EMPLOYMENT INSTABILITY AND ECONOMIC CRISIS IN SPAIN. WHAT ARE THE ELEMENTS THAT MAKE A DIFFERENCE IN THE TRAJECTORIES OF YOUNGER ADULTS?

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EMPLOYMENT INSTABILITY AND ECONOMIC CRISIS IN SPAIN. WHAT ARE THE ELEMENTS THAT MAKE A DIFFERENCE IN THE TRAJECTORIES OF YOUNGER ADULTS?

Abstract:
The article analyses the factors that have had a differential effect on the labour trajectories of individuals up to 40 years old during the economic and employment crisis in Spain. To this end, the study specifically examines labour trajectories in the period 2007-2011 using data from a longitudinal panel for Catalonia. First, it uses cluster analysis to classify the types of labour trajectory that were developed by the population aged under 40. Second, it uses a multinomial logit model to distinguish the individual, sectoral and familial characteristics influencing the development of a particular trajectory. The results show the importance of traditional lines of segmentation of the Spanish labour market, such as age and gender. However, they also highlight the importance of variables associated to social background (parents’ educational level and occupation). It is concluded that the factors linked to the different types of labour trajectories are similar to those identified in the literature for previous periods, although the role of family background seems to be more important than in the past, especially in trajectories marked by temporary employment.

Keywords: labour trajectories, economic recession, Spain, flexibility, precarious employment, social background
Introduction

This article analyses the labour trajectories of individuals up to 40 years old during the economic and employment crisis in Spain and the factors that could have had a differential effect on these trajectories. Until the start of the crisis, the unstable labour trajectories in the Spanish labour market were concentrated in the most vulnerable groups: young people, women, immigrants and unskilled workers. We do not yet have sufficient knowledge on whether these vulnerable profiles have remained to be the most affected by unstable trajectories or whether instability has occurred in similar ways across all profiles, including those who previously were better off.

The aim of the study presented here is, first, to determine whether vulnerable groups in the labour market have developed similar trajectories during the crisis to those who avoided situations of instability during the years of economic growth. Second, and linked to this first objective, the study seeks to investigate the extent to which educational credentials have made a difference in the kind of labour trajectory developed during the crisis. Middle-class households have traditionally used the education system to obtain educational credentials that provide access to certain positions in the labour market. In the context of an employment crisis, these strategies can be a key differentiating factor between young people with different social backgrounds. However, the loss of effectiveness of credentials in the Spanish labour market was already detected as a growing phenomenon in the pre-crisis period. This study aims to check this effectiveness in the period of crisis by considering the labour trajectories that have developed since its beginning. We focus the analysis on

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1 The authors want to express their gratitude to three anonymous reviewers for their useful comments, which have improved the quality of the manuscript.
2 From the point of view of employment, the recession in Spain began in the fourth quarter of 2007.
individuals up to 40 years old. Existing data on job losses during the crisis allow us to identify this age group as the one most affected by the crisis. These workers have entered the labour market since the 1980s, when the ongoing flexible contractual framework was introduced in Spain.

In the absence of panel-type longitudinal surveys for the whole of Spain, we have used the database of the Inequalities Panel (PaD) of the Jaume Bofill Foundation (2012), which provides data only on Catalonia.\(^3\) This database allows us to reconstruct the labour trajectories of the respondents for a sequence of years and also provides accurate information on their social background (educational level and occupation of both parents), which is especially relevant for our purposes and cannot be obtained elsewhere.

The article is divided into five sections. In Section 1 we briefly characterize the dynamics of employment during the economic crisis in Spain, paying special attention to the population up to the age of 40. In Section 2 we present the main characteristics of the labour trajectories in Spain and the role of educational credentials and family background in them. In Section 3 we describe the database used and the analyses carried out. In Section 4 we present the results and, finally, in Section 5 we present the main conclusions.

