



Analyzing the financial sustainability of family businesses in times of COVID-19 pandemic: The Quevedo Case

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ABSTRACT

Family business is the source of transformation of productive economies and strengthens the business dynamics in a given sector. Due to the COVID-19 pandemic, some small and medium enterprises had to abandon the supply of products and services. This social phenomenon occurred throughout the world and also in the city of Quevedo, a productive area offering goods and services with a greater presence of family businesses; the demand for products at lower costs and home delivery of products was one of the indicators for structuring a sustainability model based on the combination of financing with own and external resources. The objective of this research is to analyze the financial sustainability of family businesses during the health crises. A qualitative-quantitative methodology was applied based on the use of specialized literature, as well as the application of a questionnaire with a population of 289 small businesses and a sample of 45 family businesses from the urban and rural sectors of the canton of Quevedo. The results obtained show that the category where the family businesses are located corresponds to the commercial sector with 56.14%, and the conformation of these businesses has a family participation of 78.95%, the purchases are made on a weekly basis and the distribution of the products is done through home delivery. Finally, income from sales was between \$2000 and \$3000. This research work highlights some of the sustainability strategies applied by these businesses to remain in the productive sector during the pandemic.

Keywords: Financing, distribution strategy, family business.

RESUMEN

Los negocios familiares son la fuente de transformación de las economías productivas y fortalecen la dinámica de negocio en un determinado sector. Debido a la pandemia COVID-19, algunas pequeñas y medianas empresas tuvieron que abandonar la oferta de productos y servicios. Este fenómeno social que se dio en todo el mundo también ocurrió en la ciudad de Quevedo, una zona productiva ofertante de bienes y servicios con mayor presencia de los negocios familiares. La demanda de productos a menor costo y la entrega a domicilio de productos fue uno de los indicadores para estructurar un modelo de sostenibilidad a partir de la combinación del financiamiento con recursos propios y ajenos. El objetivo de esta investigación es analizar el sostenimiento financiero de negocios familiares durante las crisis sanitarias. Se aplicó una metodología cuali-cuantitativa a partir del uso de literatura especializada, así como también la aplicación de un cuestionario con una población de 289 empresas pequeñas y una muestra de 45 empresas familiares provenientes del sector urbano y rural del cantón Quevedo. Los resultados obtenidos muestran que la categoría de donde se encuentran las empresas familiares pertenece al sector comercial con un 56.14%, y la conformación de estos negocios tiene una participación familiar del 78.95%, las compras las realizan de manera semanal la distribución de los productos se realiza mediante entrega a domicilio. Finalmente, los ingresos por ventas estuvieron entre \$2000 a \$3000. En este trabajo de investigación se destacan algunas estrategias de sostenibilidad que aplicaron estos negocios para mantenerse en el sector productivo durante la pandemia.

Palabras clave: Financiamiento, estrategia de distribución, negocios familiares

INTRODUCTION

The sudden and widespread impact of the coronavirus pandemic and the suspension of activities to contain it have led to a drastic contraction in the global economy. The effects are particularly profound in the countries most affected by the pandemic and those heavily dependent on international trade, tourism, commodity exports and external financing (World Bank, 2020). The economic crisis generated by the coronavirus disease (COVID-19) has had a significant impact on the countries of Latin America and the Caribbean and hit a productive business structure with weaknesses that have originated over decades (ECLAC, 2020).

Family businesses play a leading role in generating the economy at the national level. The productive structure of both the province of Los Ríos and the city under study are fundamental elements that present a great heterogeneity among the sectors of production, and among them are the products and services offered by family businesses, which positively influence the generation of economic and financial activities at the level of the context of a business, in times of pandemic it was known that in a high level of presence of family, businesses carried out various strategies to sustain themselves at the financial level and to continue with the supply of products demanded by consumers.

In these times of the Covid-19 pandemic, few natural resource production and processing activities were generated, some capital-intensive services (electricity, telecommunications and banking) and few large companies have high levels of value added per worker, while the others reach very low levels of productivity (ECLAC, 2020). As a result, most

companies have registered significant drops in income and have difficulties maintaining their activities: they have serious problems meeting their salary and financial obligations and difficulties accessing financing for working capital (ECLAC, 2020).

The global health emergency caused by Covid-19 has directly impacted the economic performance of countries in the region and the world, affecting the mobility of people and the normal functioning of productive and commercial establishments. This was determinant by the fact that in 2020 Ecuador's Gross Domestic Product (GDP), in constant terms, totaled USD 66,308 million, representing a drop of 7.8%, according to data from the quarterly national accounts. This behavior is explained by: i) an 11.9% decrease in gross fixed capital formation; ii) a 7.0% decrease in household final consumption expenditure; iii) a 6.1% reduction in general government final consumption expenditure; and iv) a 2.1% contraction in exports of goods and services. Imports of goods and services were 7.9% lower than those recorded in 2019 (Central Bank of Ecuador, 2021)

According to the Central Bank of Ecuador (BCE, 2021), total losses (public and private) totaled USD 16,381.7 million during the period March-December 2020, of which the private sector accounts for USD 12,790.51 million, representing 78.1%. Total losses represent 16.6% of GDP 2020 in current values. At the private level, the main sectors that presented losses were: commerce (USD 5,514.9 million), tourism (USD 1,809.7 million) and manufacturing (USD 1,716.8 million); while at the public level, the health sector stands out with USD 2,886.2 million. Regarding the employment variable, it is estimated that 532,359 jobs were lost from March to December 2020. Economic activity affected the most affected industries: Accommodation and food services, Commerce, Construction, Transportation and Storage, Agriculture, livestock, hunting and forestry.

On the other hand, 4,648 jobs were created, corresponding to the oil and mining industries (3,813) and aquaculture and shrimp fishing (835). In 2020, production was affected at the national level, causing the closure of companies and unemployment accompanied by shortages in the supply chains of some products. In 2021, these effects were minor; however, it is important to analyze how small companies or family businesses managed to survive during the pandemic.

