

# Business Expectations and Gender Differences: The Case of SMEs in Panama

*Expectativas de las empresas y diferencias de género: el caso de las  
PYMES en Panamá*

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## Abstract

Panama, located at the crossroads of the Americas, has experienced robust economic growth and political stability in recent years, making it an attractive destination for foreign investment. Small and medium-sized enterprises (SMEs) are the backbone of any economy. They contribute significantly to job creation, income generation, and economic growth. In Panama, SMEs play a similar role. The purpose of this paper is twofold, to analyze the relationship between the business environment and business expectations among SMEs in Panama; and to test the hypothesis that women leaders are more likely to have lower business expectations. Using data from the World Bank, we implement a Tobit Regression Model and find that women-led firms are more likely to have negative expectations, relative to their counterparts.

**Keywords:** SMEs, entrepreneurship, business expectations, gender differences.

## Resumen

Panamá, ubicada en el punto medio de las Américas, ha experimentado un sólido crecimiento económico y estabilidad política en los últimos años, lo que la convierte en un destino atractivo para la inversión extranjera. Las pequeñas y medianas empresas (PYMEs) son la columna vertebral de cualquier economía. Contribuyen significativamente a la creación de empleo, la generación de ingresos y el crecimiento económico. En Panamá, las PYMEs desempeñan un papel similar. El objetivo del estudio a continuación tiene dos propósitos. Primero, analizamos la relación entre el ambiente y las expectativas empresariales en las PYMEs en Panamá y desde esta perspectiva, también examinamos la validez de la hipótesis que establece que las mujeres, en el ámbito empresarial, tienden a expresar expectativas negativas en comparación con los hombres. Utilizando datos del Banco Mundial, implementamos un modelo de regresión de Tobit para evaluar la validez de esta hipótesis. Los resultados confirman que las empresas dirigidas por mujeres tienen más probabilidades de tener expectativas negativas, en comparación con sus contrapartes.

**Palabras clave:** PYMEs, emprendimiento, expectativas de las empresas, diferencias de género.

## 1. Introduction

Panama, located at the crossroads of the Americas, has experienced robust economic growth and political stability in recent years, making it an attractive destination for foreign investment. Panama has maintained strong and consistent GDP growth over the past decade, primarily driven by its dynamic service sector, particularly finance, commerce, and logistics. As it was the case elsewhere, the COVID-19 pandemic had a negative impact, and Panama's economy has been on the road to recovery since then. Panama's strategic location as a global trade hub through the Panama Canal and the Colón Free Trade Zone has allowed large, as well as small and medium-sized enterprises (and the focus of this paper), to have access to international markets, and export opportunities.

Small and medium-sized enterprises (SMEs) are the backbone of any economy. They contribute significantly to job creation, income generation, and economic growth. In Panama, SMEs play a similar role. However, they face several challenges, such as limited access to finance, high taxes, bureaucratic procedures, and inadequate infrastructure. SMEs in Panama are defined as firms with fewer than 100 employees and an annual turnover of less than \$10 million. They represent over 90% of all businesses in the country and account for 60% of total employment. Most SMEs are micro-enterprises, with fewer than ten employees. They operate in various sectors, including retail, manufacturing, agriculture, tourism, and services (Vargas, 2021).

Using data from the World Bank, we implement a Tobit Regression Model to analyze the relationship between the business environment and business expectations among SMEs in Panama. We also try to test for the narrative that women leaders (female managers/owners) are more likely to have lower business expectations than their counterparts (Haus et al., 2013; Zampetakis et al., 2016; Ward et al., 2019).

## 2. Entrepreneurship, SMEs, and Business Expectations

While often described as a tool for poverty reduction and employment creation (Easterly, 2006; Patzelt 2011), entrepreneurship at its core is the art of taking advantage of opportunities (Liard-Muriente, 2023). This is particularly true in countries that lack the resources to confront social and economic problems (Valente, 2010). Thus, SMEs become the default economic engine with significant influence over the GDP's growth rate and structure (Ganji and Metzker, 2021).

Many factors contribute to the emergence of SMEs, main among them are, as Cepel et al., (2018) explain, economic factors (e.g., macroeconomic environment, monetary policy, and financing). Furthermore, technological, political, and social factors also play key roles (Cicea and Marinescu, 2019; Hema et al., 2019; and Gavurova, 2019).