1. Context: Dynamics of employment in Spain and economic crisis

\(^3\) The Autonomous Community of Catalonia accounted in 2007 for the 19.86% of GDP and 17.38% of total Spanish employment. Its institutional and labour-law framework is exactly the same as the rest of Spain. Moreover, the weight of the construction sector in 2007 (the sector that has characterised and shaped the Spanish labour market since the end of the 1990s) was 12.35% in Catalonia and 13.13% at Spanish level (National Statistical Institute, INE).
In its recent history, the Spanish labour market has generally been characterized by high levels of unemployment. Since the mid-1980s attempts have been made to solve this problem through a series of flexibility reforms (Recio, 1997: 169-171; Banyuls et al., 2009), which have created an employment model that is highly sensitive to economic cycles (Koch, 2006; Muñoz de Bustillo and Antón, 2012) and highly segmented, with especially unstable groups in the labour market (Bernardi and Garrido, 2008; Bernardi and Martinez-Pastor, 2010). These less stable segments have traditionally been composed of workers in unskilled services and construction, particularly young people, immigrants and women. These segments were the protagonists of the impressive growth in employment that occurred in Spain between 1996 and 2007, when more than 7.5 million jobs were created (ILO, 2011). They were also involved in the spectacular job losses that occurred thereafter, leading Spain to become the European country in which the effects of the economic crisis on the labour market have been most virulent (ILO, 2011).

As shown by studies at a European level (Cedefop, 2011), in the period 2000-2008 Spain maintained the highest stock of low-skilled jobs in Europe, though the number also increased in other countries. Using occupational structure analysis, Bernardi and Garrido (2008) reported that this is a numerically important segment that has not diminished over time, despite the improved opportunities for certain groups (men, university graduates and the short-term unemployed) to move out of it. Bernardi and Garrido (2008) and Oesch and Rodríguez (2010) report that, during the recent period of economic growth, job creation in Spain has shown a tendency towards occupational polarization, with both ends of the occupational structure increasing simultaneously. These dynamics may be related to the type of jobs created in Spain.
during the economic expansion, based on tourism and construction (Banyuls et al., 2009).

Therefore, the instability of the labour trajectories in certain groups is related to the employment model that existed before the crisis. Of course, the intensity of the instability has increased in the context of job losses caused by the recession. Existing studies on the effects of the crisis have shown that job destruction has been concentrated in the younger groups in the labour market. In fact, a quasi-exclusion from the labour market has been identified among young people. According to the Spanish Labour Force Survey (EPA), in 2012 unemployment among people aged 16-24 years had risen to over 53% compared with just over 18% in 2007, and the active population of the same age group had declined by more than 650,000.

Although youth unemployment has reached spectacular levels, the cut-off age of 24 normally used in employment statistics is not very useful for considering employment trends in Spain. As noted, the reforms introduced since the mid-1980s have, under certain conditions, facilitated the widespread use of temporary contracts by firms (Polavieja, 2006). Since the early 1990s, this high use of temporary contracts in new recruitment and differences in the protection enjoyed by temporary and permanent employees have added a new element of “generational segmentation” to the Spanish labour market. Temporary employment has mainly affected the younger cohorts, and specifically those born since the early 1970s and entering the labour market in the early 1990s (Cueto and Malo, 2010). In this regard, the longitudinal approach taken by Hernanz (2003) shows an extension of the temporary employment phase in the cohorts born during the 1970s. On the other hand, other studies highlight that instability is more often linked to a change in cohorts’ composition than to a direct effect of the reforms (Malo and Cueto, 2013).
In any case, it is clear that the institutional framework affecting persons under 40 from their entry in the Spanish labour market is totally different from that affecting the cohorts born earlier. Thus, using a cut-off age of 40 seems necessary to properly analyze the Spanish labour market if institutional factors are to be considered. The suitability of this cut-off age of 40 is illustrated in Figure 1. The contribution to job destruction between 2007 and 2012 was concentrated heavily among the cohorts under 40 years of age (-102.5%), and specifically in men (-83.1%) whereas, in the cohort of 40 years and older, job creation was concentrated among women.

The EPA data also show that temporary employment has been the type most affected by job destruction in the period, accounting for 77.2%. This job destruction is heavily concentrated in the cohorts under 40 years of age (-64.8%). Likewise, permanent job destruction is concentrated only in the cohort under 40 years, while permanent job creation has increased in those aged 40 years and older (20.4%).

The cohorts under the age of 40 have therefore been the ones most affected by job destruction, which has affected all types of employment but has hit temporary employment hardest. Given the situation described above, this article aims to complete the cross-sectional characterization provided by the most common statistical sources by introducing a longitudinal perspective and taking into account some elements that cannot be addressed with these more conventional sources.