In order to understand how COVID-19 has impacted the sustainability of small family businesses in Quevedo, this study explores entrepreneurs' main strategies and decisions related to the financing and marketing of products in times of pandemic. In the financial sustainability study of the savings and credit cooperatives of segment two of Ecuador in times of COVID-19: information was obtained from the page of the Superintendence of Popular and Solidarity Economy, where the pertinent information on the savings and credit cooperatives is found, specifically their financial statements and income statements, which will be of great help for the project.

Subsequently, the financial information was calculated using the PERLAS method, which uses financial indicators to analyze the entity in six areas of operation. Based on the results obtained by the indicators and by comparing them with the data before and after the pandemic, the hypothesis was verified, and it was found that financial sustainability had a significant impact on the solvency, profitability and liquidity ratios of the segment's credit unions (Salazar & Yamberla, 2022).

In this sense, the objective of the research was to describe the business sustainability strategies. The research is qualitative, descriptive level and non-experimental design; the instrument used was the structured interview of six iterations and applied to a group of 20 entrepreneurs dedicated to carpentry. For the hermeneutics, the Colaizzi method organized in the ATLAS software Version 9 was used.

Among the results that stand out as the main financing strategy for the purchase of inputs is the use of the material in stock and the use of own capital; social networks such as Facebook and WhatsApp were used for the marketing of products. The outsourcing of input logistics and purchase of inputs by quantity was used for the supply of inputs. Regarding reforestation, the main strategy used is reforestation and the use of natural resources; regarding community participation in the development of the business, most of the villagers buy regional products and socialize biosafety protocols (Fernández et al., 2022).

In the study based on Financial Leverage in times of pandemic by COVID-19 as a sustainability strategy for companies in Colombia, a thorough process of recognition and quantitative analysis of the literature revealed that the indicator of access to financial products, according to the report for natural persons grew during 2020 by 5.3% compared to the previous year, meaning that 2.6 million natural persons acquired financial products for the first time. It is well known that most of the sectors of the economy were paralyzed. Therefore, the normal development of the market was inefficient, making the fixed costs of maintenance reflected period by period. For this need, Colombian companies opted for financing to increase their resources and cover the expenses inherent to their operation (Santiago Santiago, 2022).

Velasques (2022) refers that the objective of the study is to develop a structural equation model (SEM) to evaluate levels of sustainability of MSEs in times of pandemic based on Confirmatory Factor Analysis (CFA) and Exploratory Factor Analysis (EFA), where six constructs oriented to integrated practices and aspects of sustainable development are analyzed. As a result of the study, the correlation between integrated practices and the pillars of sustainability that lead to the improvement of the management of MSEs and their capacity for adaptability in complex contexts is evident; so, equality and opportunity are essential in business development.

The report based on family businesses in Ecuador and Latin America and their response to Covid-19 explores the main responses given by family businesses in Ecuador compared to their peers in Latin America to the Covid-19 crisis. It uses information collected, between June and September 2020, from the STEP Project Global Consortium's Covid-19 global survey of family businesses that explores their revenue and employment effects, their emerging and strategic responses to the crisis, and their capabilities and resilience in the face of this disruptive event.

The most outstanding results are shown in 5 aspects: effects on the organizations' income and employment, government assistance, actions taken to face the emergency, strategic management actions, and their capabilities and resilience in the face of adversity. It was found that the companies in Ecuador that responded to this survey were among the most affected in Latin America in terms of employment. Of these, 63% reported feeling dissatisfied with the government's response to the crisis. In all the cases reported, companies had to reduce working hours and wages, and 95% had to lay off workers. These responses and strategic actions varied somewhat depending on their leadership. In cases where the founder is at the helm, the measures were more conservative (ESPAE-ESPOL, 2020).

METHODOLOGY

The methodology applied includes the mixed approach (qualitative-quantitative analysis) in which an exploratory information search was carried out completing the following tasks: 1. The information search was carried out with the purpose of collecting data mainly from official statistics; 2. Reading and analysis of bibliographic sources, in which scientific journals with information on the subject, books, official reports, among others, are taken into consideration; 3. Collection of primary information through the application of a survey questionnaire on the sample selected for the research study. Considering an approximate

population of 289 small businesses, a sample of 45 family businesses from the urban and rural sector of the canton of Quevedo were surveyed.

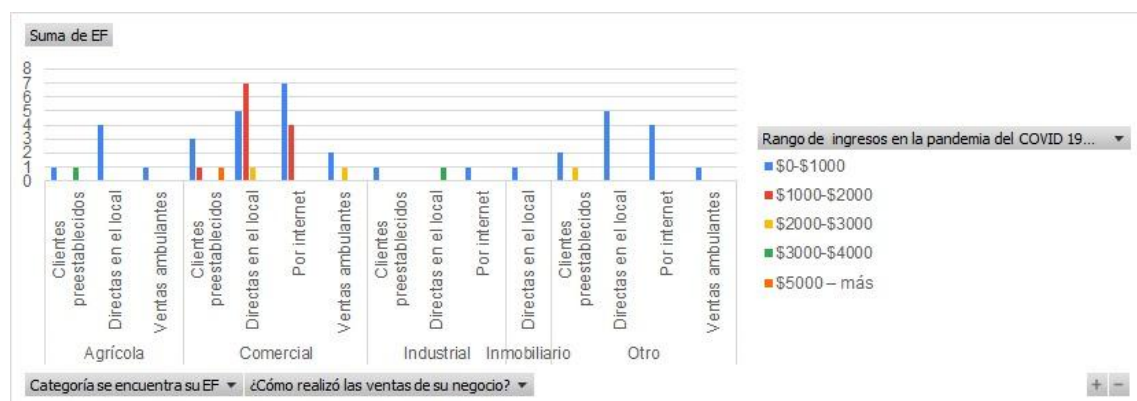
For the effect and selection of the sample, a longitudinal cross-sectional randomized probabilistic technique was applied. The sample size was calculated with a margin of error of 5% and a confidence level of 95%. Ten pilot samples were carried out to verify that the survey questions are legible and clear to the respondents, and if there are any interpretation problems, they are modified. The surveyors are distributed, 2 in the urban sector and 2 in the rural sector, applying a longitudinal transversal random sampling model. After the collection of the data corresponding to the methodological instrument, they will be tabulated in the SPSS Software "Statistical Package for the Social Sciences," which is widely used in this field.

