ASSESSING THE IMPACT OF LOCAL GOVERNMENT POLICIES ON MSMES RESILIENCE IN NCR AMIDST COVID-19 PANDEMIC: A STATISTICAL REVIEW

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This study aims to assess the impacts of local government policies on the resilience of micro-, small-, and medium-sized enterprises (MSMEs) in the National Capital Region (NCR) of the Philippines during the COVID-19 pandemic. By analyzing PSA data on establishment closures and job losses between 2018 and 2021, this study investigates the relationship between local policies and MSME resilience. The findings reveal that while most local government policies did not show statistically significant effects on establishment closures, the city of Manila stood out with a higher number of closures per square kilometer. Additionally, Manila, Makati City, and Mandaluyong City demonstrated significant effects on job losses. These results suggest the presence of other factors not accounted for in the model and highlight the need for further research to understand the resiliency of MSMEs in the NCR during the pandemic.

Keywords: COVID-19; micro-, small, and medium-sized enterprises (MSMEs); national capital region (NCR); local government policies; establishment closures; job losses; resilience; Philippines

Introduction

The implementation of COVID-19 quarantine measures in the Philippines had a significant impact on various sectors, particularly micro-, small-, and medium-sized enterprises (MSMEs).
MSMEs experienced difficulties brought about by the pandemic, leading to a considerable decline in sales and financial difficulties (Asian Development Bank, 2020; Delgado & Moreno, 2021; Desiderio, 2021).

These enterprises accounted for a significant portion of the business landscape in the Philippines, comprising 99.5% of all enterprises in 2018. Furthermore, these enterprises played a crucial role in employment, as they employed 63.2% of the labor force in 2018. NCR remains to be the center of business and commercialization, where a total of 201,080 establishments (18.6% of total establishments in 2021) are located and are currently in operation. These establishments are responsible for 33.6% of total employment registered as of 2021 (PSA, 2021).

The COVID-19 Assistance to Restart Enterprises (CARES) program was a key initiative that provided loans to MSMEs adversely affected by the pandemic. Administered by the Small Business Corporation (SB Corp.), the program received additional funding of PhP 10 billion through the government's Bayanihan 2 Act, which also supported other lending programs of the SB Corp. (Bartik et al., 2020; Bayudan-Dacuycuy et al., 2022).

Another significant program, the Expanded SURE Aid and Recovery Project (SURE COVID-19), was led by the Department of Agriculture (DA) and the Agricultural Credit Policy Council (ACPC). It aimed to assist 100,000 small farmers, fisherfolk, and 317 micro and small agri-fishery-based enterprises (Tafaleng-Ullalim, 2022; Bayudan-Dacuycuy et al., 2022).

In addition to loan programs, credit guarantees were provided to MSMEs through the MSME Credit Guarantee Program (MGCP), introduced by the Philippine Guarantee Corporation (PhilGuarantee). The MGCP offered a credit guarantee facility with a 50% guarantee for working capital loans and guarantees of up to 80% for term loans dedicated to capital expenditures. The program aimed to improve access to financing for MSMEs while mitigating borrowing risks (Bayudan-Dacuycuy et al., 2022).

Various banks, including the Bangko Sentral ng Pilipinas (BSP), Landbank of the Philippines (LBP), and Development Bank of the Philippines (DBP), also established their own programs to accelerate MSME recovery and provide financial support.

Moreover, government institutions such as the Department of Finance and the Department of Labor and Employment implemented subsidies and temporary employment programs to support employees of MSMEs (Bayudan-Dacuycuy et al., 2022; Shinozaki and Rao, 2021).

In the context of local policies, a few cities in the NCR have established their own programs to help MSMEs. One notable example is Pasig TAPAT (TulongAtPampuhunang Ayuda para sa Taga-Pasig), a subsidy program for both MSMEs and job-seeking Pasig residents, which was implemented in July 2020 by the city government of Pasig. Another is the online marketplace called "Makatindahan," a feature of the city’s Makatizen App, implemented in 2020 by the city government of Makati, where Makati MSMEs can start transferring their physical stores online for easier access (Reyes, 2022).

Aside from that, all employees of Makati-registered businesses were granted free COVID-19 vaccinations, regardless of residency. Quezon City has also launched several programs, such as Free Doorstep Document Delivery (free delivery of business permits right at the applicant's address), Qc Biz Easy: Securing Business Permits (an online processing system for business permit applications), and Regular Free Swab for Employees (a regular free testing program).
Quezon City has also featured Made in QC, which promotes the goods and products of QC’s small businesses. Similarly, Malabon City launched food bazaars and pop-up stores for MSMEs to participate in in 2021 (Parrocha, 2021). The city has also partnered with Greenpeace and San Juan City to establish an online platform where MSMEs can express their issues magnified by the climate and COVID pandemic crises (Greenpeace Philippines, 2021). In Caloocan City, the LGU partnered with the private sector to meet the increasing demand for relief assistance during ECQ (National Nutrition Council, 2020).

