Catalan consumer goods industries evolution to social economy

Final Project
BUSINESS MANAGEMENT DEGREE

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“Every short phrase about economics is inherently false.”

Alfred Marshall
Abstract

This work shows the evolution of the industry from its arrival in Catalonia in the 17th century to the present day. Focusing on the largest industrial sector that has ever existed: consumer goods industry. This sector is analyzed in depth, from a macroeconomic (importance in GDP, foreign investment) and microeconomic (accounting analysis of key companies) perspective. Industry 4.0, startups and especially the social economy are key concepts to explain the past, the present and especially the future in this immense sector, showing us the way to another more sustainable, richer and social industrial revolution whose objective is not to make profit but to achieve the general welfare embracing all economic agents.

Key words

Industrial Revolution Return on assets
Industry 4.0 Return on equity
Startup Gross margin
Social economy Solvency ratio
Foreign investment Cooperative

Resum del treball

Aquest treball mostra l'evolució de la indústria des de que va arribar a Catalunya al segle 17 fins avui. Centrant-me en el sector industrial més gran que ha existit: industria de bens de consum. Aquest sector industrial s'analitza profundament, des de una perspectiva macroeconòmica (importància en el PIB, inversió estrangera i altres factors) i microeconòmica (anàlisis comptables de empreses claus). La Industria 4.0, les startups i sobretot la economia social son conceptes claus per explicar el passat, el present y sobretot el futur en aquest sector immens, mostrant-nos el camí cap a un altra revolució industrial més sostenible, rica i social l'objectiu de la qual no és lucrari-se sinó aconseguir el benestar general abraçant tots els agents econòmics.

Paraules clau

Revolució Industrial Rendiment d’actiu
Indústria 4.0 Rendiment del patrimoni
Startup Marge brut
Economia Social Rati de solvència
Inversió estrangera Cooperativa
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INTRODUCTION

I have always liked to have a critical and objective point of view of the business world that no one can escape from, going from the most cautious citizen to the most audacious investor. I always look for ways and perspectives that can bring me a learning experience that it may help others in the future and keep me out of the comfort zone by advancing in my knowledge.

I will analyze and assess a possible evolution of the principal consumer goods industries of nowadays’ Catalonia towards social economy, therefore I will look at the annual accounts of well-known lucrative private companies assessed with audit skills by me on excel in order to compare their actual situation with the possible adaptation to the new trends that are ruling in the present and will rule in the near future: Industry4.0, startups focused on sustainability and cooperatives. To make the effect of a timeline, I will start with a review of the industrialization in Catalonia, whether we wanted it or not, it was important for the advancement of the economy and society.

The work is done in a way that everyone can understand the concepts clearly despite the strong ideas portrayed and based on verified information such as the Ministry of Industry, Commerce and Tourism, The Barcelona City Council or also trustworthy national newspapers like “ElPaís” or “LaVanguardia” among others. I have also used an own platform of the UB, very useful to review the annual accounts of companies.

Reserving the best for the last chapters, you will find extraordinary coincidences along with very unethical events that in many cases can take their toll on the companies' accounts. I hope that my work serves to raise awareness in society and, above all, the direction that capitalism can take, which, after all, can be even positive. Because the choices we make today seal tomorrow's destiny. However, I want to make clear that this work is not a contempt for a social ideology, it is a constructive criticism addressed to private and public powers to integrate the entire society within the same plural and responsible economic system.

An integrative solution is given in Chapter 8.1, which can be an important first step for the social economy to collaborate more often with the public and private powers. In addition, I propose the creation of a mandatory social balance with its corresponding audits controls for all companies, regardless of whether they seek profit or not. Moreover, a more individualized solution towards the market share growth of social economy companies is given in Chapter 8.2. All these solutions are adapted to the current coronavirus crisis.

To end the introduction, I want to thank Joaquín, my tutor, for the attention he has shown in my work. Guiding me with maximum objectivity and contributing his knowledge to improve my ideas and the structure of the work.
1. Industry, social economy and socialism

Many of the main consumer goods are essential goods that people need to subsist. Food and drinks, clothes and a means of transportation that allow us to travel to a workplace like a car are products that every family consume in their daily lives and can be integrated into the first scale of Maslow's pyramid, that is, the most basic need of a person. In these sectors, there are many well-known companies of Catalan origin that I will analyze in later chapters which are constantly trying to cover the needs of society. For this reason, I consider that the consumer goods industry is the key to establish a consolidated social economy that will cover the basic needs for society against what many believe, “industry and social economy are antagonistic concepts”, I want to believe that Union make force, both are private companies with little or non-subsidies from the state which increases the need for cooperation.

However, it is true that lucrative private companies are profoundly different but not antagonist, in the end they share the final objective, cover people needs in return of money.

There are a lot of differences like the legal form or the commitments you make as a company, but the real difference is that the social company only exists to fulfill the social mission for it was created, exists a social problem it must be solved doesn’t matter what it takes. In contrast, in a lucrative company will always prevail the capital factor, if the company does not make profits in three-five years and there is no social mission behind it will likely disappear. So, lucrative companies at one point may be bigger and richer but not stronger if they do not have social values.

Thus, we can define social economy companies as democratic private business organizations, based on the valuation of the person and environment above capital, in which the benefits of the activity are distributed among all its members. Cooperatives, labor companies, mutual societies, insertion companies, special employment centers, fishermen's guilds and associations in the disability sector are entities that make up this economic model.

It is an error to confuse these social economy companies with socialism that consist in an economical model which mission is to eradicate free market competition and give all the power to the public administrations that would control the means of production and distribution. However, it does not mean that they are completely contradictory concepts, for example, they agree in the fact that both defend the self-management of companies by workers.

Moreover, most of the social economy companies treats are just the contrary of socialism:

- They generate employment and stability thus they are competitive, plus they usually have a territorial market niche where the potential consumers prefer to consume origin products instead of imported ones. In contrast, the socialism economic model defends that the manufacturing process of industries will be controlled only by the state, reducing competitiveness and innovation.
They resolve sectoral or territorial crises thanks to their collective nature and the non-relocation of production. In other words, in most cases, they are anchored to the territory in which they were created, allowing it to resurface, grow and be maintained over time. This attitude is a source of wealth that prevents, in many cases, the depopulation of the territories. In contrast of the centralization of the economy and production postulated by socialism which considerably reduces the need for manufacturing in the autonomous communities. Although, today due to globalization in some cases they can expand, for example Bon Area, a Catalan group dedicated to the production and marketing of food which has 450 stores throughout Spain, among 263 supermarkets and 187 small stores, which are concentrated in Catalonia, Aragon, Castellón, Madrid, Guadalajara, Navarra, La Rioja and even in countries like Andorra.

They are enterprising and participatory, so they promote those same qualities in their members. Social economy companies are also known as "schools of economic democracy" just the contrary of socialism that restrict severely the opportunities of new business creations through high taxes.

They are socially supportive. They integrate people with disabilities or at risk of social exclusion into their organizations. In the last years, the hiring of people with disabilities has increased exponentially in private companies, and not only in change of fiscal benefits, also it is achieved a healthy diversity and richness in a company.

By this, I mean that the social economy does not belong to any political or social ideology, it is an economic and social system that can benefit all societies regardless of ideologies.

Juan Antonio Pedreño, The President of CEPES (Confederación Empresarial Española de la Economía Social) backing up my statements of before said when he was asked:

"An important characteristic of Social Economy companies is that they are companies that do not relocate, as they have a strong commitment to the territory where they carry out their activity and that, in addition, generate stable, quality and inclusive employment. The Social Economy demonstrates that it is a sustainable economic model, that generates economic and social cohesion by having companies in which the person prevails, but which also compete successfully in the market. All these companies, many of which are leaders at the territorial, national and even international level, demonstrate that a new economic model is possible where concerns for people take center stage, with a strong commitment to the territory and an innovative attitude to adapt and look to the future with enthusiasm. Plus, social economy companies are competitive in their markets, they are managed democratically, they redistribute their benefits equitably, and they demonstrate that economic rationality and social progress are compatible".
All of the treats that the president of CEPES mentioned are great but the truth is that from a business point of view, the great obstacles that they have faced always remain, to a large extent, in force: their insufficient size, inadequate organizational structure and reduced technological capacity; therefore, requiring political and industrial attention that allows a change in strategy and the elimination of these burdens in order to achieve higher levels of competitiveness. The quality of the product is a determining element in the framework of competitiveness and reflection of other factors such as innovation and research.

However, in Catalonia, the social economy is deeply rooted. In fact, it is where the first consumer cooperative in the Spanish State was founded. The social economy represents approximately 7% of Catalan GDP, an occupation that currently exceeds 180,000 people, and an activity present in practically all economic sectors.

With this macroeconomic statistic, we see that the social economy is not reduced to a mere mechanism to bring out informal work or to offer a second option due to the lack of job offers. In this sense, the process to articulate the future Social Economy in Catalonia will be much easier if social economy generates greater legal and political recognition that will help greater visibility, promotion and financing. We are therefore talking about an economic model that does not renounce competitiveness or growth expectations and aspire to coexist with the industrial economic model of today.

2. History of the industrial revolution in Catalonia

2.1 Industrial Revolution in Catalonia during the XVIII century

Catalonia has undergone a Smithian growth process since the last decades of the 17th century and during the 18th century. From the export of wine and brandy to the markets of Atlantic Europe, there was a specialization of the coastal regions in the cultivation of the vine, whereas those of the interior were dedicated to cereals. The Catalans stopped producing for self-consumption and began to do so for the market: capitalist development had begun. To this was added since the mid-1730s the emergence of Indian manufacturing, a modern sector, highly concentrated at the beginning in Barcelona and dedicated initially only to printing, but which later incorporated the spinning and weaving phases.

In this context, jenny spinning was adopted in Catalonia, the simplest spinning machine, which saved labor by replacing it with capital. In the last decades of the 18th century jenny spinning triumphed in Great Britain but not in France, where it was only adopted by state-subsidized factories but not small productive units. Instead, the spinning jenny arrived in Catalonia in 1784 and by the early 1790s it had already spread widely throughout the Principality.
2.2 Industrial Revolution in Catalonia during the XIX and XX centuries

During the 19th and 20th centuries Catalonia has been the Spanish region that has led industrial development by far. It is interesting to know how this phenomenon has occurred and especially how the rest of Spain has collaborated and even more than that, it has resigned so that it has been so.