More recently, the focus on SMEs has shifted from a catalyst of domestic development to global expansion opportunities and potential rival to established international businesses (HSBC, 2016; and Child et al., 2022). Although it might sound counter intuitive, as Jones (1999) explains, the internationalization process of SMEs does not necessarily follow a

series of steps. While the exports avenue seems like the logical path, there are significant speedbumps along that path such as foreign trade regulations, and competition with SMEs from the importing country (Laufs and Schwens, 2014; Stoian et al., 2018).

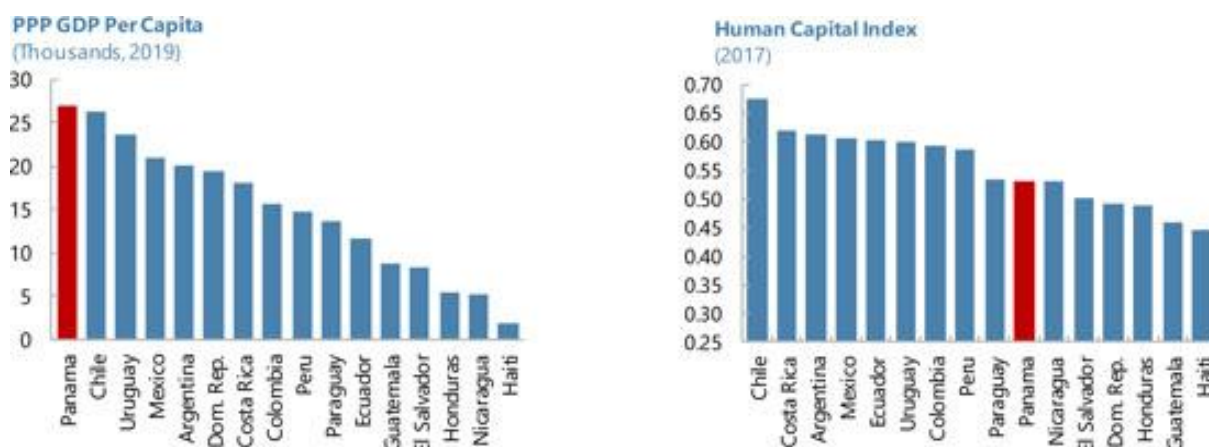
While the internationalization avenue might present itself as the next logical step in countries with reliable infrastructure and institutions, SMEs will continue to be the default prime mover for development and growth in developing countries (Liard-Muriente, 2022). Among other things, developing countries rely on SMEs for growth, employment, and entrepreneurial skills nurture. At the same time, as Mwika, et al. (2018) explain, SMEs confront significant challenges including the impact of globalization on the domestic business environment. Additional challenges include sluggish productivity, financial constraints, adverse regulatory environment, political instability, ineffective infrastructure, as well as a heavy regulatory burden (Subhan et al., 2014). And now we must add responding and recovering from a global pandemic to the list of challenges. As Eniola and Ineba Decster (2022) explain, Covid-19 will continue to have a devastating and demoralizing impact on SMEs, particularly on their workforce. Thus, as Nuwagaba (2015) argues, any strategic development plan should focus on investing on SMEs because, among other things, they play a critical role in both employment creation and income generation.

In terms of business expectations, SME managers are generally considered to have more positive business expectations than larger firms due to their flexibility, innovation, and agility. According to the European Commission (2019), SME managers tend to have a more positive outlook on their businesses than managers of larger firms, with 58% of SMEs' managers reporting positive business expectations compared to 50% of managers from large enterprises. Furthermore, following a 2019 report from the Organization for Economic Co-operation and Development (OECD), SMEs tend to have higher levels of business expectations than larger firms, particularly in terms of growth prospects. At the same time, a survey by American Express and Oxford Economics (2019) found that small business owners in the United States are generally optimistic about their business prospects, with 67% of respondents reporting that they expect their revenues to increase in the coming years. Overall, while there may be variations among different studies and regions, SMEs' managers generally tend to have higher positive business expectations relative to their counterparts in larger firms. However, while SMEs' managers tend to be more optimistic, as Exley and Neilsen (2024) explain, a gender gap in confidence and therefore expectations exist. For example, following Blau and Kahn (2017), women tend to be underrepresented in fields that are perceived to be male dominated. Hernandez-Arenaz and Iriberry (2019) have documented a gender gap in the willingness to negotiate, while Croson and Gneezy (2009) have shown a gender gap in risk preferences. Furthermore, following Grossman, Eckel, Komai, and Zhan (2019), female leaders tend to be less remunerated than male leaders of the same caliber. Finally, female leaders tend to negotiate less even in female dominated fields (Biasi and Sarsons, 2022). Thus, all things equal among SMEs, it is our hypothesis that women leaders would tend to have lower business expectations.

