

Survival of Labour-owned Firms: a theoretical approach

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Merkataritzako enpresekin –ME– alderatuta langileen jabetzako enpresek –LJE– duten iraupenari buruzko planteamendu teorikoa aurkeztu da azterlan honetan; batak eta besteak kapitalaren jabetza nola konfiguratuta duten hartu da oinarritzat. Bien aldeko argudioak daude. Azterlanaren ondorio nagusia hau da: LJE-en iraupenari buruzko teoria ekonomikoaren iragarpen zoritzarrekoak eta Espainian garapenean eta funtzionamenduan duten arrakasta ez datoz bat.

Giltza-Hitzak: Langileen jabetzako enpresak. Kapitalaren jabetzaaren konfigurazioa. Errendimendu ekonomikoa. Enpresaren iraupen ekonomikoa.

Este estudio presenta un enfoque teórico relativo a la supervivencia de las empresas propiedad de trabajadores (EPT) frente a las empresas mercantiles (EM) como resultado de sus distintas configuraciones en cuanto a propiedad de capital. Abundan los argumentos a favor de unas y otras. La conclusión principal de este análisis subraya la divergencia existente entre las funestas predicciones de la teoría económica respecto a la supervivencia de las EPT y su éxito en cuanto a desarrollo y funcionamiento en España.

Palabras Clave: Empresas propiedad de trabajadores (EPT). Configuraciones de la propiedad del capital. Rendimiento económico. Supervivencia económica empresarial

Cette étude offre une approche théorique relative à la survie des entreprises propriété des travailleurs (EPT) face aux entreprises commerciales (EC), comme résultat de leurs différentes structures de propriété du capital. Nombreux sont les arguments en faveur des unes et des autres. La principale conclusion de ce travail d'analyse met en relief la divergence existante entre les funestes prédictions de la théorie économique relatives à la survie des EPT et leurs succès de développement et de fonctionnement en Espagne.

Mots Clés: Entreprises propriété des travailleurs. Structures de propriété du capital. Rendement économique. Survie économique des entreprises.

1. INTRODUCTION

This paper presents a theoretical approach of the economic survival of Labour-owned firms (LOFs), in contrast to that of the mercantile firms (PCFs), as a result of their distinct capital-ownership configurations. The basic reasoning of this work relies on two main pillars. The first is the rising incidence of LOFs within the entrepreneurial structure of Spain. To illustrate this importance, it suffices to observe the change over time in the index of “entrepreneurial density” (the ratio of the number of enterprises per 1000 inhabitants), a common measure of social business integration within a given community (e.g. Urbano, 2006). From 1994 to 2005, this index rose from 0.13 to 0.46 in Spain, with the largest increases occurring after the implementation of the Law 4 of 24th March 1997. Second, the lack of studies aimed at evaluating the survival of the LOFs, subject which will be explained in detail further on.

In order to determine the differences between these two types of enterprises, it is important to first define the terms LOF and PCF and their legal status in Spain. Rooney (1992) distinguishes between traditional firms, with the goal of maximising benefits (PMF) and labour-managed firms (LMF) or productive cooperatives and others with similar legal structures. Included in PMFs are the ESOP (Employee stock ownership plans) and the common mercantile firms with both seeking to maximise benefits among the owners as benefits in proportion to the share of capital each owns. In the LMFs, the owners' contribution to the firm is defined in terms of their work share. Ireland and Law (1982) define LMFs as those firms where members “jointly engage in production of goods and services, where control rests with members in that important policy decisions of the enterprise reflect the desires of members and where the incomes of members depend on the residual of or surplus of the enterprise and the rules the enterprise adopts for sharing it” and where the firm's net income is distributed among the members according to a well defined formula (Pryor, 1983). Doucouliagos (1997) define the LMF as a democratically managed firm, where strategic decisions are made on the democratic principle of one person one vote, in contrast to the one share one vote system of the PMFs. Jansson (1986) also differentiates between those firms where the workers control more than 50% of the shares and those where workers' capital share is in the minority. The former are denoted as LOFs and the latter is construed as LMFs. Further, if a labour-owned firm accepts and follows co-operative principles the firm is a workers' co-operative. Hence, labour-owned firms may or may not be co-operative but producer co-operatives, such as those in the plywood industry of the US Pacific Northwest (Craig and Pencavel, 1992) are labour-owned firms. Finally it is to be pointed out that Ben-Ner and Jones (1995) define thoroughly the typology of the different names for the distribution of capital ownership within companies

LOFs operate in Spain under their own legal structure, defined in Law 4 of March 1997 and designed to promote their formation. According to this legislation, the LOF's primary characteristic is that workers with full-time,

open-ended contracts with the firm must own at least 50% of the LOF's capital. Cooperatives are more likely to belong to agriculture, but not so much in the services or industrial sectors, with some exceptions in the housing and educational areas. The end result of this discussion for the purposes of the paper rests on the presence of two types of firms, where the shareholders contribute to their respective firms either capital only (PCFs) or capital and labour (LOFs).

The structure of this study has been organised as follows: Section 2 offers a short analysis of the creation and development process of the LOFs. Section 3 provides a brief review of the most relevant contributions in the socio-economic field in order to explain the different behaviour of the LOFs and PCFs, which is a consequence of the nature of this legal form and their aims which depend on the capital structure. Section 4 outlines the reasons exposed by theoretical economics to predict the failure of the LOFs comparing it with the current situation of this legal structure in Spain. Last section provides the main conclusions of this work.

2. WHY DO LABOUR-OWNED FIRMS ARE CREATED?

In order to answer this question it is necessary to analyse the LOFs' setting up process from literature and the true motivation which has favoured the proper development of this type of firms in Spain.

According to literature, a LOF is created as a consequence of the interaction between organisational internal factors and external influences propiated by the economic climate. Excellent arguments about the internal factors of the LOFs' organisational structure which encourage or discourage the creation of this kind of companies can be found in Dow (2003) and Park, and al. (2004). The most common arguments on the negative side are that LOFs (i) exhibit a higher probability of bankruptcy, as their assets tend to be undervalued and hence have greater difficulty operating in capital markets; (ii) tend to turn into PCFs, because as the existing members' shares increase in value, it becomes expensive to be replaced by new owners and more advantageous to hire non-owner employees; (iii) experience important growth difficulties, due to the employee-owners being extremely risk averse; (iv) are inefficient, especially because of the free-rider problem; and (v) are subject to serious principal-agency problems, due to lack of incentives of individual owner-workers to monitor the performance of other owner-workers. On the positive side, employee-ownership (i) provides important incentives to motivate workers, due to the higher congruence of the goals and objectives between the managers and the owners, with the corresponding decreases in monitoring, bargaining and related conflict costs; (ii) produces more stable employment, which in turn encourages LOFs to increase their investment in human capital and thus raise the productivity of the labour force; (iii) encourages a more efficient asset utilization; (iv) leads to more open and transparent organizations; and (v) tends to generate more stable employment.

Likewise, studies indicate that the evolution of economic cycles affects the creation of the LOFs and PCFs (Bonin et al 1993). Economic growth generates an increase of employees' income, a decrease of the aversion to risk and a growing concern to participate in the decision-making process and to control working conditions which favour the creation of more LOFs and PCFs. On the contrary, during recession periods, job-finding and relocation costs go up with depressed markets; therefore LOFs could be an attractive alternative to temporary unemployment. Although economic recessions harm the thriving period of the LOFs, this growth is not just a phenomenon of adaptation (defence) to the crisis but it has proved to be an active mechanism of society which proposes alternatives, as an organisational form of a more humane way of production characterised mainly by the ability to create stable jobs in an ever increasing context of job insecurity (Grávalos y Pomares, 2001).

Nevertheless, despite the hypothesis proposed by economic literature, it is certain that the true development of LOFs took place at the end of the seventies. During the worst years of the economic crisis, governments established the need to regulate the aid destined to compensate for the loss of jobs, mainly in the industrial sector. So much so that they made those industrial workers jointly responsible thereby, to avoid unemployment they took the double role of businessmen and workers buying the company's assets and starting modernisation processes and making investments with limited help and within their means. The huge response from workers facing the closure of their companies prompted, during the eighties the Law of Public Limited LOF, Law 15/1986 25th April 1986. This law was a big step towards new methods of creating employment as it encouraged the participation of workers in the company. The implementation of this normative text was a turning point in the development and evolution of the LOFs.

Subsequently Law 19/1989 and the Real Decreto 1564/1989 (as subsidiary laws for the LOFs) introduce important new rules such as the requirement of a bigger share capital which provoked the slowing down of the creation of the Public Limited PCFs and Public Limited LOFs in particular, which gave way to Law 2/1995, 23rd March, of Limited Liability PCFs. The law propitiated a new legal reform concluding with the current LOFs Law, Law 4/1997 of 24th March 1997 (Lejarriaga 1991). This new regulatory norm of the LOFs allows for more flexibility in the creation of this type of companies. This new law closes the existing gap in which only the Public Limited Firm could obtain the rank of "labour-owned", creating the Limited Liability LOF, more appropriate to cover legally small and micro-small companies.