At the outset, it must be made clear that the entrepreneurial spirit demonstrated by Catalan businessmen was fundamental when customs were freed for the rest of Spain and for trade with America in the mid-18th century. However, full integration in the Spanish State had its numerous advantages.

As we saw before, in 1741 the manufacture of cotton fabrics began in Catalonia, although it is not possible to speak of a true industrial revolution until the end of the first third of the 19th century.

The actual process of industrialization began with the growth and modernization of cotton manufacturing. A fundamental milestone was the creation in 1833 of the Bonaplata factory in the old town of Barcelona, applying for the first time in Spain the steam engine to cotton spinning, achieving great mechanization and serving as an example to the development of other similar factories. The Catalan cotton industry exercised a true monopoly in Spain. Between 1865-1869 it consumed 88% of the imported raw material and it still increased in the last part of the century until it reached 95% of consumption.

It is still curious that a region with no cotton growing fields and hardly any coal got the leadership in this manufacturing. This lack of raw materials led to products manufactured in Catalonia being more expensive than those produced in other countries, specifically Great Britain.

For the success of Catalan cotton during the 19th century, two inseparable facts occurred: The entrepreneurial spirit of Catalan businessmen and the absolute collaboration of the successive governments of Spain creating and maintaining import tariffs on foreign products, generally English, cheaper and of higher quality.

This policy of protectionism against English products was defended by the well-organized Catalan lobbies: Commission of Manufacturers of Yarns, Fabrics and Prints of the Principality of Catalonia, Industrial Institute of Catalonia and Promotion of National Work. It was a determined and won fight so that only Catalan products were consumed in Spain, despite being worse and more expensive than the English.

In 1855 the manufacturer and politician Josep Ferrer y Vidal defended protectionism in Madrid with these words: "If a Castilian buys ten sticks of Catalan gender once a year, 40 percent more expensive than English, Catalan eats three times a day Castilian bread 40 percent more expensive than Odesa's."
The ban on imports for some years and the high taxes maintained for long periods made Catalan products take over the Spanish market.

Against this protectionism, Laureà Figuerola, the minister of finance and the creator of the peseta, approved the tariff reform of 1869 named as Figuerola tariff, based on free trade, which envisaged reducing tariffs to a maximum of 15% in six years, something that unnerved the Catalan employers, therefore, he encountered powerful enemies who managed to suspend his measures. The wool, metallurgical and cotton businessmen became the bastions of protectionism that Figuerola questioned, nonetheless, it was a point of reference for the few supporters of a greater integration of the Spanish economy in the international framework in the last quarter of the 19th century.

In the end, the truth is that Spain acted as a single nation facilitating the creation of an industrial power in Catalonia based on the economic effort of the Spanish and considering that it was all of Spain that would benefit in the present and in the future.

The pressure of the national industry achieved the promulgation of the Law of Commercial Relations with the Antilles in July 1882, to capture the entire Antillean market for the Catalan consumer goods industries, thus adding this new market to the peninsular monopoly. Through this provision, the ports of Cuba, Puerto Rico and the Philippines were considered cabotage and therefore obliged to consume textiles and products from other sectors, especially the flour sector, which came mainly from Santander. On the other hand, foreign products were taxed with a tariff of between 40 and 46 percent.

This, however, only kept the pressure groups of the Catalan industry satisfied until the 1890s, so the Cánovas Tariff was forced to prevent textile imports from other countries. In 1922, Francesc Cambó, the Minister of Finance, introduced a tariff that bore his name and that benefited the Catalan industry, by preventing foreign products from entering Spain. With all these tariff measures, Catalonia was given the opportunity to lead mechanical industries because it was a good choice for Spain.

2.2.1 Catalan Industry during dictatorship

After the disaster of the civil war, the national industry was practically destroyed. Franco's dictatorial regime wanted to create a powerful industry of its own to replace imports. Nonetheless, it was not for the benefit of Catalan people that were persecuted and banned intellectually, it was only done for his strategic and political ambitions. Therefore, the creation of the INI (National Institute of Industry) had that purpose.

Some of the sectors that took advantage in Catalonia thanks to the creation of the INI were these ones:

Automotive industry: In 1950 the Spanish Tourism Automobile Society (SEAT) was established. It was founded with the participation of INI, Spanish banks and the Italian company FIAT as a technological partner. The province of Barcelona was chosen for its installation.
Another location could have been chosen, but it was not done. The SEAT installation decisively promoted technological and industrial development in Catalonia. Vehicle production grew rapidly from 3,073 in 1960 to 328,806 in 1975. Although other industries were created such as FASA Renault or Citroen Hispania, in 1960, SEAT controlled 77.20% of the national market and in 1975 still 47% of it.

This great growth of the automobile industry in general and SEAT in particular was due to the strong tariffs applied to vehicles manufactured outside of Spain. It was not until 1990 that the entry of foreign vehicles was liberalized. At that time, the dream of many Spaniards to have access to an imported car was fulfilled. Until that date, the Spanish people were forced to buy cars manufactured in national territory, so our ancestors actively contributed to the maintenance and development of national car factories, including SEAT.

**Petrochemical Industry:** The foundations of Spain's petrochemical industry were laid in 1963 when the construction of the first two petrochemical complexes was decided, Tarragona and Puertollano. Once again it was the Spanish Government that decided to establish in Catalonia the bases for a fundamental industry for the State as a whole. The expansion continued with the decision of the Council of Ministers in 1971 to install the Oil Refinery in Tarragona. Catalonia consolidated over time, generating practically 50% of the total national chemical production, extending the ramifications towards Tortosa and Martorell.

As a proof, in this picture we can see the distribution of the workforce in the Spanish industry during the 1975, the year when Franco dictator died. The communities of Madrid, País Vasco and Catalonia were the most industrialized.
2.2.2 Growth of the social economy after dictatorship

The end of the Franco dictatorship in 1975 represented a profound political change in Spain, which also favored cooperatives that already existed in the 30s, but due to the Franco regime, social economy was really restricted.

On the one hand, these years were of effervescence and dynamism in the social and cooperative aspects. On the other hand, this was a period of economic crisis and uncertainty about labor, therefore, as society became aware that the economic crisis was going to be lasting, many workers tried to find their own exit to the problem of employment through the associated work, increasing the number of cooperatives exaggeratedly, as we see in the graph of the National Statistical Institute.

![Graph of cooperatives and unemployment in Spain 1949-2010](image)

Fuente: MEySS e INE.
During these years the government proliferate a series of legislative and financial support measures for cooperatives, allowing these societies to serve as a key instrument in the fight against unemployment. Comparing the two images of the National Statistical Institute we see that in the 1976 crisis and in the 1991 crisis the number of cooperatives increased exponentially trying to counteract unemployment which, unfortunately, also grew. However, the social economy contributed to mitigate the effects creating businesses and employment. In the next picture corresponding to CIRIEC (Centro Internacional de Investigación e Información sobre la Economía Pública, Social y Cooperativa) we can see that employment in cooperatives grew after the 1991 crisis.

Juan Antonio Pedreño, The President of CEPES mentioned: "This is the model of the future: it offers stable and quality employment, full-time and with a high participation of young people and women, in addition to being more transparent and resistant to crises".

2.3 New industrial revolution due to coronavirus crisis in the XXI century

In the current year 2020, a great economic crisis is taking place in Catalonia, Spain and worldwide due to the spread of the coronavirus that is seriously affecting labor, being just one of the mild effects. Perhaps, the creation and growth of cooperatives that have innovation as a point of view could considerably help in stopping the massive unemployment that is taking place, just recalling past crises.

Moreover, we must bear in mind that this crisis is severe with the rest of the nations, leading into a foreseeable drop in globalization, a relocation of production and the strengthening of domestic industry. These events suppose an important change in the logistics of a company. Since there is a market closure, supply chains are shortened and become more dynamic, encouraging the creation of their own distribution means while encouraging investment in
R&D. These changes would benefit the social economy as an essential economic agent for job creation and added value, giving it more visibility and importance.

Lucrative industry and public administration should realize that local and social economy industry must be supported, not only for external interests but for self-interest. If they do not want to be left behind, social economy adaptation is necessary.

3. Catalonia vs Madrid economy evolution

In recent years, many changes are taking place in the industrial sector that can affect a nation's GDP. Spain has undergone a process of outsourcing, where services have gained weight in the industry sector. This damages Catalonia because a greater part of its economy depends on manufacturing, instead, Madrid has a different industrial specialization focused on the service and knowledge factor.

On the one hand, we can see that Catalonia has had a higher GDP than Madrid community during the last 20 years, although the increase percentage over the years is smaller. On the other hand, Madrid had a higher GDP in 2012, 2013 and 2018 which shows a possible overtaking to the Catalan economy according to the ministry of finance in Spain and the National Statistical Institute.
The increasing importance of services, the decline of the industry, the headquarters effect and investment in infrastructure explain Madrid greatest boom, enhancing an economy concentration effect in the Spanish capital and making the Catalan economy look worse in comparison.

Casually, many experts from the Catalan industry are studying ways to accelerate the digitization process to improve the efficiency of production chain, design new services and promote talent within organizations.

The Catalan industry does not want to be left behind in the transition to digitization. To this end, clusters from different sectors have shared perspectives and projects for the implementation of digital processes to turn the territory into a fertile ecosystem for industry 4.0. They have been doing so hand in hand with “Acció”, the agency for the competitiveness of companies created by the “Generalitat de Catalunya”.

And it is that the industrial sector in Catalonia is not merely residual. To be aware of the importance that Catalonia industry has in Spain, the turnover generated on the industrial sector in Catalonia is the highest in Spain, doubling Community of Madrid industry as we see in the Statistical National Institute picture of 2016.
3.1 Industrial Covenant in Catalonia

In June 2013, the patronal and trade unions organizations, together with some professional colleges and universities, signed the so-called “Pacte + Indústria” to defend a new productive model based on industry. These same organizations approved on April 11, 2016 a statement in which they demanded that the Parliament of Catalonia should lay the groundwork for a national covenant.