2. Labour trajectories and employment in Spain
2.1. **Flexibility and precarious trajectories in the Spanish labour market**

As stated above, the Spanish labour market is characterized by great contractual flexibility, which has generated large segments of the labour market that are particularly sensitive to the economic cycle (Banyuls et al., 2009). This increase in flexibility has been linked to an increase in instability among persons entering the labour market. It is known that age and gender are particularly relevant for explaining employment instability in Spain, just as they are relevant for explaining atypical employment in Europe as a whole (Eurofound, 2010). However, the peculiarity of the Spanish case lies in the fact that, for a large number of workers, this instability is unlikely to be corrected over the years (Toharia et al., 2001; Cebrián, 2008; anonymised authors).

Viewed from a longitudinal perspective, these individuals follow a labour trajectory that is permanently precarious and characterized by a very low frequency of transitions from temporary to permanent employment, and even by a high frequency of transitions from temporary employment to inactivity or unemployment rather than to an open-ended contract (Hernanz, 2003, García-Pérez and Muñoz-Bullón, 2007). During the period before the economic crisis, these unstable trajectories were linked to a primarily young, female workforce with a low educational level (anonymised authors). Furthermore, in the same period, linear insertion trajectories leading to open-ended contracts declined and precarious insertion trajectories became more common, accompanied by a delay in family emancipation (Casal et al., 2006; Serracant, 2009).

What seems to have happened in Spain during the years before the economic crisis is a dualization or polarization of labour trajectories (at least among younger adults), consistent with the dualization of the labour market. Through a qualitative analysis of life stories Castillo and López Calle (2007) show that the effects of a labour
market governed by employer flexibility have been the erosion of stability in both working class and middle class trajectories. However, Alonso and Fernandez (2008) state that Spanish youth is being built in a framework of income polarization between professional and technical groups and very poorly placed groups who attempt to keep increasingly precarious jobs. In the second group there is a connection between unemployment and flexible employment and young people must adapt their desires for employment stability to the flexibility requirements of companies.

The present employment crisis seems to have worsened this situation. Existing studies of the overall effects of the economic crisis on the Spanish labour market show that those most affected by job destruction are young people, women, migrants and, in general, low-skilled workers in the construction and hospitality sectors. These are the profiles that benefited from the jobs created during the expansion period (ILO, 2011; Rocha, 2012), which have been destroyed as quickly as they were created.

### 2.2. Influence of education and family origin on labour trajectories

The information on workers who have discontinuities in their initial labour trajectories in Spain is consistent with the figures for neighbouring countries, indicating that people with low levels of education, women, and those working in low-skilled occupations are the main ones affected by a concatenation of temporary jobs and low wages (Fenton and Dermott, 2006; Mills et al. 2008). However, Cueto and Malo (2010) show that the role of educational level in shortening the initial period of temporary employment in Spain has decreased, so even workers with a high educational level remain in the unstable segments of the labour market.
In a study based on the EPA, Toharia et al. (2001) identified fairly well-defined social patterns of labour mobility in the Spanish labour market. They observed some degradation of the ports of entry into the labour market: less access to professional jobs and greater access to unskilled service jobs. They also found that to some extent less qualified young workers were expelled by more qualified workers from fairly unskilled jobs, thus creating a situation of over-qualification (or underemployment). Indeed, Spain has the highest level of over-qualification in Europe (OECD, 2007) and it is a highly persistent phenomenon (García-Montalvo, 2008). According to Ortiz (2010), over-qualification in Spain is linked to mature and well-educated young people, with a high presence of women in administrative and other white-collar jobs. The author shows that although in some countries over-qualification is a mechanism used by young people to guarantee a stable job, in Spain it can involve being “trapped” in temporary employment owing to the strong labour market segmentation. It should further be noted that, as Carabaña (1997) states, the strategy of using the formal education system to obtain credentials that allow a good (or fairly good) integration in the labour market in Spain has spread to all social levels. This generalization may well explain why this strategy is less effective as a mechanism for social mobility (Martínez Celorrio and Marín, 2010) and why other resources linked to social background, such as cultural or relational ones, are becoming more important for labour market insertion. This feature of the Spanish social structure is shared with other Mediterranean and Eastern European countries, where social mobility linked to educational credentials has remained lower than in Central and Northern Europe (Abrantes and Abrantes, 2014: 392).