The use of this qualitative-quantitative methodology became a fundamental tool for generating information based on questions formulated taking into account expert criteria, which makes it possible to offer quantified information through statistical graphs that describe the phenomenon under investigation (Rodríguez Rivadeneira, 2015).

Results

Figure 1.

Forms of business sales by economic sector

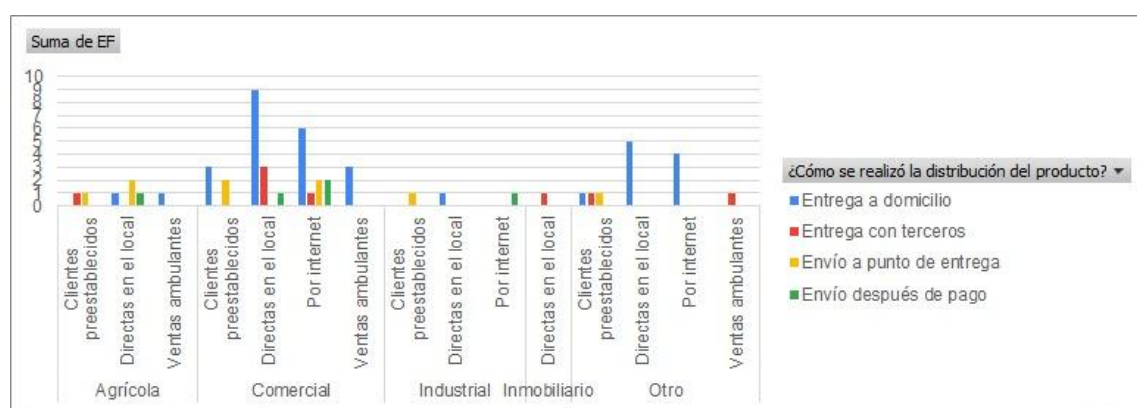


Source: Own elaboration.

The crosstab chart (Figure 1) shows the variables of business category, *forms of sales* and *sales revenue*. The commercial category is the one that has obtained the greatest economic revenue, especially in direct sales on the premises and through the Internet. In the agricultural category, it is highlighted that the income from sales made directly on the premises was in the range of \$0 to \$1000. Internet sales with revenues of \$0 to \$1000 and direct on-site sales with revenues of \$5000 or more were the most relevant in the commercial category. For the industrial category there is an equal between the Pre-arranged Customer sales forms with revenue \$0 to \$100, direct on-premises sales with \$3000 to \$4000 and internet sales from \$0 to \$1000.

Figure 2.

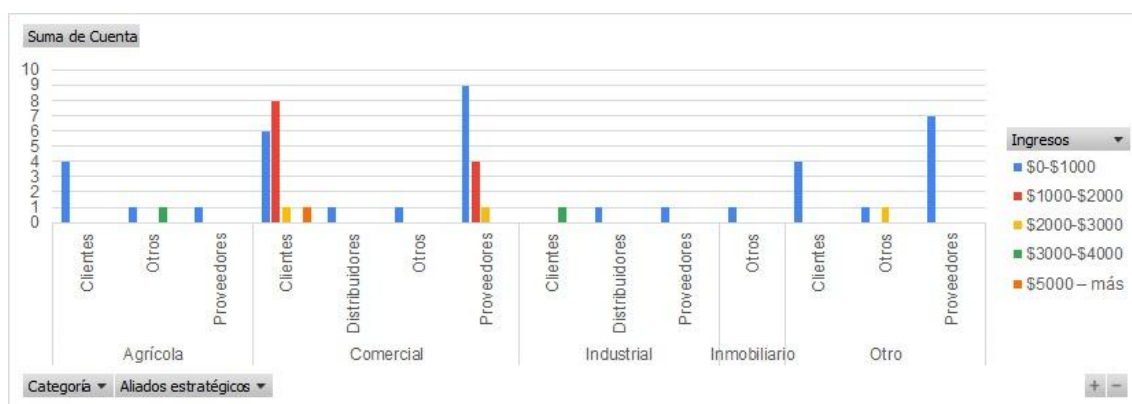
Product distribution in the business



Source: Own elaboration.

The cross-table graph (Figure 2) shows the variables business category, forms of sales versus types of product distribution. It can be seen that in the commercial category, product distribution in direct sales and online sales was done through home deliveries. In the commercial category, product delivery is made through home deliveries, followed by deliveries to third parties for direct sales made on the premises. In internet sales, home deliveries are the most common, followed by deliveries through delivery points and shipments after payment.

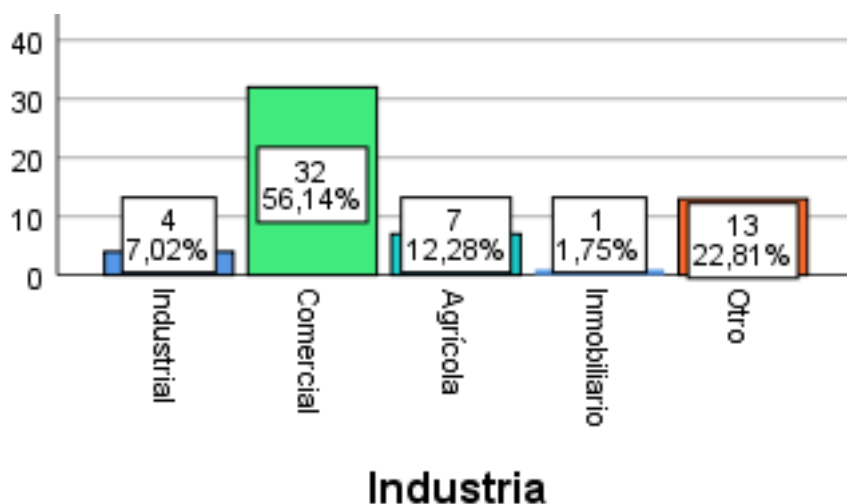
Figure 3.
Business Revenues in the COVID 19 Pandemic



Source: Own elaboration.