### **3. Panama's Business Environment**

According to a 2023 report from the International Monetary Fund (IMF) Panama's macroeconomic performance has been remarkably strong, mainly because of a strong capital accumulation leading to even stronger economic growth. As Figure 1 below shows, Panama has been the fastest growing economy in the region for the past two decades.

Figure1: Panama Per Capita GDP and HCI relative to other countries in Latin America



Source: IMF (2023)

As expected, this impressive track record has yielded a significant reduction in poverty and a strong middle class, with the poverty rate decreasing from 35.5% in 2000 to just 14.1% in 2017, as shown in Table 1.

Table1: Poverty and Inequality

| Poverty and Inequality in Panama           |                             |      |      |      |      |      |
|--|-----------------------------|------|------|------|------|------|
|  |                             | 1989 | 2000 | 2005 | 2010 | 2017 |
| Inequality                                 | Gini coefficient            | 58.9 | 56.8 | 53.8 | 51.6 | 49.9 |
| Poverty*                                   | (2011 PPP, % of population) | 50.3 | 35.5 | 34.8 | 21.8 | 14.1 |
| Extreme Poverty**                          | (2011 PPP, % of population) | 23.9 | 12.4 | 10.0 | 4.5  | 2.5  |
| Poverty in Latin America and the Caribbean |                             |      |      |      |      |      |
|  |                             | 1990 | 1999 | 2005 | 2010 | 2015 |
| Poverty                                    | (2011 PPP, % of population) | 49.3 | 47.0 | 40.9 | 31.1 | 26.3 |
| Extreme poverty                            | (2011 PPP, % of population) | 14.8 | 13.5 | 9.9  | 6.2  | 3.9  |

Source: IMF (2023) \* Poverty headcount ratio at \$5.50 a day. \*\*Poverty headcount ratio at \$1.90 a day

Following a 2022 report from the International Labor Organization (ILO), Panama's economy has been one of the most dynamic in the world. Panama's economy annual average growth was 7%, between 2004 and 2008, in contrast to the 3.3% for Latin America. Nevertheless, the pandemic put a dent on growth and with that, poverty and inequality began to expand. Panama now has one of the highest inequality rates among Latin American countries with a Gini coefficient of 50.5 (46.2 for Latin America).

In terms of employment, as ILO (2022) explains, approximately two million individuals were actively participating in the economy during pre-pandemic years, with women capturing the lion's share of the increase in participation between 2014 to 2019. However, the pandemic had a significant negative impact on employment opportunities. The unemployment rate reached 18.1% in 2020, a three-fold increase. Entrepreneurial activities, already expanding before the arrival of the pandemic, continue growing. Here too, the number of women joining the entrepreneurial class has been significant. Since 2011, the number of women working on their own has increased by 25%, with the number women own businesses increasing by 21%.

#### 4. SMEs in Panama

According to the World Bank (2020), Panama ranks 86th out of 190 economies in the ease of doing business, with access to finance as one significant challenge for SMEs in Panama, forcing most to rely on informal sources of finance to start or expand their businesses. Following the World Bank (2020), only 33% of SMEs in Panama have access to formal financing. Formal sources of finance, such as banks, are often reluctant to lend to SMEs due to their perceived high risk.

Following Vargas (2021), more than 90% of the firms in Panama are SMEs and generate 56% of the employment. The business environment for SMEs in Panama, as is the case elsewhere, has both strengths and weaknesses. On the one hand, Panama's strategic location, stable political climate, and business-friendly regulatory framework make the country fertile ground for entrepreneurs looking to start or expand their businesses. On the other hand, SMEs in Panama face challenges such as limited access to financing, high operational costs, and a shortage of skilled labor. The country has made significant strides in recent years to create an environment conducive to SMEs growth. The Panamanian government has been proactive in implementing policies and programs to support SMEs. These include financial incentives, access to credit, and simplified regulatory procedures to start and operate businesses. Nevertheless, Panama's dependence on international trade and financial services exposes SMEs to global economic fluctuations and market uncertainties.

As Palma and García (2018) explain, while the rate of new entrants is relatively high in Panama, the sustainability of entrants is low. In other words, many new SMEs are created but only about a third of those manage to survive. Despite the challenges, there are still opportunities for SMEs in Panama, particularly in the tourism, logistics, and agriculture sectors.

#### 5. Gender Gaps and SMEs in Panama

Following Fang et al. (2022), women-led enterprises tend to flourish in countries with welcoming business environments (e.g., rule of law, and gender equality), stronger individualistic culture, and small firms. Nevertheless, women-led firms tend to have lower levels of productivity and growth.