In fact, family and social background are particularly important in Spain because the educational system is not very egalitarian in terms of attainment (Miguélez and Recio, 2010; Bernardi and Requena, 2010). A low economic capacity of families
reduces the possibilities of educational investment, as is evident among the immigrant population (Cachón, 2008). The training and employment trajectories of young people with a middle-class background are longer and more complex, involving trial and error, than those of young people with a working class background (Casal et al., 2006; Cachón, 2008). In the case of Catalonia, Miret et al. (2008) show that there are still linear trajectories among young people in the transition from training to employment, and that social background plays a central role in this process: longer study and late integration in the labour market occur among young people whose parents have a higher educational and occupational level.

Social background thus partially mitigates the lack of direct connection between educational attainment and labour market position. This situation leads some authors to state that uncertainty and family dependence are prolonged in all groups, but with different effects depending on social background (Cachón, 2008; Recio, 2009). Actually, as Carabaña (1997, 2013) points out, educational capital interacts with other personal and family capitals, which are unequally distributed according to social background. Hence, this is why our analysis takes into account family social background as a relevant factor in the development of labour trajectories. In this way, a more accurate picture of the effectiveness of educational credentials in the current employment crisis will be obtained.

3. Methods and data

3.1. Database used

In the absence of panel surveys at Spanish level, the database used for the analysis is the Inequalities Panel (PaD) of the Jaume Bofill Foundation (Fundació Jaume Bofill, 2012)
conducted in Catalonia between 2001 and 2012. The PaD of the Jaume Bofill Foundation is based on a panel survey that began with a sample of 5757 individuals over 16 years of age from 2000 households in Catalonia. The PaD has two types of questionnaire, a household one and an individual one (Fundació Jaume Bofill, 2008). We have used the individual one, which means that we worked with an initial matrix of 4030 individuals in the wave of 2007.

We analyze the five waves for the period 2007-2011. We take 2007 as the first year of the series because towards the end of that year unemployment started growing among the working population in Spain after years of progressive decrease. We take 2011 as the final year because it was the last year in which the survey was conducted through a face-to-face questionnaire. The series of five years obtained is greater than the three years of EU-SILC available for Spain. Furthermore, the database used gives us information that cannot be obtained with other longitudinal databases existing in Spain, such as the Continuous Sample of Working Lives (MCVL), which is based on administrative records and does not collect data on the individuals’ family social background, which is a key dimension in our analysis.

3.2. Analyses and variables considered

The data has been processed in two stages. We first performed a cluster analysis to group different types of trajectory for the period 2007-2011. Individual trajectories that formed the basis of this descriptive analysis were built by computing the presence of

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4 The Spanish economic crisis has not only affected the situation of workers in the labour market. Owing to a lack of funds, the Jaume Bofill Foundation, which developed the Panel, carried out the 2012 wave by telephone and thereafter discontinued it.

5 With margin error of 2.9% for a confidence level of 95% and \(p=q=0.5\) for the initial reference population.
situations of temporary employment, unemployment, and inactivity during the five
years considered. We then compared the occupational level at the beginning and at the
end of the period. A hierarchical cluster analysis was carried out to construct groups of
the most similar cases based on the overall similarities and dissimilarities as conveyed
through the variables. In order to do so the Ward method was followed (Milligan, 1996)
and the solution of four clusters was selected, insofar it showed the biggest differences
between the groups. This selection was based on the values obtained in the cluster
coefficients and in the partitions observed in the aggregation tree and in the distance
dendrogram (see Aldenderfer and Blashfield, 1984: 59-60, for a discussion). This
cluster analysis was performed initially for all cases whose age was between 20 and 65
years in 2011 (1139 cases) and who, during the period analysed, had ever been active in
the labour market or had been inactive but not attending formal education.

This analysis subsequently has allowed us to comparatively situate and
contextualize within the whole population the trajectories of the subsample of cases
between 20 and 40 years (510 cases), with which we later have performed a
multinomial logit model. We analyzed this age group because, as noted above, the
individuals that compose it shared a similar institutional context since their entry in the
labour market and they have suffered the most job losses during the economic crisis.