The cross-table graph (Figure 3) shows the variables of *business category*, *strategic allies* and *sales revenues*. The major strategic allies in the commercial area are customers and suppliers. In the commercial category, the best strategic allies to obtain business revenues in the range of \$1000 to \$2000 correspond to transactions carried out with customers. Another ally in the commercial category to obtain revenues from \$0 to \$1000 are suppliers.

Figure 4.
Family business sectors

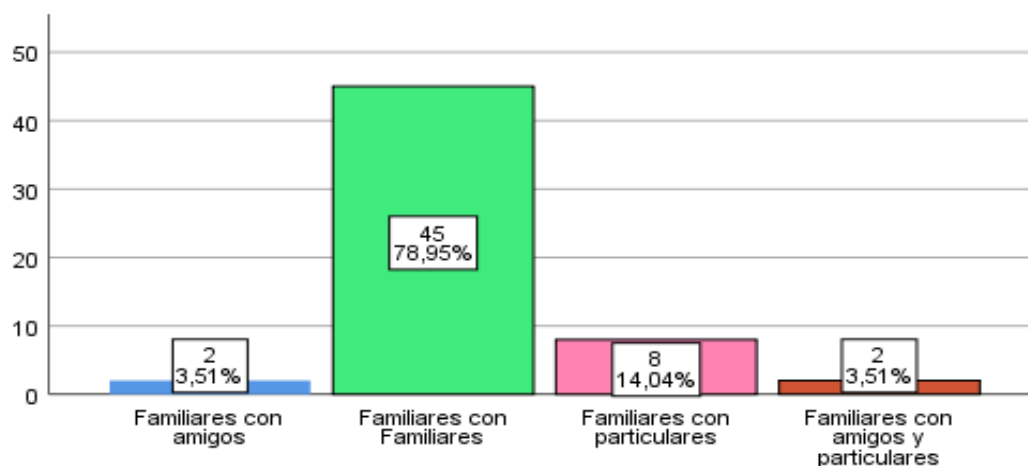


Source: Own elaboration.

Figure 4 shows the sectors in which family businesses operate. Family businesses operate with a greater participation in the commercial sector with 56.14%, followed by the agricultural sector with 12.28%.

Figure 5.

Incorporation of family businesses

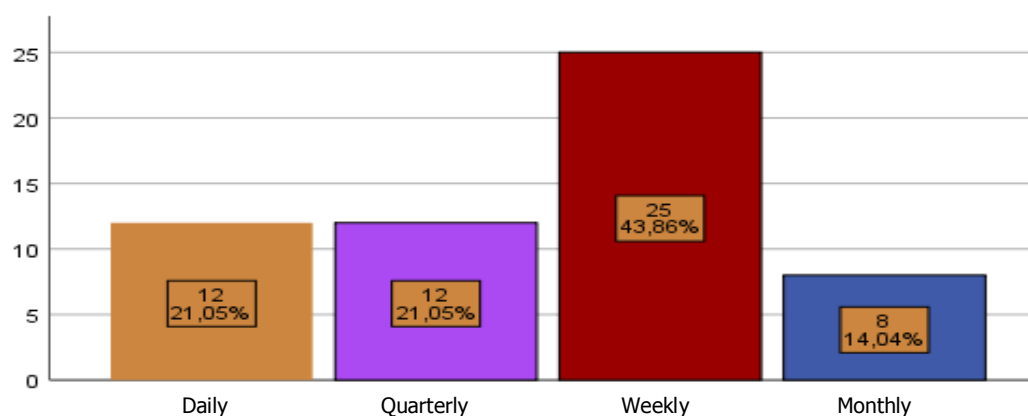


Source: Own elaboration.

Figure 5 shows that family businesses are largely made up of 78.85% of family members with relatives and 14.04% of family members with individuals.

Figure 6.

