HIGH-GROWTH COOPERATIVES: FINANCIAL PROFILE AND KEY FACTORS FOR COMPETITIVENESS

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Abstract

Given the current economic environment, high-growth companies are particularly relevant for their contribution to employment generation and wealth.

This paper discusses the results of a survey that was conducted in order to gain a deeper understanding of high-growth cooperatives through analyzing their financial profiles and then identifying key contributing factors to their growth. To do this, we compared this particular sample with other cooperatives and other high-growth mercantile companies.

The results show the main drivers related to high-growth companies success. They are the competitive advantages based on the surveyed group, modern management techniques, quality and productivity, innovation and internationalization. Additionally, we have observed some financial strengths and weaknesses. In this sense, they are under capitalized companies with an unbalanced growth.

Key terms:

Worker cooperatives, service cooperatives, high-growth cooperatives, competitiveness factors, financial information, management tools.

ECONLIT Subject Descriptors: M100, M140, M400, P130

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1. Introduction and objectives

This is a critical time for our current economic model, especially for worker and service cooperatives, as this sector is increasingly perceived as an alternative that may improve the business and unemployment. However, according to a recent study (SCOP, 2010), only 50.8% of cooperatives survive five years after their creation.

This study focuses on cooperatives that are characterized by achieving high-growth.

Over recent decades, studying business growth has become a topic of particular relevance to all types of businesses, researchers and policy makers (Sleuwaegen and Goedhuys, 2010). Among these companies that have increased their sales over a certain number of years, there is a subgroup of companies with fast growth and high profitability. They are called high-growth companies. Such companies generate special interest because they provide high profitability (Acs and Andretsch, 1990, Henrekson and Johansson, 2008) and generate a larger number of new jobs (Birch et al., 1994). In addition, these high-growth companies are indicators of business success (Fisher and Reuber, 2003, Mateos-Ronco et al, 2011).

Therefore, knowing the different characteristics of these companies is important, especially since the creation of wealth and jobs are the two primary economic objectives.

The following research has two objectives. First, we try to identify the financial profile of high-growth worker and service cooperatives. And second, we aim to highlight key factors that differentiate them from other cooperatives in order to identify the most relevant features of its business model.

2. Literature Review

Academic literature is accustomed to providing numerous business growth drivers, however the four that will be cited the most throughout this paper include: size, age, innovation and sources of available funding.

In reference to firm size, Gibrat (1931) argued that the growth of a company was independent of size. Since then there has been much controversy over whether company size can influence and or reflect company growth. Some researchers have found a positive relationship between the two variables (Acs and Andretsch, 1990), while others have found a negative relationship (Sutton, 1997). In 1998, Caves argued that growth is independent of company size until it has reached a certain minimum size. On average, most studies agree that, smaller firms grow faster than larger sized firms (Lotti et al., 2003).

Referring to the second driver, the profitable growth correlation to company age, Jovanovic (1982) argued in his thesis that younger firms grow faster because they have not yet reached the optimal size that allows them to maximize their efficiency. The negative correlation of growth experienced by older companies has proven to be successful in different studies (Evans, 1987, Yasuda, 2005 and Calvo, 2006).

The third factor in profitable growth is innovation. According to various researchers, investments made by companies in R&D will increase competitiveness and create opportunities for future growth (Aghion and Howitt, 1992, Geroski, 2000). The positive relationship between R&D and sales growth has been tested successfully in different studies (Geroski and Toker, 1996, Freel, 2000). However, there is some controversy in the literature regarding the relationship between innovation and employment generation. While some studies have found a positive relationship (Calvo, 2006), others have found a negative relationship such as Harrison et al. (2005),Their research indicates this is most likely caused from the labor savings results, which were derived from the R&D investments. Therefore, the development of high-growth companies is determined by the introduction of new ideas, innovations that improve the efficiency of the market and put pressure on larger companies to allocate resources to replicate the innovation or absorb high-growth companies. In this sense, it has been observed that the source of much technological innovation does not come from corporate R&D departments of large corporations but is created by high-growth companies operating in a unique ecosystem that are impossible to replicate by larger companies (Hannan, 2005, Harrison, 2004).