Finally, in 2016, public and private economic agents signed “El Pacte Nacional per a la Indústria” (PNI), the industrial covenant objectives were focused on:

- **Competitiveness and industrial employment**: they wanted to enhance the capacity of the industrial Catalan business through the binomial formed by internationalization and innovation.
- **Business dimension and financing**: they wanted to increase the size of the SMEs so that they can compete effectively in the global market and act as drivers of the economy.
- **Industry 4.0 and digitization**: they wanted to spread among companies the importance of the disruption that Industry 4.0 can cause in the market; as well as empowering human resources the demand of new profiles due to change in jobs.
- **Training**: they wanted to improve guidance and vocational training.
- **Infrastructure and energy**: they wanted to provide Catalonia with better infrastructural equipment, which allows to increase productivity, attract investments, improve efficiency and reduce energy costs.
- **Sustainability and circular economy**: they wanted to bet on a green and circular economy which saves resources.

All these objectives move the industry closer to a more social and sustainable economy where understanding between economic agents prevails. If synergies are created, it will likely have a positive effect on the Catalan economy in the long term.

4. Foreign investment on Catalan manufacturing sectors

The foreign sector is one of the strong points of the Catalan economy. Catalonia has a high degree of trade openness, in line with other open economies in Europe.

Nowadays, we are living in a global economy where protectionism policies can be counterproductive if we want to establish international relations leading to lower tariffs and more foreign income. The days where Spain, hence Catalonia, opt for protecting their industries are part of the past. Now with a free market economy in almost every country in the world, millions of exporting and investments transactions are taking place, therefore foreign investment is a crucial part for the PIB of a region or country.

First, we must differentiate between foreign direct investment (FDI) and indirect foreign investment. The last one also called portfolio investment is the set of loans that a country makes
abroad, it is made through loans from international organizations to governments or public companies, and through the placement of official securities of the country receiving the credit on the stock exchanges of its own country, or the country that grants the credit. Indirect investments include not only equity instruments such as stocks, but also debt instruments such as bonds.

In contrast, a foreign direct investment controls ownership in a business in one country by an entity based in another country. It is thus distinguished from an indirect foreign investment by a notion of direct control.

Therefore, it is one of the factors that influence the growth of a territory, representing an input from the rest of the world that is incorporated into the country's productive capacity, and historically it has generated positive effects in terms of the introduction of new technologies and the promotion of internationalization. Foreign direct investments can be made in a variety of ways, including the opening of a subsidiary, acquiring assets, or by means of a merger or joint venture with a foreign company.

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<td>32</td>
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<td>N.C</td>
<td>4</td>
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<tr>
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<td>100.0</td>
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<td>29.160</td>
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Fuente: Registro de Inversiones Exteriores
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<tr>
<th>CNAE</th>
<th>SECTOR DE DESTINO</th>
<th>(Clasificación Nacional de Actividades Económicas)</th>
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<td></td>
<td>Inv. Bruta</td>
<td>% total</td>
<td>Inv. Bruta</td>
<td>% total</td>
<td>Inv. Bruta</td>
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<td>15.39</td>
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<td>Comercio mayor y menor; reparación vehículos motor y motores</td>
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<td>5,016</td>
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<td>Comercio al por menor de bebidas</td>
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<td>Hostelería</td>
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<td></td>
<td>Administración Pública y defensa, Seguridad Social obrigatoria</td>
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<td>1.4</td>
<td>454</td>
<td>2.8</td>
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<tr>
<td>85</td>
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<td>27</td>
<td>0.1</td>
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<tr>
<td>92</td>
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<td>718</td>
<td>2.6</td>
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<tr>
<td>93</td>
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<td>1.9</td>
<td>825</td>
<td>2.9</td>
</tr>
<tr>
<td>94</td>
<td>Otros servicios</td>
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<td>0.2</td>
<td>84</td>
<td>0.3</td>
</tr>
<tr>
<td>97</td>
<td>Actividad de organizaciones y organismos extraterritoriales</td>
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<td>0.0</td>
<td>0</td>
<td>0.0</td>
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<tr>
<td>7.01</td>
<td>TOTAL</td>
<td>46,829</td>
<td>100.0</td>
<td>27,346</td>
<td>100.0</td>
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Fuente: Registro de inversiones Exteriores
In the two tables corresponding to the Ministry of Industry and Tourism, we can see foreign direct investment by autonomous community and sector in Spain during the last half of the decade. The foreign direct investment in Madrid has improved, in contrast, Catalonia had a downward tendency, having correlation with the GDP analysis of the previous chapter. We also see how direct investment in manufacturing and extractive industries have lost weight, in contrast, investment has increased in sectors dedicated to transport, construction, information, communication, engineering and science.

If we go into detail on the direct foreign investment of Catalonia separated by sectors and quarters during the last half of the decade, The Catalan Institute of Statistics shows us how investment in manufacturing, construction, commerce, information and communications, real estate activities and professional, scientific and technical activities stand out. Clearly showing the importance of the industry and the technological advance of Catalonia in foreign countries.
5. Main industrial consumer goods sectors in Catalonia

There are almost infinite consumer goods businesses that cover people’s needs. However, there are few of them that almost everyone needs to live or even to survive as I mentioned in the first chapter. In this chapter, I assess the Catalan lucrative industry current evolution to social economy, positive or negative, of the three main consumer goods that almost every family has bought since the beginning of the industrial era: food and drink, cloth and car. This is done with the objective of checking if their social actions, that in many cases it is a strategy to increase sales, correlate with positive accounts. If so, those benefits would be incentives to adapt to the social economy and collaborate with it.

To be as accurate as possible in my analysis I searched the national (SPAIN) accounts of the main Catalan origin companies in these sectors. The accounts are extracted from the “Centre de Recursos per a l’Aprendatge i la Investigació” abbreviated as CRAI, a research tool of the University of Barcelona. In this tool, I searched for a platform called Amadeus where only have access people registered at the university for educational purposes. Accounts can help us find patterns on the company, consequently, the evolution of the sector if the companies are important enough. The accounts are generally available until 2018, because 2019 and part of 2020 are still being audited in the current year 2020.

In all the Catalan companies analyzed, revenues will be represented in the form of a bar graph, in this way the trend of each one is clearly differentiated. All the indicated ratios are made by me, auditing the annual accounts in excels that are added in the annexes.

5.1 Analysis of the main lucrative Catalan origin food industries

Pans and Company

Pans & Company is a fast food company in the sandwich sector. The brand offers quick service snacks. In its sandwiches it offers a wide variety of types of breads and combinations of ingredients. They also have salads, different types of chips, assorted pastries, coffees and soft drinks among others.

It belongs to the restaurant group The Eat Out Group, a group that owns other brands such as FrescCo, Ribs and Santamaría. He began his history in Barcelona in 1991, with the aim of transforming the traditional Spanish sandwich into a fast-food product.

According to trustworthy newspapers like “EL PAÍS” or “eldiario”. In December of 2019, the Government of Catalonia communicated that it had opened an information file to the Pans & Company restaurant chain for denying entry and service to a group of three young people of Moroccan origin who wanted to drink coffee in a franchise of this brand located in Girona high-speed train station.

As there is video evidence, the Espai Antiracista entity in this city denounced the events on social networks through a video recorded by the young people themselves, in which an
employee explains to them that their superior had seen them on camera and had warned them not to lend them the service.

Source:
Amadeus, CRAI UB

Before the incident, according to the annual accounts, the 2018 was the best year financially speaking, the ROA was 7%, calculated dividing EBIT (earnings before interest and taxes) of 2018 by the total assets at the end of the financial year 2017, and the ROE was 18%, calculated dividing the net income of 2018 by the total equity at the end of the financial year 2017.

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EBIT</td>
<td>2.988</td>
<td>-5.165</td>
<td>-2.875</td>
<td>-2.797</td>
<td>-874</td>
<td>-16.692</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL ASSETS</td>
<td>58.854</td>
<td>42.728</td>
<td>55.736</td>
<td>47.916</td>
<td>53.528</td>
<td>60.210</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROA</td>
<td>7%</td>
<td>-9%</td>
<td>-6%</td>
<td>-5%</td>
<td>-1%</td>
<td>-21%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NET INCOME</td>
<td>2.414</td>
<td>-3.784</td>
<td>2.302</td>
<td>-3.276</td>
<td>-1.001</td>
<td>-16.060</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROE</td>
<td>18%</td>
<td>-31%</td>
<td>18%</td>
<td>-26%</td>
<td>-8%</td>
<td>-56%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Plus, the solvency ratio, calculated dividing current assets by current liabilities, had improved even though current debt is still higher than current assets. A normal situation, considering that practically all the liabilities are current liabilities since most of them are obviously short-term food providers. This ratio is very important because it measures the solvency of current assets, if it is not solvent, it could stand for serious problems because it means that even if it collected all the current assets, it would not be able to respond to the current debt and they will have to take cash from the treasury.

| Current assets | 29.054 | 11.676 | 13.798 | 8.568 |
| Current liabilities | 39.130 | 26.140 | 39.196 | 32.358 |
| Solvency ratio | 0.74 | 0.45 | 0.35 | 0.26 |
| 2018 | 2017 | 2016 | 2015 |

And it is that Pans and Company, has been an exemplary Catalan company until 2019. In 2003, just when its growth began to take off, they created the “Solidarity Club” from where they
promoted initiatives aimed at making different commitments a reality. Projects in which the company and the employees themselves were involved. They have carried out numerous campaigns to collaborate with the integration of disadvantaged groups, the protection of the environment and the promotion of culture, helping to create a more just, healthy and cultivated society.

In 2018, they started working intensively with the Ministry of Health, Social Services and Equality on the awareness campaign “There’s a way out of gender violence”, providing spaces to publicize the available resources to combat violence and facilitating the employment of people who have suffered from this kind of violence.

The 2019 incident happened because many large companies choose to establish franchises with the ambition of increasing the potential market, deriving in present and future benefits without thinking about the risks that this entails if the franchisee is not perfectly known.

This problem mainly arises because they do not look so much at the values and mission of that franchisee but rather the viability and profitability.

**Gallina Blanca**

Gallina Blanca is a Spanish company based in Barcelona belonging to the Agrolimen Group, founded by Luis Carulla Canals in 1937. Gallina Blanca is present in 70 countries on 4 continents, being a leading company in the food sector, specialized in products such as soups, broths, pasta and pre-cooked products.