Frequency of supply of family businesses

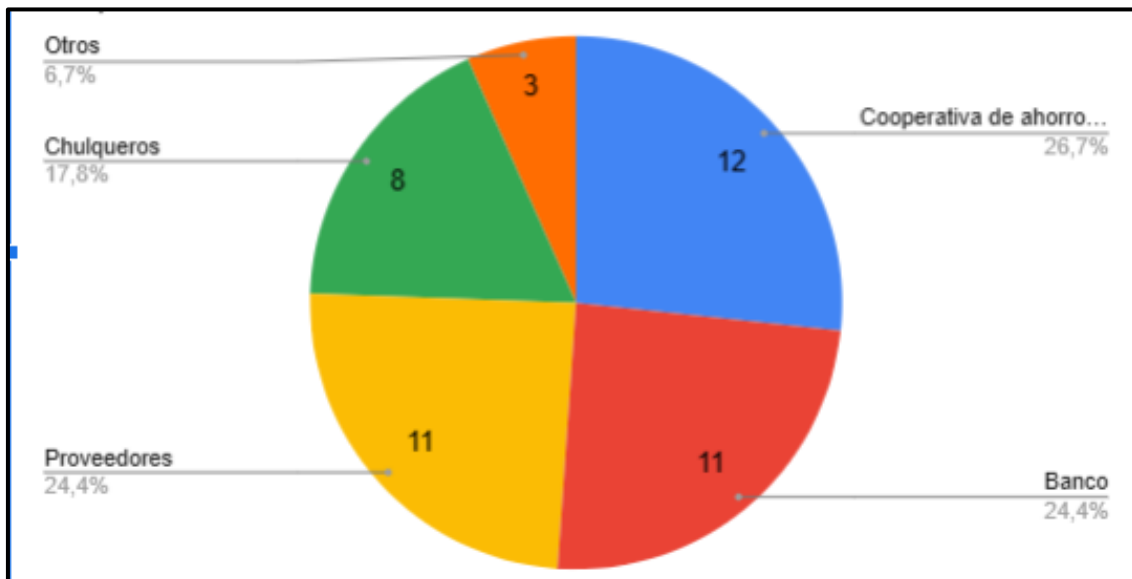


Source: Prepared by the authors

Figure 6 shows that the highest purchase frequency with suppliers is weekly with 43.86%, this is due to the economic capacity of each business for product replenishment.

Figure 7.

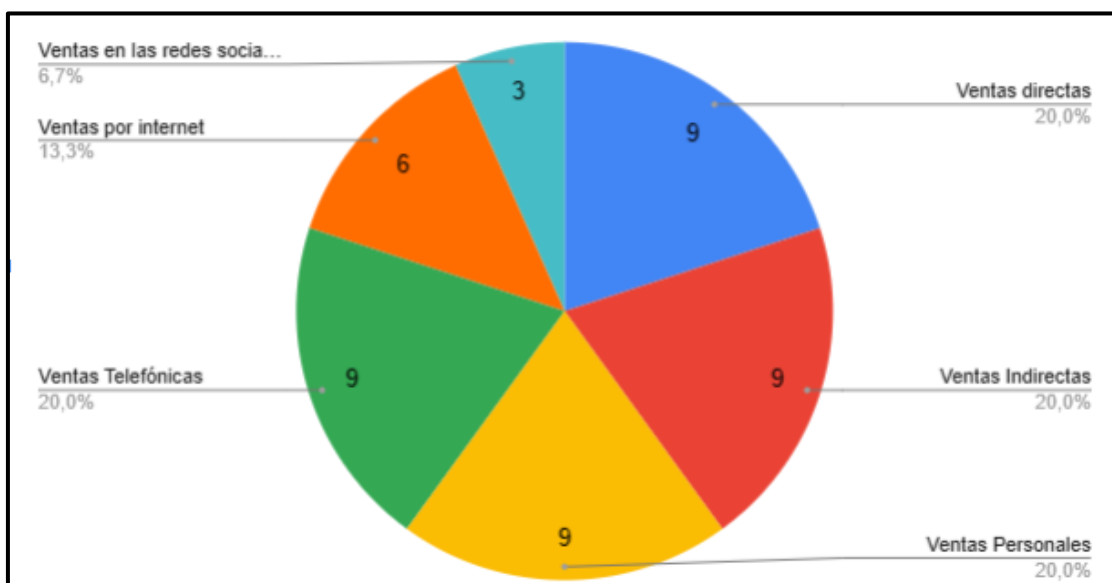
Leveraging family businesses



Source: Own elaboration.

Figure 7 shows that family businesses were financed through savings cooperatives (26.7%), banks and suppliers (24.4%), chulqueros (17.8%) and others (6.7%).

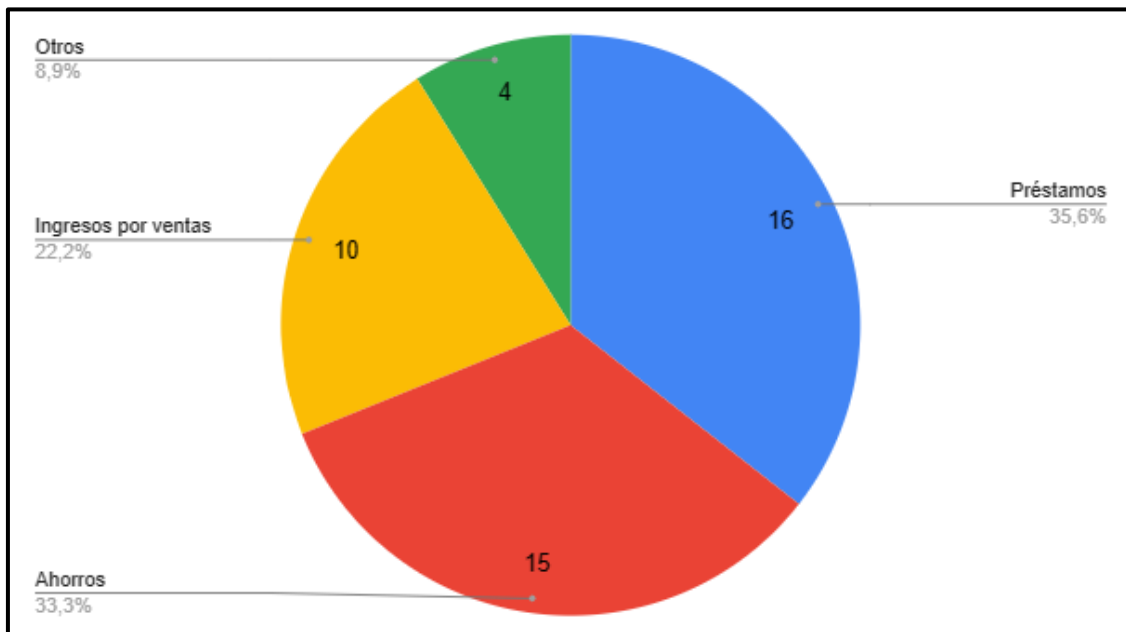
Figure 8.
Family business sales strategies



Source: Own elaboration.

Figure 8 shows that the sales models applied in the family business to maintain customer loyalty are direct and indirect sales, personal sales and internet sales (20%), and sales in social networks (6.7%).

