



Factors Influencing the Survival of Micro and Small Enterprises (MiSEs) in Thai Night Markets During an Economic Crisis

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Abstract

This study investigated the factors influencing the survival of Micro and Small Enterprises (MiSEs) in the Greenway Night Market in Thailand during the COVID-19 pandemic. It employed OLS, Logit, and Ordered Logit regression models on data from 320 thriving MiSEs through structured questionnaires in late 2022. This approach contributed to understanding MiSEs's resilience and informed policy development for future crises by selecting factors that had a statistically significant impact on survival and remained consistent across regression models with different thresholds. Findings revealed that, among the adaptive strategies, selling assets to enhance liquidity was crucial for survival, while seeking additional income and requesting debt deferrals negatively impacted business performance. The "50:50 co-payment" scheme and reduced utility costs were identified as effective government interventions. Future research was suggested to explore additional factors and assess policy impacts.

Keywords: micro and small enterprises, survival, night Market, economic crisis, adaptive strategies, economic stimulus measures

JEL Classifications: D22, E32, H12, M21

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1. Introduction

Micro and Small Enterprises (MiSEs) are recognized as vital drivers of economic growth globally, contributing significantly to job creation and the development of local economies, thereby bolstering the broader national economic landscape (Kritikos, 2024; Kim et al., 2022; Stoica et al., 2020; Doran et al., 2018; Harvie, 2003). However, MiSEs are notably vulnerable to economic uncertainties and crises, which can pose formidable challenges to their survival (Engidaw, 2022; Shafi et al., 2020; Tambunan, 2019; Liu, 2009). Considering these vulnerabilities, it is imperative to establish a more resilient and robust economic environment for MiSEs, one fortified by effective business strategies and economic stimulus measures designed to navigate economic crises successfully.

The recent global economic crisis, precipitated by the COVID-19 pandemic, served as a stark reminder of the susceptibility of MiSEs to external shocks. As the pandemic unfolded, it triggered widespread lockdown measures, leading to a deceleration of economic activities, business closures, and a surge in job losses across many nations (Naseer et al., 2023). In Thailand, MiSEs faced substantial adversity, as corroborated by empirical studies and reports such as those conducted by Boonchai et al. (2022), Jitwaropasakul et al. (2023), and findings from the Office of Small and Medium Enterprises Promotion (OSMEP, 2022; OSMEP, 2021), consistently reporting significant declines in income and sales for MiSEs, driven by factors like reduced customer footfall, escalated operational costs, and the need for workforce reductions. Consequently, MiSEs in Thailand faced substantial risks to their viability.

This study focused on a particular form of MiSEs – night markets. These markets provide MiSEs with valuable opportunities for business space rentals, access to essential amenities, and connections with a diverse customer base. The Greenway Night Market was an intriguing case study in Hat Yai District, Songkhla Province. Before the COVID-19 outbreak, this bustling market hosted approximately 800 operational MiSEs. However, the pandemic's onset necessitated a temporary closure in compliance with government mandates. Following the Thai government's decision to relax lockdown measures on October 1, 2022, a significant proportion of MiSEs, approximately 550 (68.75%), successfully weathered the challenges and resumed operations (Greenway Night Market, mentioned in Chantith & Nookate, 2023). This setting offers an ideal context for unraveling the determinants that enhance MiSEs' survival and resilience in crises. While existing research has explored business adaptation strategies and government support measures for MiSEs across various sectors in Thailand, there was a conspicuous research gap concerning MiSEs in the night market.

Therefore, this study aimed to provide a comprehensive understanding of the factors contributing to the resilience of MiSEs in the Greenway Night Market during the COVID-19 pandemic. To confirm various factors, multiple regression analysis techniques, including Ordinary Least Square (OLS), Logit Model, and Ordered Logit Model (OLM) are used. These analyses were instrumental in identifying the key factors, strategies, and economic stimulus measures contributing to MiSEs' survival. The research findings will serve as strategic guidelines for MiSEs to adapt to future economic crises. They can also assist the government in formulating policies to alleviate the challenges MiSEs face.

2. Literature Review

2.1 Resilience Factors for MiSEs During Crises

In times of crisis, the resilience of MiSEs becomes paramount for economic stability and sustainability. Various studies have shed light on the critical factors contributing to the resilience of MiSEs, particularly within the unique context of night markets in Thailand. These studies have identified four primary factors that play a pivotal role in determining the ability of MiSEs to weather the storm during challenging times. These factors encompass a range of elements, from the characteristics of MiSEs to the support provided by night market facilities, as well as adaptation strategies and economic stimulus measures. The details are as below:

2.2.1) Business Characteristics and Operations

This factor encapsulates two critical components (Essel et al. 2019; Lee, 2018): the range of products offered and the duration of business operations. It entails assessing the nature of products and services MiSEs provide within the night market and the duration of business operations. These factors collectively influence market positioning, consumer appeal, and the overall sustainability of MiSEs.

2.1.2) Night Market Facilities and Services

The second factor revolves around the amenities and services furnished by the night market environment. This factor entails evaluating the infrastructure, amenities, and assistance offered to MiSEs by the night market management. The quality of these provisions significantly impacts operational efficiency and the market's overall attractiveness, directly contributing to the success and resilience of MiSEs (Nikbin et al., 2022; Ruangkam et al., 2021; Saranrom et al., 2021).

2.1.3) Business Adaptation Strategies

The third factor, business adaptation strategies, was highlighted as crucial for addressing challenges during uncertain situations (Peñarroya-Farell & Miralles, 2022; McKee et al., 1989; Mintzberg, 1987). This factor was divided into three groups (OSMEP, 2021): *Supplementary Income* included diversifying income sources, shifting to online services, and partially selling assets to boost liquidity. *Business Expense Reduction* included negotiating debt payment extensions with creditors, reducing employee headcount, accelerating business closure, and cutting employee wages. *Business Operational Changes* included exploring new business models, seeking support from large business partners, and transitioning to a different line of business. Grasping how MiSEs navigate challenges and tailor their strategies and methodologies is crucial in gauging their adaptability and resilience in the face of uncertainties.

2.1.4) Economic Stimulus Measures

The fourth factor, Luengnaruemitchai et al. (2021) studied the policies adopted by various countries that effectively addressed the economic repercussions stemming from the COVID-19 situation. They summarized key financial and fiscal measures pivotal in supporting recovery and mitigating impacts. The monetary and fiscal policies as economic stimulus measures in Thailand were separated into three groups: *Financial Assistance Measures* included debt deferment/repayment schemes and low-interest loans from state financial institutions (Royal Thai Government Gazette, 2021; Chucherd, 2021). *Cost Reduction Measures* included reducing water and electricity costs, extending

tax deadlines, reducing contributions to the Social Security Fund, and providing tax refunds for businesses (The Secretariat of the Cabinet, 2021). *Stimulating Public Spending Measures* included programs such as the "50:50 co-payment" scheme and the "Shop Dee Mee Kuen" personal tax deduction campaign. These policies and measures aimed to provide financial support, reduce business expenses, and stimulate public spending to alleviate the economic impact of the COVID-19 outbreak in Thailand (TCIJ, 2021; OSMEP, 2022).