The company’s financial ability is another driver in profitable growth. Different studies have examined the correlation between the growth of companies and access to funding sources. One of the most accepted academic thesis states that the lack of financial resources hinders business growth, mainly in the case of small or newly established businesses (Cabral and Mata, 2003). This effect is smaller in cases of larger companies. Bechetti and Trovato in 2002 examined the financial structure of 5,000Italian SMEs and concluded that although access to funding sources was not an influential variable on business growth when companies had more than 100 employees, it a direct correlation in growth when the companies had less than 100 employees. In this sense, the research suggests that small companies who have a greater difficulty in getting access to funding sources and thus will grow more slowly than larger companies.

Although there is no evidence of research in the field of high-growth worker and service cooperatives, we note that in Spain there has been published several studies on high-growth companies; Galician companies (Cabanelas and Vaamonde, 1995), Basque (Cabanelas and Vaamonde, 1996), Catalan (Hernandez et al, 1999 and Amat et al, 2010), Aragon (Galve and Hernandez, 2007) and Andalusian (Villalba et al, 2008). According to Amat et al (2010), among the contributing factors for a company striving to achieve high-growth rates, having solid strategic management skills, quality, innovation, internationalization, focus on consumer, trade policy and a conservative financial policy based on self-financing and capital contributions, all of these would help give an excellent competitive advantage. On the other hand, several studies in the cooperative field have identified different factors such as financial efficiency (Domingo, J., 2001, Mateos-Ronco et al, 2011), innovation, training, strategic approach (Del Aguila and Padilla, 2010) and intellectual capital (Seguí, 2007) as their way of contributing to success.

3. Sample selection and methodology

The available analysis information for both worker and service cooperatives is quantitatively and qualitatively weak compared with mercantile companies.

For this study we conducted a specific survey in mid 2010 in Catalonia, Spain. Out of 3221 Catalan workers and service cooperative, we randomly surveyed 805 cooperatives, 25% of the cooperative pool. However, only 456 were valid responses, 345 were worker cooperatives and 111 were service cooperatives. This represents 14.15% of all cooperatives (see Figure 1).

We designed a questionnaire that was answered by cooperatives through personal or telephone interviews. The criterion for distinguishing the two groups was based on the number of employees within a company. We called the cooperatives with less than 7 workers, and did a face-to-face interview with the companies who had larger number of employees. Thus, out of the 456 cooperatives in which were valid for this study, 84 of them underwent a face interview and 372 were interviewed by telephone.

	Total worker and service cooperatives in Catalonia		**Sample**		
	Cooperatives	**%**	**Cooperatives**	**%**	**Weight of the sample (%)**
Worker cooperatives	3.053	94,78%	345	75,66%	11,30%
Service cooperatives	168	5,22%	111	24,34%	66,07%
TOTAL	**3.221**	**100%**	**456**	**100%**	**14,15%**

Figure 1. Survey pool of all cooperative worker and service provider in 2010, Catalonia, Spain

The survey was broken down into the following sections:

-The first section identified general information for identifying the cooperative such as, number of employees, main activity, sector, date of incorporation, type (worker or service), among others.

-The second section included accounting information from 2005 to 2007, which has been supplemented with data from the Registrar of Cooperatives and the SABI database.

-The third included questions on cooperative competitiveness, such as productivity, innovation, internationalization, marketing and financial aid received.

Of the 456 valid cooperatives we separately analyzed which were the high-growth cooperatives. We considered high-growth cooperatives to be those who meet two requirements: having at least a 20% increase in sales annually over the three years studied and having more than 10 workers. Thus, we identified nine cooperatives that met the following criteria, which represents 1.97% of the total 456 surveyed.

In order to expand our comparative analysis, we used a study, which was conducted in the same years ours was conducted and with 254 high-growth mercantile companies, who met the same growth rates and number of employee requirements (Amat et al, 2010).

4. Financial profile of high-growth cooperatives

This section discusses the financial profile of high-growth cooperatives, focusing primarily on their financing, asset management, profitability and growth.

