




# Women-owned small businesses. An analysis in pandemic context in Guanajuato, Mexico

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*Abstract. This paper examines the impact of different factors in a pandemic context, on women-owned small businesses in Mexico. The objective was to identify the main factors that enable the development of women-owned businesses in the state of Guanajuato (Mexico) and thus to identify areas for improvement both within and outside their businesses. Using a survey of 182 women small business owners, the authors analyze the effects of the pandemic on business operations, sales, employment, and access to government support programs. The scope was descriptive and comprehensive. The results indicate that the pandemic has had a significant negative impact on small businesses in Mexico, with many experiencing reduced sales, reduced employment, and financial difficulties. The authors also find that government support programs have been insufficient and ineffective in addressing the needs of women small business owners. The paper concludes by recommending that policymakers take a more proactive approach to supporting small businesses, including providing financial assistance, reducing regulatory burdens, and facilitating access to digital technologies. Overall, this paper provides valuable insights into the challenges faced by women small business*

*owners in Mexico during the pandemic crisis and highlights the importance of government support programs in promoting small business growth and resilience.*

**Keywords:** *Business; companies; women; development; Mexico.*

## PEQUEÑAS EMPRESAS PROPIEDAD DE MUJERES. UN ANÁLISIS EN EL CONTEXTO DE LA PANDEMIA EN GUANAJUATO, MÉXICO

*Resumen. Este artículo analiza el impacto de diversos factores, en un contexto de pandemia, sobre las pequeñas empresas de mujeres en México. El objetivo fue identificar los principales factores que favorecen el desarrollo de los negocios de mujeres en el estado de Guanajuato y, a partir de ello, señalar áreas de mejora tanto dentro de las empresas como en su entorno. Para ello, se aplicó una encuesta a 182 propietarias de pequeñas empresas, con la que se examinaron los efectos de la pandemia sobre la actividad empresarial, las ventas, el empleo y el acceso a programas de apoyo gubernamental. El estudio tuvo un alcance descriptivo e integral. Los resultados muestran que la pandemia tuvo un efecto negativo significativo sobre las pequeñas empresas en México, muchas de las cuales registraron una disminución de ventas, reducción del empleo y dificultades financieras. Asimismo, se observó que los programas de apoyo gubernamental han sido insuficientes e ineficaces para responder a las necesidades de las propietarias de pequeñas empresas. En consecuencia, se propone que los responsables de la formulación de políticas adopten una estrategia más activa de apoyo, mediante asistencia financiera, reducción de cargas regulatorias y facilitación del acceso a tecnologías digitales. En conjunto, el estudio aporta evidencia relevante sobre los desafíos que enfrentaron las propietarias de pequeñas empresas en México durante la crisis sanitaria y subraya la importancia del respaldo institucional para impulsar su crecimiento y resiliencia.*

**Palabras clave:** *Empresas; negocios; mujeres; desarrollo; México.*

## 1. Introduction

In the current context, there is a major problem linked to high unemployment and low levels of quality of life, which is why the creation and sustainability of companies is a relevant issue as a source of income and employment generation, and a catalyst for productive dynamics and the development of communities and countries.

However, there cannot be sustainable and inclusive development without the reduction of gender gaps in the creation and development of women-owned businesses, which is why this research aims to identify the main factors that enable the development of women-owned businesses in the state of Guanajuato (Mexico) and thus to identify areas for improvement both within their businesses and outside them.

According to National Institute of Statistics and Geography (INEGI, 2021), in Mexico women own 36.6% of micro, small and medium-sized establishments in manufacturing, commerce and private non-financial services. However, these establishments account for only 15.2% of gross census value added, as 99.5% of these are micro-businesses employing a maximum of two persons (84.5%) and 78.4% of them are informal. Even though women's participation in Mexico is still low, the female economic participation rate has increased by 15.7 percentage points in the last 10 years, from 33.3% in 2010 to 49.0% in 2020 (INEGI, 2021).

Several studies show that women-owned businesses tend to be small and slow-growing (Hablich *et al.*, 2018; Sarfaraz *et al.* 2014), so it is essential to identify areas of opportunity to strengthen them and make them sustainable and competitive.

In recent years, women-owned businesses have been studied for their contribution to the economy and social development, despite the limitations and unequal opportunities faced by their owners. For example, in most countries, Mexico being no exception, entrepreneurship statistics are dominated by men.