2.2 Assessment of MiSEs' survival

Evaluating business performance is crucial for ensuring a business's success and growth. Key performance indicators (KPIs) provide significant insights into various aspects and help businesses make informed decisions, identify strengths, address weaknesses, discover opportunities for improvement, and adjust strategies effectively. For small businesses, KPIs can be divided into two categories: 1) Non-financial metrics such as customer satisfaction and employee productivity (Srinivasarao et al., 2020; Mahmudova & Kovács, 2018) and operational efficiency (Katare et al., 2021); and 2) Financial metrics such as revenue growth, income, cash flow, liquidity, return on investment, and net profit (Stevens, 2023; Srinivasarao et al., 2020; Mahmudova & Kovács, 2018; Chan, 2004). However, Srinivasarao et al. (2020) and Aggarwal et al. (2012) stated that measuring business performance with non-financial metrics is challenging, although specific criteria can define these indicators. In contrast, financial metrics are clearly defined and easily accessed from financial reports, making performance measurement straightforward.

Therefore, assessing MiSEs is essential for understanding their financial health, which is a key factor in guiding strategic planning. By analyzing the net profit rate, stakeholders (business owners and policymakers) gain insights into the vitality of MiSEs, which helps make informed decisions, enhance resilience to crises, and refine operational strategies. Katare et al. (2021) emphasized the importance of business performance as a determinant of SME survival, with performance outcomes as the dependent variable. This aligns with OSMEP (2013), which categorized MiSEs' survival into two main groups to study the factors affecting the survival of SMEs in the primary Thai weekend market (Chatuchak Market) without being sensitive to changes in analytical models.

Detailed Scale (1 to 5 Levels):

Level 1 (Net Profit < 5%): Inferior performance, incurring losses, and lacking liquidity.

Level 2 (5-7%): Relatively poor performance, almost not surviving, but with some liquidity.

Level 3 (8-10%): Some profit, no losses, and decent liquidity.

Level 4 (11-15%): Normal survival conditions.

Level 5 (> 15%): Thriving and robust survival.

Simplified Scale (2 Levels):

Not Surviving (Net Profit \leq 5%): Indicates poor performance and financial instability.

Surviving (Net Profit > 5%): Reflects viable performance and adequate liquidity.

Using these survival level thresholds as dependent variables in regression models is crucial for identifying factors that enhance resilience during economic crises and understanding which variables contribute to MiSEs' survival under challenging conditions.

2.3 The Methods in Assessing Factors Affecting MiSEs Survival

As for the research method, several studies have proposed using regression analysis. For example, Najib et al. (2021) investigated the business survival of small and medium-sized restaurants in Indonesia, analyzing it through multiple regression analysis, specifically using the logit regression model. Alvarado Lagunas et al. (2018) studied the factors influencing the continuity and survival of micro-businesses in Mexico, employing the logit regression and alternative-specific logit regression models. The study by Wang (2016) investigated the primary obstacles to SME growth in developing countries and identified vital determinants influencing these obstacles using the probit model, which is suitable for binary outcome variables. Additionally, the OSMEP (2013) conducted a study on the economic index of SMEs and presented two main models for analysis: OLS and the logit model.

From the studies mentioned earlier, it is notable that regression analysis with binary outcome variables involves using both logit and probit models. Jose et al. (2020) studied comparing probit and logistic regression models in the analysis of dichotomous outcomes and noted that logit and probit models are very similar. Probit analysis is an alternative to the logit method, with the main difference being the assumption of a normal distribution of independent variables in the model. However, Klieštík et al. (2015), in their study on the logit and probit models used for the prediction of the financial health of companies, highlighted two practical advantages of the logit model over the probit model despite their similarities: simplicity, as the equation of the logistic distribution function is straightforward while the normal cumulative distribution function contains an unquantified integral; and interpretability, as the inverse linear transformation of the logit model can be directly interpreted as the logarithm of odds, while the inverse transformation of the probit model lacks direct interpretation. Moreover, when the dependent variables have more than two levels, several studies recommend using an OLM for analysis (Bellizzi et al., 2018; HK et al., 2017; Robson & Bennett, 2000).

Most studies primarily utilized multiple regression analysis. Therefore, in this study, the researchers have chosen regression models based on the nature of the dependent variable, the survival level of MiSEs (see section 2.2). The selection of OLS, the logit model, and OLM is well-considered, ensuring the validity and reliability of the research approach.

2.4 The impact of the COVID-19 pandemic on MiSEs in Greenway night market

The Greenway Night Market in Hat Yai District, Songkhla Province, is located in a residential area near prominent universities, making it highly popular among locals and residents from nearby areas. Hat Yai is a major economic center in southern Thailand, serving as a critical hub for commerce, investment, and services in the region. Additionally, Hat Yai's strategic importance in transportation, with its railway station and airport connecting to other parts of Thailand and international destinations, mainly attracts many tourists from Malaysia to this market.

Due to the influx of local and international consumers, the Greenway Night Market has become the largest night market in the area, housing approximately 800 MiSEs. These enterprises offer goods in four main categories: food and beverages, clothing, mobile accessories, and second-hand products (Greenway Night Market, mentioned in Chantith & Nookate, 2023). Consequently, this market is not just a crucial commercial area but also a significant contributor to the local economy, reflecting both the concentration of MiSEs and the economic conditions of Hat Yai.

The COVID-19 pandemic, which began in 2019, severely impacted the Greenway Night Market. The Thai government's declaration of a state of emergency and subsequent public health measures, including lockdowns and the closure of the Thai-Malaysian

border, led to a significant decline in customer foot traffic. As a result, MiSEs within the market experienced a substantial drop in revenue and sales, plummeting by approximately 80% (Chantith & Nookate, 2023).

The Greenway Night Market resumed operations when the crisis subsided, and the government lifted the lockdown. Market management adapted by supporting MiSEs through various facilities and services, such as reducing market service fees, adjusting market operating hours, and promoting the market. Additionally, MiSEs used adaptive strategies by enhancing liquidity, reducing expenses, and adopting innovative strategies such as online sales, delivery services, and collaboration with other vendors to share resources (Chantith & Nookate, 2023). Government support through economic stimulus measures, such as the "50:50" co-payment scheme and the "Shop Dee Mee Kuen" tax rebate program, also played a crucial role in sustaining these businesses. As a result, 550 MiSEs (68.25%) in the Greenway Night Market survived the crisis (Chantith & Nookate, 2023). This collective effort has not only sustained the market but also symbolized the survival of MiSEs during economic crises.