Thus, the decision to create a LOF involves a enterprising initiative by a group of people and the decision to establish long-term working relationships under a principle of internal democracy and solidarity among its members (Orellana, 2005). Although the utopian component could have placed a role in the creation of some of these companies, the prime motivation has always been rooted in the individual's most immediate working problems which can be solved more conclusively than at any other company due to the workers' ownership status.

3. THE FIRM'S OBJECTIVE AND ITS CAPITAL OWNERSHIP STRUCTURE

The abundant controversy surrounding companies' objectives in literature is well-known even for the PCFs (Yalcin and Renström 2003). According to economic literature companies have different objectives due to two aspects. First, we found that depending on size (Jarvis et al 2000) the common aim for big and small companies is to maximise profit whereas small companies also look for the survival and stability of their business. Secondly, there are different objectives depending on capital-ownership. The most widespread vision of pioneering works on this subject (Domar 1966; Ireland 1987; Ireland and Law 1982; Meade 1972; Vanek 1970; Ward 1958) agrees that the LOFs' objective is to maximise net rent per worker whereas the PCFs' main objective is to maximise profit. Such difference has obviously certain implications over the performance, efficiency and competitiveness of the LOFs (Morales et al 2003) which makes it different to the PCFs.

Nevertheless, several authors have questioned the theoretical points of view related to this different behaviour arisen from the capital-ownership structure. For example, Horvat (1982) questions the saliency of the traditional firm's objective and argues that LOF workers seek to maximise total net surpluses, rather net benefits per worker. That being the case the objectives of both types of enterprises are very similar. Park et al (2004) argue that, while employee ownership is associated with higher productivity, the greater survival rate of these companies is not explained by greater employment stability, rather than by higher productivity, financial strength, or compensation flexibility. This suggests that employee ownership companies may provide greater employment security as part of an effort to build a more cooperative culture, which can increase employee commitment, training, and willingness to make adjustments when economic difficulties occur. Monzón (1989) also questions the appropriateness of the traditional objective. This study maintains that the alleged differences are primarily due to the different labour's role in each type of organization, thereby giving rise to alternate decision-making processes. LOFs, with their primary concern in workers' well-being, replace net earnings with surpluses, as the main criterion to judge the firm's performance. On the other hand, a typical PCF, with its emphasis in shareholders, seeks to optimise the remuneration of its capital, whereas LOFs use capital only to ensure remuneration for the workers. As a result, any decision designed to capitalise surpluses serves to ensure the continuity of the firm's productive capacity. Hence, the primary objective of the LOFs is not to maximise earnings, but to provide paid work. Further, Bonin et al (1993) concentrate on the consequences of the LOFs switch from profit maximising to other optimising criteria that ensure workers interests in the firm's decision-making process and in their sharing of the surplus benefits.

Assuming there are differences in the economic behaviour of companies caused by the differences in the objective's function, there is a conceptual model which explains how LOFs behave differently than PCFs: the model of Ward-Domar-Vanek (Ward, 1958; Domar, 1966 and Vanek, 1970). Following the concise description of Dow (2001), Ward, Domar and Vanek's model pre-

dicts three main differences between the behaviour of a LOF and a PCF: (i) in LOFs an increase in the parametric price of production carries a decrease of offered production (an offer curve with a negative slope). This means that LOFs tend to increase employment and production when fixed costs go up; (ii) as long as the average income per partner/worker is not set by contracting conditions in the labour market, LOFs adopt inefficient behaviours in the short term, except on the long run through the entry and exit of companies; (iii) LOFs will degenerate into PCFs by employing workers that are not partners as a result of the firm's expansion, or as a substitution for the exit of partners.

Given the aim of this work, our attention will focus on the aforementioned third difference which is to be extensively explained in Section 3.

4. SURVIVAL OF LABOUR-OWNED FIRMS

The third difference described by Dow (2001), alludes to the probability that LOFs will "degenerate" into PCFs because they will contract paid non-partners workers as a result of the firm's expansion or to substitute leaving partners. In base of this assumption there is a critical assessment of the survival potential of the LOFs finding that the results show a lack of correspondence between a large part of hypothesis posed by the economic theory and the positive development of the LOFs in Spain.

According to the economic theory LOFs have a tendency to fail due mainly to two reasons. On the one hand, degeneration. LOFs tend to become PCFs because of the rent-searching behaviour of their partners, who receive a higher profit share than the salary stipulated in the current market for the type of labour service provided. Providing quality jobs are available in a competitive market at the prevailing salary, the substitution of partner by a contracted worker increases the profit share paid to the rest of partners by distributing savings among them. If all partners can be replaced by contracted workers the LOFs become with time PCFs (Ben-Ner 1984). Even when the current partners are not laid off in order to increase the individual income of the rest of the partners, those who exit the firm voluntarily can be replaced with wage earning workers so the transformation occurs at a slower pace.

