

Impact of Social Unrest and the Pandemic on Family Micro-Entrepreneurship Success in Chile



Valeria Scapini^{1,2*}, Cinthya Vergara³

¹ Facultad de Economía, Gobierno y Comunicaciones, Universidad Central de Chile, Toesca 1783 Santiago, Chile

² Escuela de Ingeniería Comercial, Universidad de Valparaíso, Blanco 951 Valparaíso, Chile

³ Departamento de Ingeniería Industrial, Universidad de Chile, Beauchef 851 Santiago, Chile

Corresponding Author Email: valeria.scapini@ucentral.cl

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ABSTRACT

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Entrepreneurship is transcendental to the economy and contributes to economic growth. In this context, law 19.749 was established in Chile to facilitate the creation of family micro-enterprises (FME). However, the social upheaval that occurred in Chile and subsequently the COVID-19 pandemic has had negative repercussions on the country's economy. The present study has the objective of studying the variables that influence the success of family micro-enterprises. A survey was conducted among micro-entrepreneurs who are beneficiaries of the FME program in the southern sector of the Metropolitan Region. A Probit model was estimated, based on socio-economic information, coming from seventy beneficiaries of entrepreneurial initiatives of a south sector community of the capital, representing 40% of the total. The results show that, in the face of social upheaval, the female gender has a positive correlation, while the number of children has a negative effect. In response to the pandemic, female gender correlates positively, whereas Chilean nationality, number of children, and productive and service sectors are negatively related. Finally, in the context of both events, the number of children and the service sector has a negative influence. The results allow us to predict the relative success of the family enterprises ahead of the arrival of eventual exogenous shock.

1. INTRODUCTION

Entrepreneurship constitutes a key element of economic vitality, serving as a lever for business development. By addressing the populace's needs, augmenting productivity, and fostering job creation Entrepreneurship is considered transcendent for the economy and it has been recognized as a driving force behind the economy as fostering innovation, contributing to employment generation and income generation, especially in local communities [1]. The interaction between entrepreneurship and economic expansion has been the subject of extensive and exhaustive study, existing research has underscored the enterprise's pronounced impact on catalyzing economic growth [2-5].

In Chile, Micro, Small, and Medium Enterprises (MSMEs) constitute a substantial portion of the nation's commercial landscape, encompassing 98.6% of all enterprises and contributing to 65.3% of formal employment. Globally, MSMEs play a pivotal role, typically constituting the preponderance of commercial entities, wielding considerable influence over employment generation, and driving innovation, thereby underpinning economic expansion and ameliorating poverty rates [6].

In 2001, Law 19,749 was enacted in Chile, created to promote and support family microbusinesses to promote the

growth and success of family businesses. Its focus is to provide a legal basis for initiatives and programs that strengthen family micro-businesses within the country, ultimately contributing to economic growth and local entrepreneurship [7], where these enterprises are often characterized by their small-scale operations and family-based ownership structure.

According to this law, the term "smaller-sized enterprises" shall be understood to encompass micro-enterprises, small enterprises, and medium-sized enterprises where Micro-enterprises are those companies whose annual revenues from sales, services, and other operational activities have not exceeded 2,400 UF (95.795,47 USD - Value calculated for September 30, 2023) in the last calendar year; Small enterprises are those whose annual revenues from sales, services, and other operational activities exceed 2,400 UF but do not exceed 25,000 UF (997.869,52 USD) in the last calendar year; and Medium-sized enterprises are those whose annual revenues from sales, services and other operational activities exceed 25,000 UF but do not exceed 100,000 UF (3.991.478,10) in the last calendar year.

However, the appearance of the social upheaval that occurred in October 2019 in Chile and subsequently the arrival of the COVID-19 pandemic in March 2020, has brought havoc upon the MSME sector, with microenterprises emerging as particularly vulnerable due to their limited capacity to

withstand protracted periods of inactivity and their heightened susceptibility to liquidity constraints. Strict border closure measures were applied around the world by every government and with it, paralyzed production, consumption decreased, and uncertainty increased [8, 9]. An analysis provided by the Ministry of Economy in its "Descriptive Analysis of the Impact of the Pandemic on Companies in Chile" shows that, between 2019 and 2020, 62.4% of companies grappled with a decline in sales. It is noteworthy that micro businesses bore the brunt of this economic downturn, with 63.1% experiencing diminished sales and a consequential average workforce reduction of -21.2%. While the adverse impact extended to businesses of various sizes, Microbusinesses were the ones that suffered the most damage. The Association of Entrepreneurs of Chile conducted a "Pandemic Impact" survey in April 2021, which revealed that 85.1% of respondents encountered impediments to their entrepreneurial pursuits. Of this cohort, 34.9% reported facing sales reductions, 36% confronted significant challenges involving partial cessation of activities and staff reductions, and 14.2% were faced with the difficulties generated by the indefinite operational suspension. Additionally, 52.5% were compelled to reduce their workforce and 36.8% of survey participants disclosed that their sales had plummeted by more than 50%, with only 15.3% managing to maintain or increase their sales figures. In this survey, the most pronounced risks cited were "Lack of liquidity due to low sales" (77.8%), trailed by "Debt arising from financial institutions" (36%), and "Deficiencies or delays in payments by debtors" (34.1%) [6].

In response to this multifaceted challenge [10], spanning the period from 2020 to 2021, the Government of Chile implemented a list of measures designed to buttress commercial enterprises. These measures encompassed the Covid-19 FOGAPE Credit line, employment subsidies such as Línea Regresa and Línea Contrata, the Employment Protection Law, direct financial support through SME Bonds, and strategic fiscal policies entailing extensions of payment deadlines for obligations and interest freeze, all intended to bolster the liquidity and resilience of companies in the face of the challenges faced by the pandemic.

Law 19.749, enacted in Chile to facilitate the creation of Family Microenterprises (FMME), stands as a legislative measure in the government's commitment to supporting entrepreneurship with a focus on formalization and business establishment. However, despite legislative facilitation, the primary challenges faced by businesses during the pandemic revolved around liquidity, primarily attributed to a significant decline in sales, further exacerbated by indebtedness to financial institutions (36%) and delays or non-compliance in debtor payments (34.1%). While the law aimed to promote the establishment of FMMEs, governmental concern focused on addressing immediate financial obstacles [11].

In complement to legislative efforts, the Chilean government, through entities like Corfo, implemented a robust set of initiatives to support SMEs, including programs like Economic Recovery Programs (PAR Impulsa), collaboration with Regional Governments to provide co-financing, supporting over 4,860 commerce businesses with subsidies exceeding \$16.373 billion; Guarantees such as Fogain, Cobex, and ProInversión that facilitated SMEs' access to financing for investment, working capital, and refinancing; the "Corfo Mipyme Credit" program, operationalized through non-banking financial intermediaries, and additional initiatives beyond subsidies with a focus on entrepreneurship and job

creation. These include platforms like "Pymes en Línea," offering free courses for SMEs' digital transformation, the "Viaje del Emprendedor," which saw a 135% increase in new entrepreneurs registering in 2020, and the "Conecta y Colabora" program aimed at fostering innovation and collaboration (cite Corfo) [12].

This study focuses specifically on the area of family microenterprises (FMEs) and their intricate dynamics. The central objective is to analyze the fundamental variables that support the success of the FME during the period after protests and social demonstrations of the Chilean social unrest of October 18, 2019, followed by the start of the pandemic on March 3, 2020. By examining the interaction between these events and FME outcomes, this research contributes to a better understanding of how FME navigates adversity and thrives within economic challenges and transformations. This study aims to address the following question: What are the key variables influencing the success of family micro-enterprises, especially in the face of socio-economic disruptions such as social upheaval and pandemics?

The findings presented in this study contribute to the current understanding of Family Microenterprises (FMME) in Chile by identifying factors that may influence their performance in times of crisis. The identification of specific variables such as gender and number of children as variables that affect the success of a family business allows us to extend the analysis of conventional assumptions. Furthermore, examining various factors such as the use of technology, family structure, use of management metrics, and where you sell products provides insights into the multifaceted nature of FME dynamics. We hope that these findings and their discussion allow for a better understanding of the challenges faced by FME.

The work is organized as follows: Chapter 1 introduces the subject; Chapter 2 describes the situation of entrepreneurship in Chile. Chapter 3 shows the used data and a descriptive statistic of these is included. Next, the methodology of the study is presented, followed by the results. Finally, the results are discussed, and conclusions are reviewed.