Given the significant number of MiSEs that have managed to withstand the economic crisis, studying the factors influencing their survival in the Greenway Night Market is essential. Understanding these factors will benefit future crisis management, providing guidelines for adapting, supporting, and promoting MiSEs. Moreover, the OSMEP (2013) suggested that studies on business survival should focus on commercially significant and economically influential areas within the province. Therefore, the Greenway Night Market is an excellent case for studying factors affecting the survival of MiSEs.

3. Methods

This research employed a quantitative approach to address the research objective, which aimed to investigate the factors influencing the survival of MiSEs in the Greenway Night Market.

3.1 Data and Statistical Analysis

For the quantitative aspect, data collection occurred between November and December 2022 from a sample of 320 MiSEs¹ that had successfully survived within the Greenway Night Market. A structured questionnaire² was utilized to gather essential information such as business characteristics and operations. The data encompassed perceptions of the significance of various market facilities and services that impact MiSEs' survival. It also included information on adopting diverse adaptation strategies, including supplementary income generation, business expense reduction, and operational modifications. Additionally, the data incorporated opinions regarding the effectiveness

¹ The Taro Yamane calculating method determined a sample size of 232 MiSEs (550 population, achieving a confidence level of 95%). However, after receiving 326 responses and checking the completeness of the data, 320 responses were deemed valid. Therefore, the researcher decided to use all 320 MiSEs for data analysis. To ensure methodological soundness, simple random sampling was used by drawing lots to select the MiSEs that would be used (Chantith & Nookate, 2023).

² The questionnaire was engaged by three qualified experts who assessed the questions for validity using the Item-Objective Congruence (IOC) index. Each question received scores of 0.67-1.00. Furthermore, the questionnaire was subjected to a tryout to evaluate its reliability. The results revealed that the Likert-scale questionnaire exhibited Cronbach's alpha coefficients at 0.89.

of economic stimulus measures, such as financial aid, cost reduction initiatives, and measures aimed at stimulating public spending. These data were treated as independent variables in the analysis.

Furthermore, a variable representing the percentage of net profit was used as the dependent variable. This variable is divided into two main groups based on the OSMEP (2013) study:

1) Detailed Scale: Comprised of five levels ranging from "inability to survive" (Level 1) to "robust survival" (Level 5), with specific net profit thresholds for each level. The interpretation of the levels of survival is as follows: - Level 1: net profit less than 5% - Level 2: net profit ranging from 5% to less than 8% - Level 3: net profit between 8% and less than 10% - Level 4: net profit comfortably falling between 11% and less than 15% - Level 5: net profit exceeding the 15% threshold.

2) Simplified Scale: A binary classification of "Not Surviving" (net profit $\leq 5\%$) and "Surviving" (net profit $> 5\%$).

The collected data underwent statistical analysis employing frequency, percentage, mean, and standard deviation methods. While a Likert rating scale with five levels was employed to interpret perceptions (1.00-1.80 = very low importance/implementation/ability to assist, 1.81-2.60 = low level, 2.61-3.40 = moderate level, 3.41-4.20 = high level, 4.21-5.00 = very high level). This data allowed for a comprehensive assessment of the factors influencing MiSEs' survival and the effectiveness of government measures in various scenarios.

Moreover, multiple regression analysis was employed to confirm the influence of various factors related to the survival of MiSEs in the Greenway Night Market during the crises.

3.2 Regression Models

The study employed three multiple regression models—OLS, Logit Model, and OLM—to investigate the factors affecting the percentage of net profit, which is linked to the survival level of MiSEs. In each model, the four primary factors mentioned earlier were used as dependent variables. Utilizing multiple models ensures robustness and insensitivity of results to the choice of model or thresholds of the dependent variable. This approach confirms the consistency and reliability of the findings (Ananapibut et al., 2015; OSMEP, 2013). Here is an explanation of each model:

OLS:

$$SVL_i = \alpha_0 + \beta_1 BCO_i + \beta_2 MFS_i + \beta_3 BAS_i + \beta_4 ESM_i + \varepsilon_i \quad (1)$$

Logit model:

For the Logit Model analysis, the dependent variable SVL_i was divided into two options: 0 = not surviving ($1-p$ = net profit less than 5%) and 1 = surviving (p = net profit exceeding 5% or more). Then, the Logit Model can be formulated as follows:

$$\ln\left(\frac{p}{1-p}\right) = \alpha_0 + \beta_1 BCO_i + \beta_2 MFS_i + \beta_3 BAS_i + \beta_4 ESM_i + \varepsilon_i \quad (2)$$

OLM:

$$SVL_i = \begin{cases} 1, & \text{if } SVL_i^* < k_1 \\ M, & \text{if } k_{i=(M-1)} \leq SVL_i^* \leq k_{i=M}, M=2,3,4 \\ 5, & \text{if } SVL_i^* > k_M \end{cases} \quad (3)$$

and SVL_i^* equal to:

$$SVL_i^* = \beta_1 BCO_i + \beta_2 MFS_i + \beta_3 BAS_i + \beta_4 ESM_i + \varepsilon_i \quad (4)$$

From Equations 1, 2, and 4, BCO_i stands for Business Characteristics and Operations factors. MFS_i depicts Night Market Facilities and Services factors. BAS_i is Business Adaptation Strategies factors. ESM_i expresses Economic Stimulus Measures factors. B_i illustrates the coefficient of determination of the independent variables is defined as $i = 1-n$. α_0 signifies the constant. ε_i represents the error term. Furthermore, SVL_i in Equation 1 represents the survival level of MiSEs. P in Equation 2 means the probability (Prob.) that MiSEs will be able to survive. Moreover, SVL_i^* in Equation 4 conveys the survival level of MiSEs using a five-point scale, which ranges from inability to survive (Level 1) to robust survival (Level 5): "net profit less than 5%" ($k = 1$), "net profit ranging from 5% to less than 8%" ($k = 2$), "net profit between 8% and less than 10%" ($k = 3$), "net profit between 11% and lower 15%" ($k = 4$), and "net profit exceeding the 15% threshold" ($k = 5$). The ordinal variable SVL_i is contingent upon another variable SVL_i^* outlined in Equation 3, continuous and unmeasured, featuring distinct threshold points.

As indicated above, the hypothesis for each independent variable suggested a positive correlation with the survival level of MiSEs during the COVID-19 period.