The analysis included inactive people who were not studying because we
consider that labour trajectories are influenced by different levels of participation
(negotiated and not negotiated) in relation to different types of work (formal, informal
and domestic) carried out by the household (Wallace, 2002). Thus, life courses should
be considered as interrelated with the different types of work mentioned (Anxo et al.,

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6 Frequency of unemployment, temporary employment and inactivity in the period 2007-2011 take values
from 0 to 5, and increase in occupational level between 2007 and 2011 had values from 0 to 1. In this
latter variable, promotion included the transition from unemployment or inactivity to any employment
situation.
in which the continued participation of certain profiles in the formal labour market is linked to a reduced or discontinued participation in relation to the other types of work, and vice versa. This participation in different types of work has an obvious gender bias, so if we want to properly deal with the influence of this variable when explaining labour trajectories and life courses, we must include these situations of inactivity. We eliminated individuals who were inactive but pursuing formal studies because we believe that the period of training and labour market insertion of these persons has not yet ended, so their inclusion would cause significant distortions.

The second type of statistical procedure was the development of a multinomial logit model, using as the dependent variable the types of trajectory identified by the cluster analysis. Before performing the regression, correlation analysis and contingency tables were used to analyse the independent variables: age, sex, educational level, occupational level, sector, number of employees in the company, type of organization (public, private, mixed and cooperative), socioeconomic status of the father and mother, and educational level of the father and mother. The variables number of employees and type of organization were not included in the model because they did not show a significant relationship with the trajectory. Occupational level of the individual was also not included, because it showed a high collinearity with educational level.

A high correlation was found between the educational level of the father and mother (but not with their offspring) which means it is not recommended to introduce both variables in the model. We used the educational level of the father because it is the model in which the higher proportion of observations is correctly classified according to the predicted outcomes. The introduction of the variables related to social background

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As stated above, in accordance with the objectives of the article, this type of analysis was performed solely for cases that were between 20 and 40 years of age in 2011. The small number of cases forced us to merge into a single category some of the groups obtained by cluster analysis. See Section 4.2 for a more detailed explanation.
increases the goodness of fit of the model. Correctly predicted outcomes increase significantly in comparison with other models (not presented) that do not include them, indicating that these variables improve the model.

The type of information on social background to use in the regressions is not obvious. The classical way to consider this information in relation to educational and occupational attainment has been to use the occupational situation and educational level of the father, in what has been called the conventional model (Goldthorpe, 1984). This perspective has been strongly criticized because it gives women a subordinate position, fails to take into account the changing dynamics of the family unit and the labour market, and fails to account for the provision of all resources available in the household or family (Stanworth, 1984; Baxter, 1988). On the basis of these considerations, more accurate models have been developed, including those that consider the parent with the highest occupational and educational level (Eriksson, 1984), those that consider the parent with the lowest educational or occupational level, and those that consider the father and mother at the same level. In this framework, several empirical studies (Korupp et al., 2002; Beller, 2009; Lampard, 2012) indicate that the best results for explaining educational and occupational levels of persons are obtained by considering the status of the father and the mother, as both are key for defining the set of economic, cultural, social and symbolic resources and capitals. Therefore, all the above authors include in the analysis mothers engaged in housework who are considered inactive, as they improve the explanatory models of the situation of the offspring and social mobility. Following these arguments, in our analysis we decided to introduce information regarding the father and mother, except when the variables were collinear.

4. Results
4.1. Types of trajectory obtained

Table 1 presents the output of the cluster analysis for the population between 20 and 65 years old and according to the age cut-off selected. It presents the means of the variables used in the computation of clusters for each resulting trajectory. The table shows the relevance of the age cut-off, as both age groups present significant differences in their share of the trajectories obtained. The 20-40 age group is characterised by having very few cases in the discontinuous activity trajectory. Moreover, compared with the 41-65 age group, it presents different forms of labour discontinuity; the temporary employment trajectory is much more frequent among the younger group, while the precarious employment trajectory presents a similar percentage in both age groups.

[Insert Table 1 about here. Half page].

As we stated above we will focus our analysis only in those up to 40 years old. As seen in the table, the largest group (54.1% of cases), which we have called Linear trajectory, shows a very low mean frequency of transitions, with none at all in unemployment and inactivity. The next largest group (about 24% of cases), called Temporary Employment trajectory, is characterized by temporary employment and also shows a frequency of unemployment higher than the average for the whole population. The group named Precarious, with 16.7% of cases, is the group with the highest mean of unemployment frequency. Finally, the group we have called Discontinuous Activity trajectory (only 5.3% of the cases) is characterized by a very high mean frequency of inactivity.
These data show that even during the economic crisis, just over half of the population aged 20 to 40 years was able to develop labour trajectories with a certain degree of stability. Nevertheless, a high percentage of the population in this age group had trajectories marked by a lack of employment security. In fact, the table shows that whereas the Linear trajectory is characterized by continuity, there have been several versions of discontinuity with different levels of instability in the period 2007-2011.\(^8\) Factors that may have caused these differences between nonlinear trajectories are discussed below.