For the financial breakdown (Figure 2). High-growth cooperatives have a higher level of debt than the average worker and service cooperative. Additionally, this level of debt is also higher than the high-growth mercantile companies. However, the quality of the debt, meaning the weight of short-term debt related to total debt is similar to that of the average debt of high-growth mercantile companies. The positive note is that the impact of financial expenses in the profit and loss account is less than the average worker and service cooperative and is also lower than high-growth mercantile companies.

	Debt quantity (Debts / Assets)			**Debt quality (Short term debt / Total debt)**			**Financial expenses / Sales**		
	2005	**2006**	**2007**	**2005**	**2006**	**2007**	**2005**	**2006**	**2007**
Total cooperatives	0,62	0,63	0,64	0,76	0,76	0,69	0,81%	0,81%	1,02%
High-growth cooperatives	0,68	0,66	0,72	0,78	0,73	0,73	0,87%	0,45%	0,53%
Mercantile companies	0,63	0,62	0,64	0,59	0,58	0,60	2,40%	2,41%%	2,31%
High-growth mercantile companies	0,68	0,69	0,67	0,68	0,74	0,74	1,54%	1,64%	1,30%

Source: Barcelona Chamber of Commerce (mercantile companies) and own elaboration.

Figure 2. Trends in debt ratios of high-growth worker and service cooperatives compared with other cooperatives and high-growth mercantile companies

Its short-term solvency as measured by the current ratio of high-growth cooperatives is acceptable and better than the rest of cooperatives and is in the average for commercial companies (see Figure 3).

	Current ratio (Current assets / Current liabilities)		
	2005	**2006**	**2007**
Total cooperatives	1,37	1,35	1,39
High-growth cooperatives	1,36	1,42	1,48
Mercantile companies	1,10	1,16	1,07
High-growth mercantile companies	1,28	1,22	1,25

Source: Barcelona Chamber of Commerce (mercantile companies) and own elaboration.

Figure 3. Trends in current ratio of high-growth worker and service cooperatives compared with other cooperatives and high-growth mercantile companies

Asset turnover ratios are useful to assess how well the assets are managed. As shown in Figure 4, high-growth cooperatives have higher values of these ratios, especially for non-current assets, but also for current assets. Therefore, these are signs concluding that their assets are being managed more efficiently than their comparisons.

	Sales / Non current assets			**Sales / Current assets**		
	2005	**2006**	**2007**	**2005**	**2006**	**2007**
Total cooperatives	4,5	4,4	3,9	2,4	2,4	2,5
High-growth cooperatives	8,5	8,8	9,1	2,4	3,0	3,3
Mercantile companies	1,3	1,4	1,3	1,9	1,9	2,0
High-growth mercantile companies	2,6	3,14	3,64	1,92	1,93	2,11

Source: Barcelona Chamber of Commerce (mercantile companies) and own elaboration.

Figure 4. Trends in asset turnover ratios of high-growth worker and service cooperatives compared with other cooperatives and high-growth mercantile companies

The margin on sales of cooperatives is well below the average for mercantile companies, because of the increased weight of staff costs and material consumption in relation to income. This reduced margin reduces the chances for self-financing.

However, high-growth cooperatives have a higher margin than the average cooperatives (see figure 5).

	(Net profit / Sales x 100		
	2005	**2006**	**2007**
Total cooperatives	1,00%	1,12%	1,34%
High-growth cooperatives	1,46%	2,71%	1,61%
Mercantile companies	4,20%	5,71%	5,20%
High-growth mercantile companies	3,72%	5,08%	6,66%

Source: Barcelona Chamber of Commerce (mercantile companies) and own elaboration.

Figure 5. Trends in margin on sales ratios of high-growth worker and service cooperatives compared with other cooperatives and high-growth mercantile companies

Another concern relates to the generation of financial wealth. To this end, we analyze performance indicators of assets and profitability. As shown in figure 6, high-growth cooperatives generate higher returns than other cooperatives. Although these rates are lower than those of high-growth mercantile companies, the value is still very high. The fact that return on equity exceeds returns on assets, it is an indication that debt is profitable for these cooperatives, so they enjoy favorable financial leverage.