4. Results and Discussions

This section presents the results of the data analysis categorized by variable type, along with the outcomes of the regression analysis that confirmed the variables influencing the survival of MiSEs during the crisis period. Furthermore, it has provided a discussion of these findings.

4.1 Basic Information

The sample group consisted of 320 MiSEs. Most were female, accounting for 52.50% of the sample. Their ages were primarily between 25 and 31 years old, at 45.94%, followed by ages between 32 and 39 years old, at 24.38%. Regarding educational attainment, most of the sample group held a bachelor's degree, at 30.30%, followed by those who had not pursued education, at 22.20%, and those with a high school diploma, at 20.60%.

The impact of MiSEs in the Greenway Night Market during COVID-19 was moderate ($\bar{x} = 3.31$). When examining the details, it was found that the reduction in hiring employees was the most affected by the COVID-19 situation ($\bar{x} = 3.33$), followed by a decrease in financial flexibility ($\bar{x} = 3.30$), and a decline in customers and revenue ($\bar{x} = 3.25$), respectively.

4.2 Business Characteristics and Operations (BCO)

The results of the analysis of the factors related to business characteristics and operations, which included 1) the type of products/services sold and 2) the duration of business operations, were as follows:

4.2.1) The type of products/services sold

Table 1: Number & Percentage Classified by the Type of Products/Services

Type of products/services	Number	Percentage
Clothing (BCO1)	117	36.60
Food and Beverages (BCO2)	98	30.60
Second-hand Products (BCO3)	56	17.50
Mobile Accessories and Jewelry (BCO4)	49	15.30
Total	320	100.00

Source: Author's calculations.

From Table 1, it was observed that the majority of MiSEs in the sample primarily sold clothing products, accounting for 36.60%. They were followed by those engaged in the food and beverage sector at 30.60%, second-hand product businesses at 17.50%, and mobile accessories and jewelry at 15.30%, respectively.

4.2.2) The Duration of Business Operations

The duration of business operations (BCO5) based on survey respondents showed that, on average, most businesses had been in operation for approximately 3.95 years (± 2.86), roughly equivalent to 3 years and 11 months. The shortest duration of business operation reported was one year, while the longest was 20 years in this market.

4.3 Night Market Facilities and Services (MFS)

The significance of various Market Facilities and Services that impact MiSEs' survival, as per the respondents' opinions, was presented in Table 2.

Table 2: Opinions on the significance of various Market Facilities and Services from the Greenway Night Market

Night Market Facilities and Services	\bar{X}	S.D.	Significance Level
Number of days available for selling per month (MFS1)	3.67	.932	High
Number of hours open for sales each day (MFS2)	3.61	.998	High
Control of number of sellers of the same products (MFS3)	3.53	1.007	High
Customer parking spaces (MFS4)	3.58	1.017	High
Number of restrooms available for customers (MFS5)	3.52	.973	High
Number of food stalls/restaurants serving customers (MFS6)	3.40	.990	Moderate
Monthly rent cost (MFS7)	3.30	1.066	Moderate
Monthly electricity cost (MFS8)	3.38	1.016	Moderate
Maintenance costs, such as garbage collection (MFS9)	3.33	1.098	Moderate
Management experience of market operators (MFS10)	3.46	1.108	High
Duration of lease agreement for the space (MFS11)	3.40	1.090	Moderate
Public relations and promotion (MFS12)	3.38	1.091	Moderate

Source: Author's calculations.

In conclusion, Table 2 highlights the significance of various amenities and services provided by the Greenway Night Market in supporting the survival of MiSEs, as reported by survey participants. These factors were ranked based on their perceived importance, with the top 6 factors that reached a high level being the Number of days available for selling per month, Number of hours open for selling each day, Number of customer parking spaces, Control of the Number of sellers of the same type of product, Number of restrooms available for customers, and Management experience of market operators, respectively.

4.4 Business Adaptation Strategies (BAS)

"Business Adaptation Strategies" was an assessment of the level of implementation of each strategy, indicating to what extent each strategy was implemented, as shown in Table 3.

From Table 3 below, it was found that in terms of income generation strategies, MiSEs primarily sold some assets to enhance liquidity, ranking first ($\bar{x} = 3.36$). The strategy was to generate additional income ($\bar{x} = 3.30$) and adapt to online services ($\bar{x} = 3.15$), respectively.

Regarding cost reduction strategies for businesses, MiSEs predominantly implemented the strategy of closing their businesses earlier ($\bar{x} = 3.22$), followed by reducing employee wages ($\bar{x} = 3.18$), reducing the number of employees ($\bar{x} = 3.14$), and negotiating with creditors for debt deferral ($\bar{x} = 3.12$).

For strategies related to changing business operations, the top strategy was switching to a different line of business ($\bar{x} = 3.25$), followed by seeking new business models ($\bar{x} = 3.12$) and seeking partnerships with larger businesses to support their operations ($\bar{x} = 3.08$).

Table 3: The Level of Implementation of Business Adaptation Strategies

Business Adaptation Strategies	\bar{X}	S.D.	Implementation Level
Supplementary Income Generation			
Boosts business income (BAS1)	3.30	1.053	Moderate
Transitioning to online services (BAS2)	3.15	1.049	Moderate
Selling some assets to improve flexibility (BAS3)	3.36	1.100	Moderate
Business Expense Reduction			
Negotiating with creditors for debt deferral (BAS4)	3.12	1.236	Moderate
Reducing the number of employees (BAS5)	3.14	1.254	Moderate
Accelerating business closure (BAS6)	3.22	1.287	Moderate
Cutting employee wages (BAS7)	3.18	1.272	Moderate
Business Operational Changes			
Exploring new business models (BAS8)	3.12	1.137	Moderate
Seeking support from large business partners (BAS9)	3.08	1.078	Moderate
Transitioning to a different line of business (BAS10)	3.25	1.154	Moderate

Source: Author's calculations.

4.5 Economic Stimulus Measures (ESM)

The ability of the Economic Stimulus Measures to alleviate the severity of the COVID-19 situation from the perspective of MiSEs, as shown in Table 4.

Table 4: The Ability to Alleviate the Severity of COVID-19
from the Economic Stimulus Measures

Economic Stimulus Measures	\bar{x}	S.D.	Alleviation Level
Financial Assistance			
Provides debt moratorium/deferment (GSM1)	2.87	1.127	Moderate
Offers low-interest loans (GSM2)	2.73	1.088	Moderate
Business Cost Reduction			
Reduces water and electricity costs (GSM3)	2.78	1.237	Moderate
Extends tax payment deadlines (GSM4)	2.83	1.105	Moderate
Reduces social security contributions (GSM5)	2.84	1.238	Moderate
Provides tax refunds (GSM6)	2.95	1.227	Moderate
Stimulating Consumer Spending			
"50:50 co-payment" scheme (GSM7)	2.90	1.200	Moderate
"Shop Dee Mee Kuen" personal tax deduction (GSM8)	3.18	1.222	Moderate

Source: Author's calculations.