2. ENTREPRENEURSHIP IN CHILE

In Chile, microentrepreneurship is characterized by high levels of informality throughout history. This situation is largely attributed to the complexity of administrative procedures and associated regulation, as noted in a 2015 Organización Internacional del Trabajo (OIT) report [13]. In recent years, several factors may have contributed to this increase in informal entrepreneurship. Economic uncertainties, such as those caused by the COVID-19 pandemic, may lead people to seek alternative sources of income through informal means. Additionally, barriers to entry into formal business activities, such as regulatory requirements and access to capital, may drive more people toward informal entrepreneurship.

The COVID-19 pandemic brought about a multitude of challenges, but it also led to unexpected trends in various sectors, including entrepreneurship. A recent report from the Instituto Nacional de Estadísticas (INE) (National Statistics Institute) sheds light on how the pandemic influenced micro-entrepreneurship and reveals gender differences in this context. Several factors may contribute to this rise in informal ventures. Economic uncertainties, such as those brought about by the COVID-19 pandemic, can lead individuals to seek alternative

sources of income through informal means. Additionally, the barriers to entry into formal business activities, such as regulatory requirements and access to capital, may drive more people toward informal entrepreneurship.

While informality can provide people with a degree of flexibility and autonomy, it often comes with disadvantages. Informal workers may need greater access to social protection, job security and fair labor practices. Therefore, the rise of informal entrepreneurship in Chile highlights the importance of addressing the challenges faced by informal workers, including efforts to provide them with better opportunities for formal employment or entrepreneurship, while extending social protection to those within this sector. According to the INE report, a significant number of microentrepreneurs, a total of 410,955 people, started their business in response to the pandemic, representing 20.8% of the total microbusiness activity during the period studied. This statistic alone underscores the profound impact of the pandemic on the business landscape.

According to the VII Microentrepreneur Survey of the INE in 2022 [14], almost half of the microentrepreneurs (48.5%) started their businesses out of necessity, while 36.9% did so due to the emergence of an opportunity. This trend reflects the findings from 2019, where need remained the most important motivation. Specifically, 20.8% of microentrepreneurs started their ventures in response to the COVID-19 pandemic, 70.8% of them cited a need and 23.7% took advantage of an opportunity. In addition, 24.8% of microentrepreneurs received formal training for their economic activities, figures similar to those of 2019. The financing of this training came mainly from personal resources (27.2%), and 24.1% depended on government programs.

Digging deeper, the report explores the motivations behind this rise in entrepreneurship. It reveals that a substantial number of people, 290,841 in total, began their microenterprise journey out of "necessity" due to the impact of the pandemic on employment and economic stability. By contrast, 97,531 people took this path because of the "opportunity" presented by the pandemic's changing business landscape.

In turn, the report highlights a gender disparity, as 94.5% of female microentrepreneurs are dedicated to commerce, services and manufacturing industries, compared to 57.4% of their male counterparts. Where, also, Gender disparity leads to income differences. It should be noted that 70.4% of female microentrepreneurs earn income equal to or less than the minimum wage, compared to 40.5% of men, which reveals a gender gap of 29.9 percentage points. This gap has widened from the 26.9 percentage points reported in 2019.

The increase from 53.1% of informal enterprises in 2019 to 58.3% in 2023, as reported by the VII Microentrepreneurship Survey of the INE, is a notable change in the panorama of microentrepreneurship in Chile. This increase suggests that an increasing number of people are choosing or being forced to participate in informal economic activities rather than formal employment or entrepreneurship.

Furthermore, it shows a predominance of informal microenterprises, where 58.3% of the total microentrepreneurs participate in informal economic activities and, compared to 2019, this figure represents an increase (compared to 53.1% in the reference period). The branches of economic activity with the highest proportion of informal microenterprises include Construction (74.6%), Agriculture and Fishing (74.3%) and Manufacturing Industries (68.4%). With this, a significant

presence of informal companies is identified within microentrepreneurship in Chile, which could have implications for labor rights, social protection, and economic development. It's important to notice that, during the pandemic period, the level of digitalization in Chile, together with initiatives such as digital signatures at affordable prices and the "Your Company in a Day" program of the Ministry of Economy, created in 2013, has played a fundamental role in maintaining and even increasing the creation of companies. These efforts have significantly simplified business creation processes, as evidenced by figures from the Ministry of Economy. In particular, during the pandemic period between January and October 2020, 109,903 new companies were created through the Registry of Companies and Companies (RES), which constitutes an increase of 16.8% compared to the same period in 2019. These data suggest that thanks to digitalization and effective government initiatives, the obstacles related to the formalization of companies do not focus directly on the procedures or complexity in the process of creating a company [15].

According to the last Microentrepreneurship Survey [14] jointly conducted by the Ministry of Economy, Development, and Tourism, and the National Institute of Statistics (INE), the data for 2022 reveals that Chile had 1,977,426 microentrepreneurs. Among them, 1,173,148 (59.3%) were men, and 804,278 (41.7%) were women. The study highlights that 58.4% of female microentrepreneurs initiate their activities primarily out of "Necessity," compared to 41.7% of men. Furthermore, the survey indicates 1,152,443 (58.3%) individuals engaging in informal microenterprises and 824,983 (41.7%) in formal ones. Broken down by gender, 63.2% of women and 54.9% of men are involved in informal microenterprises. Furthermore, regarding the pandemic's impact, 410,955 (20.8%) individuals commenced microentrepreneurial activities due to COVID-19. Among them, 207,586 were women and 203,369 were men, constituting 25.8% and 17.3% of the total microentrepreneurs for women and men, respectively. Within those who started microenterprises during the pandemic, 78.5% of women did so out of "Necessity," whereas 68.1% of men made the same choice. Additionally, 19.6% of women and 29.8% of men started their businesses out of "Opportunity."

In particular, it is possible to see that the gender of the people who undertake business is a factor to be taken into consideration and necessary to analyze in detail. A study by the Ministry of Economy [16] identifies that companies led by men presented lower sales performance compared to companies led by women and, in terms of employment management, the decrease was less marked in micro and small businesses led by men compared to those led by women. In relation to remuneration, a greater decrease was evident in microenterprises led by women in contrast to those led by men, unlike what was observed in small businesses. Therefore, the impact of gender on business management in Chile, although it presents differences, will depend on what is being measured and analyzed.

Although, in Chile, gender differences are identified in the participation and results of microbusinesses, government aid during the pandemic was defined under transversal strategies considering economic factors. A study by the Association of Entrepreneurs of Chile (Asech) [11] in the first half of 2021 reveals that 85.1% of those surveyed have seen their entrepreneurship affected by the pandemic, with 50.2% seriously affected, where 36.8% declare that they have lost

more than 50% of their annual sales, and 77.8% consider that the lack of liquidity due to lower sales is the biggest risk factor for this year, followed by debts with financial institutions. (36%).

In this context, government policies, such as FOGAPE-COVID credits, played a crucial role in supporting businesses. According to the Central Bank of Chile [17], these loans allowed the expansion of banking relationships, generating new connections between companies and banks. Those who accessed credit in new relationships experienced higher sales growth and a smaller decline in employment compared to those who opted for their main banks. In addition, initiatives such as the FCIC Program and the expansion of FOGAPE, accompanied by flexible regulatory measures, contributed to the flow of credit, helping companies remain operational and mitigate credit risks. In the context of the COVID-19 crisis, these government policies managed to successfully meet their objectives by maintaining financial stability and supporting economic recovery, as evidenced by the Central Bank's conclusions on the impact of the pandemic on companies in Chile.

3. METHODOLOGY

We conducted a survey instrument consisting of 50 questions, encompassing both open-ended and directed inquiries, which were administered directly to entrepreneurs through phone conversations. The questionnaire aimed to gather detailed information about the entrepreneurs, their families, and the key attributes of their enterprises. The collected data included demographic details such as gender, age, educational background, and familial structure, along with business-specific information such as the nature of the business, formalization status, and operational details.

The survey instrument covered various aspects of entrepreneurial activities, including business practices, financial management, marketing strategies, and the utilization of technology. Additionally, it sought insights into the entrepreneurs' experiences during the social upheaval and the COVID-19 pandemic, focusing on the impact on sales and the challenges faced by their enterprises.

The study was conducted during the summer of 2021-2022, targeting micro-entrepreneurs who were beneficiaries of the FME program in a southern sector of the Metropolitan Region. Out of the 175 entrepreneurs eligible for the municipal program, 70 willingly participated in the survey via telephone interviews, representing 40% of the total population. The responses obtained formed the basis of the analyzed database for this study. Table 1 presents the number of enterprises affected during pandemic and social upheaval, according to the economic activity.

Table 1. Number of enterprises according to economic activity

	Social Upheaval		Pandemic	
	Affected	%	Affected	%
Commerce	18	25.7	12	17.1
Service	21	30.0	24	34.3
Productive	10	14.3	10	14.3
Total	49	70	46	65.7

In Table 1, we can observe that the number of enterprises affected by the social upheaval and the pandemic were 49 and 46 respectively, which represents 70% and 65.7%. Additionally, we observe that all the economic activities were affected by both events and in the same order of importance, with the service sector being mostly affected, followed by commerce and lastly the production sector. Specifically, 30% of the service activities were affected during the social upheaval and 34.3% during the pandemic; 25.7% of the commerce activities were affected during the social upheaval and 17.1% during the pandemic; and finally, 14.3% of the production area were affected during both events.

3.1 The model

When the variable to be studied is binary, Logit and Probit models are usually used. A Probit model was utilized due to it being one of the most used in literature and is generally preferred for behavioral studies [18]. A probit model is considered a binary response model in the following way [19]:

$$P(Y = 1|X_1, X_2, \dots, X_k) = G(\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k) = G(X\beta) \quad (1)$$

$$G(z) = \Phi(z) = \int_{-\infty}^z \phi(v)dv \quad (2)$$

where,

$$\phi(z) = \frac{1}{\sqrt{2\pi}} e^{-\frac{z^2}{2}} \quad (3)$$

corresponds to the density function of the normal (0,1).

In this way, the expression of the model is:

$$Y = G(z) = G(\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k) = \int_{-\infty}^{\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k} \frac{1}{\sqrt{2\pi}} e^{-\frac{v^2}{2}} dv \quad (4)$$

Finally, to estimate the parameters, the maximum likelihood method was used.

In particular for this study, and as mentioned above, to study the variables that influence the family micro-enterprise's success in the midst of social upheaval and the pandemic in Chile, a Probit, binary nonlinear selection probabilistic model was estimated, where the explained variable corresponds to the success of the enterprise 1 or 0 (where 1 indicates that the social upheaval did not negatively affect business sales and 0 reflects the opposite) in the face of an exogenous shock.

The first estimate refers to the enterprise's success in the midst of social upheaval and the second estimate refers to the success in the face of the appearance of the pandemic. The explanatory variables considered are the female gender, age, nationality, number of children, usage of the internet or computers in the business, economic sector to which it belongs (commerce, production, or service), and number of people that work in the business. To simplify the specification of the model, we group the variables into two categories: the first category considers those variables related to the entrepreneur and the family, and the second category considers those related to the characteristics of the microenterprise. Thus, the estimated model has the following generic specifications:

$$P(\text{Success}_i = 1) = G(\alpha + \beta X_i + \gamma Z_i) \quad (5)$$

where, P corresponds to the probability and G is the standard normal accumulated distribution function. Success_i corresponds to the success variable of the enterprise i (in the face of questions, “The social upheaval affected your business sales?” or “The pandemic affected your business sales?”, the possible responses being “No” or “Si, they increased”). The sub index i reflects each micro-enterprise. X_i refers to a set of explanatory variables related to the entrepreneur and the family, and Z_i corresponds to a set of characteristics of the micro-enterprise i . The α , β and γ parameters were estimated through a maximum verisimilitude method; and the results are interpreted as the marginal effect, therefore, the symbol of the estimated parameter indicates the direction in which the probability moves each time that the explanatory variable increases. In the case of a particular businessman, if the set of attributes are greater, then there is a higher probability that the enterprise is successful in the face of an exogenous shock. Finally, to verify the statistical consistency of the models, the significance level of each variable was calculated, as well as the determination coefficient of each model.

4. RESULTS

The preliminary results presented in Table 2 point to the following general conclusions. First, and in relation to the variables that influence the enterprise’s success during the social upheaval, the seven variable estimated model is a significant predictor of success to the 0.0764 level. Of the total of the seven variables considered in the study, two of them turned out to be significant predictors, these are female gender and number of children. The former influences positively with a significance level of 0.05 while the latter influences negatively with a significance level of 0.01.