On the other hand, capital investment decisions in LOFs bring to the use of lower capital intensity than the optimal supposedly reached by Trading Firms. This dynamic aspect, essential to the development of product activity and to the firm's viability is explained by two aspects of the economic analysis (Quesada, 1987). First, the special consideration given to repayments is a hindrance to reach the required capital concentration to be in optimal production point. The temptation is then to reduce jobs to increase productivity per worker and adjust the relationship. But the higher capital concentration per worker reached, cannot be sustained with an investment which is lower to the competitive company and demands higher profitability. There is thus a process of self-extinction which, in the case of constant yields on scale, derives into smaller LOFs and to the disappearance of LOFs in the case of decreasing yields.

It is widely considered that a great number of LOFs dedicate their efforts towards intensive workforce with very low productivity or to low capital intensity and are, therefore easily imitated (Morales, et al, 2003). According to Morales, et al (2003), the consequence is logical: LOFs will suffer from shortage of competitiveness and market marginalisation. If we add the difficult access to external financing and the impossibility of integrating "capitalist" partners, the determining factors can be described as important.

To avoid this situation the Law of LOFs tries to establish some precautionary measures such as the restriction in the number of permanent workers that can be contracted, obligation to provide these workers with a share of results, or the concession of certain political rights. But it is also convenient not to burden this kind of companies with restrictive normative which makes it harder for them to face competition in equal terms to the rest of companies; this, together with the current situation of the job market render those preventive measures nearly inoperative. The applicable normative is established to avoid high number of workers non-partners with a permanent contract and to facilitate the tools needed to react with flexibility to specific peaks of activity, but such reforms in the work market create employment through temporary contracts with a high level of precariousness (Jordán, 2002). In the framework of an extremely competitive economy it is clear that LOFs are forced to follow the dynamics of the PCFs regarding the employment of external labour and refusing to incorporate new partners, and keeping internal workers in unstable conditions through habitual legal mechanisms which, bordering illegality, permit successive temporary contracts. According to the Ministry of Work and Social Affairs, as of September 2006, more than 1/3 (33.9%) keep a temporary relation with their company, rising to 50.5% in Limited Liability LOFs and around 30% in Public Limited LOFs.

Despite the predictions of economic literature, empirical evidence suggests the opposite (i.e., Park et al 2004, Welbourne y Cyr, 1999, Estrin and Jones, 1992). Park et al (2004) find a higher probability of survival in LOFs with a big job stability (when compared to capitalist enterprise) as the means of an effort to build a more cooperative culture which can increase the worker's compromise, capacitation and will to face economic difficulties. Moreover, Welbourne and Cyr (1999) find that among IPO companies in 1998 when ownership extends to all employees the company achieves high rates of survival and price share rise.

Finally, Estrin and Jones (1992) suggest that this inverse proportion between worker's ownership and the survival rate is more precise as an inverse relation between the age of the company and the survival rate. These authors find that there are many cooperatives still healthy after 50 years running, and they have not found any evidence of degeneration in terms of percentage of contracted labour, productivity, profitability or capital intensity.

On the other hand, if we analyse the evolution of LOFs in Spain we observe that they have a positive situation contrary to the economic theoretical approach. At 31st December 2006 and according to data from the Ministry of Work and Social Affairs (<http://empleo.mtas.es/empleo/econo>

mia-soc/BaseDeDatos/SociedadesAltaSSocial/2006/4Trim/B_1.pdf), LOFs throw net figures of 23,626 existing firms and 130,240 workers. Taking 1994 as a base year, the number of LOFs has grown 336% in number of companies and 157% in number of jobs.

At sector level, the service and construction sectors with 56.4% and 24.2% each concentrate the highest number of firms (by tax-assessed centres), with a level of employment of 46% and 28% each of the total employment figures in LOFs during 2006. At an evolutionary level we should highlight three aspects: (i) loss of prominence of the industrial sector, from 55.5% to 24% of the total employment figures in LOFs; (ii) the increase of the construction sector's weight in the number of firms since 1996 (from 9.9% to 24.2%); (iii) and finally, note that LOFs in the agricultural sector have maintained their minority presence during the period taken into account. After the analysis of these figures in their business dimension, the existence of two types of LOFs becomes apparent: traditional industrial firms of large-medium size operate under the public limited company legal form, and, on the other hand, the more recent micro-enterprises mainly in the services sector under the limited liability company formula.