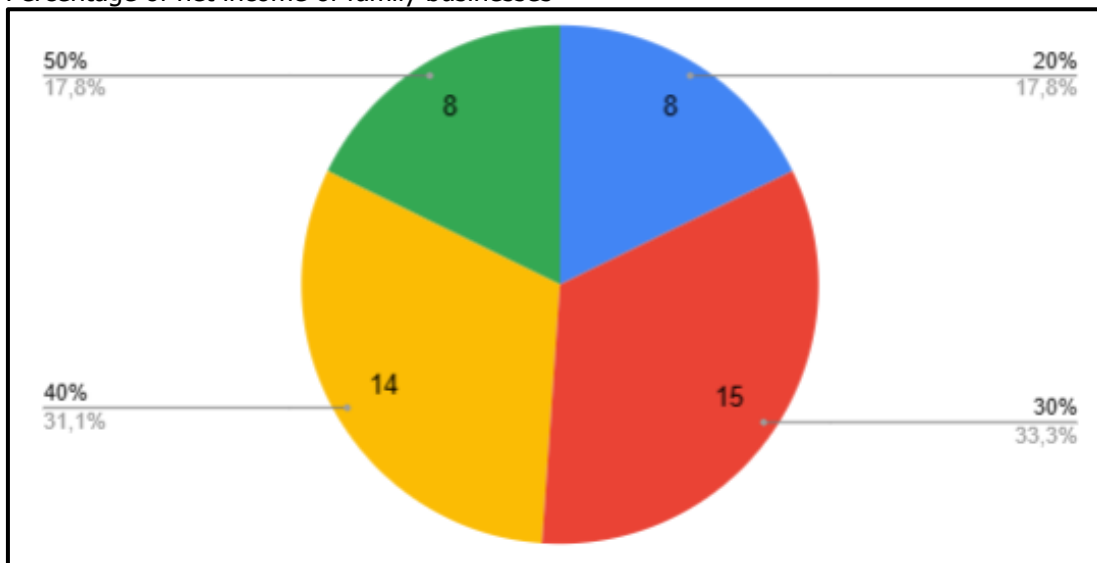
Figure 9.
Financing family businesses



Source: Own elaboration.

Figure 9 shows that the funds that the family businesses had to sustain the business were through loans (35.6%), savings (33.3%), income from sales (22.2%) and others (8.9%).

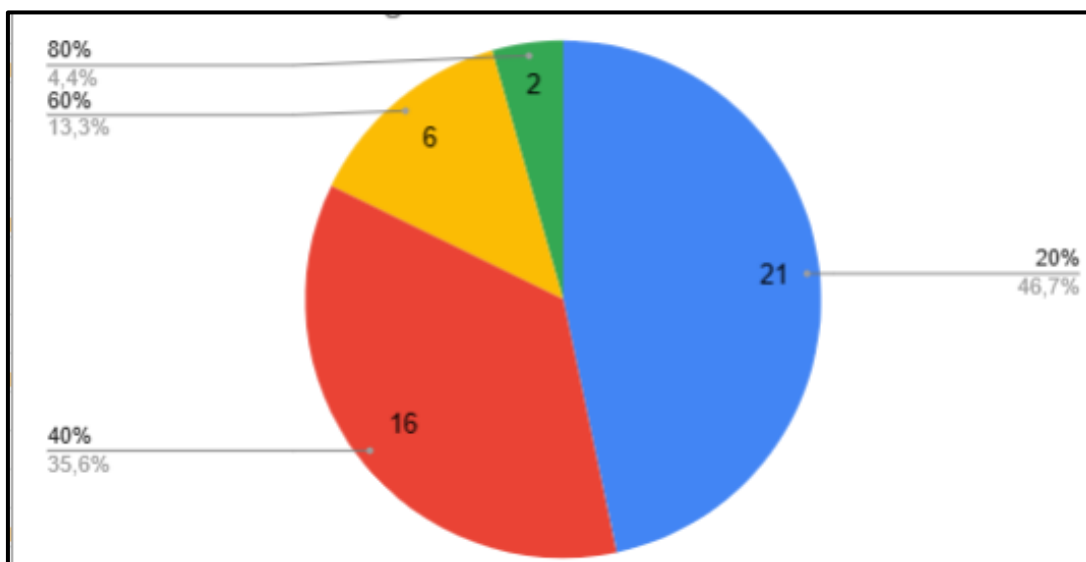
Figure 10.
Percentage of net income of family businesses



Source: Own elaboration.

Figure 10 shows that the percentage of net profit to be obtained from the business in 2021 was 30% equivalent to 15 respondents, followed by 40% from 14 respondents, while lower percentages are 8 and 8 respondents with 50% and 20% respectively.

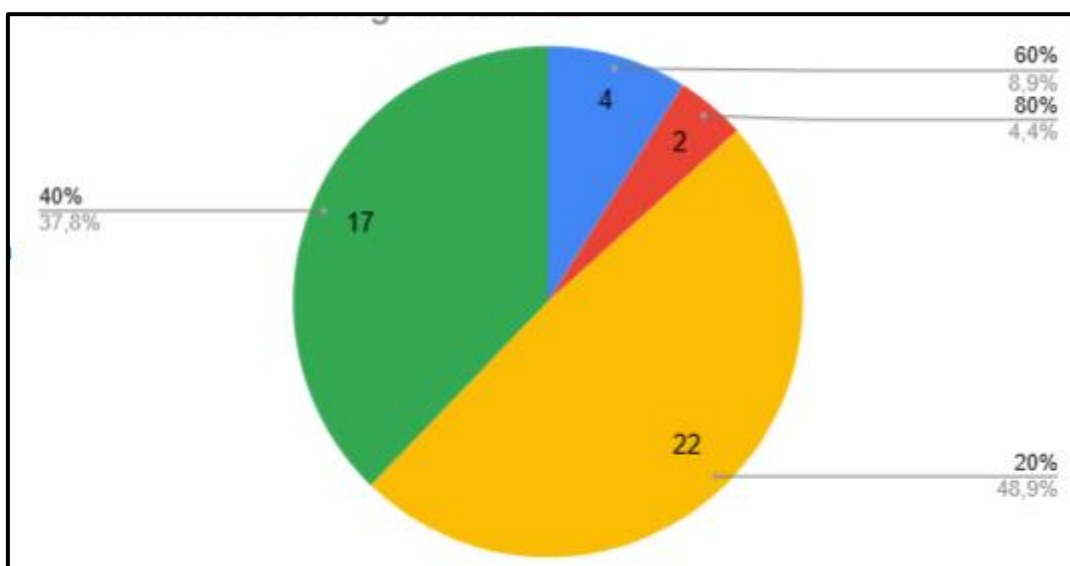
Figure 11.
Percentage of net income that covered the financing used.