4.2. The characteristics of nonlinear trajectories

To perform the multinomial logit model analysis (with standard errors robust to heteroskedasticity) and identify the individual, sectoral and social characteristics that influence the type of labour trajectory between 2007 and 2011, the Discontinuous Activity trajectory was grouped with the Precarious Employment trajectory. This was done to ensure a sufficient number of degrees of freedom in the model and because these trajectories were the closest in their characteristics (tested with cluster analysis and subsequent analysis of contingency tables). The independent variables were squared age (as a continuous variable), sex, educational level, sector of activity, socioeconomic status of the father and mother, and educational level of the father.\(^9\) The measures presented are the average marginal effects. They express the average effect of \(x_1\) on \(P\)

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\(^8\) As mentioned before, the database refers only to Catalonia, therefore the percentages of population affected by these diverse kinds of trajectories may be different for the whole Spain. The objective of the article is to display the characteristics of the population affected by the different kinds of labour trajectories identified, which the cross-sectional data for the entire Spanish labour market make us believe that are similar to the ones we find out in our analysis.

\(^9\) The variables number of employees in the company, type of organization, occupational level and educational level of the mother were not entered for the reasons explained in Section 3.2. Due to space limitations we are not presenting the covariates of the model. This information is available on request from the authors.
(y=1) and provide information at aggregate level on how a change in the dependent variable is related to a change in a covariate (Mood, 2010).

Table 2 shows that the factors having a significant correlation with the Precarious Employment and Discontinuous Activity trajectories put together are very different from those having a correlation with the Temporary Employment trajectory when compared with the Linear trajectory. In the Precarious Employment and Discontinuous Activity trajectories, the significant variables include many of the factors known to influence the segmentation of the Spanish labour market: being a woman and having an education below degree level significantly distinguishes these trajectories from the Temporary Employment and Linear trajectories. The magnitudes are especially high in up to primary and secondary educational levels in contrast with university degrees.

Age is only significantly associated with the Temporary Employment trajectory, but not with the Precarious Employment and Discontinuous Activity trajectories. Bearing in mind the Spanish occupational structure, this finding suggests that the Precarious Employment and Discontinuous Activity trajectories are the longitudinal reflection of workers who are “trapped” in segments of the labour market with the least employment stability, in which the passage of time does not lead to stability despite seniority and experience (hence the lack of significance of the age variable).

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10 We lose cases because they do not have values for all the variables included in the model.
Workers who have entered the labour market in recent years and would otherwise have developed a Linear trajectory may well have found worse conditions (temporary employment) than those obtained by workers with the same profile who entered the labour market before the crisis. We must be cautious with this explanation because the significance of this variable may also be a result of an age effect (the older workers may have better labour conditions as a result of their career progression). But the contextual information we have presented leads us to think that the age effect alone cannot explain this significant value.

Regarding educational level, it should be noted that an education below degree level is associated with the development of Precarious Employment and Discontinuous Activity trajectories. Therefore, it can be inferred that even investment in higher education has not been enough during the economic crisis to avoid the Temporary Employment trajectory. It only avoided the worst version of discontinuous trajectories. It is also noteworthy that those with secondary education are less likely to be in the Temporary employment trajectory in contrast with those with a university degree. Thus, during the economic crisis only workers with graduate or postgraduate degrees avoid a high presence of unemployment in their trajectories, but many are marked by temporary employment and instability. This information reflects the importance of overqualification in Spain (Ortiz, 2010).

Finally, regarding the influence of social background, there are no significant values differentiating the Precarious Employment trajectory from the Linear one, although, as stated above, possessing a university degree (much more common among the offspring of the middle and upper socioeconomic categories) is significant.\footnote{Our data base did not allow testing the influence of those factors linked to horizontal differentiation (such as kind of school or college assisted, subjects and degrees studied, etc.) which can be the result also}
is also a significant relationship between the Temporary Employment trajectory and having mothers who are not neither housewives nor self-employed, business owners without employees or fewer than 10 (the former with a higher effect) and fathers who are middle management, technical staff or non-manual employees. The family model of this trajectory is thus one of both parents being employees and fathers occupying white-collar jobs. This social background may indicate, first, that educational capital alone has not been sufficient to achieve stable labour trajectories during the crisis period and, second, that economic and relational capitals associated with certain family backgrounds (those which are not linked to families where both parents are employees) have been more effective in ensuring stable trajectories. These results put into question the idea that social background plays a role in securing a stable labour trajectory only through the educational credentials, at least during the present employment crisis.

