Reforming labour markets in bad times: An assessment of the Spanish experience

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Preliminary version. Please do no quote

Abstract

In February 2012 a reform of the Spanish labour market was approved, which modified some of the most important aspects of the institutional framework, affecting key elements, such as the degree of centralisation of the collective bargaining system and dismissal costs and procedures for individual and collective lay-offs. In this paper, we analyse recent developments in the main labour market variables trying to isolate the possible impact of the reform from other factors that may have driven these developments, including the adverse cyclical situation when the reform was approved. Overall, tentative results point to a deepening of the wage moderation process following the approval of the 2012 reform and a certain positive impact on net employment, although no significant progress can be identified in terms of the composition of employment flows, which continue to be dominated by temporary workers. On this issue, firm-level survey evidence tend to show that Spanish firms perceive some easing on the conditions for economic layoffs, attributing to legal changes since 2010 the main source of this higher flexibility. Regarding other labour conditions, including wages and hours, the share of firms perceiving higher flexibility is somewhat lower and legal changes on this issue have been accompanied by a change in workers attitude allowing higher flexibility at the firm level.

1 Introduction

In February 2012 a major reform of the Spanish labour market was approved, which modified some of the most important aspects of the institutional framework, affecting key elements, such as the degree of centralisation of the collective bargaining system and dismissal costs and procedures,[1] after several less comprehensive reforms implemented since 2010. In this paper, we try to identify the impact of this reform on key labour market developments, although some of its effects are structural and will require a longer period to produce their full effect.[2]

In order to analyse the possible effects of the legislative changes approved in 2012, in this paper we analyse recent developments in the main labour market variables, such as employment, unemployment and wages trying to isolate the possible impact of the reform from other factors that may have driven these developments, including notably the adverse cyclical and employment situation in which it is being applied. In addition to these aggregate developments, we use available statistical information on the collective bargaining system looking at potential changes in key structural factors, such as the degree of centralization and the extent of wage indexation.

Regarding the impact of the reform on wage flexibility, the various modifications to the regulation of collective bargaining should enable firms to better adapt wages to their specific situation and facilitate a more balanced adjustment between wages, employment and working hours in the presence of adverse shocks. Overall, tentative results point to a deepening of the wage moderation process following the approval of the 2012 reform and a certain positive impact on net employment, although no significant progress can be identified in terms of the composition of employment flows, which continue to be dominated by temporary workers. Regarding firm´s perceptions on these institutional changes, Spanish firms tend to perceive some easing on the conditions for economic layoffs, attributing to legal changes since 2010 the main source of this higher flexibility while the share of firms perceiving higher wage flexibility is lower and the role of legal changes seems to have been less relevant. These results are subject to a high degree of uncertainty, as a consequence of the brevity of the period elapsed since the reform was approved.

The rest of the paper is organised as follows. The next section briefly describes the content of the 2012 reform, while the third section analyses recent wage developments, the changes detected in collective bargaining and how different flexibility mechanisms approved in the reform has been used by firms. The fourth section analyses macroeconomic developments in employment and unemployment, along with recent patterns in job creation and destruction flows by type of contract in order to identify any change that could be attributed to the reform. The fifth section includes a summary of main results from a firm-level survey

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[1] For a description of the institutional framework existing in the Spanish labour market before the crisis, see Estrada, Izquierdo and Lacuesta (2009).

[2] The Ministry of Employment and Social Security has recently published an analysis of the impact of the labour reform, which is available at http://www.empleo.gob.es/es/destacados/HOME/impacto_reforma_laboral/index.htm. Also, OCDE has published a report on the main effects of the 2012 labour market reform in Spain, see …

about how legal changes may have increased labour market flexibility in Spain. Finally, the sixth section briefly summarizes the main conclusions.

2 A brief description of the content of the 2012 labour reform

Royal Decree-Law 3/2012, approved in February 2012, included a broad set of changes to labour market institutions.[3] With regard to collective bargaining, and in order to increase the degree of decentralisation in the system, it was established that firm-level agreements should prevail in a broad set of areas (basic wage, supplements, overtime remuneration, and the distribution of working hours), with contradictory clauses in industry-level agreements being ineffective. Also, in order to increase firms' internal flexibility, the possibilities were widened for opting out from the terms and conditions contained in the agreement in force, as well as for unilateral changes to working conditions that exceed the minimum levels established in the collective agreement. Finally, to encourage faster renegotiation, the reform established a maximum limit of one year[4] for the effectiveness of an agreement after its termination.

In the area of dismissal costs and procedures, a number of measures were taken. On one hand, the economic grounds for dismissal were redefined, establishing objective circumstances that justify termination of contract. In particular, it was determined that termination is justified if the firm reports losses (or expects to) or suffers three consecutive quarters of year-on-year declines in sales or revenues. On the other hand, the amount of compensation payable in the event of unjustified dismissal was reduced; for objective and disciplinary dismissals it was set at 33 days per year of service, subject to a maximum of 24 months' pay (as against 45 days and a maximum of 42 months' pay previously). As for dismissal procedures, the need for administrative authorisation for collective dismissals was eliminated, as was the obligation on the part of the firm to pay wages for the period between the time of notification of dismissal and final judicial resolution.

In relation to hiring possibilities, a new type of permanent contract, called an "entrepreneurs' contract", was introduced for firms with fewer than 50 employees, with a probation period that has been extended to one year and various fiscal incentives. In addition, some of the terms and conditions of the training and apprenticeship contract and those relating to part-time hiring were made more flexible.

Finally, although this was not a legislative change, it is worth remembering the Agreement for Employment and Collective Bargaining (AENC-2012) signed by the social agents at the beginning of 2012. This agreement included recommendations for wage increases of 0.5% in 2012, 0.6% in 2013 and between 0.6% and 1.5% in 2014. More recently, a new AENC

[3] Eventually approved as Law 3/2012 in July.

[4] From 8 July 2012, the date of publication of Law 3/2012 in the BOE. This period can, however, be extended by agreement between the parties.

has been signed for the period 2015-16, incorporating a recommendation for agreed wages up to 1% in 2015 and 1.5% in 2016.

3 Recent evolution of labor costs

The various modifications to the regulation of collective bargaining, the purpose of which was to make it a more decentralised system, to increase firms' internal flexibility, especially in the presence of adverse economic conditions and to accelerate the renewal of collective agreements, should, if proved successful, enable employment conditions (wage and non-wage conditions) to be better adapted to the specific situation of firms and facilitate a more balanced adjustment between wages, employment and working hours.[5] Additionally, the reduction in dismissal costs and the easiness of the process of dismissals under economic conditions should also have had an influence on the wage bargaining process, reducing workers bargaining power.

Looking at recent labour costs developments, we focus in market economy, given that it is important to isolate the effects of the labour reform on the wage formation process in the private sector of the economy from the direct effect on the average compensation of the whole economy arising from the cut in public-sector wages in 2012. In Chart 1, we plot recent developments in compensation per employee in the market economy, according to QNA information, and in labour costs estimated by the quarterly labour costs survey (LCS). Since the approval of the reform at the beginning of 2012, an intensification of the wage moderation process has been observed, after large wage increases registered in the initial phase of the crisis (200(). In particular, compensation per employee, according to the QNA increased by 0.5% in 2012 and after a modest pick-up in 2013 (1%) basically stabilized in nominal terms in 2014 and the first half of 2015. The information supplied by the LCS shows a somewhat sharper wage moderation since 2012, especially in 2013 (0.3%) and 2014 (-0.5%). It should be noticed that in real terms (see Chart 2) both indicators reflect an intensification of the fall in real wages initiated in 2010, although the very low, or even negative, inflation since the end of 2013 stopped this process.

However, in a situation of sharply deteriorating activity and employment, it is difficult to determine which part of this labour cost behaviour stems from the cyclical situation and which part may be attributed to the effects of the reform. To try to distinguish between the impacts of these two factors, a wage equation has been estimated in which wage increases are related to their traditional determinants: unemployment, inflation and productivity. The regression is estimated from 1981 to 2012 Q1 for the market economy, in such a way that the changes in wage determination following this quarter do not affect the estimation. Inflation is measured by the 12-month increase in the CPI in December of the previous year, since this is the reference used most in the wage formation process, and productivity is the year-on-year increase in this variable in the market economy.

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[5] For an analysis of the impact of the level of decentralisation in collective bargaining on the functioning of the labour market, see Jimeno and Thomas (2011).

$$\Delta w_t = \alpha + \beta \Delta CPI_{t-1} + \gamma \Delta U_t + \delta Prod_t + \varepsilon_t \quad (1)$$

Negative values for the residuals of this equation would indicate that the slowdown observed in compensation per employee had gone beyond what could be attributed to changes in its determinants.[6] Thus, the evolution of these residuals in the period before and after the reform can be interpreted as an approximation of the possible effect of the legislative changes on the wage formation process, although any other factor possibly affecting wage determination after 2012 would also be reflected in these residuals.

As seen in Chart 3, from 2010 the residuals have negative values, following the high positive values observed in the first phase of the crisis, and in absolute terms their value increased after 2012 and until the end of 2013. In 2014, however, wage residuals started to come back to positive values, possibly reflecting the impact of negative inflation rates. A similar analysis based on LCS data, although in this case the sample series is much shorter starting in 2002Q1 points to a similar picture, even a somewhat more intense process of wage moderation, which started in 2012 Q2 (See Chart A1 in the Appendix).