	Return on assets (Earnings before interest and taxes / Assets)			Return on equity (Net Profit / Equity)		
	2005	**2006**	**2007**	**2005**	**2006**	**2007**
Total cooperatives	3,22%	2,75%	2,63%	6,50%	5,52%	4,94%
High-growth cooperatives	4,42%	7,76%	5,80%	11,40 %	25,37 %	18,28 %
Mercantile companies	4,7%	4,4%	4,4%	7,1%	9,7%	9,1%
High-growth mercantile companies	7,31%	10,42%	10,56%	16,15 %	26,47 %	26,76 %

Source: Barcelona Chamber of Commerce (mercantile companies) and own elaboration.

Figure 6. Trends in return ratios of high-growth worker and service cooperatives compared with other cooperatives and high-growth mercantile companies

To complete the financial profile of these cooperatives, we analyze their financial growth model. To do this, we check the growth rate in sales, assets, debts and net profit.

Balanced growth implies that sales increased more than assets, indicative of efficient asset management where debts grow less than assets; indicative of prudent financial management, and then results grow more than sales, indicating efficient cost management. In figure 7 we see that high-growth cooperatives have a more balanced growth than the rest of cooperatives due to asset growth that grew faster than sales. However, debts grow more than assets and results grow less than sales. In this regard, high-growth mercantile companies have a more balanced growth pattern.

	Total cooperatives	High-growth cooperatives	Mercantile companies	High-growth mercantile companies
Sales 2007 / Sales 2006	1,07	1,46	1,12	1,34
Assets 2007 /Assets 2006	1,10	1,33	1,15	1,26
Debts 2007 /Debts 2006	1,12	1,45	1,18	1,24
Net profit 2007 / Net profit 2006	0,96	0,97	1,01	1,81

Source: Barcelona Chamber of Commerce (mercantile companies) and own elaboration.

Figure 7. Growth ratios of high-growth worker and service cooperatives compared with other cooperatives and high-growth mercantile companies

The financial profile of high-growth cooperatives, please see figure 8, has significant strength as they have the ability to generate income with efficient asset management and increase short-term solvency. The primary weaknesses are the volume of debt and the net result, which they are insufficient to provide self-financing in order to help strengthen the equity and financial independence.

