



# Analysis of Financial Resilience in Magelang to Develop Effective Policies

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**Abstract.** Financial resilience is an important issue today. COVID-19 pandemic that has occurred since 2020 causes household finances adversity due to financial shocks. The Indonesian Political Indicator states that most Indonesian experienced a decrease in household income in February 2021. The fact is that many people cannot withstand the crisis caused by Covid 19 because the crisis is very different. This is proof that the Indonesian people must have financial resilience to be able to go through various changes and uncertainties that occur. The government must develop effective policies, and ultimately, improve well-being to solve this problem. But first, they need to understand at the individual level to determine the resources needed to overcome financial difficulties. Financial Resilience Spectrum is a solution to find out the position of the community and can be known to which group they belong. The purpose of this research is to create a map of the community in Magelang into Financial Resilience Spectrum Categories. This paper applies the concept of financial resilience to Magelang people to analyze their situation in the aftermath of COVID-19. It is based on a survey and will be analyzed as the average score for each component of financial resilience using descriptive statistics. The findings indicate that Magelang adults experienced severe or high levels of financial vulnerability raising very real concerns about financial wellbeing. These results can be used as input for the government, especially the governments in Magelang to solve financial problems and maintain the financial resilience of their citizen.

**Keywords:** Financial Resilience, Financial vulnerability, Vulnerable Groups.

## 1 Introduction

Globally, financial inclusion has become a powerful framework for building financial resilience by reducing vulnerabilities and providing a buffer against adversities. In fact, most national financial inclusion strategies now aim to enhance individuals' livelihoods and focus on building more inclusive and financially resilient societies [1]. GoBear Financial Health Index (FHI) show that the awareness of the Indonesian people regarding financial planning and financial literacy are still low, although knowledge about conventional financial products is quite high. Data shows that only 37% of Indonesians have savings to cover more than six months of expenses if they lose their main job [2].

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M. Setiyo et al. (eds.), *Proceedings of the 4th Borobudur International Symposium on Science and Technology 2022 (BIS-STE 2022)*, Advances in Engineering Research 225,

[https://doi.org/10.2991/978-94-6463-284-2\\_35](https://doi.org/10.2991/978-94-6463-284-2_35)

The emergence of the COVID-19 pandemic from 2020 until now adds to the importance of financial inclusion in Indonesia. This pandemic causes household financial adversity due to financial shocks. Previous research explained that household financial well-being will decline due to this financial shock [3]. A report conducted by CFPB proved that households with experience and understanding of finance are better able to deal with financial shocks and maintain their financial well-being [4]. In the end, a strong understanding of financial shock will help households in strengthening financial resilience [3].

Financial resilience is defined as an individual's ability to access and draw on internal capabilities and appropriate, acceptable and accessible external resources and supports in times of financial adversity. Resilience is dependent on the individuals': 1) knowledge of the adverse event; 2) ability to accurately predict risks associated with such events; 3) access and knowledge of available alternatives; and 4) resources to adapt successfully [5].

This research was conducted because many people, especially in Magelang, are still vulnerable in the financial sector. Previous researchers have surveyed some of the community, and they have financial problems such as: being in debt, having no savings, having no pension fund, some children being sandwich generation which can increase family conflict, and so on. This is shown the importance of building financial resilience to lead financial security and understanding risk management in finance [6]. Although previous research stated that there are various kinds of financial problems that arise in the community, not many studies have tested how to mapping these problems to people in non-industrial areas. Therefore, the purpose of this research is to create a map of the community in Magelang into Financial Resilience Spectrum Categories [7] [8], it consists of several levels: a) Severe financial vulnerability (1 - 1.75), b) High financial vulnerability (Score band: 1.76 - 2.5), c) Low financial vulnerability (Score band: 2.51 - 3.25), d) Financially resilient (Score band: 3.26 - 4). Based on these categories, the community can be known to which group they belong.

As stated by previous research related to financial resilience needs to understand at the individual level to determine the resources needed to overcome financial difficulties [8]. This understanding will help the government to develop effective policies, and ultimately, improve well-being. The results of this study can be used as input for the government, especially the governments in Magelang to solve financial problems and maintain the financial resilience of the Magelang community.

## 2 Method

This study used multidimensional framework—i.e. (1) Economic resources; (2) Access to financial resources; (3) Financial knowledge and behaviour; and (4) Social capital—three to five scoring questions were included, and survey to measure financial resilience in Magelang and enable the identification of vulnerable groups. The data collected were weighted based on age, gender, and location characteristics to be demographically representative of the Magelang population and questions related to the components of fi-

financial resilience. Respondent’s answer analyzed as the average score for each component of financial resilience using descriptive statistics, then analyzed further for weighting into the category of financial resilience as shown in Fig. 1.



Fig. 1. The financial resilience spectrum categories

### 3 Results and Discussions

The results of this study indicate that the level of individual financial resilience of households in Magelang is still quite high. Using the method developed by Muir [7], questionnaire data on households in Magelang showed an average value of 2,374. This value is included in the second category, namely High financial vulnerability. This means that households in Magelang City Regency have weak in financial resilience, even though the quantitative value is close to the upper limit. Table 1 below is the result of the processing of each component of financial resilience.

Table 1. Results on each component of financial resilience

| Components                        | Average     | Level                        |
|-----------------------------------|-------------|------------------------------|
| Average economic resources        | 2           | Low                          |
| Average financial resources       | 2,815384615 | Moderate                     |
| Financial Knowledge and Behaviour | 2,115384615 | Low                          |
| Social Capital                    | 2,564102564 | Moderate                     |
| Total                             | 2,373717949 | High financial vulnerability |

The results of this test indicate that there are several components of financial security that need to be considered more deeply than others. Based on the level description presented by Muir [7], average economic resources and financial knowledge and behavior are at a low level. This component is categorized as low because it is in the range of 1.76 to 2.5. While the other two components are included in the moderate level, which is in the range of 2.51 to 3.25.

The same thing happened to the total average value. The results of the test show that the level of financial resilience in Magelang is not so good. As shown in Fig. 1, that in the range of 1.76 to 2.50, the category for individual financial security is at a quite dangerous level, namely high financial vulnerability.

However, even though the two components are included in the moderate category, their values are close to the lower limit of the category. This indicates that the average level of financial resources and social capital also needs to be considered. Two other components that are at low level need to be considered.

## 4 Conclusion

The conclusion of this study is that the financial resilience of individuals in Magelang still needs to improve. Since there are no components that have a high average value. Two of the components are at a moderate level and the other two are at a low level. So that overall, financial security in Magelang is still in the high financial vulnerability category. The results of this study are contributed to the vision of the institution and the research strategic plan in Poverty Alleviation and Independence. This study provides a study of the financial resilience of individuals in post-pandemic. It is hoped that this research can be used as additional information and reference for government to make policies and regulations in alleviating poverty and increasing financial inclusion. The limitation in this study is the uncharted demographic distribution. In future research, this will provide a better picture when the demographic distribution of the respondents (e.g., age, location of residence, occupation, etc.) can be mapped.

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