If we analyse current LOF's data from their beginning we find several interesting conclusions (see Table): 94% of existing LOFs were created from 1995 and until 2006 the number of companies has grown by 333%. Therefore we find a young and expanding formula. Nevertheless we should define that although the Public Limited LOF has 13% of firms and 28.5% employment, the spectacular growth of LOFs is due to Limited Liability Companies with more than 87% of the total of companies created in 1998. Moreover, 90.4% of firms and 87% of employment created in LOFs with ten or less employees are Limited Liability Companies. Although firms corresponding to this dimension are 87.5% of LOF, they only represent 48% of employment.

Evolution of number of LOFs in Spain according to registration date

Registration years	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<1989	1450	1269	1115	989	890	809	738	688	605	526	492	487
1989-1991	999	878	740	683	599	552	498	464	422	383	355	348
1992-1994	2211	1886	1672	1472	1324	1163	1045	943	848	746	703	687
1995-1997	753	1276	2086	1898	1661	1430	1272	1121	1005	891	853	801
1998-2000				2037	5146	7981	6921	6103	5257	4576	4118	3861
2001-2003							3844	7536	10270	9023	8000	7410
2003-2006										3248	5758	10032
Total	5455	5413	5613	7079	9620	11935	14318	16855	18407	19393	20279	23626

Source: Ministry of Work and Social Affairs data

According to the evolutive data of their creation date the survival rate of LOFs was, for firms set between 1998 and 2000 down 16% during the last three years (2004-2006), or during their first eight years 2 out of 10 firms had disappeared approximately (http://empleo.mtas.es/empleo/economia-soc/BaseDeDatos/base_de_datos.htm). Moreover, the number of LOFs created between 1995 and 1997 went down by 44% during the last six years, or analogically, during the initial eleven years the survival rate is 56%. This fact confirms the existence of solvent and robust firms which have consolidated themselves in their respective sectors.

A recent study by the Ministry of Work and Social Affairs shows that of the companies registered in the Social Security, from 1994, the whole of cooperatives (self-employed excluded) and LOFs have an inter-annual mortality rate of around 10% (<http://www.mtas.es/empleo/economia-soc/Noticias-Doc/NoticiasPortada/AmplNoticiaSupervivencia140307.htm>). It is to be noted that during the early years there is a slight higher mortality rate which then goes down. Also, according to the same study by the Ministry of Work, taking a central year of the period, with five years of existence, 51.4% of LOFs are still registered in the Social Security. The number of Public Limited LOFs that survive their first five years is 56.39% while in the Limited Liability LOFs subsector 53.62% survive. This figures show that LOFs are more perdurable than the rest of LMFs. (<http://www.economiasocial.es>).

As a consequence, the reality of LOFs in the present is very positive as they have been consolidated as the formula of choice by collective entrepreneurs to legally establish their business project in the field of the Social Economy.

5. CONCLUSIONS

For a long time LOFs have been subject to different visions related to their non-viability and to the generation of inefficiency. It is certain that despite modern trends towards globalisation and the generally adverse consequences foretold by the traditional economic models, LMFs, with LOFs in particular, have become the favourite business model of collective entrepreneurs.

A theoretical approach of LOFs' survival has been carried out from the revision of the contributions made to become acquainted with the profile of these companies. Results drive us to the following conclusions:

First, regarding employment, LOFs have shown to have the capacity to generate stable employment. This permits a stronger identification between company and worker advantageous to LOFs' productivity which in its turn ameliorates the permanence of workers in those companies.

Secondly, regarding the entry and exit of LOFs it is clear that there is an intense process in the creation of this business modality which tends to swell the whole of productive units every year. This despite the fact that

these companies will have to face the factors that make them most vulnerable before their competitors such as a smaller dimension, more unit labour costs per unit of production, and financing difficulties.

Regarding degeneration, it is observed that LOFs show high survival rates with respect to the rest of LMFs and even PCFs (Park et al 2004). This high survival rate is a consequence of the positive profile employment has in these companies together with other factors (technical, normative, subsidies and public incentives...), which have helped them to become a true mechanism in the ever more relevant and necessary policies for creating employment and enterprises.

All of the above takes us to manifest the lack of correspondence between a big part of the theories exposed by the theoretical economy and the positive development of LOFs in Spain.

As a consequence, in order to contrast the theoretical economy, it is required an investigation with, on one hand, a strong empirical content required to ascertain the degree of survival reached by LOFs compared to PCFs' survival. And on the other hand, to advance in the discovery of mechanisms, mediations, that link the firms' constitutional singularities to the peculiarities of their behaviour.

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