From Table 4, most MiSEs believed that all economic stimulus measures could provide a moderate level of alleviation in terms of financial assistance. It was found that providing debt moratorium/deferment alleviated problems and was ranked first ($\bar{x} = 2.87$), followed by offering low-interest loans from financial institutions ($\bar{x} = 2.83$).

In terms of reducing business expenses, it was found that tax refunds were at the top ($\bar{x} = 2.95$), followed by reducing social security contributions ($\bar{x} = 2.84$), extending tax payment deadlines ($\bar{x} = 2.83$), and reducing water and electricity costs ($\bar{x} = 2.78$), respectively.

As for stimulating consumer spending, the "Shop Dee Mee Kuen" program was found to be in the first place ($\bar{x} = 3.18$), followed by the "50:50 co-payment" program ($\bar{x} = 2.90$), in respective order.

In summary, there were 5 independent variables in the Business Characteristics and Operations factor: 12 in the Night Market Facilities and Services factor, 10 in the Business Adaptation Strategies factor, and 8 in the Economic Stimulus Measures factor, making a total of 35 independent variables.

4.6 Survival Level of MiSEs (SVL)

The survival level was a variable of interest in this study and could be measured based on the net monthly profit rate of MiSEs, as shown in Table 5.

Table 5: the Net Monthly Profit Rate

Net monthly profit rate	Number	Percentage
Level 1: Less than 5% (SVL1)	59	18.40
Level 2: From 5% to lower 8% (SVL2)	212	66.30
Level 3: From 8% to lower 10% (SVL3)	43	13.40
Level 4: From 10% to lower 15% (SVL4)	6	1.90
Total	320	100.00

Source: Author's calculations.

From Table 5, it was observed that the majority of the sample group fell into the "net profit ranging from 5 % to lower 8 %" category (survival level 2: relatively poor, almost not surviving, but with some liquidity), accounting for 66.30%. Those with net profit less than 5 % (survival level 1: very poor, barely surviving, incurring losses, and lacking liquidity) constituted 18.40%. Those falling between 8% and lower 10% (survival

level 3: some profit, no losses, and decent liquidity) made up 13.40%. Only 1.9% were in the net profit category between 11% and 15% (survival level 4: surviving under normal circumstances). Notably, no one had a net profit exceeding 15%.

4.7 OLS Results

From the OLS model, it was found that the independent variable significantly affecting the survival level of MiSEs at a significance level of 0.01 was the government assistance in reducing water and electricity costs. As for the independent variable with a significant impact at a significant level of 0.05, the request for debt deferment from creditors had an inverse relationship with profitability. The independent variables with a significant impact at a significant level of 0.10 included the number of restrooms provided to customers, the sale of assets for liquidity, and the forming of partnerships with large businesses. All three of these variables had a positive relationship with survival level (see Table 6).

Table 6: OLS Results

Factors	Coefficient	Std. Error	t-ratio	p-value
const	1.93954	0.248487	7.805	<0.0001 ***
Clothing (BCO1)	-0.131168	0.113965	-1.151	0.2507
Food and Beverages (BCO2)	-0.127758	0.118573	-1.077	0.2822
Second-hand Products (BCO3)	-0.122249	0.134284	-0.9104	0.3634
Duration of Business Operation (BCO5)	0.0182987	0.0116699	1.568	0.1180
No. of selling days per month (MFS1)	-0.0469906	0.0736508	-0.6380	0.5240
No. of hours open each day (MFS2)	-0.0711931	0.0812952	-0.8757	0.3819
No. of the same type of products (MFS3)	-0.0245456	0.0484670	-0.5064	0.6129
Customer parking spaces (MFS4)	-0.0631114	0.0470540	-1.341	0.1809
No. of restrooms (MFS5)	0.0976564	0.0567048	1.722	0.0861 *
No. of food stalls (MFS6)	0.0504296	0.0481324	1.048	0.2957
Monthly rent cost (MFS7)	-0.0678170	0.0490942	-1.381	0.1682
Monthly electricity cost (MFS8)	0.0486599	0.0519894	0.9360	0.3501
Maintenance costs (MFS9)	0.0431825	0.0540315	0.7992	0.4248
Management experience (MFS10)	-0.0167473	0.0444351	-0.3769	0.7065
Duration of contract (MFS11)	-0.0157989	0.0512058	-0.3085	0.7579
Public relations and promotion (MFS12)	-0.0159650	0.0499050	-0.3199	0.7493
Boosts business income (BAS1)	-0.106685	0.0670321	-1.592	0.1126
Transitioning to online services (BAS2)	0.0215177	0.0612570	0.3513	0.7256
Selling some assets (BAS3)	0.0780971	0.0464512	1.681	0.0938 *
Negotiating for debt deferral (BAS4)	-0.0964184	0.0454305	-2.122	0.0347 **
Reducing the no. of employees (BAS5)	0.0339847	0.0415528	0.8179	0.4141
Accelerating business closure (BAS6)	-0.0138427	0.0324070	-0.4272	0.6696
Cutting employee wages (BAS7)	0.00585414	0.0390831	0.1498	0.8810
Exploring new business models (BAS8)	-0.0461161	0.0421237	-1.095	0.2745
Seeking support from partner (BAS9)	0.0887673	0.0505465	1.756	0.0801 *
Shift to a different line of business (BAS10)	0.00660518	0.0453784	0.1456	0.8844
Provides debt moratorium/ (GSM1)	-0.0314795	0.0442752	-0.7110	0.4777
Offers low-interest loans (GSM2)	0.0234137	0.0485123	0.4826	0.6297
Reduces water/electricity costs (GSM3)	0.0932251	0.0310453	3.003	0.0029 ***

Factors	Coefficient	Std. Error	t-ratio	p-value
Extends tax payment deadlines (GSM4)	0.0259116	0.0412570	0.6281	0.5305
lowers social security payments (GSM5)	0.0342818	0.0387902	0.8838	0.3776
Provides tax refunds (GSM6)	-0.0569043	0.0386710	-1.471	0.1423
“50:50 co-payment” scheme (GSM7)	0.0577302	0.0364013	1.586	0.1139
"Shop Dee Mee Kuen" tax deduction (GSM8)	0.0251559	0.0418522	0.6011	0.5483

Note: Omitted Variable: Mobile Accessories and Jewelry (BCO4). *** significance at the 0.01 level, ** significance at the 0.05 level, * significance at the 0.10 level. R-square 0.155880 Adjusted R-squared 0.055177 F (34, 285) 1.755527 P-value(F) 0.007729

Source: Author's calculations.