In order to analyse wage developments in greater detail, it is important to consider the results of collective bargaining. Chart 4 shows wage increases according to the agreement data for the period 2009-2015 (up to August 2015), showing total agreed wages and agreed wages in newly signed agreements, which may better reflect economic conditions in the respective period. It can be seen that the average wage increase is very close to past inflation in the period 2009-2011, despite the intensity of the job destruction taking place during these years and the collective bargaining agreement in effect, which was signed in 2010 and tried to promote wage moderation. This reflects the high wage indexation in the bargaining system, leading to a notable degree of real downward wage rigidity[7]

From 2012, however, a clear reduction is seen in the average increase in wage rates, which stood at 1.3% in 2012 and starts to diverge from past inflation rate, with newly signed agreements a more up-to-date indicator of the possible effects of the reform on collective bargaining results, reflected even more moderate wage increases.

In the area of wage indexation, not only initial agreed wages have, at least partially deviated from past inflation, but in addition the percentage of workers covered by indexation clauses has declined significantly in recent years. More recent data show that the percentage of collective agreements including inflation-adjustment clauses has decreased to 18.5% in the second quarter of 2015.

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[6] This analysis does not take into account the increase in non-wage costs for firms arising from the 5% increase in the maximum contribution bases at the beginning of 2013.

[7] See Messina et al (2009) for comparative estimates with other European countries

In this respect, low inflation rates are playing a role but there is also some evidence of a lower incidence of inflation-adjustment clauses at the firm level. In particular, a firm-level survey carried-out in the context of a Eurosystem Research Network[8], shows that proportion of firms applying this type of wage adjustment was declining over the crisis, from about 70% in the period previous to the crisis 2010 to 37.2% in 2013. On the reasons behind this lower incidence of wage indexation, low inflation seems to be the main factor: in 2013, 14.1% of firms declared that it was the main reason for not adjusting wages to inflation. But, on the other side, an increasing share of firms reporting the inexistence of inflation-adjustment clauses[9].

It should also be noted that the effective impact of indexation clauses was smaller than expected in the period 2012-2013, which could be reflecting the fact that the General Wage Agreement signed by Social Agents recommended to include a more flexible definition. This greater flexibility reduced the percentage of clauses eventually activated and their aggregate impact on wage developments. By contrast, recent Wage Agreement signed for the period 2014-16 recommended the inclusion of inflation-adjustment clauses, which may be not relevant in the current context of low inflation but may re-introduce old practices in the Spanish labour market in the case of unexpected upward inflation surprises.

In any case, it should be noticed that very low inflation rates, or even negative inflation at the end of 2014, has modified this picture since agreed wages in real terms started to increase in 2014 and a similar picture is observed in 2015. This is mainly reflecting the presence of nominal wage rigidity that limit the extent of wage cuts. As can be seen in Chart 5, individual microdata from Social Security Registers show a large concentration of wage changes around zero in 2013, while in the pre-crisis period, wage distribution showed a larger pick around expected inflation.

Regarding the degree of decentralization in the wage determination system, the information available does not shows a rise in the coverage of firm-level agreements since 2012, despite this was one of the main goals of the reform (See Chart 6). In particular, 2012 reform ensured the priority of firm-level agreements over sectoral level ones in a large set of labor conditions, including wages and hours. However, the structure of the collective bargaining system has not yet reflected these legal modifications. Thus, the average size of firms that have their own agreement has barely changed and remains large, so that the greater possibilities for decentralisation do not seem to have been sufficiently exploited by smaller firms, which did not usually negotiate firm-level collective agreements before the reform. However, it should not be concluded from this result that the greater possibilities for decentralisation are having no effect on collective bargaining. The mere fact that, following the reform, it is possible to negotiate firm level agreements may be affecting the results of wage bargaining at the sectoral level.

As for the analysis of the greater possibilities for internal flexibility fostered by the recent legal changes, Table 1 shows, in accordance with the information provided by the special

8 Wage Dynamics Network (WDN). See https://www.ecb.europa.eu/pub/economic-research/research-networks/html/researcher_wdn.en.html, for more information about the work carried-out in this network.

9 See Izquierdo and Jimeno (2015) for additional details.

module included in the *Encuesta de Coyuntura Laboral* (ECL),[10] the percentage of employment accounted for by firms that have opted out from the terms and conditions of the agreement between 2010 and 2012. Since 2010, opt-outs from the terms of the agreement have barely changed, remaining within a range of around 5%-6% of employees. By contrast, it seems that the possibilities for making substantial changes to employment conditions are being heavily used by firms. The data available (see final column of Table 2) indicate that a significant proportion of firms, accounting for 12.1% of total employment, have had recourse to this tool for internal flexibility in 2012. In any event, this instrument has been used mainly by large firms, while among small firms the rate of use is very low.

More recent information shows a similar picture in 2013. In particular, WDN survey shows that 3.4% of Spanish firms declare they opted-out from collective agreement in 2013. The use of opt-outs was not uniform across firms. In particular, as can be seen in Table 2 opt-outs were mainly used by very large firms opting-out from its own firm-level agreement. Thus, this possibility was mainly used by these firms as an additional tool to renegotiate the labour market conditions of its own collective agreement. On the other side, the share of small and medium size firms opting-out from sectoral agreements was fairly low in 2013. Moreover, the 2012 labour market reform additionally eased conditions for unilateral modifications of those labour conditions set above the minimum level set by collective agreements. These flexibility measures have been more frequent than opt-outs (15.6% of firms), although again, they have been used mostly by larger firms (25.1% of firms with more than 200 employees have used these measures while only 14.3% of firms under 20 employees declare to have used them in 2013). [11]

ECL data have been used to analyse the differences in the behaviour of employment at firms that declared they had opted out in 2010 and 2011. The results obtained indicate that the firms that used this option in either of these years had a better record in terms of level of employment in 2012 than those that did not (around 4.4% higher),[12] which shows the role that internal flexibility measures can play in promoting employment. In particular, the left part of Table 3 shows the result of estimate a model for the employment of each company, including as explanatory variables of time dummy variables to capture the overall macroeconomic situation, each company fixed effects to control their individual potential, and step variable capturing the possible effect on the employment of the companies that practiced one pick in 2010 or 2011:

Chart

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[10] We are grateful to the Ministerio de Empleo y Seguridad Social for giving us access to this database, which is based on a questionnaire completed by firms on a quarterly basis. Since February 2012 an official register has been available of opt-outs from collective agreements, although this information does not allow the figure for opt-outs to be compared with that observed previously.

[11] Overall, these figures are in line with information on the use of the flexibility mechanisms provided by *Encuesta de Coyuntura Laboral* and the *Encuesta Annual Laboral* both conducted by the Spanish Ministry of Employment.

[12] This result is obtained from a regression using panel data, in which the effect of the opt-out is estimated after controlling for the presence of aggregate trends in the economy so as to strip out the aggregate cyclical situation and individual firm-level trends that strip out the specific situation of firms.

$$\ln(Employment\ _{t,i}) = \beta Opt - out_{t,i} + 1(t) + +\varphi_i + \varepsilon_{t,i}$$

It is noted that companies that practiced an opt-out managed to keep employment level 5.3% higher than those not applying opt-outs mechanisms. In addition, data from the ECL possible to analyse the extent to which better employment performance is due to lower rates of job losses or higher rate of job creation. The results show that the best performance of employment in companies that conducted a wage lift would be associated with an increase in hiring, while the estimated effect on lower and lower estimates is not significant.

However, since a very close relationship between firm size and the proportion of companies that make the opt-out is observed, it could be that estimated in the previous specification effect were explained by the existence of differential trends in employment by company size since the beginning of the period. If so, the step variable defined to capture the effect of opting-out in the previous year could be picking outperformance of larger companies rather than the genuine impact of the flexibility measure. To try to control for this possibility, on the right side of Table 3 a new specification of the previous model is estimated with the difference equation, and controlling for the possible existence of a single trend for each company, that separates the aggregate behaviour captured by artificial time variables:

$$\Delta\ln(Employment_{t,i}) = \beta Opt - out_{t,i} + 1(t) + \varphi_i + \varepsilon_{t,i}$$

In this alternative specification, being the model differences, dummy variable captures a permanent effect on the rate of employment growth. Result show that even after controlling for individual business trends, the effect is positive and significant, presenting firms implementing an opt-out in 2010 0 2011 higher employment growth above the rest by 4.4 pp[13].

4 Recent employment and unemployment evolution

Different measures approved in the area of dismissal costs and procedures would have led to a decrease in employment protection in Spain, given that, in principle, the new definition of the economic grounds for dismissal would facilitate lay-offs to firms in bad economic conditions dismissal costs were reduced in the case of unfair dismissals. In the case of collective dismissals, the elimination of the administrative authorisation have also eased the procedure and may have reduced dismissal costs. Overall, OECD EPL indicator (See Chart 7) shows that EPL for regular contracts have significantly decreased over the more recent period both as a result of 2010 reform and, especially, after 2012 reform. In particular, OECD

[13] In this case, however, the evidence does not distinguish whether it is due to higher procurement or a minor extinctions

estimates point-out that EPL indicator was above Euro Area average in 2008 (2.66) while the 2010 reform, that eased the definition of fair dismissals under economic conditions, reduced this indicator to 2.56. According to this methodology, EPL additionally decreased to 2.28 after 2012 labour market reform just below OECD average in 2013.

The information on the direct impact of the different legislative changes on dismissal procedures and costs is far from being complete but the information available points to an increase in the percentage of objective dismissals, which would have reduced the average cost of lay-offs for economic reasons.[14] In particular, the percentage of objective dismissals increased considerably from the reform of 2010 to reach a maximum at 44% in the first quarter of 2013 and decreasing afterwards, reflecting the improvement in economic activity (to 31.3% in the second quarter of 2015). It should be noticed that this figures was below 10% in the pre-crisis period before 2010 and 2012 reforms.

