

Financial Resilience of Disaster-Affected Fisheries Businesses in San Nicolas, Batangas

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Abstract: Central point of the study was to assess the financial resilience of disaster-affected fisheries businesses in San Nicolas, Batangas. It also sought to determine how fisheries businesses responded and how financially resilient they were to the situations. Last 2020, Batangas Province was severely hit by the recent Taal Volcano eruption and Covid-19 pandemic which both created a negative effects to all the Batangueños especially on the fisheries not only in life, but in terms of actions, properties and sources of income. This study pursued to assess the business profile and the dimension of financial resilience in terms of robustness, anticipatory capacity, awareness, flexibility, and recovery ability which was lifted from the study of Barbera, Korac, Jones, Saliterer and Steccolini. This study also wants to recognize the significant difference between profile and the dimensions of financial resilience. The researchers used descriptive method and survey questionnaire to gather responses from 111 fish cage owners selected through simple random sampling method. Findings revealed that the respondents were all financially resilient with a composite mean results of 2.50, 2.67, 2.87, 2.70 and 2.60, respectively. There is also significant differences between the assessed dimensions of financial resilience and the business profile. Proposed recommendations were intended to enhance the financial resilience of the fisheries businesses in San Nicolas, Batangas.

Key Words: robustness; anticipatory capacity; awareness; flexibility; recovery ability

1. INTRODUCTION

In mandate to deal with business crisis, efforts to cultivate resilience should extent to the systematic financial decision-making. Financial resilience is the capacity to resist or recover from financial shocks. Events such as natural disaster and covid-19 pandemic challenged so many businesses in terms of their resilience, allowing businesses owners

to adapt and respond quickly to continuous impediments and restrictions. Specifically, a financially resilient businesses means it is more adaptive and more willing to deal with environmental crisis.

Based on the study of Gathergood and Guttman-Kenney (2021), many organizations experienced periods of financial hardships during the operations. Some others recover relatively quickly and

some experienced long periods of financial distress. Business actors often suffer losses due to economic downturn brought by calamities and other related business crisis. By this point, they need financial resilience which aims to break the siloed mentality that has traditionally separated these areas and bring them together for the greater good of the company.

On the other hand, Summerfield (2020) mentioned that financial resilience is critical, of course, but fortitude also depends on an organization's governance, culture, strategy, risk and crisis management posture. Ultimately, resilient businesses increase their chance of survival during the covid-19 crisis which will test to the limit their ability to maintain operations – and also gain an advantage in the post-crisis economy. A business and financial resilience plan can provide organizations with powerful tools to reduce harm caused by adverse event. It is crucial that an organizations take appropriate action to protect as much of the business as possible and swiftly begin the process of recovery. The plan should coordinate different elements of the organization's operations to ensure personnel can respond to the crisis, preserve ongoing workflow and resume any disrupted productivity processes. This goes far beyond simply having cash reserves on hand. With a bleak economic viewpoint, many companies have realized that having a financial resilience plan in place can help shore up cash flow and guard the statement of financial position, as well as set them apart from competitors. On the same note, resilience has perhaps never been more vital. It allows business to adapt quickly to disruption, maintain continuous business operations and defend people, assets and brand equity. Resilient organizations are best placed to survive an economic slowdown and ride out uncertainty.

Batangas Province was severely hit by the recent Taal Volcano eruption and covid-19 pandemic which both created a negative effects to all the Batangueños especially on the fisheries businesses in the lake not only in life, but in terms of actions, properties and sources of income. Since no one wants to make it happen, what can be done now is to make a resilience plan or program and recover all the things that were affected. Relevant to what happened, this paper contends to provide a reliable data on the present status of the fisheries businesses in Taal Lake after the environmental crisis and to propose recommendations to further enhance their business' financial resilience.

With this, the researchers decided to make a study regarding this matter. The researchers intend to conduct this study to assess and describe how fisheries businesses responded to the situation and how financially resilient they were at present. They also want to help the fisher folks to broaden their knowledge on the significance of financial resiliency. Further, this study sought to help to strategize and adapt to new normal while recovering their operations in the lake.

The general objective of the study was to assess the financial resilience of disaster-affected fisheries businesses in San Nicolas, Batangas. Specifically, this study sought to answer the following questions: to assess the profile of the fisheries businesses in terms of capitalization, average monthly income, years of fishing business operations and number of fish cage owned; to assess the dimensions of financial resilience in terms of robustness, anticipatory capacity, awareness, flexibility and recovery ability; to determine if there is a significant difference between the assessed dimensions of financial resilience and the business profile; and lastly, what recommendations may be proposed to further enhance the financial resilience of fisheries businesses in San Nicolas, Batangas.

As part of the priori assumption, the respondent's assessment bears significant difference between the business profile such as capitalization, average monthly income, and years of fishing business operations and number of fish cage owned and the dimensions of financial resilience in terms of robustness, anticipatory capacity, awareness, flexibility and recovery ability. From the obtained result, the researchers proposed recommendations to further enhance the financial resilience of the fisheries business in the lake.

In the study of Mugumya (2018), it was mentioned that in this ever-changing business environment, firms must be financially strong and resilient in order to survive. This is because financially resilient firms as well as those operating under austerity must have financial robustness, anticipatory capacity, awareness, flexibility and recovery ability – the attributes that determine the survival of firms in the unpredictable market place and stimulates responses to financial shocks.

2. METHODOLOGY

2.1 Theoretical Framework

This section explains the theories that are related to the subject of the study and was used for the analysis and interpretation of data. The present researchers used the theory made by Barbera, Korac, Jones, Saliterer and Stecollini (2017). Based on their findings, financial resilience is mainly about the ability of an organization to thrive in the face of shocks, as well as known and unanticipated. They emphasized the importance of capacities of organization and distinguish five dimensions of financial resilience namely, robustness, anticipatory capacity, awareness, flexibility and recovery ability. Robustness concerns resistance of a particular organization in order to stay stabilized during disturbances. Anticipatory capacity of a business involves the tools and possibilities that they have to recognize and identify a crisis or shock before it has appeared. Awareness means understanding the nature, timing, likelihood and scale of threats and risks that could appear. Applied to financial resilience this means being prepared to unexpected financial crisis and shocks in the future. The amount of flexibility involves the ability of a business to adjust to the new situation after a shock or crisis appeared. It is also about an organizations' capacity and flexibility to reconsidering financial approaches in order to adjust to the new situation. Recovery ability means a business' capacity to recover from a change or shocks and restore previous functionality.

2.2 Data Gathering Instrument

In the enactment of the study, the quality of the instrument is crucial since the conclusions and recommendations will be based on the information obtained from the respondents. The researchers used a survey questionnaire as a primary tool in the collection of data in order to create a design of data for analysis. The statements presented on the survey questionnaire are based on the objectives of the study. A Likert scale was used in the present study to assess respondents' attitudes by asking how financially resilient they were during the time of environmental crisis. The scoring and interpretation used for the questionnaire was presented in Table 1.

Table 1. Scoring of responses

Scale	Range	Interpretation
4	3.50-4.00	Highly resilient
3	2.50-3.49	Resilient
2	1.50-2.49	Less Resilient
1	1.00-1.49	Not Resilient

3. RESULTS AND DISCUSSION

3.1 Profile of the Business

The key objective of this part was to show the profile in connection with financial resilience of disaster-affected fisheries businesses in San Nicolas, Batangas. The profile of the business was assessed in terms of capitalization, average monthly income, years of fishing business operation and the number of fish cages own in the lake. Table 2 presented the frequency distribution of the business profile in San Nicolas, Batangas.

Table 2. Frequency Distribution of the Business Profile in San Nicolas, Batangas

Profile of the Business	Range	Frequency*	Percentage
Capitalization	P500,000.00-P1,000,000.00	41	36.9
Average monthly income	P50,000.00 and below	109	98.2
Years of fishing business operation	6-10 years	44	39.6
Number of fish cage own	4-5 fish cages	37	33.3

**Note: The presented frequency counts were the majority of the respondents.*

The researchers found out (see table 2) that 36.9 percent of the fishing businesses have a capitalization of P500, 000.00-P1, 000,000.00. Fish farmers need to invest large amount of capital to start a fishing business in the lake. They invested on the equipment that is necessary for the business operation. The fish cage owners do have their average monthly income of P50, 000.00 and below due to the price of feeds, fry, and some equipment needed in the operation. There was a provincial lockdown that is

why the average monthly income was too low. In terms of years of fishing business operation in the lake, the researchers found out that the majority of the fish cage owners were operating for 6-10 years in the lake. This years may indicate that the fish cage owners are more experienced in handling their finances and their operations and they are more aware of the business and environmental crisis. However, since disaster happened and covid-19 pandemic is present, they need more time to recover. In terms of the number of fish cage own, majority of the respondents owned 4-5 cages – the maximum number of fish cages that must be owned by one person. Handling and managing such number of fish cages in the lake was a bit risky because the owners need to take care of those and it actually require effort to monitor, but on the positive note, it is good because the fish cage owners can accumulate bigger income and profits rather than those with fewer number of fish cage owned.

3.2 Assessment on the Financial Resilience

The key objective of this part was to assess the financial resilience of disaster-affected fisheries businesses in San Nicolas, Batangas. The respondents were asked to give their insights about financial resilience and their business experiences during the occurrence of disaster and the covid-19 pandemic. Table 3 presented the assessment on the dimensions of financial resilience among fisheries businesses in San Nicolas, Batangas.