This research builds on the studies of Shafi et al. (2020) and Bartik et al. (2020), which investigated the impact of the COVID-19 pandemic on MSMEs in Pakistan and the United States, respectively.

These studies provide valuable insights into the challenges faced by MSMEs during the pandemic, including financial vulnerability, supply chain disruptions, and decreased demand. Bartik et al. (2020) found significant layoffs and closures among MSMEs early in the crisis, particularly among businesses with high monthly expenses and limited cash reserves. These findings inform our understanding of "resilience" in the current study, defined as the ability to minimize closures and layoffs in a particular location.

On the other hand, Shafi et al. (2020) highlighted the financial difficulties faced by Pakistani MSMEs during the pandemic, with many fearing they would not survive an extended lockdown. This underscores the importance of preparedness and the need for effective government assistance in crisis situations.

Drawing from these valuable insights, the study builds on several key theories to delve deeper into the impact of local government policies on the resilience of MSMEs in the NCR during the COVID-19 pandemic. The first component of our framework is resilience theory. This theory allows the study to assess the capacity of MSMEs to withstand and recover from the adversities brought about by the pandemic.

It provides a lens through which we can examine the ability of these enterprises to minimize closures and layoffs, a crucial aspect of resilience as informed by Bartik et al.’s (2020) research. Next, the study integrates policy implementation theory. This theory helps the researchers explore the processes and factors that affect the effective implementation of local government policies targeted at MSMEs.

Lastly, the Resource Dependence Theory allows the study to understand how local government policies influence the availability and accessibility of critical resources for MSMEs. It helps us analyze how these resources, or the lack thereof, can impact the resilience of these enterprises during the pandemic. By integrating these theories into our framework, we aim to provide a nuanced and comprehensive understanding of how local government policies shape the resilience of MSMEs in the NCR during the COVID-19 pandemic.

The purpose of this study is to assess the impacts of local government policies on the resilience of MSMEs in the NCR in the context of the COVID-19 pandemic. Accessible and available studies have focused on the local responses of LGUs in the NCR during the pandemic, but not specifically on the local responses made for MSMEs (Alvarez et al., 2021), while others have focused on the resilience of MSMEs all around the country (Cueto et al., 2022; Shinozaki & Rao, 2021; Asian Development Bank, 2020).

Other studies have also focused on interview-based data on MSMEs in Metro Manila, which did not generate any statistical findings applicable to this study.
Certain studies have focused on women in MSMEs (Peña & Bayudan-Dacuycuy, 2022; Bayudan-Dacuycuy et al., 2022), the resilience of MSMEs outside the NCR (Lobaton, 2023), or solely on food-based MSMEs (Labios et al., 2021).

There is a lack of existing research assessing the resilience of all types of MSMEs, specifically in the NCR context. By filling this research gap, the study aims to provide a comprehensive analysis of the effectiveness of various local programs and initiatives in supporting MSMEs.

The findings of this study can also inform policymakers, local government units, and relevant stakeholders in making informed decisions and shaping better policies to boost MSMEs, which are crucial drivers of employment, economic growth, and export revenue in the Philippines.

**Methodology**

**Data collection**

For this study, data published by the Philippine Statistics Authority (PSA) were utilized. The dataset includes information for all cities and municipalities in the National Capital Region (NCR) of the Philippines, namely: City of Manila, Mandaluyong City, San Juan City, Marikina City, Quezon City, Makati City, Pasig City, Pateros, Taguig City, Caloocan City, Malabon City, Navotas City, Valenzuela City, Las Piñas City, Muntinlupa City, Parañaque City, and Pasay City. However, due to data availability, only the years 2018–2021 were used in this study.

To measure "MSME resilience," the study focuses on the number of MSMEs that closed down and the number of workers who became unemployed as a result of these closures. However, it should be noted that the data specifies only the total number of employees of permanently closed establishments. Hence, the data only includes job losses resulting from the complete closure of establishments and does not account for job losses due to layoffs from surviving businesses.

Table 1 - Number of establishments and employments permanently closed in NCR between 2018 and 2021

(Source: cleaned data from PSA)
The dataset used in this study was acquired from the PSA website, which provides information on the "number of establishments with permanently closed status" and "total employment of establishments with permanently closed status".

Additional information, such as the total land area of each city in the NCR, was retrieved from the NCR website of the PSA.

**Variables and measures**

The main dependent variables used in this study are "establishments closed per square kilometer (KM^2)" and "job loss per square kilometer (KM^2)." These variables were computed to account for city size and allow for a fair comparison of the closure of establishments and job losses across cities. On the other hand, the independent variables consist of the cities included in the NCR and the time variable of the years 2018–2021.