This increased use of dismissal for objective reasons should have reduce firing costs paid by firms, although different available statistics do no provide a precise estimate. In particular, data provided by the Quarterly Labour Cost Survey (ECTL) showed a small decline in 2012, but it did not continue afterwards. By contrast, average payments in the conciliation of individual dismissals showed a clear downward trend from above 30.000 euros in 2011/12 to around 22.000 euros in 2014. However, statistics on judicial sentences fail to provide a decrease in average dismissal costs, showing indeed a small upward trend since 2012. In any case, it should be stressed that this Information does not control for composition effects as no information is available on the characteristics of workers made redundant.

In relation to collective dismissal procedures, the elimination of administrative authorisation has not increased the weight of applications for labour force reduction through terminations, but as a result of the elimination of the need for administrative authorisation, there was a decline in the percentage of applications agreed with the workers' representatives.

All in all, in order to evaluate the impact of these changes, and those implemented in the collective bargaining system, on the post-reform evolution of employment and unemployment it is needed to isolate the impact of the reform from the cyclical situation of the labour market. In particular, in 2012 the Spanish economy was in the middle of a second recession that began in mid-2011 and continued throughout the third quarter of 2013. Overall, the fall in employment kept very intense just after the reform, with a fall of -4.4% in 2012 and slowed thereafter, showing a first positive quarterly rate of growth in the first quarter of 2014. In turn, the rate of unemployment increased to peak at 26.9% in 2013 Q1 initiating then a process of continuous decline to 22.4% in the second quarter of 2015. It should be noted, in any case, that part of the deterioration of the labour market situation during 2012 was caused by the fall in public-sector employment in the context of the ongoing budgetary consolidation plans.

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[14] The statistics available on the cost of dismissal per worker dismissed do not allow a very firm conclusion to be drawn, since it is not possible to separate out from the evolution of the average cost of dismissal possible changes over time in the composition of the dismissed workers.

A simple way to discount the impact of cyclical factors is to estimate the relationship between employment/unemployment and economic activity and to analyse the residuals in the period after the reform. In particular, two regressions are estimated, in which the rate of change of economic activity is related to the change in the rate of unemployment and employment growth, respectively, a relationship that is commonly known as Okun's Law.[15]

$$\Delta Unempoyment\ Rate_t \ = \alpha_{expansions} + \alpha_{recessions} + \ \beta \Delta PIB_t \ + \varepsilon_t$$

$$\Delta Employment_t^{private\ sector} = \alpha_{expansions} + \alpha_{recessions} + \beta \Delta GVA_t^{private\ sector} + \varepsilon_t$$

These regressions are estimated for the period 1981q1-2012q1 allowing for a change in the constant of this relationship between expansionary and recessionary periods given that previous studies have identified an asymmetric pattern in the relationship of employment/unemployment and GDP along the different phases of the business cycle[16]. Charts 9 and 10 shows the residuals of these equations for the most recent period. In the case of the equation relating employment and activity, the residuals were negative until the third quarter of 2012 reflecting a sharper rate of job destruction than would have been expected given the fall in activity only in the second quarter of 2012 in the post-reform period. From that date, however, residuals became positive, especially since the beginning of 2014 when then recovery in economic activity seems to have been translated into higher employment growth than expected[17].

In the same way, the analysis of the residuals of the equation relating unemployment and activity show negative residuals became larger after the approval of the reform, especially in 2013 and 2014. In this case, this could be probably reflecting not only the better evolution of employment but also the decline in the labour force.

This analysis points to somewhat better than expected behaviour by employment in the private sector, at least in the most recent period,[18] which is in line with the slowdown observed in productivity growth and may be reflecting the effects of wage moderation on employment. As in the case of wages, it is still very premature to draw final conclusions, although it is worth stressing that other studies, which use different approximations, tend to

[15] To ensure that the evolution of the public sector does not distort the results the estimation is carried out using the employment and GVA of the market economy. This cannot be done for the unemployment rate, which is not defined for the market economy, so the regressor in this regression is GDP.

[16] See, for instance, Izquierdo et al (2010).

[17] It should be noticed that part-time employment growth has been higher in the post-reform period than full-time employment. These regressions try to correct for this using full-time equivalent estimates for employment.

[18] When the previous regressions are estimated with parameters that change over time a recent increase in the constant of this regression is observed, while the elasticity of employment to GVA is reduced. However, it is too soon to know if these changes are statistically significant.

show similar results that relate the wage moderation caused by the labour reform to improved employment behaviour.[19]

However, to analyse the effects of the reform on employment it is essential to examine the changes that may have occurred in the job creation and destruction processes, which may be done using the information provided by Labour Force Survey (LFS) flows data. Considering the content of the reform, one might expect the decline in dismissal costs to increase the rate of destruction of employment of workers with permanent contracts, especially if the various internal flexibility measures were not heavily used. In turn, the changes in dismissal costs and wage moderation should lead to more permanent increases in the rate of creation of permanent employment.

Chart 11 shows the rates of job destruction and creation, approximated by the outflow from employment to unemployment and by the inflow to employment from unemployment, respectively, along with the year-on-year growth in GVA in the market economy since 2006. As seen in this chart, job destruction rates only slightly increased after the approval of the reform, despite EPL had decreased and the adverse economic situation. Indeed, job destruction rates started to slowdown already in 2013 along with the economic recovery. In the case of the job creation rate, the picture is somewhat less positive since it was decreasing until the second half of 2013 and it has only slightly picked-up since then.

In order to isolate the impact of cyclical factors, a regression analysis has been conducted on the relationship between job destruction and job creation rates. In this case, data availability severely limit the sample period as LFS flows data are only available since 2001. We use sectoral disaggregation (1 digit level) to compensate this smaller time period. The following equations are estimated:

$$Job\ Destruction\ rate_t^{industry} = \alpha^{industry} + \beta \Delta GVA_t^{industry} + 1(quarter_t) + \varepsilon_t$$

$$Job\ creation\ rate_t^{indsutry} = \alpha^{industry} + \beta \Delta GVA_t^{indsutry} + 1(quarter_t) + \varepsilon_t$$

Results are shown in Charts 12 and 13. The coefficients have the expected signs: the higher activity less intense destruction and higher rate of job creation. Chart 12 indicates that after the reform, and after taking into account the situation of cyclical weakness, although the rate of destruction of jobs has not increased in comparison to what happened before it, it remains very high and above its historical relationship with the activity. In terms of job creation, the continued decline in the intensity of job creation have slowed in recent quarters

[19] Specifically, De Cea and Dolado (2013) show that growth rates of 0.3%-1.3% of GDP would suffice to increase employment in net terms, provided that the current wage moderation is maintained. BBVA (2013) estimates that the 2012 wage moderation saved the destruction of some 60,000 jobs in the short term, and had a medium-term impact of some 300,000 fewer jobs destroyed. Also, the evaluation by the Ministry of Employment also finds that the behaviour of employment in the most recent period was even better than would be attributable to wage moderation. Finally, OECD report on the assessment of the impact of the 2012 labour market reform also finds some positive results on employment

but results do not show any improvement given its traditional relationship with economic activity.

However, disentangling by type of contract, a similar analysis tends to show some recent improvement in job destruction rates of permanent contracts. In particular, Chart 15 shows that job destruction rates of permanent contracts has significantly decreased since 2012 reaching at the end of 2014 and the first semester of 2015 similar levels than those observed in the pre-crisis period. By contrast, job destruction rates of temporary workers remain at high levels while the pick-up in job creation rates is basically concentrated among temporary jobs.

As a result, the downward trend in the temporary employment ratio continued after the reform, reducing the ratio to 21.9% in the first quarter of 2013, has stopped and the economic recovery has risen temporary rate to 25.1% in the second quarter of 2015. This should basically be attributed to the impact of cyclical conditions, which again play a determining role.[20] Statistics of registered contracts provides more information about the range of creating permanent jobs. In this respect, the percentage of permanent contracts in total has not been made major alterations (that is 6.7% in the second quarter of 2015, while it was 7.5% in 2010 and 6.9% in 2011 and 6.9% in 2012).

Finally, where more significant changes are observed is in the form of part-time contracts. The rate of partiality increased from around 14% in the pre-reform period to 17.2% in 2014 (17% in the second quarter of 2015), accelerating the positive trend seen in this ratio prior to the reform. In the statistics of contracts, the weight of the partial contracts was 30% before the reform (24% before the crisis), has now reached 36.1%. It should be taken into account that there were modifications of existing legislation to allow the existence of overtime as the legal maximum provided according to the agreed working hours and changes were incentivized contracts training and apprenticeships for youngsters.

5 Firm´s perceptions on labour market reforms

WDN3 survey provide useful information about how Spanish firms assess the recent legal modifications of the main institutions in the labour market. As showed in Izquierdo and Jimeno (2013) Spanish firms tend to consider that in comparison with the situation in 2010, it was easier in 2013 to adjust labour costs in their firm. In particular, almost 50% of firms replied it is now easier to lay off workers based on economic reasons than it was in 2010 (see Chart 16) while only 10.8% of firms declared that is now more difficult. According to employers' perceptions, adjusting the level of employment was also easier in 2013 using collective lay-offs (for 42.7% of firms). On the wage side, one third of firms declare that lowering wages of new entrants in the firm has become easier while to adjust wages of incumbent workers is easier only for 26.5% of firms.

[20] A similar analysis to the above-mentioned ones to eliminate the cyclical component of the recent developments in the temporary employment ratio shows no significant changes in the period after the reform that may be associated with the legal changes approved.

To check to what extent these legal modifications may explain these changes, WDN3 survey also requested employers to reply about the main factors behind these changes, allowing them to choose between changes relate to legal modifications, changes in the enforcement of the law, changes in unions behaviour or changes in the workers' attitude. Table 3 shows that most firms declaring that it is easier to adjust the level of employment using economic dismissals (individual or collective) replied that changes in labour laws are the most relevant factor behind this easiness (between 75.3% and 83.4% in the case of individual and collective dismissals, respectively), although enforcement of the law has also played a role in this easiness over this period. On the contrary, when we analyze which factors may explain higher wage flexibility, firms replies tend to show that, although legal changes also matter, individual workers attitude has been a key factor in explaining higher flexibility since 2010[21].

Moreover, labour market reforms in Spain since 2010 have tried to facilitate the use of opting-out mechanism in order to increase wage flexibility in a collective bargaining mechanism characterized by the prevalence of sectoral level agreements. In previous section, however, we showed that these mechanisms have been relatively infrequent, with the exception of large firms that have used these new possibilities to renegotiate its firm-level agreement. The survey also requested some information about how firms perceive opting-out procedures have been eased in the more recent period. In this respect, cery large firms (more than 200 employees) have perceived an easiness of the procedure to implement and opt-out from the collective agreement, especially those with a firm-level agreement (53.5%). On the contrary, a relatively reduced share of smaller firms declared that this procedure is easier after the different legislative changes introduced since 2010.

6 Conclusions

This paper has analyzed the recent evolution of the main figures of the Spanish labor market and has tried to link these developments with the legal amendments approved in February last year. This analysis is subject to significant limitations. In particular, the short time since the adoption of the reform narrows the availability of data in a context in which it is essential to distinguish the possible impact of the reform of cyclical factors derived from the adverse economic situation. On the other hand, some of the structural modifications may only fully manifest its effects on a medium-term horizon once the players involved have internalized the new institutional framework.

The emerging results point to a deepening of the process of wage moderation following the adoption of the reform of 2012, might be starting to reflect greater wage sensitivity of the process to the specific situation of firms determination. However, still a significant increase in the degree of decentralization of the bargaining system is observed. Meanwhile, the use of internal flexibility mechanisms introduced has focused on larger companies. In the field of employment, the results tend to show a positive impact on net job you would associate with wage moderation, although the evidence is less conclusive. Finally, no significant

[21] A similar picture emerges when we look at factors behind easiness in changes in working conditions (hours, mobility) where firms tend to reply that recent legal changes have a similar relevance than the change in worker attitude.

progress has been made in terms of the composition of employment flows are still dominated by the employees with temporary contracts.

Looking ahead, it is necessary to carry out continuous monitoring of the labor market that allows contrast the degree of permanence of the patterns observed thus far. In this sense, it is desirable that some aspects of the statistical information to adjust to the new situation created by the successive labor reforms in recent years, expanding the information available on issues such as the procedure and the actual cost of dismissal.

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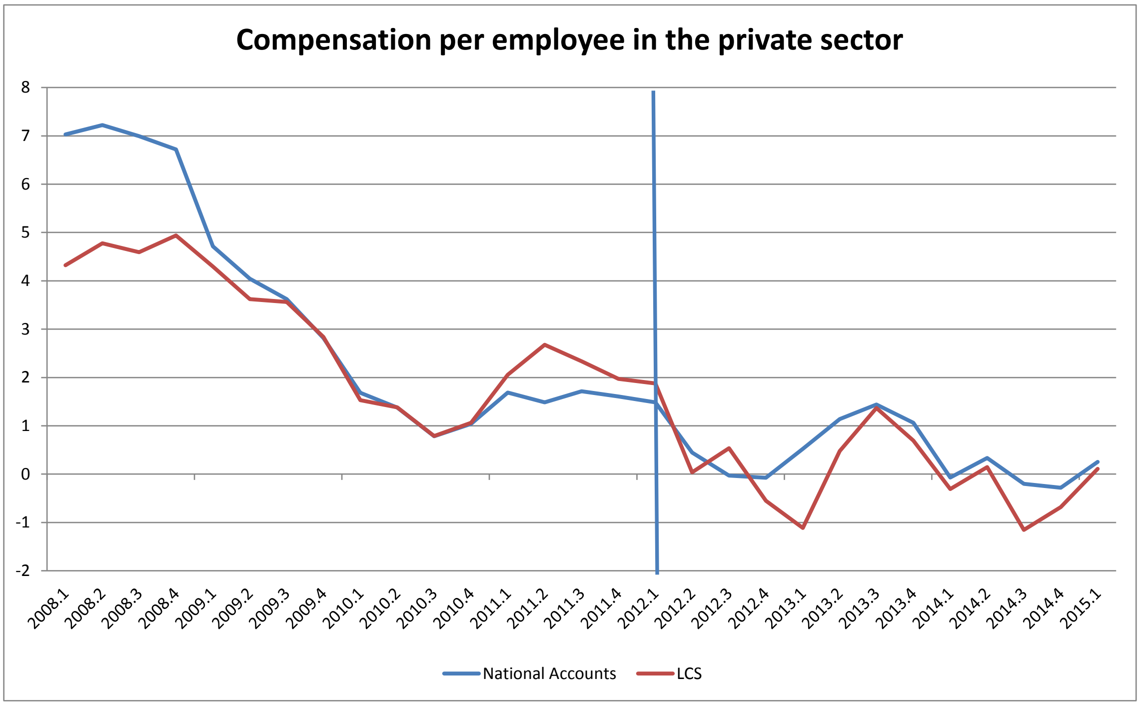
Chart 1



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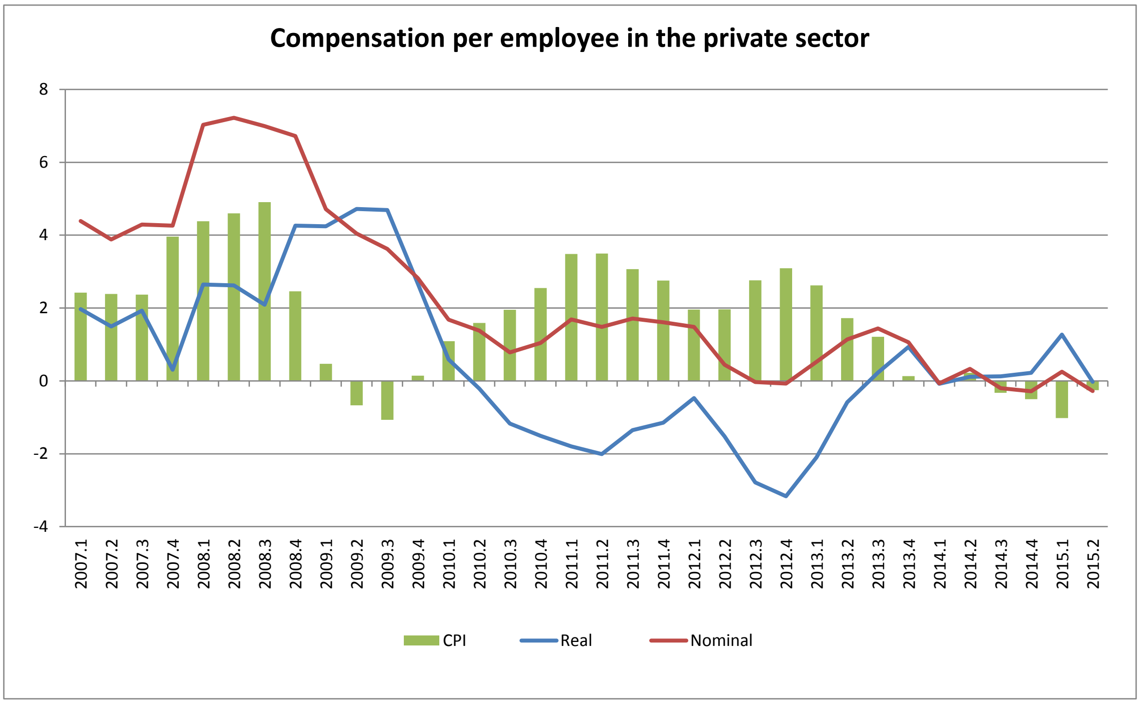

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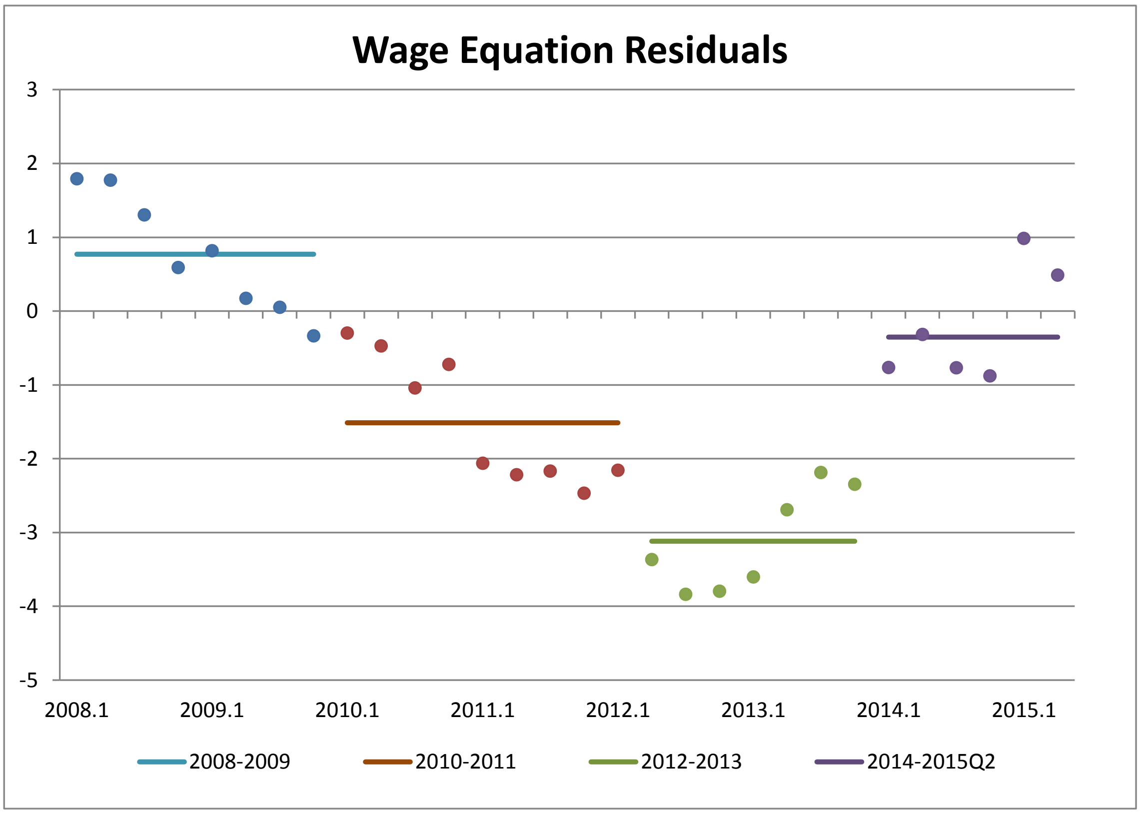