Founded in 1937, in the middle of the Spanish Civil war, with the name of Gallina de Oro, from its headquarters in the Paseo de Gracia in Barcelona, it produced a novel and revolutionary product in the sector: concentrated bouillon cubes, consisting of one ounce and half of Argentine meat and a varied extract of legumes and vegetables; the production was carried out in an artisanal way, even collaborating in it the lady of Carulla, María Font.

The success of the product was considerable, and the production moved to Calle de Aragón, while the market increased its presence, creating a corporate image and sponsoring radio programs.

In 1954, the company's most famous product was introduced: Avecrem broth, whose growing demand, together with its soups, makes the company move its industrial facilities to the Barcelona town of San Juan Despí.
Gallina Blanca then decided to expand its range of products, taking advantage of its position in a market with little competition. The veteran and well-known Gallina Blanca soups, made from dehydrated products, of easy preparation that are currently still being sold, were noteworthy.

In December 2018, the Agroalimen Group, owner of Gallina Blanca, announced the closure of the San Juan Despí plant with its subsequent departure from Catalonia. Due to this suspicious transfer, strange because the Carulla family has always defended being a Catalan traditional and familiar company, Gallina Blanca had to negotiate agreements with their workers to avoid serious problems.

According to news from “El Periódico”, a well-known newspaper, Unions accepted the latest proposal to transfer the management of Gallina Blanca, which aimed to take production from the Sant Joan Despí plant to Ballobar (Huesca). The representatives of the workers had agreed to indemnities of 60 days per year worked, with a ceiling of 42 monthly payments, and early retirement for employees between 58 and 61 years of age who did not want to move. The conditions of this agreement, detailed by the plants, caused the call off for an indefinite strike that the plants hold for a week.

The conditions offered by the company also incorporated a linear bonus of 1,000 euros per year of service. Apart from the voluntary layoffs, ten people had managed to get the company to accept a relocation to other plants in the Agrolimen group, two to Hospitalet de Llobregat and eight to Rubí.

Despite this agreement, the decision made by Gallina Blanca and the Alimen group was reckless and individualistic, typical of an industry whose sole purpose is to increase capital without caring about its workers, demonstrating that they do not have a social mission. And not only this, according to the newspaper “el Economista”, the closure of the company was also made to carry out a real estate operation "purely speculative" without considering the jobs.

The unions demanded responsibility from the Sant Joan Despí town council for allowing speculation with industrial land.

Source:
Amadeus, CRAI UB
We see how there is a stagnation, even a slight drop, in revenues during 2016, 2017, 2018; curiously between the years in which the media scandal by the transfer of the production chain took place.

<table>
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<th>Gross margin ratio</th>
<th>14%</th>
<th>16%</th>
<th>16%</th>
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</thead>
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<tr>
<td>Median</td>
<td>18%</td>
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</tr>
<tr>
<td>Average</td>
<td>17%</td>
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</table>

<table>
<thead>
<tr>
<th>2015</th>
<th>2014</th>
<th>2013</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>17%</td>
<td>18%</td>
<td>19%</td>
<td>21%</td>
</tr>
</tbody>
</table>

However, they had been participating in numerous social campaigns, for example in 2014, signed an agreement with the Spanish Heart Foundation (FEC), by joining the Food and Health Program (PASFEC), which encourages the industry to develop more beneficial products for health and makes it easier for consumers to choose the best product according to the components that directly affect cardiovascular health. Apart from this agreement they had previously signed with various organizations to promote healthy habits, among which are its adherence to the PAOS Code in the fight against childhood obesity, the Havisa Plan of the Alimentum Foundation and The Food Safety Agency and Nutrition for promoting healthy lifestyle habits in the Spanish population. In addition, Gallina Blanca has a Chair in Nutrition and Health at UCAM university so that company and university were able to focus their lines of research in the field of nutrition and public health. Precisely, the accounts during these years were practically fantastic, gross margins close to or even above 20%, ROA higher than 20% and with respect to ROE, impressive data, such as 2012, where the net income exceeded the equity of the previous year.

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>TOTAL ASSETS</td>
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<td>118.707</td>
<td>103.266</td>
<td>125.449</td>
<td>123.325</td>
<td>111.856</td>
<td>94.658</td>
<td>99.596</td>
</tr>
<tr>
<td>ROA</td>
<td>19%</td>
<td>26%</td>
<td>21%</td>
<td>23%</td>
<td>25%</td>
<td>28%</td>
<td>30%</td>
<td>44%</td>
</tr>
<tr>
<td>EQUITY</td>
<td>48.179</td>
<td>69.345</td>
<td>49.433</td>
<td>51.363</td>
<td>45.489</td>
<td>41.962</td>
<td>21.937</td>
<td>20.617</td>
</tr>
<tr>
<td>ROE</td>
<td>24%</td>
<td>40%</td>
<td>35%</td>
<td>45%</td>
<td>47%</td>
<td>93%</td>
<td>102%</td>
<td>92%</td>
</tr>
</tbody>
</table>

And it is that despite the scandal, the benefits have not totally sunk, and that may also be thanks to campaigns that started during these years. For example, in 2017, they donated more than 20,000 kilos of food, which is equivalent to more than 75,000 dishes of a main meal to the Alimentum Foundation.

**Casa Tarradellas**

Casa Tarradellas is a Catalan food company founded in 1976 by Josep Tarradellas Arcarons. Its headquarters are in the town of Gurb, province of Barcelona (Spain).

The company, founded and directed by Josep Tarradellas, started with a family structure until it became one of the leading Spanish companies in the food sector. Two years after its establishment, in 1978 they created what would be one of the main products of the company, the Espetec, a type of fuet tied at one end.
In 1996 it tried its luck with the canning sector, although without reaching the desired results, having to close that line of business.

Years later, innovation in the food sector made them consolidate in the Spanish market by putting the first fresh pizza on sale, a new market sector in Spain that has risen over the years, while the Frozen pizza sector has been declining.

We can see a steady growth in sales, and it is not by chance, many things have been done well, from its successful advertising campaigns to its investments in innovation and development.

In 2018, the company installed 2,000 solar panels in the wheat warehouse that supplies its own mill in which flour is made for their pizzas. This building, which has a storage capacity of more than 10,000 tons, involved an investment of around 10 million euros and currently, with the surface of solar panels, operates 100% with photovoltaic consumption.

The company ensures that this effort is not new and that it has spent more than 15 years investing in optimizing energy consumption to try to reduce the emission of polluting gases using renewable energy, applying the social economy.
These advances are clearly reflected in its annual accounts. The gross margin has remained around 4%, both the ROA and ROE of 2017 and 2018 were 7% and amazingly the solvency ratio in 2018 was positively quintupled.

<table>
<thead>
<tr>
<th>Current assets</th>
<th>349.106</th>
<th>330.817</th>
<th>312.924</th>
<th>367.498</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current liabilities</td>
<td>69.963</td>
<td>72.718</td>
<td>63.253</td>
<td>108.705</td>
</tr>
<tr>
<td>Working capital</td>
<td>279.143</td>
<td>258.099</td>
<td>249.671</td>
<td>258.793</td>
</tr>
<tr>
<td>Solvency ratio</td>
<td>4.99</td>
<td>4.55</td>
<td>4.95</td>
<td>3.38</td>
</tr>
</tbody>
</table>

### 5.2 Analysis of the main lucrative Catalan origin drinks industries

**Cacaolat**

The Cacaolat shake was created by Joan Viader Roger, son of Marc Viader Bas, a Catalan industrialist who had founded the Latvian joint stock company in 1925. The idea of the milkshake came from a craft drink that Joan and his father saw in Hungary. Joan Viader applied for the product patent on December 4, 1931 as a "refreshing nutritious drink", being the first industrially produced in the world.

In 1971 Clesa takes control of Letona, the company name, and for that reason it also happens to control Cacaolat, the brand name. The dairy producer promotes the consumption of Cacaolat in Catalonia while increasing advertising to publicize the product in its reference areas. In 1998 the company was bought by Parmalat, and between 2007 and 2011 it belonged to Nueva Rumasa. This last company split Cacaolat from Clesa in 2010, so that it would become an independent brand. Although his intention was for it to go public, it did not.

At the beginning of 2011, Nueva Rumasa had a debt of 700 million euros that affected all its companies. Since then, Cacaolat has had serious problems maintaining its business model and jobs. To avoid its disappearance, some companies have presented offers to get the brand and consumers have mobilized under the Catalan motto "Salvem el Cacaolat" (translatable as Let's Save Cacaolat).

After a long auction process in a commercial court in Barcelona, the company was bought on November 8, 2011 by an alliance formed by the Damm beer group, the Cobega bottling company and the investment fund Victory Turnaround, which paid 130 million euros for the whole company. Cacaolat is a clear example where national and foreign investment can save an almost centennial company much loved by both Catalans and Spaniards. The income increased considerably even though the benefits were practically nil for the big debts.
Despite managing to save Cacaolat, the shareholders ambitions for quick profits to recover the investment caused a dispute with the workers who felt exploited, especially in 2018, leading to a strike. This caused an increase in production costs resulting in losses.

The claim of the striking workers was based on improving the work schedule for 2019, as well as optimizing the time conditions of the fourth shift and the organization of the staff during the weekends in summer, to reconcile working life and family. The indefinite strike, (called by the following Unions: the CC.OO, UGT and Usoc), had an impact of 24 hours a day on the production personnel, 80 workers of the total of 210 employed by the factory were gathered.
This also led to a boycott by Catalan society to support the cause of workers, holding back the potential of sales which were still pretty good due to the willingness of the people to support local brands.

The annual accounts were really affected in 2018, for example, the return on assets (ROA) was -1%, and the return on equity (ROE) was -5%. In comparison, the ROA and ROE of 2017 were 4% and 10% correspondingly.