Following IMF (2023), gender inequality in Panama is high relative to other countries in the region. Women's lives and opportunities have significantly improved since 2000, with the country experiencing an increase in life expectancy, better access to healthcare and sanitation, a decrease in female unemployment rates, and an increase in access to high-level positions for women. Nevertheless, Panama ranked 108 out of 160 countries in gender equality in 2017. Furthermore, according to the ILO (2017), women in Latin America are outshining men in terms of tertiary educational attainment, and Panama is not an exception. Following ILO (2022), women entrepreneurs in Panama have higher levels of education relative to their male counterparts. Nevertheless, they self-report lower levels of knowledge and experience to start a business. For example, while 40% of the women have a college education relative to 35% of men, 67% of women report having enough knowledge and experience to start a business relative to 78% of men. Thus, the glass ceiling remains entrenched with potential negative consequences in terms of business expectations and economic expansion.

## 6. Data and Methodology

Using a proprietary dataset from the World Bank, we are trying to understand the drivers of positive business expectations among SMEs and, all things equal, we are trying to validate our hypothesis that women leaders (female managers/owners) are more likely to have lower business expectations than their counterparts.

The World Bank has been conducting firm-level surveys to analyze the impact of Covid-19 in the private sector via its Enterprise Analysis Unit. When deploying a survey, the World Bank targets the population of all registered establishments with at least five employees. In the case of Panama, the sample contains 300 establishments with interviews conducted between May 24<sup>th</sup> and June 28<sup>th</sup>, 2021. The sample for Panama follows a stratified random sampling methodology, which is superior to the simple random sampling approach because all sub-groups of the population would be represented in the final sample, allowing us to obtain robust estimates.

According to the data obtained from the World Bank, 83% of the firms in the sample are SMEs. In terms of sectoral dynamics, 40% of the firms are in the Other Services category, 35% in Manufacturing, and 25% in Retail. Approximately 35% of firms are run by women, with women accounting for 45% of all full-time workers as well. Nearly 95% of the firms remained open during the Covid-19 pandemic. However, only 14% of firms experienced an increase in sales. Almost half of the firms created an online presence during the Covid-19 pandemic, with the same proportion of the firms moving operations online during the same period. Closely to 60% of the firms experienced an increase in production costs. Finally, 85% of firms received no Government assistance.



The survey asks managers/owners, what is the probability that your business will be in a better position in the next six months relative to your current position? This is our dependent variable (*Better*). The observed range of this variable is censored and for that reason, we implement a Tobit model.

A Tobit model is a statistical methodology that is specifically designed to address the problem of censored data. Censoring in this context means that we have observations that fall below or above a certain threshold and are recorded only as being less than or greater than that threshold. Thus, this method would allow us to estimate the parameters while accounting for the presence of censored or truncated observations. Following Greene (2018), the general formulation is given by:

$$y_i^* = x_i' \beta + \varepsilon_i, \quad (1)$$

$$y_i = 0 \quad \text{if } y_i^* \leq 0, \quad (2)$$

$$y_i = y_i^* \quad \text{if } y_i^* > 0. \quad (3)$$

In our case, when  $y_i^*$  is positive, we observe the actual value of  $y_i^*$ , and when  $y_i^*$  is non-positive, we only observe it as zero. This binary nature of the outcome variable is what makes the Tobit model distinct from traditional linear regression. Following Olsen (1978), with  $\gamma = \beta/\sigma$  and  $\theta = 1/\sigma$ , the log-likelihood is as follows:

$$\ln L = \sum_{y_i > 0} -\frac{1}{2} [\ln(2\pi) - \ln \theta^2 + (\theta y_i - x_i' \gamma)^2] + \sum_{y_i = 0} \ln [1 - \Phi(x_i' \gamma)] \quad (4)$$

In essence, the Tobit Regression Model (TRM) is a powerful tool for handling censored or truncated dependent variables in regression analysis. It would allow us to consider the limitations in the data due to censoring and would provide estimates for the underlying relationships between variables.

In terms of our control variables, following Mukosa (2021) a key element to confront challenges that emerge while conducting businesses is resiliency. We adopt the concept of resiliency by using three control variables: 1. We measure adaptation, as a form of resiliency, by employing a discrete variable (*BusOnline*) that controls for the fact that some business moved operations online, this variable also controls for the pattern presented by Lechuga and Chavarria (2020), regarding changes in consumption patterns during the pandemic; 2. We approximate resiliency as well with another discrete variable that controls for if firms were able to “ride the wave” by remaining open (*FirmOpen*); 3: Our last discrete variable that captures the spirit of resiliency is if the firm reported an increase in operation costs (*ProductCost*). Furthermore, we control for sectoral effects as well as firm size. Finally, following Fang et al., (2022), we control for gender differences (*TopManagerFem*) by distinguishing women-led firms, to capture any potential gender differences in business expectations.