The Covid-19 pandemic has profoundly impacted on the global economy, with small businesses bearing the brunt of the economic fallout. These businesses are particularly vulnerable to economic shocks, as they often have limited financial resources, weak market power, and limited access to credit. In the case of developing countries like Mexico, small businesses play a crucial role in driving economic growth and creating employment opportunities, making them essential for poverty reduction and inclusive development.

We argue that the pandemic has had a significant negative impact on small businesses in Mexico, with many experiencing reduced sales, reduced employment, and financial difficulties. The authors collected data from a survey of 182

women small business owners, which allowed them to analyze the impact of the pandemic on business operations, sales, employment, and access to government support programs. The paper also provides a detailed analysis of the different sectors and regions that have been affected by the pandemic, highlighting the heterogeneity of the impact across the Mexican economy.

The paper also examines the effectiveness of government support programs in addressing the needs of women small business owners during the pandemic. The authors find that government support programs have been insufficient and ineffective in addressing the needs of small business owners and recommend that policymakers take a more proactive approach to supporting small businesses. This includes providing financial assistance, reducing regulatory burdens, and facilitating access to digital technologies.

Despite the challenges faced by small business owners in Mexico, the authors highlight the resilience and adaptability of women-owned small businesses in responding to the pandemic. Many small businesses have adopted innovative strategies, such as digital platforms and e-commerce, to maintain their operations and adapt to changing market conditions. The paper also provides important insights into the role of social networks and community support in promoting small business growth and resilience.

Overall, this paper provides valuable insights into the challenges faced by women small business owners in Mexico during the Covid-19 pandemic and highlights the importance of government support programs in promoting small business growth and resilience. The paper contributes to the literature on small business development in developing countries by highlighting the importance of government support programs in promoting small business growth and resilience. The paper concludes by recommending that policymakers take a more proactive approach to supporting small businesses, including providing financial assistance, reducing regulatory burdens, and facilitating access to digital technologies.

## **2. Context and theoretical approach**

EAGLE economies (Emerging and Growth-Leading Economies) are a group of emerging economies identified by BBVA Research in 2011 as having potential for high economic growth in the future. Selection indicators include a population of more than 20 million people, GDP per capita of more than \$15,000 and average economic growth of more than 3% in the previous decade (BBVA Research, 2011).

EAGLE economies include Mexico, as it is the second largest economy in Latin America after Brazil and has a strategic geographical location between

North and Latin America. Mexico is also a member of the Organization for Economic Co-operation and Development (OECD) and recently ratified the T-MEC (North American Free Trade Agreement), which makes it attractive for foreign companies looking to invest in the region.

Notwithstanding the above, in recent years Mexico's economy has experienced several challenges, some of them stemming from the current government's economic policy (which has gone from republican austerity to Franciscan poverty), low oil prices and undoubtedly the ravages of the Covid-19 pandemic (AMLO, 2022; PWC, 2023).

Against this background, business creation is essential because it contributes to economic growth, employment generation, innovation and social development. Businesses are undoubtedly a key source of employment and income and can have a positive impact on the community in which they are established.

In the case of this paper, the creation of women-led enterprises is important because it can contribute to the reduction of gender inequality in the economy and in society in general. However, several studies suggest that the development of women-owned businesses is slower and more difficult, so it is urgent to identify those factors that can contribute to the development of these businesses (see Table 1).

According to the above, factors can be classified as internal and external.

Internal factors:

- ✦ Access to finance
- ✦ Use of technology
- ✦ Innovation and creativity
- ✦ Business skills and leadership
- ✦ Entrepreneurial vision and passion

External factors:

- ✦ Support networks and mentoring
- ✦ Favorable regulatory environment
- ✦ Market access
- ✦ Public policies that promote gender equality and diversity
- ✦ Cultural attitudes towards the role of women in business

It is important to note that these internal and external factors can interact and affect each other. For example, a favorable regulatory environment can facilitate access to finance and access to markets can expand the visibility and impact

**Table 1. Determinants of women-owned business development**

Factor	Description
Access to finance	Women often face greater barriers to accessing finance than men. Only 10% of women-owned businesses in developing countries have access to formal finance. However, when given access to finance, women-owned businesses can perform as well or better financially than male-owned businesses.
Support networks and mentoring	Women who have access to support and mentoring networks are more likely to create and grow successful businesses. Women entrepreneurs who participate in mentoring programmes have a higher business survival rate than those who do not. In addition, participation in networks of women entrepreneurs can help overcome isolation and lack of role models, which can be especially important for women in industries where they are in the minority.
Favorable regulatory environment	A favorable regulatory environment can help women-owned businesses to thrive. For example, policies that promote gender equality and diversity in decision-making can create a more conducive environment for women's entrepreneurial success. Countries with stronger gender equality policies also have higher rates of female entrepreneurship.
Training and education	It is important that women entrepreneurs have access to business training and education programmes that enable them to acquire skills in areas such as management, marketing, finance and human resources.
Technology and market access	Technology and access to markets can be key factors in the success of women-owned businesses. Women entrepreneurs who use technology in their businesses are more likely to be profitable than those who do not. In addition, access to global markets can expand the scope and scale of women-owned businesses, as well as enhance the productivity and innovation of these businesses.

Source: Own elaboration based on IFC, 2018; OEAP, 2018; BID, 2019; OECD, 2020; The World Bank, 2021; ILO, 2023.

of a women-owned business. At the same time, the leadership and creativity of women entrepreneurs can drive innovation and firm growth, which in turn can influence the regulatory environment and cultural attitudes towards female entrepreneurship.

In addition to the above, the profile of the entrepreneur can vary widely depending on factors such as industry, geographical location, age, education and previous work experience (socioeconomic and psychosocial factors) (Escamilla Salazar & Caldera González, 2013).

### 3. Method

The research carried out is quantitative, and the survey was used as a tool, in addition to the documentary review. Its scope was descriptive and comprehensive.

Fieldwork was conducted from May to November 2022. The methodology of the Global Entrepreneurship Monitor (GEM), the Training Guide for Women Entrepreneurs of the International Labour Organization (ILO) and the United Nations (UN) World Survey on the Role of Women in Development were considered for the design of the instrument.

The dimensions on which the instrument was built were as follows:

- Motivations for entrepreneurship
- Constraints to enterprise development
- Environmental factors for enterprise development

The data collected from the survey were processed through descriptive statistical analysis using SPSS (*Statistical Package for the Social Sciences*) version 22 software.

The main hypotheses were:

1. Personal self-fulfillment is the main motivation for women entrepreneurs in Guanajuato.
2. Gender stereotypes (cultural issue) are the main obstacle faced by women entrepreneurs in Guanajuato.
3. Lack of support networks limits women's business development in Guanajuato

In accordance with the principles established by the Research Ethics Committee of the University of Guanajuato (CEPIUG) and in accordance with national and international laws, policies and best practices in scientific research, it was ensured that ethical considerations and data protection of the women research participants were met.

### 4. Theoretical framework

The purpose of this theoretical framework is to provide a comprehensive analysis of the hypothesis that personal self-fulfillment is the main motivation for women entrepreneurs in Guanajuato. To achieve this goal, this paper will review the literature on women entrepreneurship, motivation, personal self-fulfillment, barriers and lack of

support networking for women businesses. The paper will also examine the cultural and social context of Guanajuato and how it may influence women's motivations to become entrepreneurs and the institutional support they receive. Finally, the paper will discuss the implications of the hypothesis for policy and practice.

Women entrepreneurship has gained increasing attention in recent years as it contributes to economic growth and job creation. In Mexico, the number of women entrepreneurs has been growing steadily, accounting for 25% of small and medium-sized enterprises (SMEs) in the country (GEM, 2020). Previous research suggests that women's motivations to become entrepreneurs are diverse and may include factors such as financial independence, work-life balance, and personal fulfillment (Brush et al., 2009). Personal self-fulfillment refers to an individual's pursuit of their own goals and aspirations and finding personal satisfaction and happiness in the process (Kasser & Ryan, 1996). For women entrepreneurs, personal self-fulfillment may be related to their desire to create something meaningful and long-lasting, and to make a positive impact in their communities (Brush et al., 2009). Previous research has also found that personal fulfillment may be a significant predictor of entrepreneurial intention among women (Kolvereid & Isaksen, 2006).

Guanajuato is a state located in central Mexico, characterized by a rich cultural heritage, including the historic city of Guanajuato, which is a UNESCO World Heritage Site. Despite the state's economic growth, there are still social and cultural barriers that may hinder women's entrepreneurship (Caldera González et al., 2021). For example, traditional gender roles may limit women's access to education and financial resources, while social expectations may discourage women from pursuing non-traditional careers (Kabeer, 2008; UNESCO, 2020).