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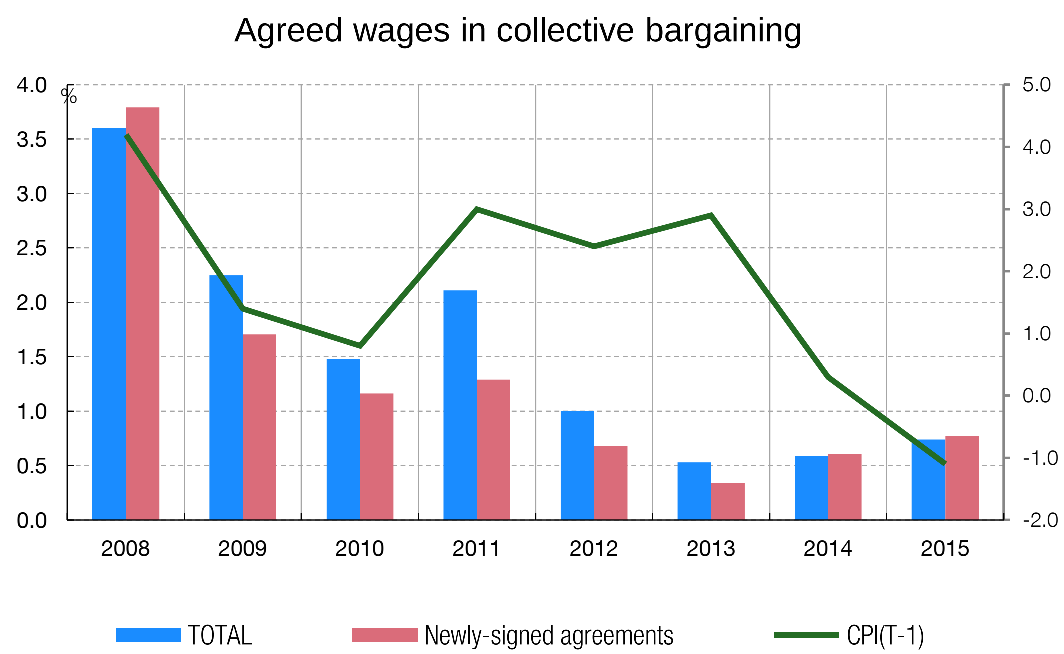

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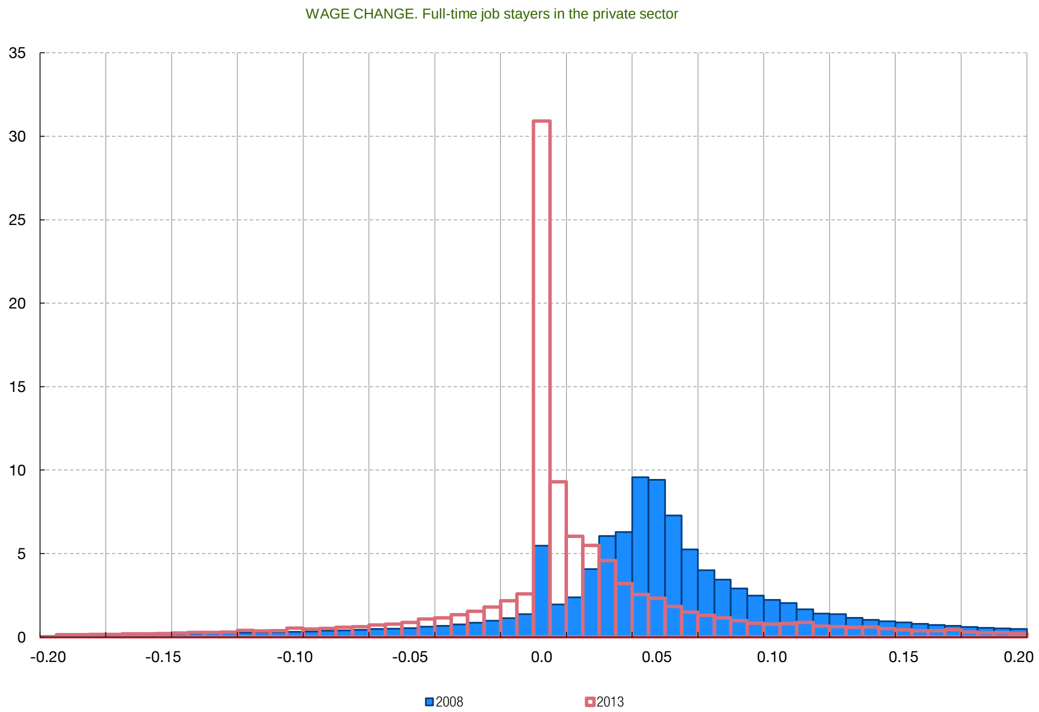

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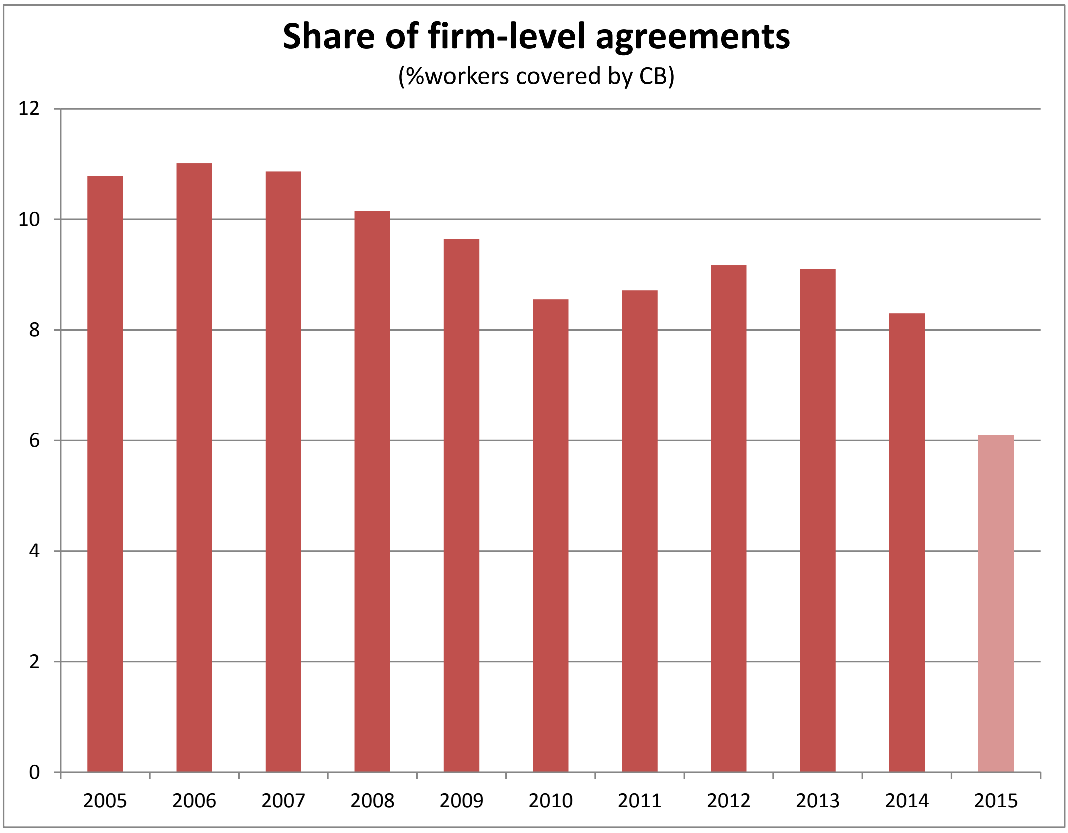