<table>
<thead>
<tr>
<th>EBIT</th>
<th>136.579</th>
<th>144.036</th>
<th>149.359</th>
<th>147.127</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL ASSETS</td>
<td>137.943</td>
<td>145.656</td>
<td>149.359</td>
<td>147.127</td>
</tr>
<tr>
<td>ROA</td>
<td>-1%</td>
<td>3%</td>
<td>2%</td>
<td>-14%</td>
</tr>
<tr>
<td>NET INCOME</td>
<td>-1.830</td>
<td>2.624</td>
<td>-435</td>
<td>-11.632</td>
</tr>
<tr>
<td>EQUITY</td>
<td>35.311</td>
<td>33.836</td>
<td>33.746</td>
<td>34.181</td>
</tr>
<tr>
<td>ROE</td>
<td>-5%</td>
<td>8%</td>
<td>-1%</td>
<td>-25%</td>
</tr>
</tbody>
</table>

Moreover, the gross margin (EBIT/REVENUES) of 2018 was -1% while in 2017,2016,2015 were 8%/9%.

<table>
<thead>
<tr>
<th>Gross margin ratio</th>
<th>-1%</th>
<th>9%</th>
<th>8%</th>
<th>9%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

And this is not all, the solvency ratio was also affected.

| Current assets | 15.899 | 16.572 | 19.584 | 15.957 |
| Current liabilities | 15.065 | 10.549 | 12.599 | 8.428 |
| Working capital | 834    | 6.023  | 6.985  | 7.529  |
| Solvency ratio  | 1.06   | 1.57   | 1.55   | 1.89   |

<table>
<thead>
<tr>
<th>2018</th>
<th>2017</th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5.2.1 Alcoholic drinks

The wine industry, with net sales of more than 300 million euros per year, constitutes the third food and beverage sector in Catalonia. The Catalan wine sector has a very solid and competitive structure. More than 22,000 people work in the vineyards, wineries and associated services sector. There has been a continuous growth in the area covered by vineyards registered with Denominations of Origin thanks to the constant improvement in the quality of the grapes produced in these areas.

Winemakers and producers in Catalonia are constantly searching for great wines. It is a long tradition that has been enriched by the most innovative production techniques and methods. This helps them to obtain wines with a complex character, rich nuances of a territory that although it is relatively small presents a great diversity of landscapes, microclimates and grave varieties. Inside a bottle of Catalan wine there is tradition, culture, landscape, research, innovation, technology and the most important healthy ambition and passion.

In June is celebrated The Wines and Cava business forum which is a business event with the participation of producers and processors of wine and cava from Catalonia, and importers and distributors from third countries, with the aim of establishing commercial relationships between Catalan wine and cava companies and the operators of the invited markets seen in the picture below.

Freixenet

Freixenet is a Cava producer founded in 1861, headquartered in Sant Sadurní d'Anoia, Catalonia. It is the largest producer of traditional method sparkling wine worldwide, and the largest exporter of Cava.

Freixenet was started after the union of two Spanish families with a lengthy history in winemaking: the Ferrers, owners of La Freixeneda, a 12th-century farming estate in Sant Quintí
de Mediona in the Alt Penedès, and the Salas, winemakers since 1830 and the founders of Casa Sala, a wine exporter to Latin America, in Sant Sadurní d'Anoia.

In 1941, Freixenet launched its leading product, the Carta Nevada. In 1974, the company achieved international success with another cava, the Cordon Negro. Nowadays Freixenet offers public tours of the winery in which both cavas are produced; visitors are shown the underground cellars and the bottling plant before tasting the finished product of the winery situated in Sant Sadurní d'Anoia.

This company was doubting until the last moment whether to move the headquarters due to the declaration of independence or not, since a high percentage of its clients are Spanish, around 95% of Spain's total Cava production is from Catalonia and Sant Sadurní d'Anoia is home to many of Spain's largest production houses. But, finally, decided to stay when they saw that the Government had taken the appropriate measures and the situation had calmed down.

The political instability of the end of 2017 and the beginning of 2018 has taken its toll on many companies, but even more on Freixenet, given its indecision to transfer the headquarters, added to the political opinion of its leaders, such as that of the President of Freixenet, José Luis Bonet, against the referendum of October 1, 2017.

Politics has a direct impact on companies, and it is sometimes better to keep your mouth shut and plan your strategy for the future. In this case, the position of staying in Catalonia and at the same time criticize the referendum, are opposed strategies. Deriving in a double boycott, on the
one hand the rest of Spain boycotting Catalan cava and on the other hand the independent Catalans boycotting Freixenet cava in response for the words of the entity president.

This incidence caused their production costs to increase and their sales to stagnate, as we see in the annual accounts. Nevertheless, their accounts are stable and positive with a positive gross margin and solvency throughout the years. Moreover, they have been demonstrating social and environmental commitment.

At Freixenet, they are aware that the long process of elaboration of their cavas comes from the earth, from the vine, and for this reason their environmental sensitivity is understood as the result of this close link between the process of elaboration of its products and our natural environment. Proof of this true responsibility is that in 1999 they obtained the ISO14001 environmental management certificate, being the first cava company to obtain this distinction. Since then, new measures to preserve the environment have been incorporated:

- **Reductions in water consumption**: Comparing current water consumption with respect to consumption before the implementation of the ISO14001 system, the reduction is 40% per bottle produced. This reduction has been achieved using this methodology: Measure, prioritize, reduce, optimize and invest.

- **Reductions in waste generation**. Freixenet has spent years implementing objectives to eliminate or reduce the generation of industrial waste. These objectives have allowed the company to reduce by 37% the total industrial waste generated per bottle produced and by 76% the non-recoverable waste that is taken to landfill. This has been possible by eliminating the single-use packaging by reusable packaging. They have also invested in evaporation systems and in the implementation of systems to reduce losses, especially those due to glass breakage.

- **Energy measures**: They are currently working towards a double objective: to be more energy efficient and to help counteract the effects of climate change. To reduce energy, the company has sections linked to control software, incorporating Industry 4.0. Energy audits, that should be compulsory in every big group, are also being carried out. In the same sense, the Freixenet Group warehouses have been the first in the CAVA sector to verify their greenhouse gas (GHG) emissions throughout the organization, in
accordance with the ISO14064-1 standard. The objective of this integration process is to reduce CO2 emissions and contribute to the process, both of mitigation and adaptation to climate change. In this sense, it is important to highlight some of their innovations in sustainable viticulture, such as using the wood resulting from winter pruning to generate biomass; the vegetal covers planted between the rows of the vineyard to compensate the vigor of the vines and to favor the biodiversity of the soil.

- **Preservation of the natural environment:** They have been establishing collaboration agreements with various entities for the preservation of biodiversity. Installing nest boxes in suitable places in the vineyard or preparing shelters in the forest areas that border them, they can break free birds and mammals from wildlife recovery centers. They collaborate closely on European projects such as the BioDiVine project, participating in the demonstration of the benefits of biodiversity in the wine-growing landscape.

In addition, for the improvement of their processes they have had the participation of suppliers. Thanks to a close collaboration, they have managed to promote the use of reusable packaging and achieve a substantial reduction in process losses thanks to the combination of technological innovation incorporated into their processes together with the technical improvements in the materials supplied, applying Industry 4.0.

**Estrella Damm**

Estrella Damm is a lager beer made with barley malt, rice and hops, following the original recipe since its foundation in 1876. This Catalan beer is made 100% with natural ingredients collected and processed by local farmers and cooperatives, in order to preserve their maximum quality.

In March 2015 was distinguished as "the best Spanish beer of the year" by obtaining the "Spain Brewery Awards", awarded by the jury of the New York International Beer Competition.

**Source:**
Amadeus, CRAI UB
The revenues of Estrella Damm have gone from 800 million to more than 1200 million in less than 10 years, which represents a spectacular increase considering the competition of the beer market in Spain, both national (San Miguel, Cruzcampo, Amstel, Estrella Galicia, Mahou, Moritz, Dorada and more) as international (Heineken, Carlsberg, Coronita and some more). Below, we can see the favorite beer for the consumers by autonomous community in 2019, the image is taken from “LaVanguarida” newspaper.

Although Estrella Damm's main market is the Spanish Mediterranean arch (Catalonia, the Balearic Islands and the Valencian Community), it is distributed in more than 70 countries around the world, the United States and the United Kingdom being the two main ones.

Getting deep into the accounts, the average gross margin of the last 10 years has been an 11%, quite impressive if we take into account that in all the years have been equal or above 10%.

ROA and ROE have been very stable in recent years, with an 8% and 14% as more poor data in 2018.
The accounts are very good from the company that has 49% of Cacaolat shares and has also invested in some others such as Veri, Letona and Rodilla.

And it is that they have not only known how to invest, they have also learnt how to transmit to society that their product is not only a drink, it is an experience. Moreover, they perfectly know that if you also participate in countless social actions, you win the love of the people, getting loyal customers.

They work for the labor inclusion of people with functional diversity and at risk of social exclusion. Logistics department integrates people from the Cares Foundation into its Prat activity, a special employment center that works for the employability of people with functional diversity.

Rodilla, a sandwich company acquired by Damm, is committed to youth employment and integration of people at risk of social exclusion. It collaborates in the initiatives promoted by the Foundation, the Spanish Red Cross, the San Martín de Porres Foundation, Barcelona Activa and the Madrid City Council. This company also collaborates in “Batido solidario” campaign by creating two ice cream recipes whose generated sales were donated to the “El Jardín de mi Hospi” project where they rebuilt disused roofs of hospitals throughout Spain to turn them into beautiful gardens where hospitalized children can go out to play.

Damm collaborates with the Seur Foundation in the "Plugs for a new life" initiative, a project aimed at providing children without material resources or medical treatment not regulated in the health system. The Damm centers, in some cases, are dyed blue to support autism sufferers on World Autism Awareness Day, red to join World AIDS Day, and pink to commemorate World Fight Day Against the breast cancer.

For Damm, moving from the linear economy (produce, use and throw away) to the circular economy (produce, use, regenerate / recycle) has been the logical process to preserve and maintain the value of products and materials as long as possible, creating a new relationship with clients.

For the elaboration of their beers they use barley transformed into malt together with rice and hops. From the cooking of these elements comes a by-product, bagasse, which has excellent nutritional properties for feeding cows thanks to its important protein content. Instead of discarding it, more than 90,000 annual tons of bagasse that are generated, is used entirely to
feed the cows of farms that are dedicated to the production of milk, for example, La Fageda, a famous Catalan cooperative.