The hypothesis that personal self-fulfillment is the main motivation for women entrepreneurs in Guanajuato has important implications for policy and practice. First, policies that promote equal access to education and financial resources can help women overcome the cultural and social barriers that may hinder their entrepreneurship. Programs that provide mentorship and networking opportunities can also facilitate women's entrepreneurship by providing access to role models and business expertise. Second, policymakers and practitioners should recognize the importance of personal self-fulfillment as a motivator for women entrepreneurs, and design policies and programs that promote it. For example, programs that encourage women to pursue entrepreneurship as a means of fulfilling their personal goals and aspirations may be more effective than programs that only emphasize financial incentives. Finally, policymakers and practitioners should work to promote the positive impact women entrepreneurs can have on their communities. By recognizing the value of women

entrepreneurs, policymakers can design policies that support their success and encourage them to pursue entrepreneurship as a means of making a positive impact in their communities.

Social networks and relationships can generate benefits for individuals and organizations, such as information, resources, and social support (Bourdieu, 1986). Social capital theory argues that the strength and quality of an individual's social networks can determine their access to resources and opportunities. Therefore, women entrepreneurs in Guanajuato who lack strong support networks may struggle to access the resources and opportunities necessary for enterprise development. Furthermore, organizations depend on external resources, such as financial capital, knowledge, and relationships, to survive and grow (Salancik & Pfeffer, 1978). Resource dependence theory argues that organizations seek to establish relationships with resource providers to ensure a steady supply of resources. Women entrepreneurs in Guanajuato who lack support networks may struggle to access critical external resources, such as funding and expertise, which can limit their enterprise development. Luhmann's theory (1995) can help to explain how social networks and community support can promote growth and resilience for women small business owners. According to Luhmann, social systems are composed of interdependent elements that communicate with one another through a set of rules and structures. These rules and structures are created by the system itself and are constantly evolving. Social networks and community support can be seen as sub-systems within the larger social system. These sub-systems can create their own rules and structures, which can support women small business owners. For example, social networks can provide women small business owners with access to information, resources, and opportunities. These networks can be formal or informal and can include organizations, associations, and other business owners. Through these networks, women small business owners can gain access to funding, training, and mentorship programs. They can also learn about new business opportunities and market trends. Luhmann's theory also suggests that social systems create a sense of belonging and identity for their members. This sense of belonging can be fostered through community support programs that provide women small business owners with a supportive environment. These programs can include training and education programs, networking events, and mentorship opportunities. Through these programs, women small business owners can build relationships with other business owners and community members, which can provide them with emotional and practical support. Organizations are shaped by the norms, values, and rules of their institutional environment (Powell & DiMaggio, 1991).

Institutional theory suggests that organizations must conform to institutional norms and expectations to gain legitimacy and support from external stakeholders, such as customers, investors, and regulators. Women entrepreneurs in Guanajuato who lack support networks may struggle to conform to institutional norms and expectations, which can limit their legitimacy and support from external stakeholders. Also, women entrepreneurs in Guanajuato may face gendered barriers, such as discrimination and stereotyping, which can limit their access to support networks and external resources and contribute to the limited development of their enterprises (Caldera González et al., 2021). Gender theory argues that gender is a central organizing principle of social life, and that gender roles and expectations shape social interactions, relationships, and institutions (Connell & Messerschmidt, 2005).

Gender theory argues that women face unique challenges and opportunities in organizations due to gendered norms and expectations. Finally, women entrepreneurs in Guanajuato who belong to marginalized social groups, such as indigenous women or women from low-income backgrounds, may face compounded barriers to enterprise development due to the intersection of gender, race, and class. Intersectionality theory suggests that individuals have multiple social identities, such as gender, race, class, and sexuality, which intersect and interact to shape their experiences of social inequality and discrimination (Crenshaw, 1989). Intersectionality theory argues that social inequality is not caused by a single factor, but rather by the intersection of multiple factors that shape individuals' experiences of disadvantage and privilege.

## 5. Results

A total of 182 online surveys were administered via the Microsoft Forms platform. The survey consisted of 69 items (Caldera González & Riesco Villavicencio, 2022).

The reliability of the instrument was verified using Cronbach's alpha coefficient, which allows estimating the reliability of the instrument through a set of items that are expected to measure the same construct.

