

EXPANDED ABSTRACT

Cooperatives' demography in times of crisis

The main goal of this paper is to study how the crisis of 2008 affected the business demography of cooperatives and to compare their situation with that of the years prior to and after the crisis. To this end, the crisis period is delimited, and the pre-crisis and a post-crisis periods are established by defining the turning points in the cyclical fluctuations of the GDP by means of the deviation cycle. This methodology allows us to define these periods: 2000-2007 pre-crisis, 2008-2013 crisis and 2013-2016 post-crisis. The cooperative variables analysed are the number of establishments and employment.

The results of this work are of interest because in the field of the Spanish economy, the literature has usually dealt with the effects of the crisis of 2008 by comparing cooperatives with capitalist companies, but it has not analysed the figures of the cooperative sector by themselves, which is what is carried out in this study. Moreover, a comparison of the results of this paper with those of future inquiries will offer us the keys to set public measures and strategies that strengthen these companies before future external shocks.

The study advances through three fields of analysis: business dynamics, structural components and territorial area. Business dynamics are studied through the evolution of the entry, exit and survival rates. The structural component presents the effects of the crisis, distinguished by the size and type of cooperative. Finally, in the territorial area, the Shift-Share regional analysis technique is applied to identify and decompose the growth of cooperatives' employment between the regional effect and the sectoral effect.

The main results are the following. In the business dynamics sample, the entry rates surpass the exit rates in years of greater growth in the Spanish economy. However, before 2008 and during the crisis period, this tendency changed, and the differences in the years 2009, 2011 and 2012 were especially significant. A comparative analysis of the creation rate of the number of cooperatives and of their employment, respectively, and the tax of the variation in the GDP allows us to affirm that the crisis involved a more pro-cyclical behaviour of both variables. The correlation index corroborates this result. The indexes are higher during the crisis than in the pre-crisis period, and furthermore, in the pre-crisis period, the employment correlation index shows a slight counter-cyclical behaviour which becomes pro-cyclical during the crisis period. This seems to imply the non-existence of a refuge or defensive effect on the cooperatives in the face of the crisis situation, which is an effect that, according to the literature, has been detected in other periods of downturn.

Regarding the survival rates, calculated from one year of survival to eleven years, we observe first that the crisis diminished the rates in all the bands, except that of nine years. Second, overall, such decreases were more important in the short-term rates than in the long-term rates. With respect to employment, we can see that cooperatives which were born immediately before the crisis or even in the midst of the full crisis and survived, maintained and even increased their employment compared to the moment of their creation. This contrasts with what occurred in the older cooperatives, where employment fell in relation to the pre-crisis period. We can conclude that the seniority of cooperatives was a safeguard against the crisis, but it did not maintain the employment level.

The structural component reveals that all sizes of cooperatives lost establishments. However, the greatest decrease was in the micro and small cooperatives. Employment again shows a very important impact of the crisis on the smallest cooperatives. The results support the higher resiliency of the large cooperatives during the crisis, both because of their capacity to stay active and their capacity to preserve employment.

The analysis by class of cooperatives indicates that those that represent a greater volume, i.e. the associated work cooperatives, are those that decreased more in number and in employment. The purpose of these cooperatives, which is tied more to productive activities and to the market, made them especially vulnerable. In contrast, we observe a process of the creation of cooperatives and/or the increase in the employment of those tied to the goal of meeting common forms of needs or services, such as defence, during the time of austerity and crisis.

At the regional level, the analysis indicates important changes in the Autonomous Communities (CCAA) that presented the advantages of region and make it self-evident that the possibility to preserve employment did not occur as a result of the high presence of cooperatives and the cooperative culture in the CCAA. In this way, the crisis of 2008 does not conform with the established literature in this field, which affirms that the relationship that often develops between the territory and the employment of cooperatives depends on the significance of such companies in it. On the other hand, the results show that in most CCAs, the industrial and construction sectors were the most affected, which is in line with the characteristics of the crisis. However, before the decrease in economic activity, both presented low sectorial advantages, which indicates that the cooperatives in these sectors had already experienced difficulties with consolidation and expansion before the crisis. Regarding the agricultural sector, if we compare it with the two previous sectors, we can see that its disadvantages in many CCAs were relatively diminished, except in those with more advantages, e.g. the Murcia and Valencian Communities. Finally, the service sector is the one that, among all the CCAs, presented less relative loss in its sectorial advantage.

Some of the factors that may have influenced the previous results are the following. Regarding the greater cyclical symmetry, the fits indicate that there were two factors that played a fundamental role. The first is the access to financing. If, during periods of upturns, cooperatives already have more difficulty in accessing sources of finance, then during the crisis, the widespread closure of financing channels had a relatively important effect on their degree of creation and survival. The second is the legal frame and the role of social economy promotion policies. In spite of the "political statements" recognising the need to give value to the social economy, the real advances were almost non-existent. Spanish Law 5/2011, of 29 March, of Social Economy, whose main aim is to establish a common juridical frame for the group of entities that integrate the social economy and to determine measures to promote it, has not been the subject of regulatory development or suitable implementation. Moreover, during the crisis, the budgetary cuts implied a reversal or a deficiency in the implementation of the promoting measures, which had negative effects on the resistance of the cooperatives' employment. In a contrary sense, we want to point out two strategies that helped capitalist companies that were already consolidated to survive in the crisis, i.e. innovation and the opening to the international market, which were observed in some of the oldest cooperatives and explain their higher resiliency.

In conclusion, the number of cooperatives and of their employment are evidence that the crisis triggered a change in their relation to the business cycle. The increase in the cyclical behaviour of both variables makes it self-evident that during the crisis, the cooperatives were more sensitive to the phases of the cycle and did not present the refuge effect that some studies centred in other periods had evidenced. The greatest resilience was linked to size and seniority.

KEYWORDS: Cooperatives, cooperative employment, economic crisis, analysis Shift-Share, business dynamic, sectors and classes of cooperatives.