At the El Prat factory, they have a new pasteurizer, which represents energy and water savings of 75%. Taking advantage of this remodeling, the mercury vapor discharge lamps have been replaced by LED luminaires, which represents a reduction in electricity consumption of 85%. The 100% of the electricity consumed at the Prat factory comes from renewable and certified green energy sources.

About gender, equality between men and women is a reality within the company that became effective with the development of the Damm Equality Plan actions. In 2017, Rodilla constituted the negotiating table for the renewal of the new Equality Plan, whose workers are 73% women and 70% young people.

5.3 Cloth sector

Mango

Punto Fa, S.L., trading as Mango, is a Catalan clothing design and manufacturing company, founded in Barcelona, by brothers Isak Andic and Nahman Andic.

MANGO's workforce is made up of 15,970 people, of whom 80% are women. People of 57 nationalities work at the headquarters and stores in Spain.

There are advantages and benefits for employees that contribute to improving their well-being, such as: flexible hours or temporary suspensions for personal reasons, intensive working hours on Fridays or the eve of a holiday, free public transport, the possibility of geographic mobility and more.

Source:
Amadeus, CRAI UB

It has had a spectacular growth in recent years despite the great competition (H&M, Zara, Bershka, Pull&Bear, Stradivarius and more). But, we can verify that there is a clear recess in the annual accounts from 2015 till 2017, it is true that sales were the highest in its history in
these years, however the ratios are quite poor, the most surprising fact is that during these years they did not carry out a single social campaign.

<table>
<thead>
<tr>
<th>EBIT</th>
<th>-14</th>
<th>-13.676</th>
<th>-61.855</th>
<th>39.630</th>
<th>122.386</th>
<th>144.123</th>
<th>132.479</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL ASSETS</td>
<td>1.811.700</td>
<td>2.032.287</td>
<td>2.214.760</td>
<td>2.273.090</td>
<td>2.367.198</td>
<td>2.110.758</td>
<td>2.133.643</td>
</tr>
<tr>
<td>ROA</td>
<td>0%</td>
<td>-1%</td>
<td>-3%</td>
<td>2%</td>
<td>6%</td>
<td>7%</td>
<td>6%</td>
</tr>
<tr>
<td>NET INCOME</td>
<td>-35.674</td>
<td>-33.166</td>
<td>-60.940</td>
<td>11.874</td>
<td>77.876</td>
<td>91.181</td>
<td>113.447</td>
</tr>
<tr>
<td>EQUITY</td>
<td>594.395</td>
<td>620.342</td>
<td>706.512</td>
<td>749.232</td>
<td>754.814</td>
<td>740.266</td>
<td>718.377</td>
</tr>
<tr>
<td>ROE</td>
<td>-6%</td>
<td>-5%</td>
<td>-8%</td>
<td>2%</td>
<td>11%</td>
<td>13%</td>
<td>16%</td>
</tr>
</tbody>
</table>

In contrast, in 2014, Mango joined the first “RunTheParty” event aims to raise awareness about the benefits of healthy habits and will allocate a part of the earnings to various associations and NGOs. Moreover, they had invested part of the benefits in the financial year 2013 to create around 2,000 jobs.

<table>
<thead>
<tr>
<th>Gross margin ratio</th>
<th>0%</th>
<th>-1%</th>
<th>-3%</th>
<th>2%</th>
<th>6%</th>
<th>8%</th>
<th>8%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median</td>
<td>6%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It was not until 2018 when the numbers begin to improve, curiously, when they carried out a campaign to commemorate the International Day to Combat Breast Cancer on October 19, MANGO put on sale a collection of T-shirts and other products for charitable purposes, in the framework of a new collaboration with the Fero Cancer Research Foundation.

5.4 Car sector

SEAT

Seat is a Catalan automobile manufacturer with its head office in Martorell. As I explained in chapter 2, it was founded on May 9, 1950, by the Instituto Nacional de Industria (INI), a Spanish state-owned industrial holding company. It quickly became the largest supplier of cars in Spain. In 1986, the Spanish government sold SEAT to the German Volkswagen Group of which it remains a wholly owned subsidiary.

The headquarters of SEAT, S.A. are located at SEAT’s industrial complex in Martorell near Barcelona. By 2000, annual production peaked at over 500,000 units.
In total, up to 2006, over 16 million cars have been produced including more than 6 million from the Martorell plant, with three-quarters of the annual production being exported to over 70 countries worldwide.

SEAT today is the only major Spanish car manufacturer with the ability and infrastructure to develop its own cars in-house.

Seat has always been a competitive brand despite the great competition in mid-range cars (Ford, Renault, Peugeot, Citroen, Opel, Fiat, Mini, Dacia, Hyundai, Nissan, Volvo, Volkswagen and more), by way of proof, the best-selling car in Spain during 2019 was the Seat Leon with 35,847 units sold.

From 2014 to 2018, when it started to become more socially responsible as a brand, the annual accounts improved, going from a ROA and ROE of -4% and -13% to 4% and 19%.

In 2014, Seat engaged with employees, regulators, customers, suppliers, communities, public authorities, and other stakeholders to improve the understanding of environmental requirements and expectations. The contributions of the stakeholders are considered and reflected in their Environmental Compliance Management System and in their operations, products and services. SEAT was committed to reduce CO2, by implementing efficient projects to reduce energy consumption in the production process. As a reward, it had received various grants from the European Union. We can see an example below “New energy saving technology in sheet metal robots”:
They created an occupational health and safety management policy in 2018, we can see the beginning and the end with the corresponding signatures of the declaration.

6. The new industrial revolution of XXI century

The time passes, and it seems that technology integrates much deeper into our day to day. The same happens with the development of industries, therefore, it would be a disadvantage for consumer goods industries not to adapt to the innovations that occur in the business field. Since over the years and with the arrival of new trends, the public’s perception changes and therefore, their needs.

In addition, although at first instance the impact of technologies may be confusing, the mission is really to promote the saving of time in business processes to allocate it to other relevant activities at the industrial level while being sustainable.

Technologies must be valued for what they are, tools that seek to automate business management. The new technological era has offered great advantages at the industry level, such
as production with Industry 4.0, an important trend that seeks to save time in various areas of a business.

We are facing a true revolution in the technological system, which seeks to increase the growth of industries following a more sustainable methodology. The fourth industrial revolution brings with it an impressive amount of benefits within the reach of each company without being directed to a specific prototype, which highlights the power of diversity.

This modern tool is extremely recent, which has helped it to form an impressive trend in today's world. The estimated benefits that this innovation will offer will leave us impressed, reinforcing the certainty that we are facing an era where technological power reigns and tries to change our perception of things.

6.1 What is Industry 4.0?

Industry 4.0 involves the complete digitization of value chains through the integration of data processing technologies, smart software and sensors; from suppliers to customers, to be able to predict, control, plan, and produce intelligently, which generates greater value for the entire chain.

The aim of the "Industry 4.0" concept is to computerize the factory world. This involves the technical integration of cyberphysical systems (SCF) in production and logistics activities, as well as the use of the Internet in industrial processes.

This implies a good degree of automation and digitization of factories and factories. Using the Internet and cyber-physical systems, that is, using virtual networks with possibilities to control physical objects, you can modernize manufacturing plants until transforming them into smart factories characterized by continuous and instantaneous intercommunication between the different workstations that make up the production, supply, and packaging and dispatch chains themselves.

The use of sensors contributes a self-diagnosis situation of the machines and tools inside the plant, that allows remote control, ensuring its eventual withdrawal from service or its best integration in the global production system when it is necessary. Basically, it has a series of
accessories where robotic sensors stand out, which capture real-time information on various processes.

In turn, these sensors provide detailed data to cybernetic systems which distribute the material received to other systems of the same category. In addition to this, the influence of the Internet of Things allows each information link to be interconnected, allowing a large amount of disaggregated information to be reached.

Moreover, thanks to the number of sensors that make up Industry 4.0, you can see a detailed picture of the state of production in industrial plants.

This modern trend does not operate alone but has a series of accessories that together allow it to operate in such a way that they offer the scope of a wide range of benefits at an industrial level.

Among the accessories, we find Big Data, which oversees estimating compressed data to later offer an analysis and evaluation of them.

At this point the influence of Big Data stands out, especially to aid in decision-making. Since the tools that are responsible for drawing conclusions offer a predictive assessment of what could happen, and above all it helps to assess how this will affect the state of the business.

The surprising thing about this technological revolution is that everything seems to be strategically interconnected, through networks that play a leading role in the development of this trend.
3D Printing, for example, will offer the opportunity to purchase standardized product drawings, which in turn allows for increased production on a large scale. One of the healthiest points in a company is the constant increase in production, since this generates solidity and ensures the best results in the medium and long term.

This, with the help of analysis or estimated diagnoses, can help to make the best decisions oriented to the state and productive management of any industry. Moreover, there is no doubt that Industry 4.0 technology will offer strategic time savings for making decisions aimed at present and future improvements without being polluting.

In addition, one of the most important reasons why acquiring a technological service is highly relevant is because, at an industrial level, it is not possible to live oriented towards retreat. If the market generates changes, a company must adapt and offer services and products that match the needs of the consumer if it wants to stay competitive or surpass competition, and following this new trend is the most ethical way to do so.

The Mondragon Corporation is a clear example of cooperation towards Industry 4.0, a group of cooperatives and companies originated in País Vasco autonomous community currently spread throughout the rest of Spain and abroad. It is made up of 264 entities that employ 81,837 people around the world, and they also have fifteen R&D centers. For example, in Catalonia, regarding the industry sector, it is found the Mondragon Assembly Catalunya subsidiary in Barberà del Vallès (Barcelona) specialized in the design, production and installation of a wide range of equipment for assembly process automation.

This type of corporations aims at concentration, clustering, knowledge, companies, talent and markets as a powerful instrumentation of industrial policy and regional development. And they also bet on innovative scientific developments, one of them is the biomedical development whose purpose is to investigate the molecular, biochemical, cellular and genetic mechanisms of human diseases. The need of coordinating the respective agendas of the industry, the administration and the university to integrate biomedical R&D into the science-based industrial policy is proposed as an inescapable precondition for the viability of bioclusters. A corporate group like Mondragon is a clear example since it has Mondragon Unibertsitatea, a non-profit university, and also collaborates with the Euskadi Public Administration.