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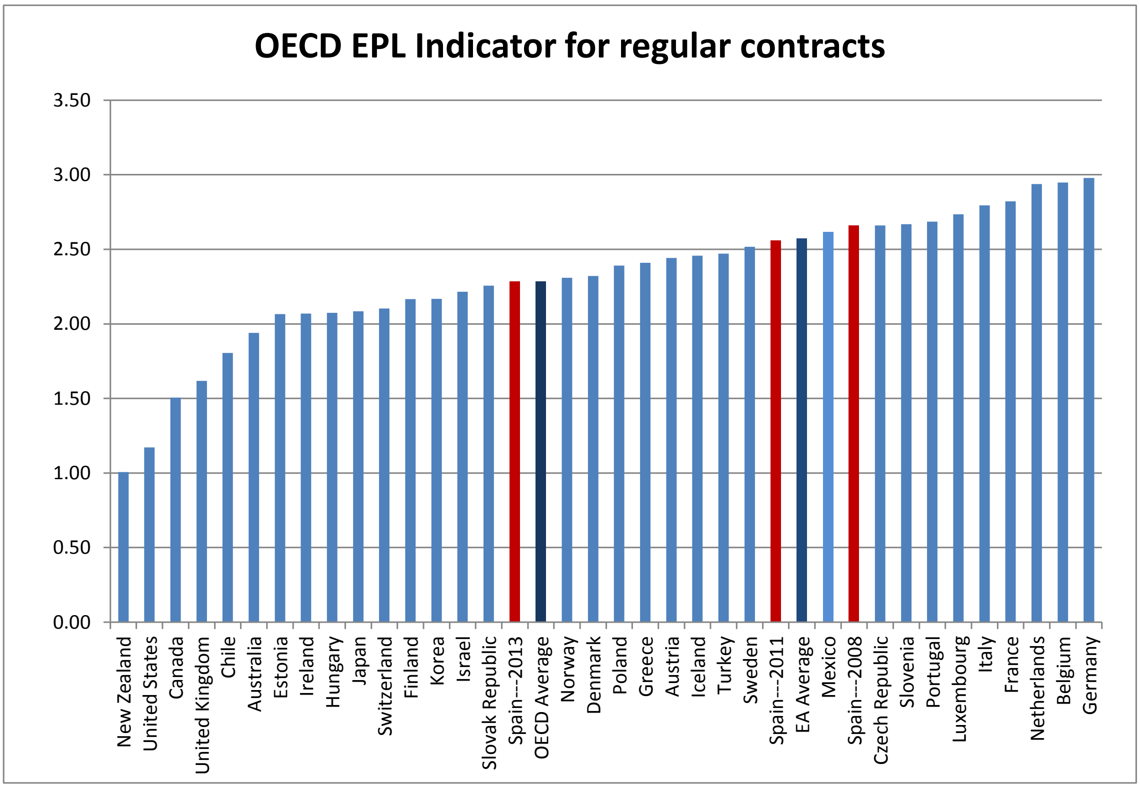

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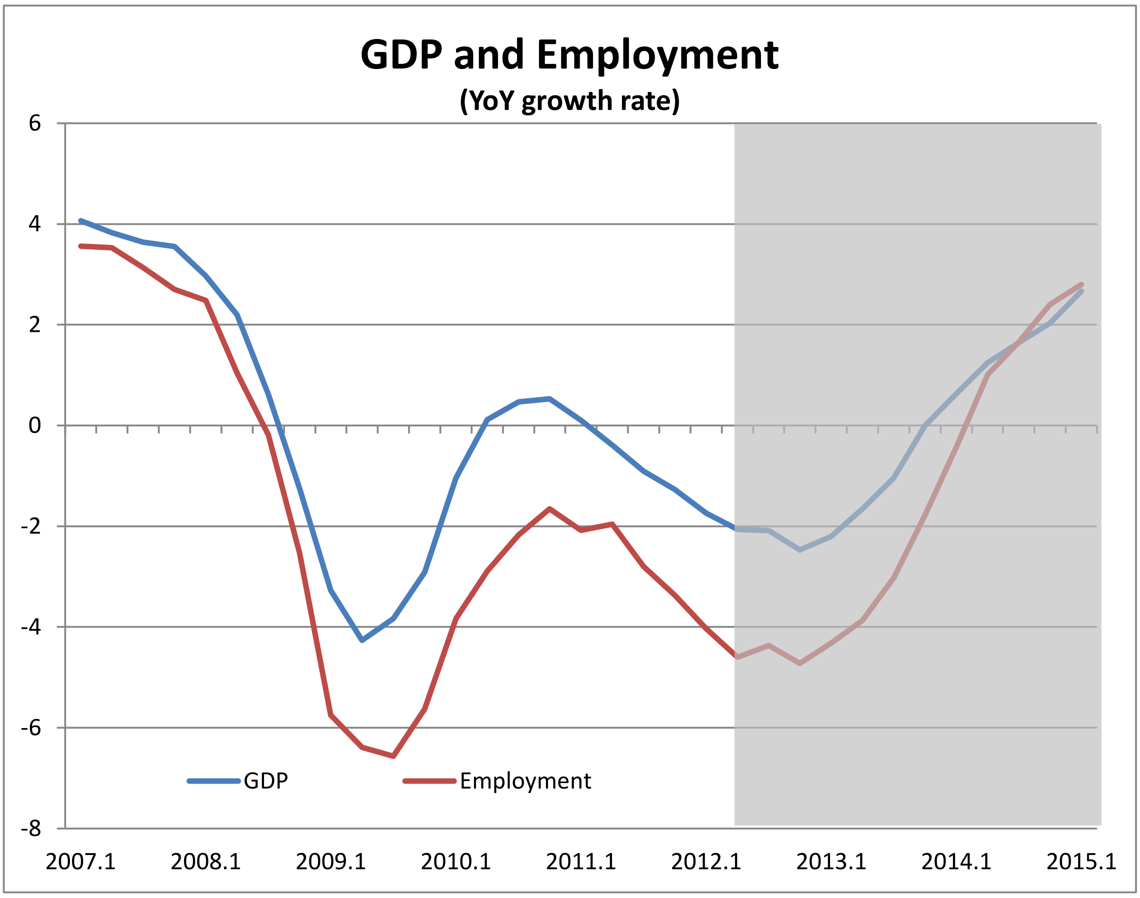

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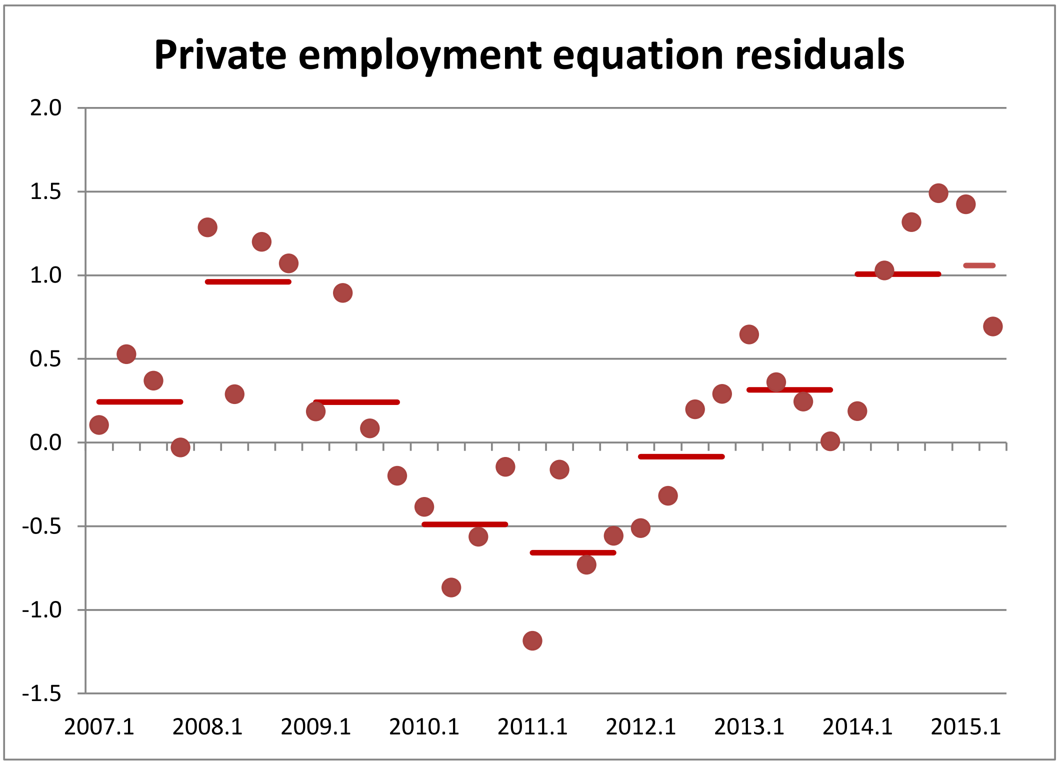

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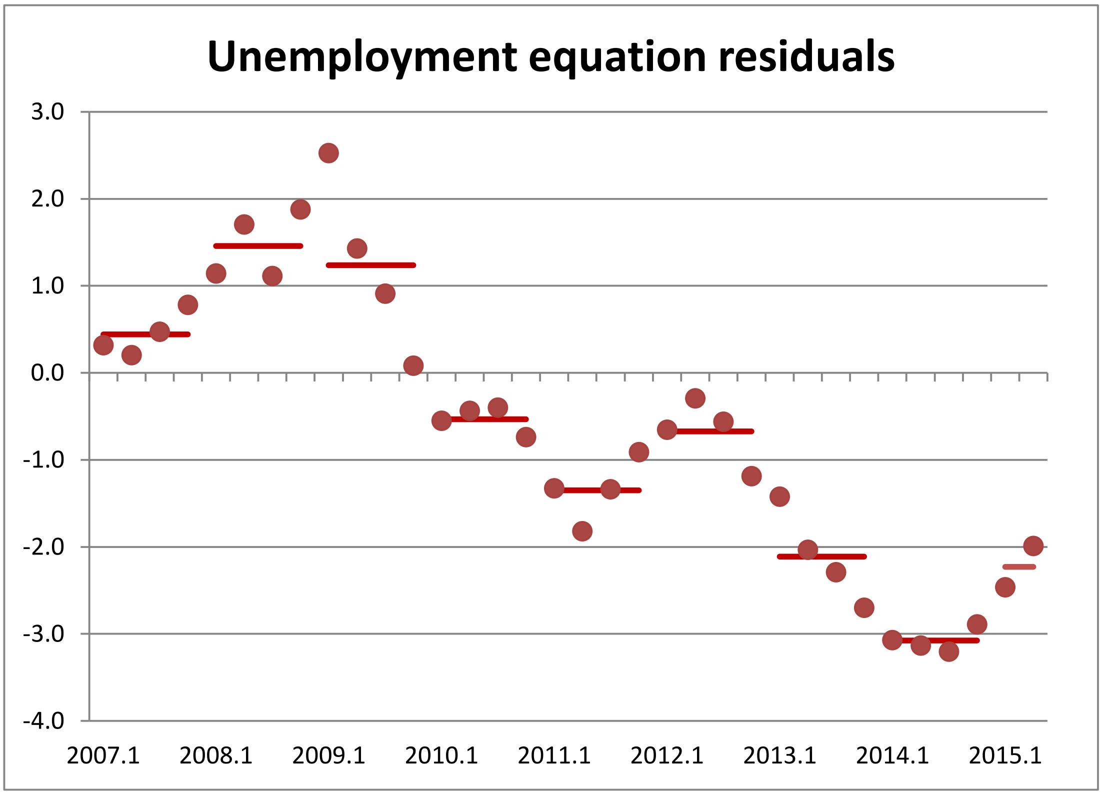