Source: Own elaboration.

Figure 11 shows that the percentage of net profit that allowed to cover the financing in 2021 was 20% equivalent to 21 respondents, followed by 40% of 16 respondents, while lower percentages are 2 and 6 respondents with 80% and 60% respectively.

Figure 12.
Percentage of sales that covered the expense.

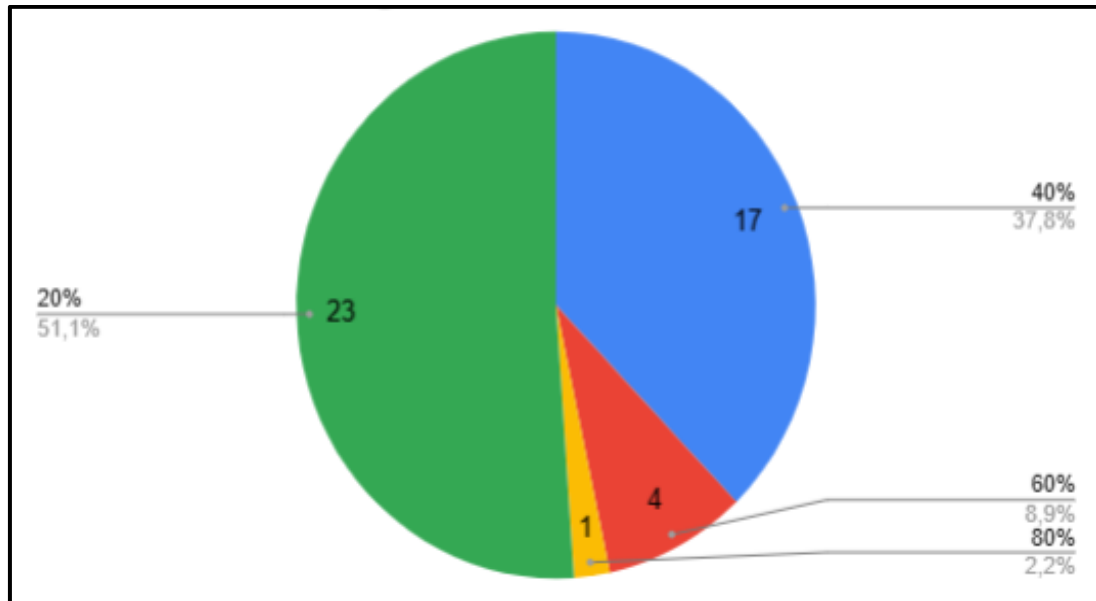


Source: Own elaboration.

Figure 12 shows that the percentage of sales that covered expenses in the year 2021 was 20% equivalent to 22 respondents, followed by 40% for 17 respondents, while lower percentages were 2 and 4 respondents with 80% and 60% respectively.

Figure 13.

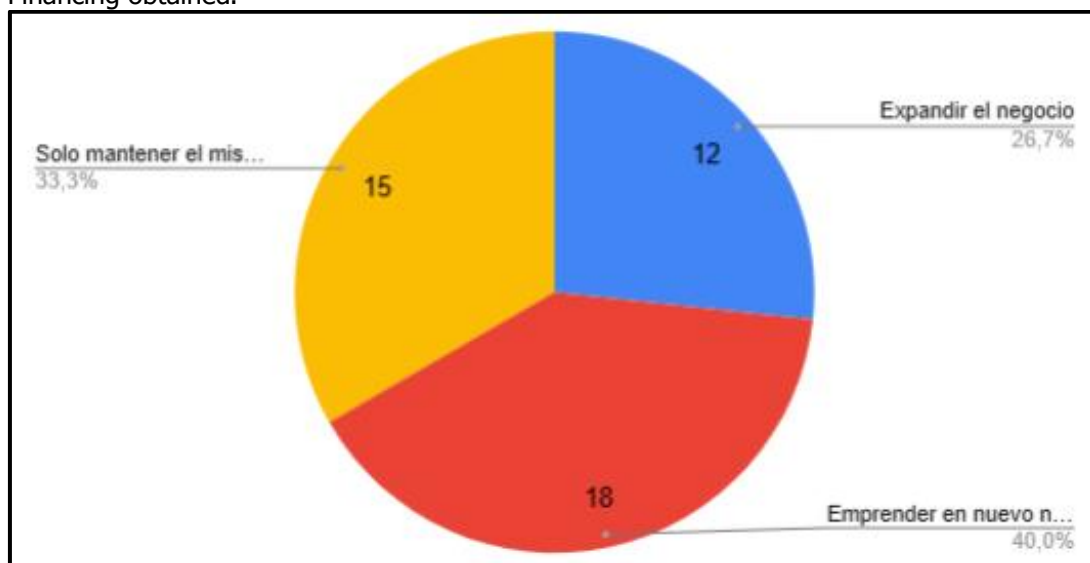
Percentage of investment recovery.



Source: Own elaboration.