6.2 How can affect industries that need more humanpower like the Catalan food and beverage industry?

Some sectors such as food and drinks need workers who handle it with great care, for example the fruit sector. However, it is observed that the companies in the food and beverage industry that prepare for this industry will be able to retain more customers and increase their profitability by controlling the production process and its value chain.

Even equipment maintenance can be benefited by the adoption of new concepts. Sensors that control the machines capable of detecting small deviations allowing better operation and
anticipation. Thus, it will provide a significant increase in availability and avoid downtime losses.

The experts believe that another advantage of Industry 4.0 is that it drives supply. Something that, for the food industry, depends on various raw material segments that are of crucial importance, for example, regarding the supply chain we can highlight the great exchange of information between customers and suppliers, so that you can really anticipate the demands and provide balance in the production process.

When analyzing the possibilities of exchanging with consumers, the profits of the food and drinks industry can be very valuable. The expert points out that customers can, for example, interact with point-of-sale applications and these make the help for choosing the most appropriate product depending on the profile of the consumer.

From a more scientific perspective, Industrial biotechnology has enough potential to address some of the greatest challenges in the world, such as feeding a growing population and offering new alternatives to scarce natural resources. However, it is important to highlight that biotechnology in the industrial area is not only transforming the way in which products are manufactured, but also provides new products that previously we could not even have imagined.

Food biotechnology is a science that allows us to modify the genes of our food sources; these being animals, plants and microorganisms. Through it, species with much healthier and nutritional properties are created in appearance, taste and health, mainly those obtained through crops. It helps to detect undesirable bacteria and viruses in food, lowering the risk of suffering from a disease due to the consumption of food in bad conditions.

Another benefit of biotechnology in this area of application is that it allows the production of food with a better and higher level of flavor. Moreover, it also helps people eat fresher food, many vegetables and fruits take longer to mature which means that distributors have more time to take their products to stores; leaving them in good condition, reducing the risk of people suffering from some type of illness from consuming spoiled food.

Foreign investment on this sector is increasing at unsuspected rates between countries. During the last years, an increasing number of Spanish companies in the Biotechnology sector has made the leap to the American market through a process of commercial implementation or an opening of subsidiaries in the USA. Some of these companies have done it with the collaboration of bigger companies, for example, they have signed agreements and alliances to commercialize their products. Other companies have attracted American investments to Spain to carry out the research through different rounds of funding, with the support of Spanish organizations such as CDTI “Centro para el desarrollo Tecnológico Industrial”.

This demand for biotechnology is mainly driven by the level of innovation within industry, demographics and social trends among consumers. For example, The American and Spanish population are aging rapidly and causing the incidence of diseases such as cancer, Alzheimer’s,
coronary heart disease and diabetes. Accordingly, the demand is growing in industrial innovative sectors like food biotechnology which aims to improve food quality, thus preventing these diseases.

**7. Effect of The Start Ups movement on Catalan industry**

There are two main forms that startups can affect consumer goods industries in Catalonia. The first one is changing radically by their own the focus of the sector, implementing new and innovative ideas, focusing on the sustainability and the environment. And the second one consists in a transition of the sectors, helping consolidated industries in the adaptation of new environmentally friendly ideas.

As a real example of the first option, we find the vegan industry, society claims sustainability and care for the planet, more and more citizens are opting for a flexitarian or vegetarian diet as a way of life and for an environmentally friendly diet as an ethical mantra. It is a change of mentality that has generated a change in the consumption of the population and, in turn, an opportunity in the market for new startups.

The United Nations pointed out that in a market that is on the rise and predictions in which 10 billion people will have to be fed by 2050, a cultivation area similar to the size of India will be needed.

Food startups are articulated as a possible solution to the problem to boost sustainability throughout the food chain: from agricultural production to the production of animal protein, from the supply chain to packaging areas.

However, most of the startups are looking for ways that will help todays’ industries rather than going all alone that will imply a lot of risks, implementing ideas that would facilitate the transition to a new industrial era, giving current industries a competitive advantage. In exchange, these start-ups can get more funding and survival capacity if the current industries help them to keep up although it may suppose tough competition for the historical industries sooner than later, but the industry sector is too competitive to miss opportunities for improvement and continuously seeks to reach agreements with different organizations.

For example, in 2019, the Catalan industry ratified its great deal with startups in the sector with the aim of promoting a productive economy. Startup + Industry = Future is the project led by IQS Tech Factory, the IQS entrepreneurship center and the first accelerator of industrial startups in Spain. They have joined forces to seek commercial and strategic collaborations in Vallés, an economy that contributes 30% of Catalonia's total GDP. At least ten startups are part of this project every year. For 6 months, startups have the support and dedication of top-notch mentors and professionals in the industrial sector, who help them carry out their prototype to create the first series of industrial production.
The CEO of IQS Tech Factory, Oriol Pascual, assures that the project has supported some 62 start-ups in five years and that only four have disappeared. “**Industrial startups have a higher survival rate than digital ones. There are more barriers to enter the ecosystem, but when it is achieved, these startups go for it. Also, when something is tangible, it is easier to see if it works or not**” he said.

Backing up his statement, we should consider that an industrial start up is a new scientific-technical based company that involves some type of production process. Their final products are physical and expendable in comparison with some digital companies that only focused on software and intangibility. Thus, an industrial start up requires longer development times, if compared to a digital one, it needs more capital because it must prototype, test them; and it is subject to regulatory issues to put the product on the market. For these reasons, it may cost a lot more for an industrial start up than for the digital one to get financing.

However, these industrial start-ups can become companies that contribute to social progress and technological advancement, just like Google, PayPal, eBay, Facebook have become.

**8. Solutions for the growth of the social economy in today’s industry sector**

**8.1 Collaboration of public and private agents at the time of coronavirus**

Like foreign countries that invest in the main companies in the Catalan industry. The main companies in the Catalan industry should invest in companies of the social economy that are small and do not have visibility. But not investing money in change of more money plus interest, they should invest money and capital in change of valuable knowledge and sustainable ideas for the future. The idea is to create a joint venture through a collaboration contract where cooperatives can contribute with know-how, work and innovation. Capital, money and merchandising would be contributed by the lucrative company. This is just an example; several conditions can be negotiated in the contract to distribute the input of each company equally, depending on the industrial sector and the current situation of each company.

Following the first idea of distribution, one way to do it is transferring the investment cost in the profit and liabilities accounts as research and development expense account inside intangible assets. In this way, for the lucrative industrial company the investment will be an expenditure of the year in which they invest. The lucrative industry could activate the investment as a research and development expenses component of intangible assets and not as expenses of the year. For this, the following requirements should be met:

- There is a specific and individualized project for each research and development activity. The costs assigned in their execution, how they are imputed and distributed over time, must be clearly established.
- With technical knowledge, the technical success of the application and development of these novelties is predicted.
There are good reasons that the economic and commercial expectations of the development of the investigations carried out are attractive, since an income greater than the costs incurred is expected. In short, the development of the investigations seems to be profitable.

The financing of the different research and development projects should be sufficiently assured so that their realization can be carried out.

In the Spanish General Accounting Plan of 2007, development expenditure must be activated if it is fulfilled that there are expectations of technical and commercial success mentioned before and is reported in the Annual Report. Nonetheless, although it is not mandatory, not having financing problems is ideal to keep up the project.

Research expenditure begin to be amortized the next year of their activation, with a maximum term of five years, although less time is allowed if the useful life is shorter, as can happen in the new technology sector. Also, if the company justifies it, it can exceed five years.

When there are reasonable doubts about the technical or economic viability of the project, the company will be obliged to withdraw the capitalized costs of the project, taking the amount to the account (670) “Losses from intangible assets”.

Once the research or development is completed, if the project is registered in the Patent and Trademark Registry, it will be recorded in the account (203) “Industrial Property” for the unamortized part of the development costs plus the registration costs. Obviously, the cooperative will have the consent of the lucrative industry for the manufacture, sale and use of the product. Also, without forgetting the part of the remuneration of the sales that would belong to it according to the stipulations of the contract.

If they arrived at an agreement in the conditions and the outcome is successful it is a win-win situation for both. In this way, the cooperative can get financing to continue growing and fulfilling their social mission, it can achieve a broader potential market by being known beyond the niche and it can gain experience and good reputation for having collaborated with a large industry while maintaining a possible designation of origin or a patent. From the current industry perspective, it adapts to a more sustainable ideas improving their Social Corporate Responsibility image while being innovative and competitive. If the collaboration is not successful everything will be like the beginning, for the cooperative, since it is a company that has a social mission and to make profit is not one of the objectives, and for the industrial company, the fact of cooperating with social economy companies transmits confidence to shareholders.

The concept can be applied to private companies in conjunction with organizations of the public administration of national, provincial or municipal order. If this is possible, the integration of private capital with public investment would bring benefits of imponderable characteristics for the states, especially when these joint actions take place in the area of science and technology.
As a real example, news like “Cooperatives meet with the industrial company Juver to seek ways of collaboration and use of quality raw materials in the manufacture of finished products. The intention on both sides is to initiate possible collaborations between the cooperatives dedicated to the production of stone fruit and the juice industry. The cooperatives fulfill their social mission while financing and getting reputation” are more and more usual.

In Catalonia, the clearest example of collaboration between for-profit and non-profit companies is The Guissona Food Group, a Catalan business group dedicated mainly to the production and commercialization of food, headquartered in “Guissona segarrenc”, municipality of Catalonia. The group is presented to the consumer with different services and different brands, the most important being BonÀrea, a network of small supermarkets. They also have a mix of lucrative and non-lucrative companies:

- “Caixa Guissona”, a small financial institution.
- Seagui, S.L. is an Insurance Brokerage owned by the Farmer of Guissona.
- “Fundació Agropecuària de Guissona”, a private non-profit organization whose main purpose is to provide social and residential care to the elderly, promote and facilitate medical care, along with the prevention of diseases and accidents, such as a social work.
- The “BonÀrea” Foundation is a private non-profit organization based in Massoteres, whose main purpose is to promote sports and leisure activities among the people around it.
- “Corporació Alimentària Guissona, S.A.” that includes all the industrial and commercial activities of the Guissona Food Group.