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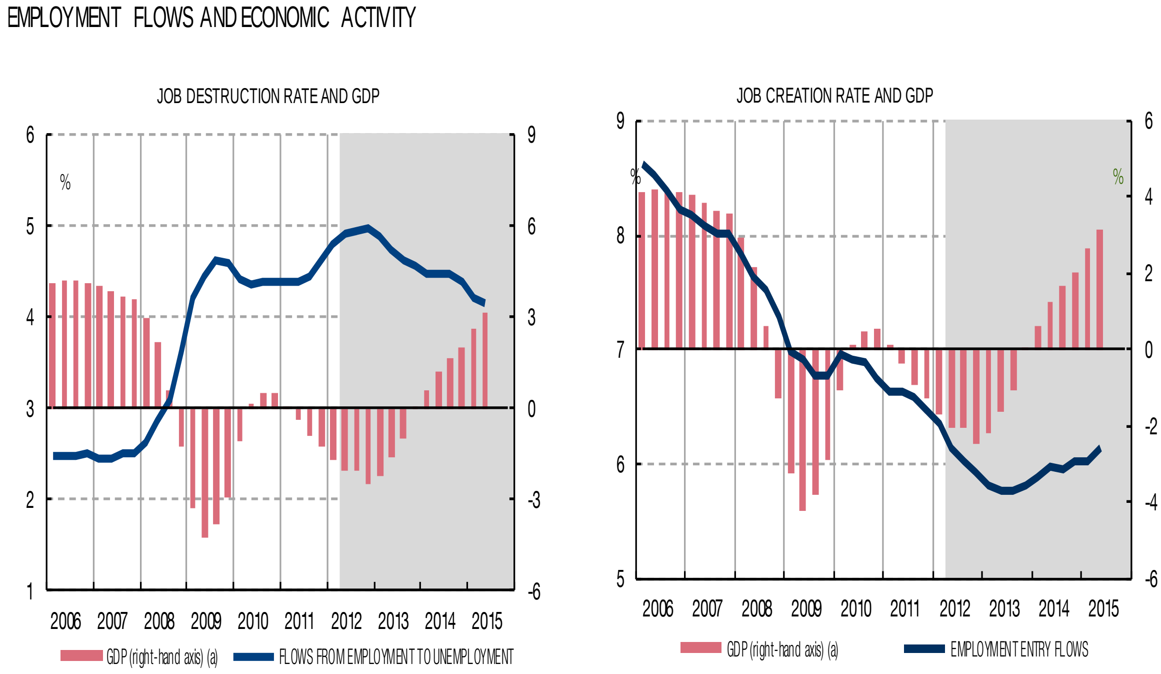

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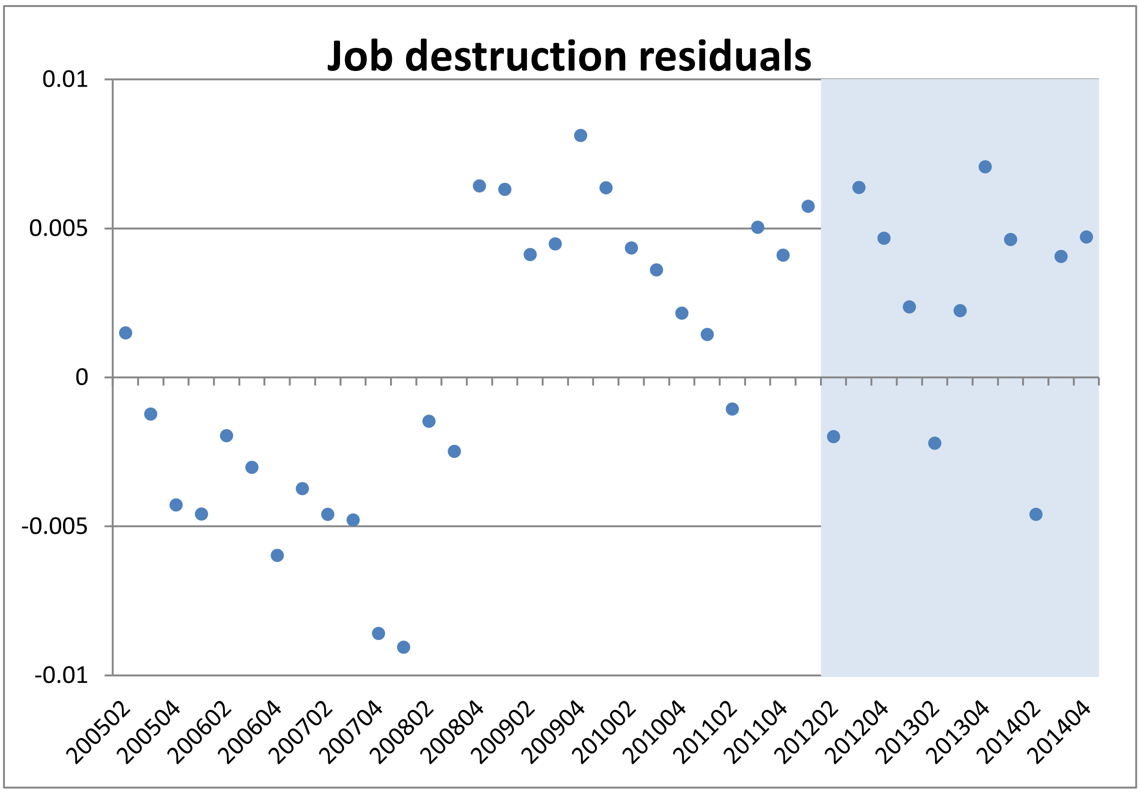

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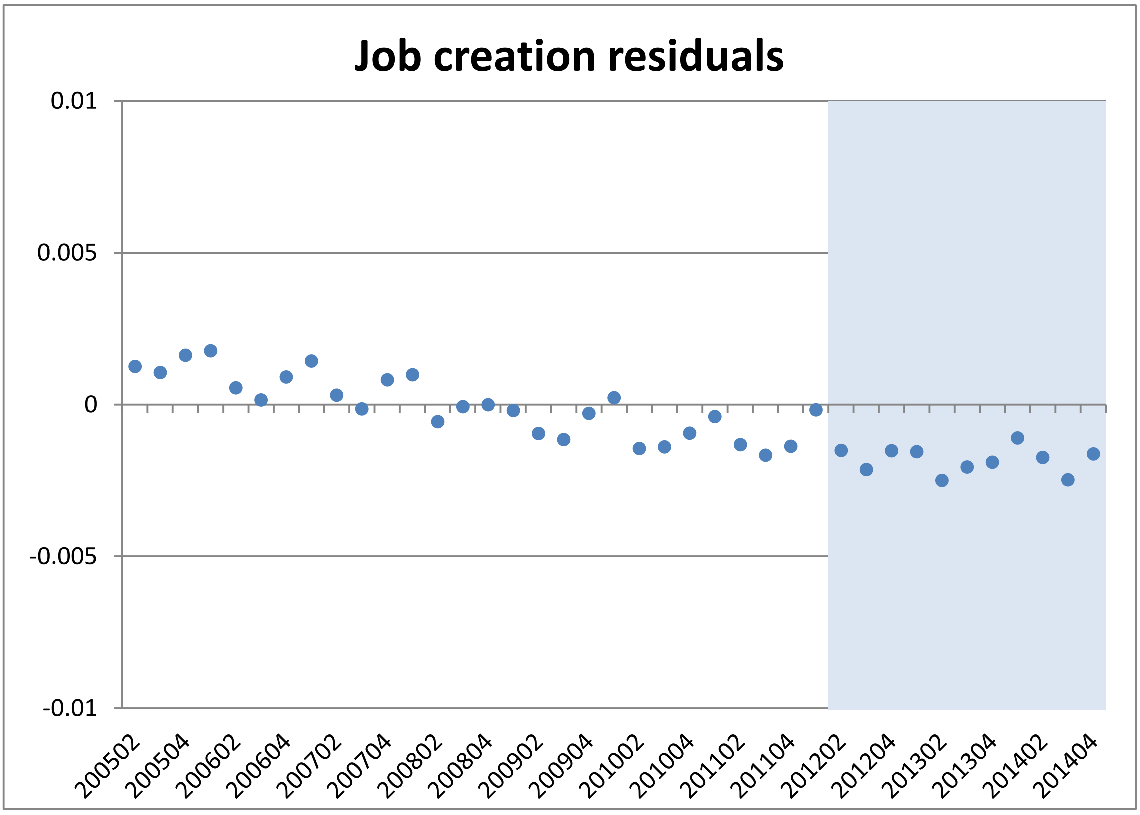
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-0.01
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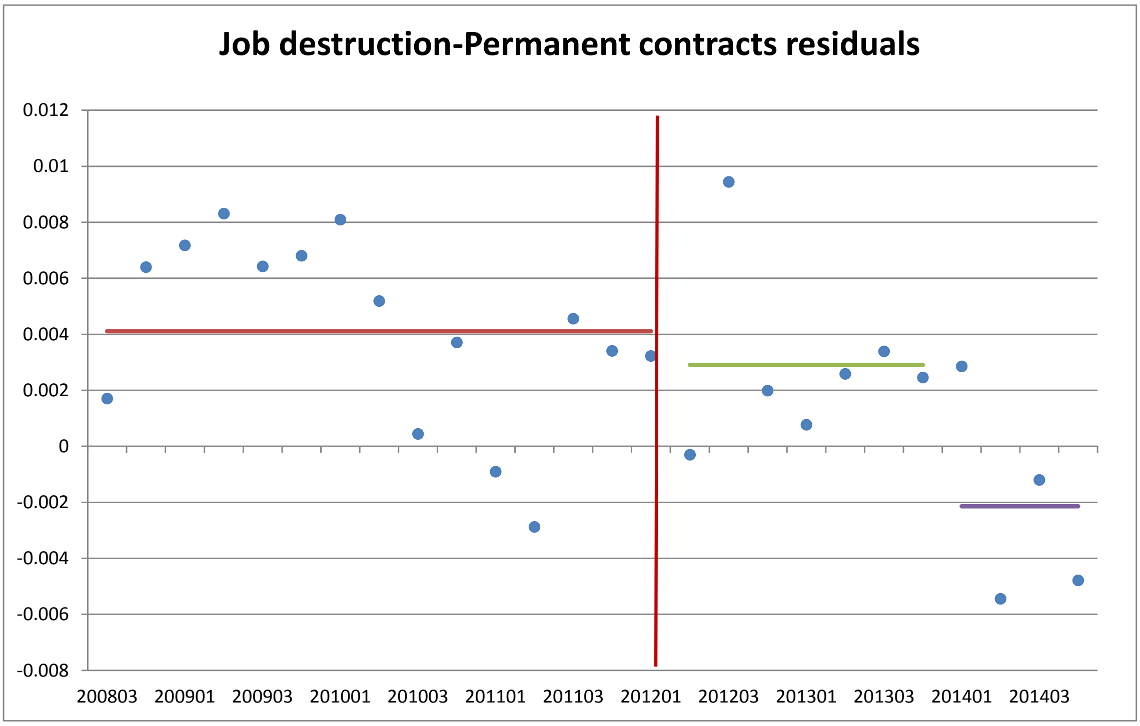
200604
200702
200704
200802
200804
200902
200904
201002
201004
201102
201104
201202
201204
201302
201304
201402
201404