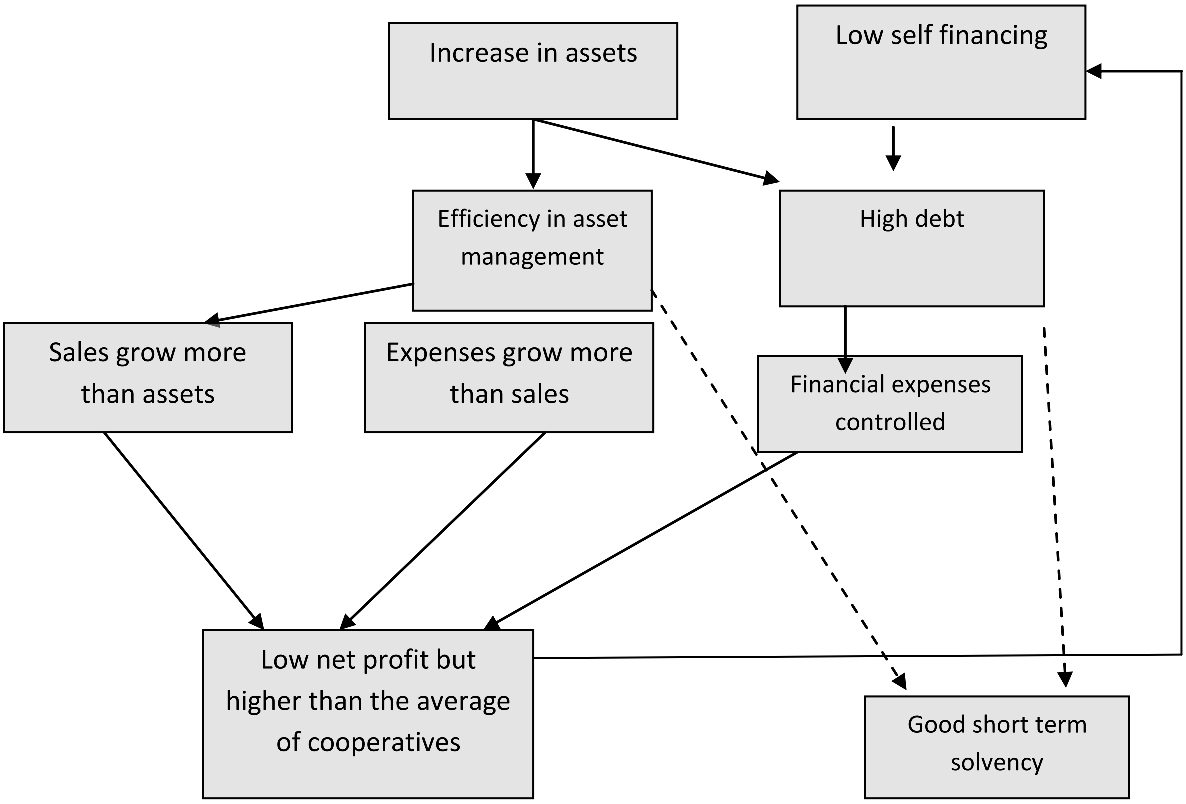

Figure 8. Financial profile of high-growth cooperatives

This profile identifies that a challenge for these cooperatives is their increasing margins to produce a greater result in order to obtain resources that promote self-financing. Thus, their self-financing will help to increase equity and thus reduce debt. In doing so, this will contribute to a more balanced growth and reduce financial risks.

5. Key factors for the competitiveness of high-growth cooperatives

In order to identify factors that distinguish between the cooperatives that grow faster than the others, the questionnaire included aspects that previous literature considered impertinent for competitiveness such as innovation, internationalization, marketing, quality and productivity, human resources and training, strategic management and investment decisions. In one part of the questionnaire the cooperatives had to put the factors in order based on importance according to their competitive structure. In figure 9 we can see that for high-growth cooperatives the key factors are human resources and training, quality and productivity is followed by innovation and then legal form.

Compared to average cooperatives, high-growth cooperatives give more importance to human resources and training, quality, productivity and then innovation. On the other hand, high-growth cooperatives give less importance to strategic management and investment decisions, legal forms and marketing.

Compared to mercantile companies, high-growth cooperatives focus more on human resources and training, and also on quality and productivity. In contrast, high-growth cooperatives give less importance to internationalization and especially to strategic management and investment decisions.

	Total cooperatives	**High-growth cooperatives**	**High-growth mercantile companies**
Innovation	8%	12%	10%
Internationalization	0%	0%	8%
Cooperative legal form	17%	12%	-
Marketing	8%	0%	10%
Quality and productivity	23%	38%	23%
Human resources and education	25%	38%	8%
Strategic management and investment decisions	13%	0%	41%
Other factors	6%	0%	0%
Total	**100%**	**100%**	**100%**

Figure 9. Factors that are considered key to competitiveness

There are also significant differences between high-growth cooperatives and other cooperatives in relation to management techniques and policies used to conduct business. As shown in figure 10, high-growth cooperatives give more importance to modern management techniques (strategic plan, business plan, budgetary control systems, suggestions, etc.) and company policies that promote competitiveness (quality and environmental policies, international activity, advertising budget, investment in R&D, level of automation, etc.). There is also evidence that high-growth cooperatives are more proactive than other cooperatives (obtaining grants from the government, launching new products, etc.).We added that information as a result of the total activity quality, high-growth cooperatives have a total of 0,2% return on sales, while the average for total cooperatives is 3%.

	Average of cooperatives with a positive answer	**Average of high-growth cooperatives with a positive answer**
Have a strategic plan	30%	78%
Have a business plan	30%	56%
Use budgets and control of variances	56%	78%
Employees participate in suggestions systems and in quality improvement	52%	100%
Have a systems to get customer suggestions	46%	67%
Have environmental policies	70%	75%
Develop international activity	11%	22%
Have a sales responsible	48%	56%
Have a budget for advertising and promotion	60%	78%
Have invested in R & D in the last year	20%	33%
Have received financial aid for R D in the last years	11%	50%
Have received other financial aids in the last years	34%	78%
Plans to launch new products in the two coming years	27%	44%
Have a higher automation level compared with competitors	10%	25%

Figure 10. Management techniques and business policies used

Finally we also questioned the cooperatives on the priority actions to address the economic downturn. In this sense, high-growth cooperatives risked more by a way of reducing non-labor costs, launching new products and improving quality (see figure 11). However, these cooperatives have not prioritized measures to reduce labor costs, which is consistent with what is stated above in connection with the importance of people.

	Average of cooperatives	**Average of high-growth cooperatives**
Non labor cost reduction	18%	22%
Labor cost reduction	15%	0%
Funding	7%	11%
Launching new products	9%	17%
Obtaining new costumers	11%	11%
Higher marketing efforts	16%	17%
Investment in employees education	2%	0%
Increasing quality	3%	11%
Increasing productivity	2%	0%
Others	17%	11%
Total	**100%**	**100%**

Figure 11. Priority actions to deal with recession

Figure 12 summarizes the business model of high-growth cooperatives following the Kaplan and Norton (1992) strategic map format. The model for these cooperatives is characterized by their commitment to people, modern management techniques, quality and process excellence, innovation, significant cost structure, internationalization, client satisfaction which brings more sales and achieving a higher return than average cooperatives. The remaining challenges of this model are controlling expenses to improve outcome and increase capitalization in order to gain financial strength.

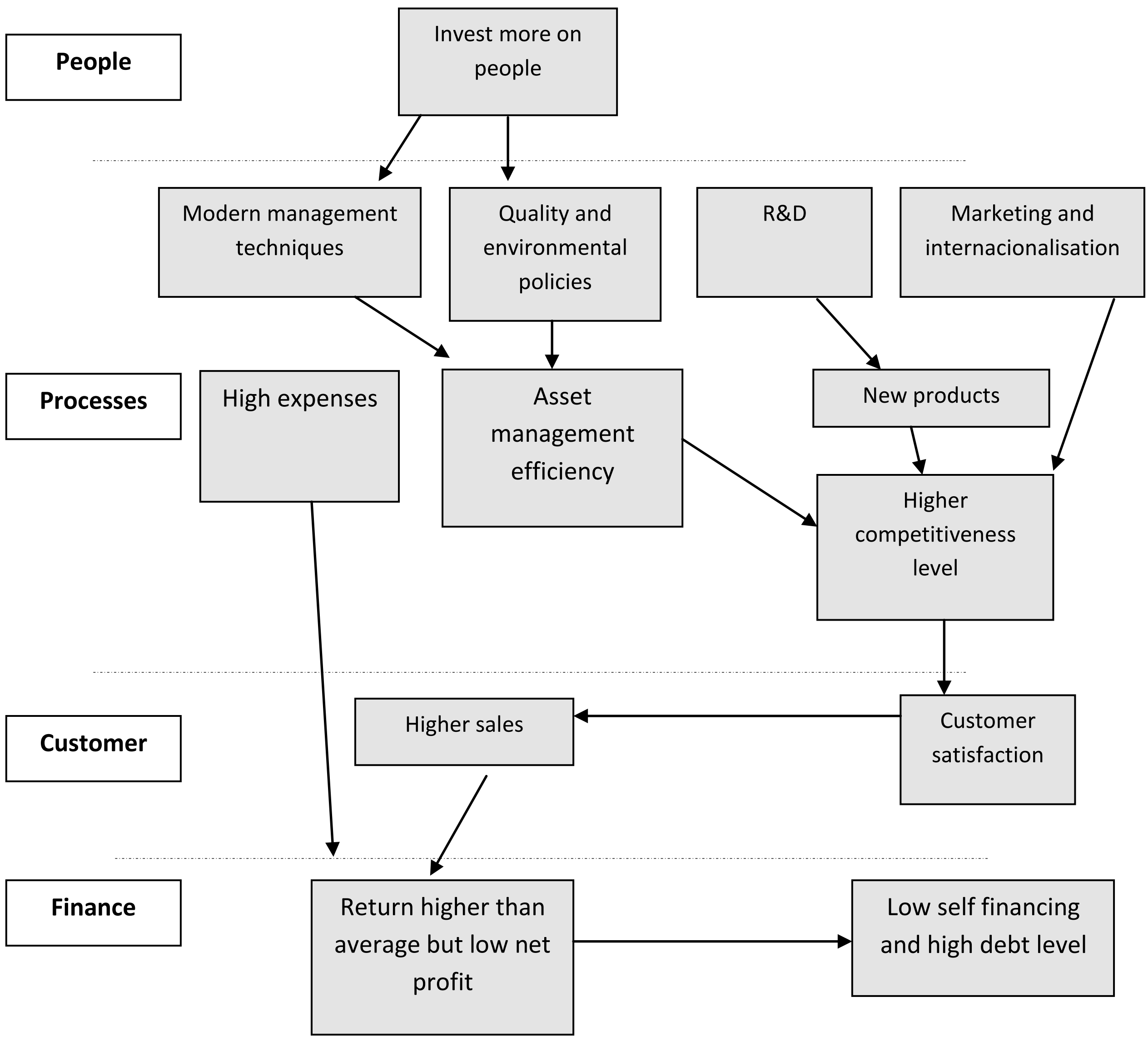

Figure 12. Business model of high-growth cooperatives

6. Conclusions

Research on high-growth companies is important because their evolution is considered to be an indicator of business success and, moreover, their companies achieve high return rates and generate more jobs.

This study has compared high-growth cooperatives with other cooperatives and high-growth mercantile companies through the lens of financial stability and the main drivers that influenced their growth.

In regards to the financial profile, cooperatives in general, and high-growth cooperatives in particular have invested heavily in assets that were financed primarily with debt. This is different from the high-growth mercantile companies, which have been characterized by financial policies based on self-financing. On the bright side, high-growth cooperatives stands in front of other groups analyzed in their asset management side, which has a small impact in interest expenses in the profit and loss account; this implies that the final effect of borrowing in the profit and loss account is reduced. In addition, these cooperatives have an acceptable level of short-term financial solvency. It is also noteworthy that high-growth cooperatives generate high returns on equity. However, this profitability has been supported by financial leverage, with a risk that entails if incomes decline in the future so will profitability. However, high-growth mercantile companies have achieved a similar performance with lower financial leverage. Therefore, they are better prepared to face future adverse situations.

High-growth cooperatives have experienced a substantial increase in sales but their growth pattern is unbalanced because they do not receive a significant increase in profits as a result of increased expenses such as wages and consumption of materials.

It is important to stress that the high-growth cooperatives factors that were identified are key in explaining that the evolution is different from that of high-growth mercantile companies. Although both groups identify product quality and productivity as key factors, high-growth cooperatives opt for the human factor as the most important variable in explaining growth. Interestingly, high-growth cooperatives did not select strategic managements another key driver to their growth.

In relation to the rest of the cooperatives, high-growth cooperatives have distinctive features in their business model. The most important factors are their commitment to the people, the increased use of modern management techniques, significant emphasis on quality and process excellence, innovation, internationalization, customer satisfaction which gives them more sales and achieving a higher return than the average cooperative. Among the remaining challenges of their business model, their control of expenditures, improved outcome and increased capitalization to better prevent financial risks.

The above work has limitations that require more research to be done, to better understand this issue. First, we must take into account the small number of high-growth worker and service cooperatives analyzed. Second, cooperatives have been analyzed over a period of three years. It would be interesting to extend the time horizon for future research to evaluate the progress of these companies in longer cycles. Another aspect to consider is that the methodology used to identify the key factors does not allow for evidence of cause-effect relationships between the various key factors. Therefore, in future extensions of this research, it will be appropriate to go deeper in the causality field in order to reach more definitive proposals on the subject under study.

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