Table 3. Assessment on the dimensions of financial resilience among fisheries businesses

Variable	Mean	Interpretation
Robustness	2.50	Resilient
Anticipatory capacity	2.67	Resilient
Awareness	2.87	Resilient
Flexibility	2.70	Resilient
Recovery ability	2.60	Resilient

The results of descriptive statistics shows that the fisheries businesses in San Nicolas during the time of environmental crisis were all financially resilient. In terms of robustness, the respondents assessed themselves that they are resilient because have sound financial management plan that includes

careful and consistent control of all incomes, expenditures, assets and liabilities. This may indicate that fish cage owners believed that to be able to withstand in a crisis like covid-19 pandemic, one must have the ability to plan and manage their finances properly. In term of anticipatory capacity, the respondents are resilient because they have clear understanding on any external environmental threats which might affects their business operations in the lake. They somehow identified the possible financial problems in their fishing business. In terms of awareness, the respondents are resilient since they are aware on the nature, likelihood, and scale of potential financial shocks in the environment and they are aware on the current situation and possible threats to their financial health. Environmental awareness is also vital as the fishing environment is one of the most vulnerable to disasters which can result to a massive losses or business failure. It was also shown that the respondents are resilient in terms of flexibility. The respondents are currently adapting to the new normal which enable them to overcome financial challenges. They also tried to respond to disaster damages while minimizing the financial vulnerabilities. The only way is continue looking forward despite of the environmental crisis. Lastly, in terms of recovery ability, the respondents are resilient because they coordinated their problems to the local government unit. Some of the problems they have were the discontinued trading of fishes and transporting those fishes to markets.

3.3 Significant Difference between the dimensions of Financial Resilience and the profile variables

In relation to the hypothesis mentioned above, there is a significant differences between the assessed dimensions of financial resilience and business profile.

Table 4. Difference on the Assessment of Dimensions of Financial Resilience in terms of Capitalization

Variable	p-values	Decision on Ho	Verbal Interpretation
Robustness	0.00	Reject Ho	Significant
Anticipatory capacity	0.00	Reject Ho	Significant
Awareness	0.00	Reject Ho	Significant
Flexibility	0.00	Reject Ho	Significant
Recovery ability	0.00	Reject Ho	Significant

It basically implies that the fish cage owners who has larger amount of capital tends (see table 4) to be more resilient than those who have lesser one. The higher the capital base, the higher the chance to be financially resilient.

Table 5. Difference on the Assessment of Dimensions of Financial Resilience in terms of Average Monthly Income

Variable	p-values	Decision on Ho	Verbal Interpretation
Robustness	0.00	Reject Ho	Significant
Anticipatory capacity	0.00	Reject Ho	Significant
Awareness	0.00	Reject Ho	Significant
Flexibility	0.00	Reject Ho	Significant
Recovery ability	0.00	Reject Ho	Significant

On the part of average monthly income (see table 5), the assessment of the respondents on the dimensions of financial resilience is significantly different. For them, they can achieve financial resilience if they more monthly income. It can also be concluded that the total income variation of fisher folks who have income sources may be much lower and considered as a good way to deal with risks and uncertainties.

Table 6. Difference on the Assessment of Dimensions of Financial Resilience in terms of Years of Fishing Business Operation

Variable	p-values	Decision on Ho	Verbal Interpretation
Robustness	0.00	Reject Ho	Significant
Anticipatory capacity	0.00	Reject Ho	Significant
Awareness	0.00	Reject Ho	Significant
Flexibility	0.00	Reject Ho	Significant
Recovery ability	0.00	Reject Ho	Significant

In terms of the years of fishing business operation (see table 6), the longer the period in business operations, the more they are financially resilient. The years in operations can be a basis in determining how vulnerable or how strong the fisheries businesses are in times of crisis.

Table 7. Difference on the Assessment of Dimensions of Financial Resilience in terms of Number of Fish Cages Owned

Variable	p-values	Decision on Ho	Verbal Interpretation
Robustness	0.00	Reject Ho	Significant
Anticipatory capacity	0.00	Reject Ho	Significant
Awareness	0.00	Reject Ho	Significant
Flexibility	0.00	Reject Ho	Significant
Recovery ability	0.00	Reject Ho	Significant

In terms of the number of fish cages owned (see table 7), the respondents tend to be resilient because they know in the end of the day, they are positive that they can earn money out of the installed numbers of fish cages in the lake. Small-scale fisheries in San Nicolas, Batangas must have contingency plans in case of the occurrence of disaster or any other related crisis.

4. CONCLUSIONS

After careful analysis and interpretation of data gathered, the researchers concluded that the fisheries businesses in San Nicolas, Batangas are resilient. At this point, fisheries businesses may improve their financial resilience plan and make business continuity plan and robust monitoring to have an assurance that will have a sustainable management and prepare for the business uncertainties or any crises that can undermine the entire business. It is necessary to coordinate everything with the local government units so that they can request for further assistance from them.

To further strengthen the contribution of the study, a follow up qualitative study is highly recommended. The present study has allowed for elucidation of new insights concerning the financial resilience of a particular business. It may be useful for further qualitative studies and wider generalizable studies.

To conclude this paper, the researchers can say that the fisheries businesses in San Nicolas, Batangas that have been examined in this paper are bouncing forward after experiencing a tremendous financial shock such as the Taal Volcano eruption and covid-19 pandemic. Bouncing forward means it's about believing that setbacks are often just a problem we haven't solved yet, and that things can

and will be better. The key is recognizing the realities of the situation and figuring out some sort of options to move forward, without getting overwhelmed. While this may sound quite challenging, or something reserved for those facing life-changing adversity, resilience is basically a capability that can be used every day.

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