5. Conclusions

The aim of the analysis presented in the article has been to explore what factors correlate with the different labour trajectories of younger adults between 20 and 40 years during the economic and employment crisis in Spain. A secondary objective has been to assess the importance of educational credentials as a means to ensure a stable employment trajectory during this period. Data limitations and the short length of the series analyzed make us cautious of the results obtained. Moreover, the fact that the economic crisis in Spain has not yet ended makes us unable to determine whether the observed effects are temporary or long-term.

of different educational strategies held by different social groups. Abrantes and Abrantes (2014) highlight the importance of these patterns of informal differentiation.
Regarding the first general objective, our results suggest that sex and educational level are still, during the economic crisis, discriminating variables between the development of trajectories with the highest levels of employment instability and the development of linear trajectories or, as a lesser evil, a temporary employment trajectory. Age is also a discriminating variable between those with stable trajectories and those with trajectories characterized by temporary employment.

Regarding the second objective, the findings show the high price in educational credentials paid in Spain in order to avoid the more precarious trajectories during the economic crisis. Nevertheless, according to the data, it seems that educational investment is no guarantee of stability, because it only avoids the trajectories characterized by unemployment and inactivity. The analyzed data indicate that university graduates could not avoid temporary employment during the crisis, a fact that already emerged in the previous period. Thus, the significant differences between individuals developing temporary employment trajectories and those with linear trajectories are not found in educational level but rather in age and social background. The role played by the variables linked to social background present a challenge for future research; our results suggest that, being the offspring of property-owner parents allows for protection against temporary employment trajectories, independently of the educational level. This finding seems to show that, for the period studied, investment in educational credentials does not result in social mobility. This conclusion contrasts with the findings by Carabaña (2004), who finds that, at least up to 1991, University degrees had been a very effective vehicle for social mobility in Spain. This apparent contradiction can be partly explained by the fact that during the crisis there has not been public employment creation, due to cutbacks in public expenses, and thus educational credentials alone have lost their “market value” and other non-educational factors have
increased their role in the labour integration of graduates. However, because we could not control by other non educative resources connected to social background, this possible explanation should be taken as a point of departure for new research. Moreover, it is also important to bear in mind the role of educational systems in Mediterranean countries as a lever for intergenerational social mobility, which is less important than in other European countries (Abrantes and Abrantes, 2014).

The results also suggest relevant questions regarding gender inequality. The analysis has shown that gender is an important factor related to insecure trajectories. The increase in women’s participation in paid work, especially strong during the crisis in Spain for the less skilled (González and Segales, 2014), and their overrepresentation in the precarious situations should be analyzed in terms of gender equality prospects, as women still do the majority of the unpaid and care work. The examined dataset does not allow a careful analysis of the role of domestic and informal work in relation to labour trajectories, but, nevertheless, points at the deep differences among the working lives of women and men.

Other important questions that arise from the results should be answered by further research. The effects of the economic recession on employment and living conditions prospects for younger cohorts and groups, or how young adults with different profiles cope with the different situations described are to be researched. It is not possible, for the moment, knowing whether some of the workers having a temporary employment trajectory will be able to obtain more stable jobs or not, and therefore to what extent the crisis is producing the so-called “scarring effect”. At a methodological level, these questions should possibly be analyzed by a combination of quantitative and qualitative methods in order to better understand the different and complex dimensions involved.
References


Figure 1: Contribution to the destruction or creation of employment by age group and type of contract, 2007-2012 (%).

Source: Authors based on EPA
Table 1. Frequencies of unemployment, temporary contracts, inactivity and increase of occupational level by trajectories (cluster output) and group of age.