Additionally,, in relation to the variables that influence the success of the enterprise during the pandemic, the results show that the seven variable models is a significant predictor at the 0.0003 level. Of the seven considered variables, five are significant variables, these are female gender, Chilean nationality, number of children, production, and service sector. The first of them influences positively with a significant level of 0.1 while the rest of them influences negatively with a significance level of 0.01 in the case of services and with a significance level of 0.1 for the rest of the variables.

Finally, the success predictor model in both events is a significant predictor at the 0.0595 level. The variables that showed to be significant are the number of children and the service sector, both influenced negatively with a significance level of 0.01 and 0.1 respectively.

The relatively low pseudo R-squared values in the study (0.1662, 0.3202, and 0.2138 in social upheaval, pandemic, and the combination of both events models respectively) may stem from the inherent complexity of the phenomena under investigation, such as the impact of unforeseen events like social upheaval and the pandemic on family microenterprises. These events involve unpredictable factors not entirely captured by the variables considered in the model. Additionally, the sample size and representativeness might be limited, affecting the generalizability of results. The lack of variability in some variables could also impact the model's ability to explain variation in business success. This implies that other unaccounted factors play a significant role in

determining business success during social upheaval and the pandemic. Decision-makers should be aware of these limitations when using the model's results, and addressing these limitations through a larger sample size, additional variables, and econometric techniques is recommended.

Table 2. Parameter estimate and significance level

	Social Upheaval (Success)	Pandemic (Success)	Both Events (Success)
Female	0.811272** (0.396098)	0.732271* (0.4203533)	0.726034 (0.45546)
Age	0.014228 (0.01864)	-0.014374 (0.020978)	-0.008121 (0.02214)
Chilean	-0.5223939 (0.5549886)	-1.034316* (0.617797)	-0.337108 (0.60790)
N° of Children	-0.44557*** (0.1642614)	- (0.1780839)	-0.477*** (0.18534)
Internet/ computer	0.664908 (0.48834)	-0.3761254 (0.518104)	0.027291 (0.51478)
Production Sector	-0.9332854 (0.57772)	-1.115189* (0.6070382)	-0.83088 (0.67114)
Service Sector	-0.5239288 (0.38900)	- (0.4379082)	-0.7459* (0.43963)
N° of workers	0.039656 (0.227363)	0.259519 (0.250903)	0.1568576 (0.26835)
Observations	70	70	70
Pseudo R- squared	0.1662	0.3202	0.2138

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

The Probit model estimates, presented in Table 2, shed light on the factors influencing the success of family micro-enterprises in Chile during the social upheaval and the pandemic. Notably, female gender emerges as a positive predictor of success in social upheaval and pandemic events indicating a higher likelihood of success. Conversely, Chilean nationality shows a negative impact on success during the pandemic. The number of children has a negative impact on success in all events, including social upheaval, pandemic, and the combination of both. Additionally, the service sector negatively influences success in pandemic and the combined events. Other variables, including age, and business sectors, do not exhibit statistically significant effects on success. Likewise, it is surprising that the use of computers/Internet is not associated with venture success. These findings provide valuable insights into the nuanced dynamics of family micro-enterprises in navigating challenging circumstances.

5. DISCUSSION

In general, establishing a consensus on the determinants of enterprise success remains elusive due to a multitude of internal and external factors. Key factors extensively studied include creativity, financial opportunities, social media utilization, human capital, and gender, among others [20, 21]. Contrary to a singular focus on training, studies assert that fostering the country's entrepreneurial capacity necessitates a collaborative effort involving the government, private sector, and academia, they can plan future actions for development in the medium and long term [21-23]. It is underscored that

enhancing enterprise potential requires improving funding conditions and creating conducive spaces for innovation [21].

While social media offers benefits such as resource access, improved client-provider interactions, increased value, and strategic alliances, influencing enterprise success [24-26], our results deviate by not indicating a significant association between computer or internet use and venture success. The apparent lack of correlation between Internet/computer use and business success is noteworthy and may be attributed to factors like inadequate academic training, the cost of maintaining internet services, and resistance to change [27].

Addressing gender dynamics in entrepreneurship, prior studies have indicated lower performances among female entrepreneurs [28], with males exhibiting a greater propensity to establish enterprises and demonstrating higher entrepreneurial capacity than their female counterparts [29, 30]. However, our specific findings counter this trend, revealing that the female gender is associated with a higher probability of success in family enterprises.