From Table 6, the model's R-squared value of 0.155880 indicated that the included predictive variables explained approximately 15.59% of the variability in MiSEs' survival during the crisis. While this value might have seemed low, it was necessary to note that in complex fields such as social sciences or economics, R-squared values often fell within the 0.10 to 0.50 range (Frost, 2019; Ozili, 2023). Nevertheless, the statistically significant variables could still provide valuable insights into variable relationships.

4.8 Logit Model Results

Table 7: Logit Model Results

Factors	Coeff.	S.E.	Z	p-value
const	0.0838965	1.17521	0.07139	0.9431
Clothing (BCO1)	-0.156601	0.592847	-0.2642	0.7917
Food and Beverages (BCO2)	-0.800452	0.599008	-1.336	0.1815
Second-hand Products (BCO3)	-0.465844	0.725075	-0.6425	0.5206
Duration of Business Operation (BCO5)	0.274329	0.0912710	3.006	0.0027 ***
No. of selling days per month (MFS1)	0.278775	0.380338	0.7330	0.4636
No. of hours open each day (MFS2)	-0.0671108	0.390491	-0.1719	0.8635
No. of the same type of products (MFS3)	-0.116842	0.286658	-0.4076	0.6836
Customer parking spaces (MFS4)	-0.684055	0.310287	-2.205	0.0275 **
No. of restrooms (MFS5)	0.458565	0.305401	1.502	0.1332
No. of food stalls (MFS6)	0.583513	0.294594	1.981	0.0476 **
Monthly rent cost (MFS7)	-0.461020	0.288232	-1.599	0.1097
Monthly electricity cost (MFS8)	0.302809	0.270313	1.120	0.2626
Maintenance costs (MFS9)	0.112380	0.276354	0.4067	0.6843
Management experience (MFS10)	-0.210746	0.260420	-0.8093	0.4184
Duration of contract (MFS11)	0.0597914	0.292937	0.2041	0.8383
Public relations and promotion (MFS12)	0.0104083	0.281931	0.03692	0.9706
Boosts business income (BAS1)	-0.989365	0.297292	-3.328	0.0009 ***
Transitioning to online services (BAS2)	0.742166	0.345055	2.151	0.0315 **
Selling some assets (BAS3)	0.695282	0.223863	3.106	0.0019 ***
Negotiating for debt deferral (BAS4)	-0.713993	0.257583	-2.772	0.0056 ***
Reducing the no. of employees (BAS5)	-0.270744	0.228662	-1.184	0.2364
Accelerating business closure (BAS6)	0.407057	0.227146	1.792	0.0731 *
Cutting employee wages (BAS7)	-0.440129	0.228529	-1.926	0.0541 *
Exploring new business models (BAS8)	-0.590564	0.239791	-2.463	0.0138 **
Seeking support from partner (BAS9)	0.173275	0.266586	0.6500	0.5157
Shift to a different line of business (BAS10)	0.255626	0.252475	1.012	0.3113

Factors	Coeff.	S.E.	Z	p-value
Provides debt moratorium/ (GSM1)	0.369355	0.224163	1.648	0.0994 *
Offers low-interest loans (GSM2)	0.100883	0.264467	0.3815	0.7029
Reduces water/electricity costs (GSM3)	0.318984	0.204536	1.560	0.1189
Extends tax payment deadlines (GSM4)	-0.325190	0.218744	-1.487	0.1371
lowers social security payments (GSM5)	0.149368	0.211791	0.7053	0.4806
Provides tax refunds (GSM6)	-0.316053	0.226924	-1.393	0.1637
“50:50 co-payment” scheme (GSM7)	0.630305	0.224099	2.813	0.0049 ***
"Shop Dee Mee Kuen" tax deduction (GSM8)	0.0951589	0.211004	0.4510	0.6520

Note: Omitted Variable: Mobile Accessories and Jewelry (BCO4). *** significance at the 0.01 level, ** significance at the 0.05 level, * significance at the 0.10 level. Number of cases 'correctly predicted' = 279 (87.2%) $f(\beta'x)$ at mean of independent vars=0.388.

Likelihood ratio test: Chi-square (34) = 89.1069 [0.0000

Source: Author's calculations.

From the Logit model in Table 7, it was found that the independent variables significantly affecting the survival of businesses in the Greenway Night Market at a significance level of 0.01, in the same direction, were the duration of business operations, the sale of assets for liquidity, and joint ventures. As for the independent variables with a significant impact at a significant level of 0.01 in the opposite direction, they included additional income and requests for debt deferment from creditors.

Moreover, the independent variables with a significant impact at a significant level of 0.05 in the same direction were the number of food stalls serving customers and the adoption of online services. In the opposite direction, the variables included the customer parking spaces and the pursuit of new business models. Regarding the independent variables with a significant impact at a significant level of 0.10 in the same direction, they included shorter opening hours and debt relief measures implemented by the government. On the other hand, reducing employee wages significantly impacted the opposite direction.

4.9 OLM Results

The OLM found that the independent variable significantly affecting the survival level of MiSEs at a significant level of 0.01 in the same direction was the reduction of water and electricity costs as part of the government's measures. Additional income was the statistically significant independent variable at a 0.01 significance level in the opposite direction. In other words, an increase in extra income from other sources decreased the survival level of existing businesses. The independent variable significantly impacted at a 0.05 significance level in the same direction as the sale of assets for liquidity. Regarding the independent variable with a significant impact at a 0.10 significance level in the same direction, it was the 50:50 co-payment scheme (see Table 8).