<table>
<thead>
<tr>
<th>Traj.</th>
<th>Age group 20-40 (N=510)</th>
<th>Age group 41-65 (N=629)</th>
<th>Total (age 20-65) (N=1,139)</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
</tr>
<tr>
<td></td>
<td>16.7</td>
<td>54.1</td>
<td>5.3</td>
</tr>
<tr>
<td>Unemp.</td>
<td>1.812</td>
<td>0.000</td>
<td>0.185</td>
</tr>
<tr>
<td>Temp.</td>
<td>0.400</td>
<td>0.112</td>
<td>0.185</td>
</tr>
<tr>
<td>Inact.</td>
<td>0.517</td>
<td>0.000</td>
<td>2.222</td>
</tr>
<tr>
<td>Increase occup. level</td>
<td>0.588</td>
<td>0.065</td>
<td>0.370</td>
</tr>
</tbody>
</table>

Abbreviations: (1) Precarious; (2) Linear; (3) Discontinuous Activity; (4) Temporary Employment.

Source: Authors based on the PaD
Table 2: Multinominal logit model. Influence of individual characteristics, sector and social origin on labour trajectories of individuals aged 20-40 years in Catalonia, 2007-2011. Marginal effects

<table>
<thead>
<tr>
<th>Reference: Linear trajectory</th>
<th>Precarious Employment/ Discontinuous Activity</th>
<th>Temporary Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>dy/dx</td>
<td>Std Err.</td>
</tr>
<tr>
<td><strong>Age squared</strong></td>
<td>-0.0001</td>
<td>0.0001</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>ref</td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>0.1008**</td>
<td>0.0409</td>
</tr>
<tr>
<td><strong>Educational level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate and postgraduate</td>
<td>ref</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to primary</td>
<td>0.4108***</td>
<td>0.1390</td>
</tr>
<tr>
<td>Secondary</td>
<td>0.4311***</td>
<td>0.1266</td>
</tr>
<tr>
<td>Vocational training</td>
<td>0.3272***</td>
<td>0.1198</td>
</tr>
<tr>
<td>Diploma</td>
<td>0.3344***</td>
<td>0.1613</td>
</tr>
<tr>
<td><strong>Sector</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public administration</td>
<td>ref</td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>0.2588</td>
<td>0.2414</td>
</tr>
<tr>
<td>Industry</td>
<td>0.2490</td>
<td>0.1621</td>
</tr>
<tr>
<td>Construction</td>
<td>0.2798</td>
<td>0.2145</td>
</tr>
<tr>
<td>Commercial and trade services</td>
<td>0.1451</td>
<td>0.1351</td>
</tr>
<tr>
<td>Education, health and social services</td>
<td>0.1039</td>
<td>0.1807</td>
</tr>
<tr>
<td><strong>Socioeconomic level of father</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manual workers (skilled and unskilled)</td>
<td>ref</td>
<td></td>
</tr>
<tr>
<td>Middle management, technical and non-manual employees</td>
<td>0.01640</td>
<td>0.0506</td>
</tr>
<tr>
<td>Self-employed, business owners without employees or fewer than 10</td>
<td>0.0468</td>
<td>0.0741</td>
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<tr>
<td>Executives, entrepreneurs (with 10 or more workers) and professionals</td>
<td>-0.0157</td>
<td>0.0557</td>
</tr>
<tr>
<td><strong>Educational level of father</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University</td>
<td>ref</td>
<td></td>
</tr>
<tr>
<td>Up to primary</td>
<td>0.1371</td>
<td>0.1411</td>
</tr>
<tr>
<td>Secondary</td>
<td>0.1077</td>
<td>0.1551</td>
</tr>
<tr>
<td><strong>Socioeconomic level of mother</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manual workers (skilled and unskilled)</td>
<td>ref</td>
<td></td>
</tr>
<tr>
<td>Middle management, technical and non-manual employees</td>
<td>-0.0397</td>
<td>0.0472</td>
</tr>
<tr>
<td>Self-employed, business owners without employees or fewer than 10</td>
<td>-0.0434</td>
<td>0.05870</td>
</tr>
<tr>
<td>Executives, entrepreneurs (with 10 or more workers) and professionals</td>
<td>0.1088</td>
<td>0.0998</td>
</tr>
<tr>
<td>Inactive - housewife</td>
<td>0.0060</td>
<td>0.04827</td>
</tr>
<tr>
<td>N/Sig</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R2 McFadden / McFadden’s Adj R2:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NB: * Significant at <.1; ** Significant at <.05; *** Significant at <.01. ; dy/dx for the factor level is the discrete change from the base level
Abbreviations: N, number;
Source: Authors based on the PaD (Bofill Foundation)