These collaborations imply deciding to carry out the economic activity in accordance with principles that, essentially, transform the activity into more ethical purposes. It is true but, this often entails an added difficulty when measuring the value or wealth created. In this sense, initiatives such as Social Balance or Comprehensive Social Value help to highlight the true impact of this type of economy, both socially and environmentally, beyond economic value. Even every lucrative industrial company should implement a Social Balance, carrying out the mandatory audit of this balance when the companies have a certain size and penalizing those who do not have it.

In this sense, as the social economy does not have enough power to establish these principles, the power of public administrations is key to establish laws that compel companies to have a social balance and carry out the corresponding audit, encouraging the creation of social economy companies or sustainable lucrative companies.

Thanks to this type of balance, any user can know if the company complies with the provisions of social responsibility and if the actions it undertakes are in favor or against ethical-moral principles, informing workers about the course of social responsibility as a company. For this reason, both positive and negative aspects that have been carried out must be included in the
social balance. Positives can include job creation, staff training, wealth generation and donations. Also, those measures taken to lower social costs and acts that bring positive added value to society should also be included. As for the social costs are those that have to do with environmental, acoustic and visual pollution. Also included are those activities that generate social conflicts, work accidents, excessive exploitation of natural resources, diseases or unemployment.

Moreover, backing up the idea of a new balance, the new industrial revolution based on technology and the social economy shared a lot of common treats, making the integration of both easier. They are more sustainable over time, less affected by wage inequalities, characterized by a better distribution between urban and rural areas, and finally they have higher levels of satisfaction and identification with the mission. At the same time, cooperatives are a kind of great laboratory for experimentation with sustainable and innovative work modalities, and labor relations within companies in which creativity and innovation are constantly repeated, just like Industry 4.0 methodology.

These private industries agreements do not contradict the aid of the Barcelona public administration. What is more, the union of administrations in this case can be the result of a stronger and more resistant social economy that can overcome unforeseen problems.

A current clear example, unfortunately, because of the declaration of alarm status caused by the coronavirus pandemic disease in the beginning of 2020, the Barcelona City Council subsidy program for the promotion and reinforcement of the social and solidarity economy (ESS) that consist on granting of subsidies to carry out activities and projects to promote and reinforce the social and solidarity economy in the city of Barcelona has been suspended by virtue of the provisions of the third additional provision of the Royal Decree 463/2020.

The activities or projects to be subsidized have to promote activities of public or social interest that aim to contribute to the achievement of the objectives of the Plan for the promotion of the social and solidarity economy 2016-2019 who was already extended until the approval of the new one for the period 2020-2023, the contribution to the deployment of the BCN 2030 ESS Strategy, and that promote and reinforce the lines of work of the plan, including the development of common elements that define the transformative nature of the social and solidarity economy, such as management democratic and participatory, orientation to human needs and commitment to the community.

So, in these cases, the help of private investment can be essential for the survival of social economy. When public administration cannot subsidize because it must focus its efforts for exceptional reasons, the private administration must demonstrate that it is useful for society and one way to do it is to help and adapt social economy measures, exponentially improving its own social image.
Furthermore, the consumer goods sector is so important that the demand for products will not be as affected as, for example, the services sector. The industry can manage to maintain financial stability or even increase sales. In sectors like the food and drinks, demand has increased during the pandemic confinement. According to “Público”, a digital newspaper, “The basic purchase of food increases more than 7% in the first weeks of confinement”.

Given this, a less ethical way of facing the situation on the part of the lucrative industry is to raise prices taking advantage of the situation, something quite negligible, which clearly reveals the nature of a lucrative company.

In the first industrial revolution, it was the state that took care of the industry when it was just taking its first steps. Now, in the fourth industrial revolution, it is up to the industry to return the favor to the administration, demonstrating that it can cooperate with the economic and social agents when it is most needed.

8.2 Social Economy Brand commercialization at the time of coronavirus

Establishing collaborations with other public and private economic agents is phenomenal, but it takes internal growth to go further and position itself as an important market agent.

Brand recognition is one of the factors that severely restricts the growth of the social economy despite having a positive social image in society. As a demonstration, I am sure that many of you know at least 10 brands of the consumer goods lucrative industry, but could you think about 10 brands of social economy companies? Surely, many of you would need to google it up to answer this question.

On the Internet, it is true that it exists the domain " coop" that differentiates a cooperative from a private company in the hands of investors. By viewing " coop" in an email or on a website, everyone will know that you are dealing with a cooperative. However, in the world that we live today, this is not enough to achieve a differentiation that positions cooperatives in such a competitive market as consumer goods sector.

Now, to obtain enough market share, these companies also need to establish a specific marketing plan that highlights their social commitment, vision and mission. To achieve this, they must create strategies focused on selling their products and the values behind each product, differentiating them from the competition. For example: investing now, in times of coronavirus, on different digital communication channels like television and social media can be a clever strategy since they offer a great national repercussion which is where the potential market is currently concentrated. Moreover, now that prices are skyrocketing in lucrative companies, cooperatives could maintain moderate prices to obtain competitive advantage and attract customers that cannot afford to buy at such high prices.

These strategies should be adopted by traditional cooperatives to compete fairly in the market and verify that the cooperative model, based on democratic values, would not necessarily be in
conflict with economic profitability and territorial sustainability if marketing strategies are applied.

9. Conclusions

We have seen that from the beginning of the industrial revolution in Spain, Catalonia has been a relevant nation for its development. Taking root in Catalan lands since the 17th century, with the cultivation of Spaniards and Catalans has not stopped growing until it became what it is today. However, yesterday's cultivation methods are no longer useful today, society demands new production techniques, more sustainable, ecological, efficient and above all committed to the well-being of all, leaving no one behind.

Today’s Catalan industry has a superlative importance and eradicating it would be unwise and costly, so a deep transformation is the wisest, clever and most logical path that we can follow today despite the great stagnation that we are facing. Nevertheless, this profound evolution to improve the Catalan economy must have a clear objective and this is the digitization of production processes where innovation and knowledge prevail.

Moreover, we have checked that all of us are living in an entrepreneurial and industrial era where synergy must prevail over inconsistency, competition over incompetence and union over separation. So, in my work I propose something that has been increasing today but still done on rare occasions, which is the cooperation of the big industry with smaller economic agents in the industrial sector such as cooperatives or start-ups implementing together Industry 4.0.

A fairer, more supportive and sustainable industry with the efficiency of industry 4.0 and the innovative ideas of the start-ups are the key factors to unleash the full potential of social economy transition. To achieve this, the consumer goods industry can bring its grain of sand by directing its policies towards the social economy, cooperating with labor companies or cooperatives to attract innovative and ecological ideas being able to establish a clear social mission, because what is important is not the legal form of a company but the social mission that it hides.

And is that all the large Catalan lucrative consumer goods industrial companies analyzed, without exception, present a certain correlation between social commitment and healthy accounts.

And this is because the environmental and social responsibility is key to building trust, increasing credibility and brand image. Not only contributes to a better feeling with the client, increasing sales and loyalty, it also reinforces the cooperative relationship with suppliers, dealers, shareholders and other organizations, providing stable and beneficial business links for all stakeholders, therefore reducing production costs.
Furthermore, all collaborators at all hierarchical levels think and act within the framework of the established processes, in accordance with their respective responsibilities, achieving a domino effect on social economy implementation.

Nowadays, the coronavirus could accelerate a technological and logistical adaptation with local character, favoring local companies, including the social economy companies that are deeply rooted in national territory. The Catalan public administration “Generalitat de Catalunya” should realize this fact and it should take the opportunity to promote and strengthen the local market because every cloud has a silver lining.

There are different policies that can be implemented to potentiate local industry and strengthen the industrial covenant whose objectives are explained on Chapter 3.1. For example: it can offer subsidies to R&D projects that are economically viable, tax reductions to local SMEs that create a certain amount of employment or maybe it can offer financing, with lower interests than banks, to companies that implement an implacable Corporate Social Responsibility.
10. References

Ajuntament de Barcelona: https://ajuntament.barcelona.cat/es/informacion-administrativa/subvenciones


Cacaolat: https://www.cacaolat.es/compromiso/

Casa Tarradellas: https://casatarradellas.es/

Centro de Biotecnología: https://www.centrobiotecnologia.cl/investigacion/que-es-la-biotecnologia-en-alimentos/

CEPES: https://www.cepes.es/social/econ_social_que_es


Colegio de Registros: https://www.registradores.org/

Comunicae: https://www.comunicae.es/nota/la-industria-catalana-se-alia-con-las-startups-1209816/

CRAI UB: https://crai.ub.edu/es/recursos-de-informacion

Cronica global: https://cronicaglobal.elspanol.com/creacion/vida-tecky/startups-industriales-sobreviven-mas-que-las-digitales_312326_102.html

Diario de Pontevedra: https://www.diariodepontevedra.es/articulo/comunicados/beneficios-han-traido-nuevas-tecnologias-industria/20180725082110992525.html


Eldiario: https://www.eldiario.es/catalunya/Generalitat-expediente-Pans-Company-negarse_0_977452483.html

ElMundo: https://www.elmundo.es/cataluna/2019/02/27/5c767d8cfc6c838b318b46a8.html


Estrella Damm: https://www.estrelladammm.com/


Fransualdo, Francisco. Retrieved from article: https://journals.openedition.org/confins/24633

Freixenet: https://www.freixenet.com/

Instituto de Estadística de Catalunya: https://www.idescat.cat/indicadors/?id=conj&n=10257&lang=es


LIBERTADUNICO: https://libertadunico.blogspot.com/2013/05/la-industrializacion-de-cataluna.html


Mondragon: https://www.mondragon-corporation.com/empresa/mondragon-assembly-catalunya/

Montes, Lidia. Retrieved from article: https://www.businessinsider.es/6-startups-espanolas-llamadas-transformar-alimentacion-440883


Pans&Company: https://www.pansandcompany.com/nuestros-valores


Seat: https://www.seat.es/sobre-seat/politicas-seat/politica-ambiental.html
Servimedia: https://ecodiario.eleconomista.es/empresas-finanzas/noticias/8418027/06/17/Rsc-gallina-blanca-dona-mas-de-75000-platos-en-el-dia-de-la-alimentacion-solidaria.html