Table 8: OLM results

Factor	Coeff.	S.E.	z	p-value
Clothing (BCO1)	-0.642461	0.394813	-1.627	0.1037
Food and Beverages (BCO2)	-0.571931	0.400052	-1.430	0.1528
Second-hand Products (BCO3)	-0.507663	0.466905	-1.087	0.2769
Duration of Business Operation (BCO5)	0.0675686	0.0448146	1.508	0.1316
No. of selling days per month (MFS1)	-0.146664	0.263586	-0.5564	0.5779
No. of hours open each day (MFS2)	-0.175536	0.268487	-0.6538	0.5132
No. of the same type of products (MFS3)	-0.100192	0.189023	-0.5301	0.5961
Customer parking spaces (MFS4)	-0.244183	0.179348	-1.362	0.1734
No. of restrooms (MFS5)	0.203256	0.192692	1.055	0.2915

Factor	Coeff.	S.E.	z	p-value
No. of food stalls (MFS6)	0.300594	0.190008	1.582	0.1136
Monthly rent cost (MFS7)	-0.222593	0.187053	-1.190	0.2340
Monthly electricity cost (MFS8)	0.249471	0.186842	1.335	0.1818
Maintenance costs (MFS9)	0.128475	0.190832	0.6732	0.5008
Management experience (MFS10)	-0.133658	0.172896	-0.7731	0.4395
Duration of contract (MFS11)	-0.00103822	0.179565	-0.00578	0.9954
Public relations and promotion (MFS12)	0.00932591	0.177019	0.05268	0.9580
Boosts business income (BAS1)	-0.610209	0.202979	-3.006	0.0026 ***
Transitioning to online services (BAS2)	0.206728	0.202849	1.019	0.3081
Selling some assets (BAS3)	0.385352	0.156226	2.467	0.0136 **
Negotiating for debt deferral (BAS4)	-0.276417	0.171040	-1.616	0.1061
Reducing the no. of employees (BAS5)	0.126099	0.154385	0.8168	0.4140
Accelerating business closure (BAS6)	0.0114902	0.141964	0.08094	0.9355
Cutting employee wages (BAS7)	-0.0480398	0.140306	-0.3424	0.7321
Exploring new business models (BAS8)	-0.213601	0.152528	-1.400	0.1614
Seeking support from partner (BAS9)	0.262575	0.176247	1.490	0.1363
Shift to a different line of business (BAS10)	-0.0299253	0.158325	-0.1890	0.8501
Provides debt moratorium/ (GSM1)	-0.116241	0.157205	-0.7394	0.4597
Offers low-interest loans (GSM2)	0.0910180	0.180972	0.5029	0.6150
Reduces water/electricity costs (GSM3)	0.343673	0.129648	2.651	0.0080 ***
Extends tax payment deadlines (GSM4)	0.135722	0.150416	0.9023	0.3669
lowers social security payments (GSM5)	0.197911	0.140043	1.413	0.1576
Provides tax refunds (GSM6)	-0.158292	0.142296	-1.112	0.2660
"50:50 co-payment" scheme (GSM7)	0.241208	0.138276	1.744	0.0811 *
"Shop Dee Mee Kuen" tax deduction (GSM8)	-0.0170127	0.143734	-0.1184	0.9058
Cut1	-1.15550	0.796972	-1.450	0.1471
Cut2	2.64020	0.820112	3.219	0.0013 ***
Cut3	4.99099	0.905128	5.514	<0.0001 ***

Note: Omitted Variable: Mobile Accessories and Jewelry (BCO4). The model has no constant term because the intercept will be the value used to divide the result into the four profit levels based on the level of survival. *** significance at the 0.01 level, ** significance at the 0.05 level, * significance at the 0.10 level. Mean dependent var 1.987500, S.D. dependent var 0.628353, Log-likelihood -267.0240, Akaike criterion 608.0480, Schwarz criterion 747.4759, Hannan-Quinn 663.7242

Source: Author's calculations.

4.10 Variable Extraction Results from OLS, Logit Model, and OLM

Variable extraction for MiSEs survival displayed statistically significant variables in at least one model. The presentation was ordered by variable type and the number of models in which these variables had statistically significant effects (variables that were significant in multiple models indicated their greater importance in the survival of MiSEs), as detailed in Table 9.

Table 9: Variable Extraction Results that Impacted the Survival of MiSEs from OLS, Logit Model, and OLM.

Regression Models	OLS	Logit	OLM
Independent Variable	Level of survival	Prob. (survival) 0 = net profit less than 8%, not surviving	L 1: net profit < 5% L 2: 5% ≤ net profit < 8% L 3: 8% ≤ net profit < 10%

Regression Models	OLS	Logit	OLM
		1 = net profit exceeding 8%, surviving	L 4: 10% ≤ net profit < 15%
Dependent Variable	Coefficient	Coefficient	Coefficient
Business Characteristics and Operations			
Duration of Business Operation	Insignificant	0.274329	Insignificant
Night Market Facilities and Services			
No. of food stalls	Insignificant	0.583513	Insignificant
No. of restrooms	0.0976564	Insignificant	Insignificant
Customer parking spaces	Insignificant	−0.684055	Insignificant
Business Adaptation Strategies			
Selling some assets	0.0780971	0.695282	0.385352
Transitioning to online services	Insignificant	0.742166	Insignificant
Accelerating business closure	Insignificant	0.407057	Insignificant
Seeking support from partner	0.0887673	Insignificant	Insignificant
Additional business income	Insignificant	−0.989365	−0.610209
Negotiating for debt deferral	−0.0964184	−0.713993	Insignificant
Cutting employee wages	Insignificant	−0.440129	Insignificant
Exploring new business models	Insignificant	−0.590564	Insignificant
Economic Stimulus Measures			
“50:50 co-payment” scheme	Insignificant	0.630305	0.241208
Reduces water/electricity costs	0.0932251	Insignificant	0.343673
Provides debt moratorium/	Insignificant	0.369355	Insignificant

Source: Author's calculations.

From Table 9, The variable categorized as "Business Characteristics and Operations" revealed that *the duration of operation* positively impacted the survival of MiSEs (as indicated significant only in a logit model) and aligned with the assumed hypothesis. This finding was in line with the research conducted by Dhliwayo (2021) and Ratanasongtham & Tungjirasil (2020). The length of time a business operated led to the accumulation of knowledge and expertise over time. This expertise could be applied to problem-solving and decision-making, ultimately influencing the business's survival in the same direction.

The variable in the "Night Market Facilities and Services" category revealed that *the number of food stalls* (significant only in the logit model) and *the number of restrooms* (significant only in the OLS model) had a positive impact on the survival of MiSEs in the Greenway Night Market. This finding was consistent with the study conducted by the OSMEP (2013), which stated that consumers often expected there to be sufficient food stalls to meet their needs in commercial areas. Additionally, the research

by Homboonyong & Sriyothin (2021), in line with the OSMEP (2013), argued that having an adequate number of clean restrooms affected the customer's decision when choosing to use commercial area services and influenced the survival of businesses in the commercial area. However, it was found that ***the scarcity of parking spaces*** within close proximity to the market had a negative impact on the survival of MiSEs (significant only in the logit model), contrary to the hypothesis and the research conducted by the OSMEP (2013). Chantith and Nookate (2022) discussed that, based on interviews with business owners in the Greenway Night Market, customers changed their intentions when they were unable to find parking spaces near the market; they changed their intentions and chose not to make a purchase. Furthermore, customers were less inclined to buy products or use services from businesses relatively far from the parking area.