## 7. Results



Table 2 shows the results of the TRM targeting *Better* as the dependent variable with the above-mentioned controls.

Table 2: Regression Results

| Dependent Variable: BETTER   |                    |                   |                    |              |
|--|--------------------|-------------------|--------------------|--------------|
| Method: ML - Censored Normal (TOBIT, Newton-Raphson / Marquardt steps) |                    |                   |                    |              |
| Included observations: 292   |                    |                   |                    |              |
| <u>Variable</u>  | <u>Coefficient</u> | <u>Std. Error</u> | <u>z-Statistic</u> | <u>Prob.</u> |
| C  | -42.05743          | 12.87957          | -3.265436          | 0.0011       |
| BusOnline  | 6.828700           | 3.050793          | 2.238336           | 0.0252       |
| FirmOpen   | 70.76112           | 11.94579          | 5.923519           | 0.0021       |
| Manufacturing  | 2.007305           | 4.192030          | 0.478839           | 0.6321       |
| OtherServices  | 6.610016           | 3.912955          | 1.689265           | 0.0912       |
| Medium   | 17.40209           | 5.963659          | 2.918022           | 0.0035       |
| Small  | 6.658821           | 3.979282          | 1.673373           | 0.0543       |
| ProductCostUp  | -4.714733          | 3.053082          | -1.544254          | 0.0225       |
| TopManagerFem  | -8.482434          | 3.496624          | -2.425892          | 0.0153       |

Note: Results obtained with EViews statistical software.

As Table 2 shows, we get similar results to Mukosa (2021) regarding resiliency. In other words, our controls capturing resiliency are all statistically significant and present the expected correlation with business expectations. Thus, firms that remained open and moved operations online are more like to have better business expectations than those firms that did not. Also, those firms weathering the storm and experiencing increases in operational costs are less like to have positive business expectations. Furthermore, we find no statistically significant differences among sectors. However, there are strong correlations between firm size and business expectations, with both small and medium size firms showing positive estimates. Thus, we obtain similar results to European Commission (2019), OECD (2019), and American Express and Oxford Economics (2019). Finally, we find similar results to Fang et al., (2022). In other words, women-led firms are more likely to have negative expectations, relative to their counterparts.

## 8. Final Remarks

Panama has maintained strong and consistent GDP growth over the past decade. However, the COVID-19 pandemic had a negative impact, and Panama's economy has been on the road to recovery since then. As in other countries, small and medium-sized enterprises (SMEs) are the backbone of Panama's economy. In Panama, SMEs represent over 90% of all businesses and account for 60% of total employment. However, they face several challenges, such as limited access to finance, high taxes, bureaucratic procedures, and inadequate infrastructure.

SMEs' managers are generally considered to have more positive business expectations than larger firms due to their flexibility, innovation, and agility. Nevertheless, a gender gap exists regarding business expectations. As explained above, not only do women tend to be underrepresented in fields that are perceived to be male dominated, but a gender gap exists in the willingness to negotiate and in risk preferences. Also, female leaders tend to negotiate less even in female dominated fields. Women entrepreneurs in Panama have higher levels of education relative to their male counter parts. Nevertheless, they self-report lower levels of knowledge and experience to start a business. We illustrate a significant difference in business expectations between female managers/owners and male managers/owners. Thus, we obtain similar results to Exley and Neilsen (2024). Our results also validate previous findings regarding resiliency (Mukosa, 2021), and firm size and business expectations (European Commission, 2019; OECD, 2019; and American Express and Oxford Economics, 2019). Potential culprits behind the gender gap in business expectations in our findings point to the fact that women-led businesses often face more challenges in securing funding, which can limit their ability to invest in technology and other productivity-enhancing tools (Morazzoni and Sy, 2022); that women entrepreneurs may have less access to established business networks and markets compared to their male counterparts (Mickiewicz and Nguyen, 2024); that societal biases can lead to perceptions of women as less capable leaders, impacting their ability to attract talent and secure advantageous business deals (Martínez-Zarzoso, 2023); and that women often face additional family responsibilities which could affect their ability to dedicate full focus to business operations (Cirera et al., 2024).

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