Forty-five out of 69 items (corresponding to part 3 and part 4 of the survey), were evaluated and a Cronbach's Alpha value of 0.926 was obtained for the analysis of the instrument, which according to Gliem & Gliem (2003) is excellent.

Through the survey of women entrepreneurs in the state of Guanajuato, we were able to observe that the age of their businesses is concentrated in the 1 to 5 year range (49.45%), followed by the 6 to 10 year range (20.88%), in third place those that are more than 10 years old (19.23%) and finally those that are less than 1 year old (10.44%).

The sector of economic activity with the highest participation of female entrepreneurs is commerce (51.65%), services (41.22%), manufacturing (5.49%), agriculture and livestock (1.09%) and finally construction (0.55%).

Regarding the number of employees, the majority indicated that they have 1 to 10 employees (53.85%), followed by those with no employees (41.76%) and finally those with 11 to 50 employees (4.39%). As to whether they operate formally, the majority do so with 58.79% and the rest do not (41.21%).

Guanajuato is a state with 46 municipalities. The sample we took for this study was 182 companies distributed in 13 municipalities. In this sense, the sample was non-probabilistic and by convenience.

The form of sales is mostly physical (79.12%) and to a lesser extent online (20.88%). Products or services are mostly sold directly (98.35%) and through an intermediary a very small amount (1.65%).

Most of the enterprises were started on their own initiative (84.06%), followed by family inheritance (7.14%), invitation or collaboration (5.48%), and finally the purchase of an ongoing business (3.29%).

The main financial support to start their business is led by their own savings (63.18%), followed by family and friends (33.52%), then credit from financial institutions (2.75%) and government support from only one person (0.55%).

Regarding the profile of women entrepreneurs, we find that the age bracket is headed by those aged 46 to 55 (25.27%), followed by those aged 26 to 35 (24.73%), then 36 to 45 (23.07%), then under 25 (15.38%) and finally over 55 (11.55%). The educational level of most women entrepreneurs is higher education (38.46%), followed by high school (31.87%), then secondary school (12.64%), then master's degree (9.89%), then primary school (7.14%).

Marital status is headed by those who are married (47.25%), single (30.22%), then those who are in union (10.44%), those who are divorced/separated (9.35%) and finally widows (2.74%).

In relation to the number of children of the Guanajuato women surveyed, the highest percentage of responses indicates that they have no children (29.67%), then those with 2 children (29.12%), followed by those with 3 children (21.43%), then 1 child (15.38%), then those with 4 children (2.75%) and finally with 3 responses (1.65%) those with more than 4 children.

The activities of women before becoming entrepreneurs are firstly full-time students (25.82%), then housewives (23.63%), employed in a private MSME (17.58%), government employees (10.99%), employed in a large company (7.14%), unemployed (6.59%), and owner of another company (8.24%).

It was also found that the vast majority (81.87%) of the women surveyed did not belong to a network or association of women entrepreneurs, and those who did only 18.13%.

The table 2 below shows the results for the category of Motivations for entrepreneurship.

The following Table 3 indicates the main motivations of women entrepreneurs. In the study conducted in the state of Guanajuato, women emphasized their passion for what they do, personal fulfillment, and financial independence. The dimension related to the lack of job opportunities presents a high deviation; this means that the answers are varied, in relation to the averages presented.

The most significant response was the excessive enjoyment of economic activity, as well as the desire to contribute to society. A balance between family and work was shown to be essential. Table 4 summarizes the category Constraints to entrepreneurship.

**Table 2. Descriptive statistics: Motivations for entrepreneurship**

	N	Minimum	Maximum	Media	Deviation
<b>Self-realization</b>	182	1	5	3.88	.926
<b>Economic independence</b>	182	1	5	3.93	.975
<b>Work-family balance</b>	182	1	5	3.38	.972
<b>Lack of employment or source of income</b>	182	1	5	3.04	1.252
<b>Desire to contribute to society</b>	182	1	5	3.46	1.006
<b>I enjoy what I do</b>	182	1	5	4.46	.770

**Table 3. Results by dimension: Motivations for entrepreneurship**

Label	Self-realization	Economic independence	Work-family balance	Lack of employment or source of income	Desire to contribute to society	I enjoy what I do
<b>Too much</b>	45	58	23	28	23	108
<b>A lot</b>	89	72	60	38	76	55
<b>Medium</b>	33	36	66	54	51	16
<b>Little</b>	11	13	29	38	25	2
<b>None</b>	4	3	4	24	7	1
<b>Total</b>	<b>182</b>	<b>182</b>	<b>182</b>	<b>182</b>	<b>182</b>	<b>182</b>

The Table 4 below provides a descriptive analysis of the reasons why the development of businesses run by women is limited.