The variable in the "Business Adaptation Strategies" category revealed that ***selling assets to enhance liquidity*** was an essential strategy for the positive survival of MiSEs (significant in all models). This finding aligned with the recommendations of the OMSEP (2021), which suggested that during the COVID-19 situation, selling some assets could help provide sufficient working capital, thereby enhancing resilience and positively impacting the survival of MiSEs. Furthermore, ***adapting to online services, accelerating business closures*** (both significant in the Logit model), and ***seeking partnerships to support businesses*** (significant in the OLS model) also positively impacted the survival of MiSEs. These discussions aligned with the business adaptation trends in the New Normal era, which emphasized the need for businesses to reach their target customers online and offline (Bank of Thailand, 2020; Chuyingsakulthip, 2021). Additionally, cost reduction through faster business closures was considered a crucial strategy (OSMEP, 2013; OSMEP, 2021), along with seeking partnerships, such as collaborating with businesses in the same industry to bulk order and reduce expenses and cooperating with online platform businesses to distribute products, all of which positively influenced survival (OSMEP, 2021; Chuyingsakulthip, 2021).

While the following strategies have been found to have adverse effects contradicting the initially hypothesized outcomes: ***Seeking Additional Income*** (significant in both logit and OLM), the finding aligned with Invest Northern Ireland (2023) and Allianz Trade (2021), that provided insights regarding the disadvantages of expanding or diversifying business activities. They suggested that engaging in supplementary business ventures would increase the need for additional investments and might have led to cash flow shortages in the long run, ultimately impacting the primary business. ***Requesting Debt Deferrals from Creditors*** (significant in both OLS & Logit): The OSMEP (2013) stated that debt deferral primarily involved postponing repayment schedules. The debt burden would have remained, and interest would have continued to accrue during the grace period. Consequently, in the long term, having to repay a significant amount of principal and interest could have strained business liquidity and adversely affected business survival. ***Reducing Employee Wages*** (significant in logit model): Drakopoulos & Grimani (2015) noted that pay cuts resulted in lower job satisfaction, subsequently affecting work performance. Furthermore, research by Mohan et al. (2020) in "Consumers Punished Firms that Cut Employee Pay in Response to COVID-19" suggested that cutting employee pay hurt the business. ***Seeking New Business Models*** (significant in logit model): Research findings aligned with those of Invest Northern Ireland (2023) and Allianz Trade (2021), which provided insights into the drawbacks of altering business operations. Such changes had been seen as potentially diverting resources from the core business and adversely affecting the primary business.

The variable "Economic Stimulus Measures" included the following measures: a 50:50 co-payment scheme, reduction in water and electricity costs, and debt moratorium by the government, in that order. It was found that these measures positively impacted

business survival, as hypothesized. Here is an elaboration on the findings: **"50:50 co-payment" scheme** (significant in both logit and OLM): According to OSMEP (2021), this measure was the most beneficial for small, medium, and medium-sized enterprises. An evaluation of the "50:50 co-payment scheme's impact on society and the economy during the COVID-19 pandemic by TDRI (2020) reported that stimulating the economy by increasing consumers' income led to increased spending. This measure positively affected businesses, resulting in higher sales and income, ultimately contributing to higher business survival rates. **Reduction in Water and Electricity Costs** (significant in both OLS and OLM): As reported by the OSMEP (2013) and the OSMEP (2021), cost reduction was a critical factor in determining business survival. The reduction in operational expenses for businesses, as indicated in the Economic Index for SMEs, allowed them to manage their costs better and improve their financial flexibility. This measure, in turn, contributed to higher business survival rates. **Debt Deferment by the Government** (significant in logit model): This measure was found to align with the findings of the Bank of Thailand (2020), which highlighted that debt deferment measures helped individuals affected by the COVID-19 virus by allowing them to postpone debt payments without being considered in default. It also provided financial flexibility for additional spending. Businesses, particularly those with the potential, could repay their debts as usual.

5. Conclusion and Recommendations

5.1 Conclusions

The analysis of various factors that influenced the survival of MiSEs during economic crises yielded valuable insights and policy implications. Here are the key conclusions drawn from the findings:

1) Business Characteristics and Operations: The duration of operation positively impacted the survival of MiSEs, aligning with the accumulation of knowledge and expertise over time, which aided in problem-solving and decision-making.

2) Night Market Facilities and Services: The presence of a sufficient number of food stalls and clean restrooms had a positive influence on MiSEs' survival in the Greenway Night Market. This result underscored the importance of catering to consumer expectations and convenience.

The scarcity of available parking spaces within close proximity to the market harmed MiSEs' survival, likely due to customer preference for easy access.

3) Business Adaptation Strategies: Selling non-essential assets to enhance liquidity was crucial for MiSEs' survival during economic crises. Embracing digital transformation, accelerating business closures, and seeking partnerships with other businesses were effective strategies to increase resilience and survival. Seeking additional income, requesting debt deferrals from creditors, reducing employee wages, and seeking new business models had adverse effects on MiSEs, emphasizing the need to consider these strategies carefully.

4) Economic Stimulus Measures: Government measures, such as the "50:50 co-payment" scheme, water and electricity costs reduction, and debt deferment, have positively impacted MiSEs' survival. These measures stimulated consumer spending, reduced operational expenses, and provided financial support.

In conclusion, MiSEs enhanced their survival during economic crises by adopting adaptive strategies aligned with market demand and cost-effectiveness. Government support in the form of targeted stimulus measures significantly contributed to MiSEs' survival. Future research should consider additional factors and policy impact

assessments to provide a more comprehensive understanding of MiSEs' dynamics in crises, ultimately aiding both MiSEs and policymakers in navigating challenging economic conditions.

5.2 Recommendations

1) Business Strategy and Policy Recommendations for MiSEs Survival in Crisis Situations:

MiSEs should consider selling non-essential assets in economic crises to enhance their financial flexibility. They should avoid clinging to traditional business models and instead adapt to online sales or seek partnerships. Additionally, MiSEs should have processes to adjust their business operations promptly to reduce costs.

For the government, it is recommended to support measures that specifically reduce regular expenses for MiSEs. Initiatives like the "50:50 co-payment" scheme, which allocates sufficient funding to cover various types of consumer spending, should be considered.

2) Suggestions for Future Research:

Future research should consider additional factors, such as market mix factors, consumer satisfaction, and technological expenditure, to analyze their impact on MiSEs' survival during crises comprehensively.

Moreover, conducting policy impact assessments categorized by business type can provide valuable insights into which types of businesses are most affected and require tailored support.

Additionally, exploring different trade areas to analyze factors influencing business survival in various business environments similar to and different from the one studied could yield further insights.

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