Chart 14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0.008
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0.004
0.002
0
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-0.004
-0.006
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201103
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201401
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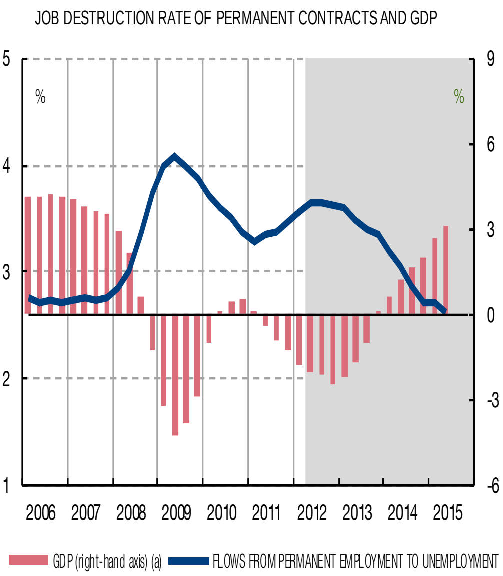
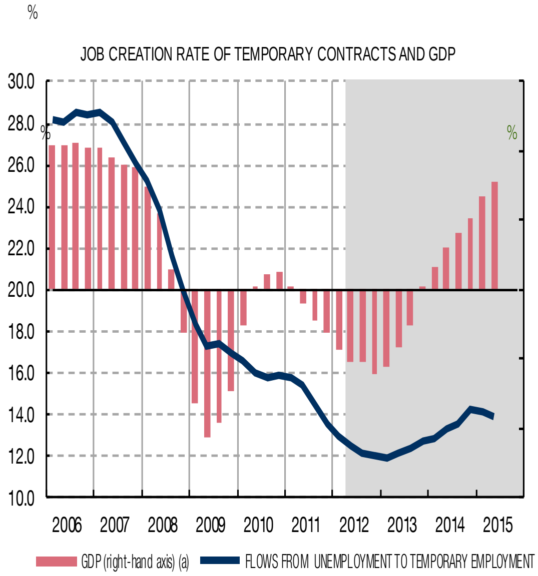
Chart 15





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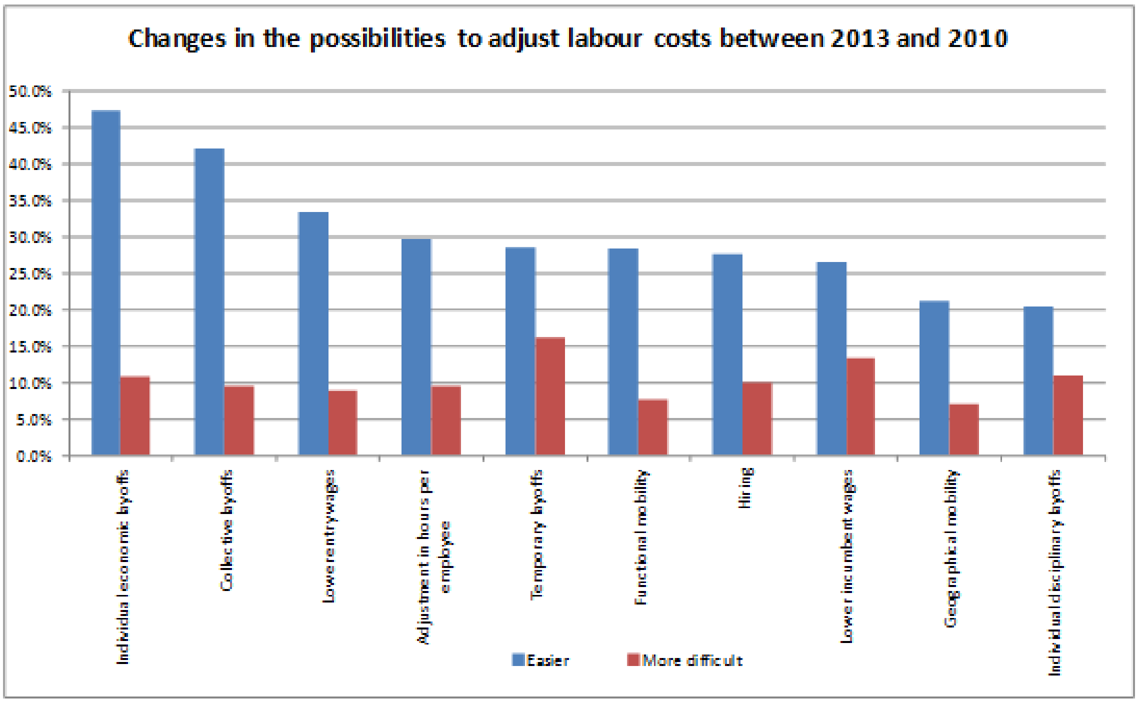

TABLE 1. OPT-OUTS AND SUBSTANTIAL CHANGES, BY FIRM´S SIZE				
	Opt-outs 2010	Opt-outs 2011	Opt-outs 2012	Substantial changes 2012
As a % of employees				
TOTAL	6.8	5.2	5.7	12.1
1-10 employees	4.3	4.3	0.9	4.7
11-50 employees	6.4	4.4	2.6	8.8
51-250 employees	8.4	6.1	5.8	14.1
Over 250 employees	10.5	7.3	12.7	20.2
SOURCE: Ministerio de Empleo y Seguridad Social.				

Table 2. Opt-outs and other flexibility measures by firm size					
	Less than 20	20-50 emp	50-200 emp	More than 200 emp	Total
Opt-out from					
Sectoral agreements	3.9%	3.3%	2.0%	5.9%	3.7%
Firm-level agreements	1.3%	3.5%	0.0%	16.6%	1.9%
Other flexibility measures	14.3%	19.3%	18.9%	25.1%	15.6%
Source: WDN3 Survey					

Table 3

Fim-level estimates on the impact of opt-outs on employment

	Level specification			First-difference specification		
	Employment	Hirings	Lay-offs	Employment	Hirings	Lay-offs
Opt-out	0.053	0.130	-0.037	0.044	0.094	-0.052
	(0.0096)***	(0,0217)***	(0,0209)*	(0,0135)***	(0,0493)*	(0,04892)
Obs	343,411	224,695	235,780	217,765	119,080	128,517
Firm-level fixed effect	Yes	Yes	Yes	Yes	Yes	Yes
Sectoral dummies	Yes	Yes	Yes	Yes	Yes	Yes

FUENTE: Ministerio de Empleo y Seguridad Social y Banco de España. Datos individuales de la Encuesta de Coyuntura Laboral. Regresiones por empresa.

a. Standard errors en paréntesis.
b. *** p<0,01, ** p<0,05, * p<0,1

Table 4. Relevance of factors behind the easiness of the different mechanisms to adjust labour costs at the firm level

	Individual economic layoffs	Collective layoffs	Lower entry wages	Lower incumbent wages
% firms declaring it is easier	47.4	42.2	33.5	26.5
due to				
Reforms of labour laws	75.6	83.4	45.0	54.0
Enforcement of laws	15.7	12.8	10.0	9.8
Unions behaviour	1.3	1.3	2.2	2.2
Workers attitude	7.4	2.5	42.9	34.1

Source: Izquierdo and Jimeno (2015)