Figure 13 shows that the percentage that the investment made in the year 2021 was 20% equivalent to 23 respondents, followed by 40% of 17 respondents, while lower percentages are 4 and 1 respondent with 60% and 80% respectively.

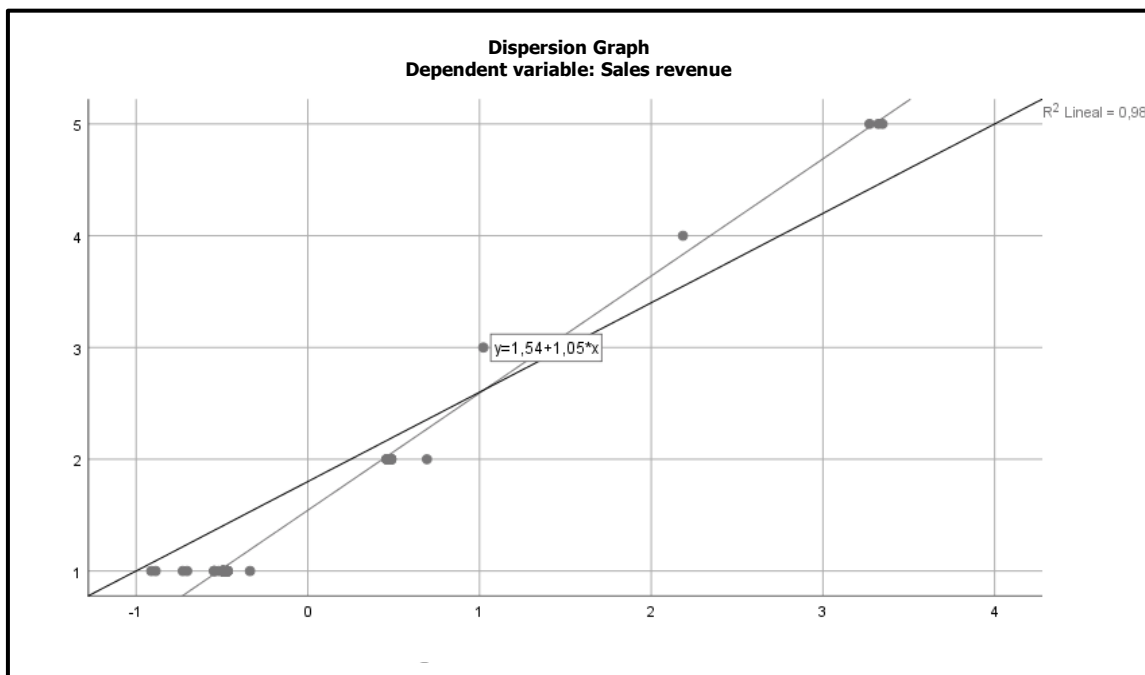
Figure 14.
Financing obtained.



Source: Own elaboration.

Figure 14 shows that 40% of the financing obtained, equivalent to 18 respondents, allowed them to start a new business, followed by 33.33% of 15 respondents, to maintain the same business, while 12 respondents (26.7%) expanded their business.

A regression analysis was performed, in which there is a strong correlation between sales revenue and the relationship with suppliers (strategic allies).



CROSS-TABLES BY INDUSTRY AND SALES REVENUE

ANOVA ^a						
Modelo		Suma de cuadrados	gl	Media cuadrática	F	Sig.
1	Regresión	,824	2	,412	,375	,689 ^b
	Residuo	59,317	54	1,098		
	Total	60,140	56			

a. Variable dependiente: Ingresos por ventas
b. Predictores: (Constante), Quienes Laboraron en la empresa, Aliados estrategicos

Crosstab: Indicate what type of industry or category your family business is in How much did Covid-19 pandemic sales or revenue represent in 2021?

Recuento

		¿Cuántos representaron las ventas o ingresos en época de la pandemia del COVID 19 en el año 2021?					Total
		\$0-\$1000	\$1000-\$2000	\$2000-\$3000	\$3000-\$4000	\$5000 - más	
Indique en qué tipo de industria o categoría se encuentra su empresa familiar	Agrícola	6	0	0	1	0	7
	Comercial	18	11	2	0	1	32
	Industrial	3	0	0	1	0	4
	Inmobiliario	1	0	0	0	0	1
	Otro	12	0	1	0	0	13
Total		40	11	3	2	1	57

CONCLUSIONS

The pandemic has caused changes in economies worldwide, where all markets have experienced a volatile demand and supply of goods and services, due to the necessary isolation consumption decreased causing companies to have unsold stock and having to reduce their production and affect their workforce thus increasing unemployment. The impact on family businesses is related to several factors from variations in their sales, in the goods and services they sell, in the means of financing to leverage their businesses, and for including digital media to improve their sales.

During the study period analyzed, 78.85% of the family businesses were made up of family members and only 14.04% were made up of individuals. In the year analyzed, the most representative sales revenues were in the commercial sector, followed by the agricultural sector. Within the commercial sector, the strategies applied such as Internet sales and direct sales in stores were those that provided the greatest support for the commercialization of products. The two main sources of financing were loans (35.6%) and savings (33.3%). Among the institutions that facilitated leverage are savings and credit cooperatives with 26.7%, and banks and suppliers with 24.4%.

Within the analysis carried out in the year 2021, the net profit represented 30% in most of the family businesses, the same that allowed to cover the financing loans in 20% and 40%. In reference to the expenses, these were covered in 40% and 20% with the sales made in most of the businesses. The investment was recovered in 20% and 40% in most of the businesses, while the financing obtained allowed in 40% to start a new business, and 33.33%, to maintain the same business, while in 12% to expand the business. Despite the difficulties caused by the pandemic, some of the family businesses were able to maintain themselves and take advantage of new market opportunities through their values and principles, customer loyalty, ability to adapt to changes, family commitment, having a clear objective that allowed them to join forces among family members; all these characteristics allowed them to continue with their businesses.

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