Furthermore, technology is recognized as a fundamental variable influencing the initiation, development, and growth of enterprises [31, 32], facilitating the creation of client-oriented products or services and improving post-sale services [33, 34]. Despite this, our study aligns with previous results by not demonstrating a significant association between computer or internet use and venture success. This lack of correlation underlines the need for a nuanced understanding of the interplay between technology, gender, and other factors influencing enterprise success [27].

6. CONCLUSIONS

Entrepreneurship contributes to the economic growth of the country and due to this, it is considered transcendental for the country's economy. In times of crisis, entrepreneurship requires special attention given that many entrepreneurs do not have the funds that allow them to preemptively spend or tackle the necessary requirements of the moment.

The Chilean government has implemented various policies and programs to support SMEs. These initiatives include financial incentives, training, technical assistance, and regulatory reforms aimed at reducing barriers to business operations. As in many other countries, SMEs in Chile face challenges such as competition from larger corporations, regulatory complexities, and the need for innovation to remain competitive.

In this context, the variables that influence the success of family enterprises were studied, in the face of unexpected events in Chile, the social upheaval occurred on October 18th of 2019 and subsequently the arrival of the pandemic on March 3rd of 2020. We studied 70 family micro-enterprises of a southern sector of the capital, that were beneficiaries of its municipality. A survey was conducted on the entrepreneurs during the summer of 2021-2022 that allowed us to characterize the entrepreneur, family, micro-enterprise, and understand how their sales were affected in times of social upheaval and pandemic. A Probit probability model was estimated based on the socio-economic cross-section information, where the explanatory variables considered were gender, age, number of children, usage of internet/computer, production sector to which it belongs and nationality. The results obtained show that the seven variable model is a significant predictor of the success of the enterprise in the face

of the social upheaval at the 0.0764 level. Additionally, the variables, female gender and the number of children resulted significantly at 5%, the former influences positively while the latter influences negatively. On the other hand, the results obtained show that the seven variable model is a significant predictor of the enterprise's success in the face of the pandemic at the 0.0006 level. Moreover, the variables: female gender, Chilean nationality, number of children, belonging to the production and service sector, are significant, the first influencing positively and the rest negatively. Lastly, the results obtained show that the seven variable model is a significant predictor of the success of enterprises in the face of both events at a 0.0595 level. The variables, number of children and service sector are significant at 1% and 10% and they influence negatively.

Law 19,749 has had a significant impact on the SME landscape in Chile. It has contributed to the formalization of companies, improved access to financing, fostered entrepreneurship and promoted innovation among micro and small businesses. By addressing the key challenges faced by SMEs, this law plays a crucial role in strengthening Chile's economic fabric and promoting sustainable economic growth. Law 19,749 in Chile is a comprehensive legal framework designed to promote and support the development of micro and small businesses. It covers several provisions aimed at addressing the unique challenges faced by SMEs while encouraging entrepreneurship, innovation and economic diversification. While challenges remain, the law's achievements have been significant, positioning Chile's SME sector for continued growth and contribution to the country's economic prosperity. Despite its important contribution, Law 19,749 has not been free of challenges and limitations. Critics have pointed to the need for further improved implementation, greater outreach to informal SMEs, and better coordination between government agencies responsible for SME support programs.

Finally, the results allow us to predict the relative success of the family enterprises in the midst of eventual exogenous shocks, and with it deliver useful information for correct decision making and the elaboration of public policies. It should be noted, that the results obtained cannot be considered as general, given that they are based on a reduced group of micro-entrepreneurs and of a particular municipality.

Among the main limitations of the study, it can be noted that the sample size may not capture the characteristics and opinions of a larger group, potentially impacting the external validity of our results. In this context, it is recommended that future research endeavors consider a greater number of observations to enhance the external validity of investigations. Additionally, it is advised to incorporate greater variability in the spatial dimension and employ econometric techniques to isolate any endogeneity that the model may present. Other areas of future research could include the impact of digital transformation on FMMEs and the study of the resilience and adaptability of enterprises during crisis periods.

The conclusions drawn from this analysis can assist decision-makers in the political and business domains. The identification of specific variables, such as gender, number of children, and business sector, that influence the success of enterprises during periods of crisis suggests the need for personalized support. Policymakers can tailor support programs to address these factors, thus enhancing resilience in the face of unexpected situations.

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