The highest number of obstacles faced by women is limited access to financing or financial support, as well as time management. The different activities undertaken to support the family are closely related to educational levels and business experience (see Table 5).

**Table 4. Descriptive statistics: Constraints to developing the enterprise**

	N	Minimum	Maximum	Media	Deviation
Cultural stigmas in society	182	1	5	2.58	1.231
Poor access to finance	182	1	5	3.10	1.226
Lack of family support	182	1	5	2.04	1.148
Organization of time	182	1	5	3.07	1.130
Relations with suppliers and customers	182	1	5	2.87	1.110
Educational level and experience	182	1	5	2.58	1.162

**Table 5. Results by dimension: Constraints to enterprise development**

Label	Cultural stigmas in society	Poor access to finance	Lack of family support	Organization of time	Relations with suppliers and customers	Educational level and experience
Too much	11	10	6	11	9	11
A lot	24	44	18	68	51	31
Medium	45	53	33	46	52	47
Little	59	53	45	36	47	57
None	43	22	80	21	23	36
Total	182	182	182	182	182	182

The items related to the dimension of culture and stigmas represent the greatest dispersion; this is due to the diversity in business and leadership positions among the women surveyed.

The most representative limitations faced by women entrepreneurs in Guanajuato are the lack of access to financing, followed by the limitation of time organization, and in third place the relationship with suppliers and clients.

The lowest rated limitation was lack of family support with a mean of 2.04.

Also, an important part of the challenges faced by women has been the lack of formal preparation or training in their businesses.

The Table 6 summarizes the results with respect to environmental factors.

The factors that had the greatest impact on the business context were those related to the economy and insecurity. The study was conducted during the pandemic crisis, which is why this factor was the highest in the ranking of the most decisive factors considered a milestone in business management for the research project.

Insecurity is another aspect underlying the challenges of women's entrepreneurship. The dispersion of responses demonstrates the complexity of the issue, which could be analyzed in subsequent studies for each case (see Table 7).

As can be seen, the three environmental factors evaluated with the greatest intensity were: the Covid-19 factor with an average of 3.86, followed by the economy factor with an average of 3.64 and the insecurity factor (crime) with an average of 3.24.

The external factors that were evaluated with less intensity in the development of the company were: the laws and regulations factor with an average of

**Table 6. Descriptive statistics: Factors in the environment for enterprise development**

	N	Minimum	Maximum	Media	Deviation
Economy	182	1	5	3.64	.880
Corruption	182	1	5	2.69	1.298
Insecurity (Crime)	182	1	5	3.24	1.377
Laws and regulations	182	1	5	2.90	1.190
Use of new technologies	182	1	5	2.68	1.220
Covid-19	182	1	5	3.86	1.166

**Table 7. Results by dimension: Environmental factors for enterprise development**

Label	Economy	Corruption	Insecurity (Crime)	Laws and regulations	Use of new technologies	Covid-19
Too much	24	18	41	19	13	70
A lot	89	37	49	42	39	50
Medium	52	39	32	44	44	36
Little	13	46	33	56	49	18
None	4	42	27	21	37	8
Total	182	182	182	182	182	182

2.90, followed by the corruption factor with an average of 2.69 and finally the use of new technologies factor with an average of 2.68.

The pandemic crisis involved the intensive use of new forms of sales through e-commerce and the adaptation to apply ICT reactively to maintain the survival of businesses.

## **6. Discussion**

We highlight the negative impact of the pandemic on business operations, sales, and employment, and the challenges faced by women small business owners in accessing government support programs. This discussion will critically evaluate the strengths and limitations of the paper, and its contribution to the existing literature on the impact of the Covid-19 pandemic on small businesses.

One of the strengths of the paper is its empirical approach, which provides valuable insights into the experiences and challenges faced by women small business owners in Mexico during the Covid-19 pandemic. The authors collected data from a survey of 182 women small business owners, which allowed them to analyze the impact of the pandemic on business operations, sales, employment, and access to government support programs. The paper also provides a detailed analysis of the different sectors and regions that have been affected by the pandemic, highlighting the heterogeneity of the impact across the Mexican economy.

Another strength of the paper is its policy relevance, as it provides important insights for policymakers and practitioners on the challenges faced by women small business owners during the pandemic. The authors argue that government support programs have been insufficient and ineffective in addressing the needs of small business owners and recommend that policymakers take a more proactive approach to supporting small businesses, including providing financial assistance, reducing regulatory burdens, and facilitating access to digital technologies.

## **7. Limitations of the paper**

One limitation of the paper is its focus on the impact of the pandemic on women small business owners, without considering the broader social and economic context in which they operate. The authors do not explore the structural factors that may have contributed to the vulnerability of small businesses during the pandemic, such as the concentration of economic power, the prevalence of informal work, and the weak social safety net.

Another limitation of the paper is its reliance on self-reported data from women small business owners, which may be subject to bias and may not reflect

the true impact of the pandemic on their businesses. The authors acknowledge this limitation and suggest that future research should incorporate alternative data sources and research methods to validate their findings.

## 8. Contribution to literature

Despite its limitations, the paper makes an important contribution to the existing literature on the impact of the Covid-19 pandemic on small businesses. The paper provides empirical evidence of the negative impact of the pandemic on small businesses in Mexico, and highlights the challenges faced by women small business owners in accessing government support programs. The paper also contributes to the literature on small business development in developing countries, by highlighting the importance of government support programs in promoting small business growth and resilience.

## 9. Conclusions

The results of this research point to an opportunity for economic and social growth through the development of women-owned enterprises. The general objective of this study was to identify the main factors that enable the development of women-owned businesses in the state of Guanajuato (Mexico) and thus to identify areas for improvement both within and outside their businesses.

It was found that the areas of opportunity for strengthening women-owned businesses in the state of Guanajuato are the use of new marketing channels, which were promoted by Covid 19, and which are supported by technology; seeking support and backing from networks or associations of women entrepreneurs (networking); participation in forums and meetings for training and, above all, sharing experiences in the business environment.

One of the factors limiting the development of the businesses was the lack of access to financing, for which micro-financing could be implemented as government support, considering that the economic independence of women through their businesses is an advance towards gender equality in all spheres. It is also necessary to work on the formalization of businesses, as more than 40% of the enterprises studied are informal.

The research assumptions could be confirmed and rejected as follows:

- ♦ *Personal self-fulfillment is the main motivation for women entrepreneurs in Guanajuato: ACCEPTED*

- Gender stereotypes (cultural issue) is the main obstacle that *women entrepreneurs in Guanajuato* have faced: **REJECTED**
- Lack of support networks limits *women entrepreneurs in Guanajuato*: **REJECTED**

Theoretically, several studies have pointed out that women's enterprise development is influenced by funding, government policies, entrepreneurship education, infrastructure, and social and cultural norms (GEM, 2019; Quezada et al., 2020), issues that were contrasted in this research.

The results also reaffirm that women continue to face significant barriers to entry into the business sector, as they continue to face the imposition of stereotypes and beliefs that maintain and deepen inequalities between men and women in business.

A revealing aspect of this work was that in most cases there is strong family support, which has allowed the women to start and, in some cases, consolidate their businesses. It was also found that in Guanajuato, violence and crime is an external factor that limits the development of entrepreneurship.

Among the limitations of this study is the absence of an official directory of the number of women-owned businesses in the state of Guanajuato, especially because many of them are informal. Another limitation was that many women entrepreneurs did not participate in the study due to a lack of trust, and that we could not cover more territory in the state because of the insecurity in the region.

Finally, it is worth mentioning that although the economic empowerment of women and the recognition of their importance have been placed on public agendas, we are still far from finding true equality, since despite attempts, women-owned businesses are still smaller and the obstacles they face are often greater, from the issue of the imbalance between domestic and work tasks, to social stigmas, access to financing and recognition of their work.

It is hoped to continue with the analysis of the results and to be able to carry out a correlational study, as the richness of the fieldwork is very great.

## **Project funding**

This research is funded by the *Dirección de Apoyo a la Dirección y al Posgrado* of Universidad de Guanajuato (Mexico) in the Institutional Call for Scientific Research 2022 (CIIC), in charge of Diana del Consuelo Caldera González and as external researcher Victoria Sanagustín-Fons and María Guadalupe Arredondo-Hidalgo as internal researcher.

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