The inclusion of the cities allows for a comparison of closure rates and job losses between the different cities in the NCR while controlling for the effects of the year variable since we already know, without doubt, that the COVID lockdowns of 2020 had a significant impact on the closure of establishments.

**Statistical analysis**

To assess the relationship between the independent and dependent variables, an ordinary least squares (OLS) regression analysis was employed using Stata 14. The OLS regression analysis enables the measurement of the impact of city and year variables on the number of permanently closed establishments and employment losses. This would allow us to see whether there are cities that stood out in terms of closing establishments and job losses.

As mentioned previously, to account for the influence of city size on the number of establishments closed and job losses, the data was normalized to reflect closure and job loss per square kilometer (KM^2). This normalization helps to standardize the data and provide a fair comparison across cities of different sizes.

Additionally, it should be noted that, due to the lack of available data, specific MSME categories were not considered in this study. Lastly, a confidence interval of 95% will be used for this study. Thus, only p-values of less than or equal to 0.05 will be considered statistically significant.

By employing these statistical analyses and methodologies, this study aims to provide insights into the relationship between local government policies and MSME resilience in the context of the COVID pandemic.

**Results**

With the "number of establishments closed per square kilometer" as the dependent variable, the regression analysis reveals that, apart from the city of Manila, the local government policies implemented by the cities and municipalities in the NCR did not demonstrate statistically significant effects.

The p-values ranged from 0.339 (Pateros) to 0.988 (Navotas City), indicating that these policies did not have a significant impact on the number of permanently closed establishments.
However, the city of Manila stood out with a statistically significant p-value (<0.001) and a coefficient of 104.09, suggesting a higher number of closures per square kilometer compared to the baseline.

Regarding the year variable, the regression results indicate that 2020 had a statistically significant p-value (<0.001) and a coefficient of 55.9 compared to the base year of 2018. This finding aligns with our expectations, as 2020 was the year marked by the most severe COVID-19 lockdowns and restrictions, resulting in a higher number of establishment closures. This model has an r-squared value of 0.5862.

Meanwhile, when analyzing "job losses per square kilometer" as the dependent variable, the regression results show that the cities of Manila, Makati City, and Mandaluyong City now have significant p-values (<0.001, 0.030, and 0.004, respectively). With Manila having a coefficient of 516, Makati city with 268.53, and Mandaluyong city with 367. The p-values for the remaining cities range from 0.187 (Pasay City) to 0.903 (Parañaque City), indicating a lack of statistically significant effects compared to baseline.

Similarly, in terms of the year variable, only 2020 demonstrates a statistically significant p-value (<0.001) with a coefficient of 259. This finding is, again, consistent with expectations, as it reflects the year of heightened COVID-19 impact and associated job losses. This model has an r-squared value of 0.6622.

Discussion

The regression results indicate that, apart from the city of Manila, the local government policies implemented by the cities and municipalities in the NCR clearly did not demonstrate statistically significant effects on the number of establishments closed. This suggests that perhaps policies at the national level may be more impactful in this regard. However, the city of Manila stood out with a statistically significant coefficient and a higher number of closures per square kilometer compared to the baseline.

This may indicate that either the local government policies in Manila worsened the closure of MSMEs or there are variables present in the city that are simply not included in this model. Considering that the study found no notable difference in the local government policy of the city of Manila compared to the other cities, and given the r-squared value of 0.5862, the latter seems likely to be the case.

Meanwhile, in terms of job losses per square kilometer, the regression results show that the cities of Manila, Makati City, and Mandaluyong City have significant effects on employment losses. Again, considering that the study found no notable differences in the local government policies for MSMEs at the height of the COVID pandemic, this may indicate other factors at play that are not included in the model. Especially for Makati City and Mandaluyong City, which did not have a significant difference in MSME closures.

On the other hand, the remaining cities clearly did not demonstrate statistically significant effects on job losses compared to the baseline.

These findings suggest that the effectiveness of local government policies in mitigating job losses may have varied across the different cities in the NCR or that other factors must be considered.

In any case, further research is needed for policymakers to have a better understanding of the resilience of MSMEs in the NCR in the context of the COVID pandemic.
Conclusion

While most local policies did not show significant effects on establishment closures, the city of Manila stood out with a higher number of closures per square kilometer. Moreover, Manila, Makati City, and Mandaluyong City exhibited significant effects on job losses.

These findings suggest the presence of unaccounted factors influencing MSME resilience and highlight the need for further research to better understand these dynamics. This could involve exploring additional variables such as industry-specific characteristics, financial support mechanisms, and socio-economic factors that may contribute to the varying outcomes observed among different cities in the region.

References:


