

Gig Workers, Financial Resilience and Financial Literacy in Supporting Decent Work and Economic Inclusion

Nur Hidayah^{1*}, Betari Maharani¹, Rayinda Faizah¹, and Veni Soraya Dewi¹

¹Universitas Muhammadiyah Magelang, Magelang, Indonesia

Abstract. This study aims to analyze the effects of gig work characteristics and financial literacy on financial resilience among young gig workers in Magelang, Indonesia to supporting decent work and economic inclusion. The increasing prevalence of gig work, characterized by income volatility and flexible work arrangements, highlights the need to understand the factors that strengthen workers' ability to withstand financial pressure. Financial resilience is therefore an essential capability for gig workers who frequently face unstable economic conditions. A quantitative research design was employed using a survey distributed to 173 respondents from Generations Y and Z engaged in various gig economy activities in Magelang. Respondents were selected through purposive sampling. Data were analyzed using Structural Equation Modeling–Partial Least Squares (SEM PLS) to examine the relationships among the studied variables. The results indicate that financial literacy has a positive and significant effect on financial resilience, whereas gig work characteristics do not significantly influence financial resilience. These findings suggest that the ability of young gig workers to make informed financial decisions plays a more critical role in strengthening financial resilience than the structural nature of gig work itself. The implications of this study emphasize the importance of promoting structured and accessible financial literacy programs tailored to the needs of young gig workers. Policymakers and local governments may utilize these insights to design community based financial education initiatives and develop more responsive socioeconomic protection strategies for gig workers. The study also contributes to the development of a contextual financial resilience framework relevant to the Indonesian gig economy.

1 Introduction

The gig economy has expanded rapidly worldwide, reshaping labor markets through flexible, task-based employment mediated by digital platforms. In Indonesia, this trend is particularly pronounced. In 2023, approximately 46.47 million individuals equivalent to 32% of the total labor force were engaged in freelance or gig based work, reflecting a substantial structural shift toward non-standard employment arrangements [1]. While gig work offers flexibility

* Corresponding author: hida@unimma.ac.id

and entry opportunities for young workers, it also entails significant financial vulnerabilities, including income volatility, limited access to social protection, and weak legal safeguards.

These vulnerabilities are especially salient in developing economies, where informal employment dominates and labor market institutions remain fragmented. The International Labour Organization (ILO) highlights that platform based workers in emerging markets often experience long working hours, unstable earnings, and inadequate social security coverage, raising concerns about the quality of employment and long term economic security [2]. Empirical studies on gig workers in Indonesia similarly report a paradox between perceived flexibility and heightened economic insecurity, as workers frequently compensate for unstable income by extending working hours while remaining excluded from formal labor protections [3,4].

Financial vulnerability among gig workers is further exacerbated by insufficient financial literacy. Financial literacy defined as the knowledge and skills necessary to make informed financial decisions has been consistently linked to improved financial behavior and economic well-being [5]. Based on OJK, Indonesia's national financial literacy index reached only 68.4% in 2022, with significantly lower levels observed among informal and young workers. Low financial literacy limits individuals' ability to manage irregular income, plan for emergencies, and build financial buffers, thereby increasing exposure to economic shocks.

At the macroeconomic level, the expansion of gig work without adequate institutional support presents broader challenges. Platform based employment models often fail to promote long term skill accumulation, contribute minimally to formal social security systems, and complicate national efforts to achieve decent work standards as articulated in the Sustainable Development Goals (SDG 8) [5]. At the micro level, income instability and the absence of employment benefits constrain workers' capacity to develop financial resilience the ability to withstand and recover from financial shocks [5].

Prior research has examined the relationship between financial literacy and individual well-being, as well as the working conditions of gig workers in Indonesia [6,7]. International studies also document positive associations between financial literacy and financial resilience, particularly in contexts characterized by income uncertainty [5,8]. However, the existing literature is predominantly concentrated on developed countries or large metropolitan areas, where access to financial services and economic opportunities is relatively higher.

Consequently, several research gaps remain. First, there is a paucity of empirical evidence on the financial literacy of young gig workers in small cities within developing countries, including Indonesia. Second, limited attention has been given to the linkage between financial literacy and financial resilience in the specific context of local gig workers operating outside major urban centers. Third, existing policy and educational interventions are often designed for metropolitan settings and may not adequately reflect the socioeconomic characteristics of small cities. Addressing these gaps, this study aims to analyze the relationship between financial literacy and financial resilience among young gig workers in Magelang.

This study contributes to the literature in three main ways. First, it advances empirical understanding of financial literacy and financial resilience among gig workers in small-city contexts. Second, it supports the development of contextually grounded measurement instruments for assessing financial resilience among informal workers. Third, it provides evidence-based recommendations for localized financial education strategies and regional policy interventions aimed at enhancing the socioeconomic protection of gig workers.

2 Method

This study adopted a quantitative approach with a cross-sectional survey design to examine the relationship between financial literacy and financial resilience among young gig workers in Magelang, Indonesia. The target population consisted of individuals engaged in freelance or platform-based work without permanent employment contracts. A total of 173 respondents aged 17–40 years were selected using convenience sampling, a method commonly applied in exploratory studies involving informal and hard-to-reach worker populations [9]. Primary data were collected through a structured questionnaire administered both online and offline.

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Financial literacy was measured as a multidimensional construct encompassing financial knowledge, behavior, and attitudes, adapted from the OECD/INFE framework and prior studies by [5]. Financial resilience was operationalized through indicators reflecting individuals' capacity to manage income shocks, maintain emergency savings, control debt obligations, and perceive financial security, drawing on [5].

Instrument validity and reliability were assessed using confirmatory factor analysis within the SEM-PLS framework. Convergent validity was evaluated based on factor loadings, average variance extracted, and composite reliability, while internal consistency reliability was assessed using Cronbach's alpha, following established thresholds [10]. Data analysis proceeded through descriptive statistics, measurement model evaluation, and structural model testing using SEM-PLS to examine the hypothesized relationship between financial literacy and financial resilience. SEM-PLS was selected due to its ability to simultaneously analyze latent constructs and structural relationships while accounting for measurement error, making it suitable for financial behavior research [10].

3 Results and discussion

3.1 Results

The analysis began with an evaluation of the measurement model to assess the validity and reliability of the constructs. Convergent validity was examined using indicator loadings, Average Variance Extracted (AVE), and composite reliability (CR). All indicators retained in the model demonstrated acceptable loading values, indicating that each indicator adequately represented its respective construct. In addition, the AVE values met the recommended threshold, suggesting that the constructs explained a sufficient proportion of variance in their indicators. Composite reliability values also exceeded the minimum requirement, confirming internal consistency across all constructs. The summary of the measurement model assessment is presented in **Table 1**.

Discriminant validity was assessed using the Fornell–Larcker criterion. The square root of the AVE for each construct was greater than the correlations with other constructs, indicating that each construct was empirically distinct. These results confirm that the measurement model exhibits adequate discriminant validity. The results of the discriminant validity assessment are shown in **Table 2**.

Table 1. Measurement model assessment

Construct	Indicators	Loading	AVE	CR
Gig Work Characteristics	GIG1	0.755		
	GIG2	0.795		
	GIG3	0.784		
	GIG4	0.763		
	GIG5	0.806		
	GIG6	0.703		
	GIG7	0.788		
	GIG8	0.711		
	GIG9	0.763		
	GIG10	0.735		
Financial Literacy	FL1	0.875	0.780	0.821
	FL2	0.891		
Financial Resilience	FR1	0.750	0.605	0.876
	FR2	0.806		
	FR3	0.777		

Table 2. Discriminant validity (Fornell–Larcker Criterion)

	FL	FR	GIG
FL	0,883		
FR	0,434	0,778	
GIG	-0,212	-0,218	0,761

The structural model was evaluated using Partial Least Squares Structural Equation Modeling shown in **Fig. 1**.

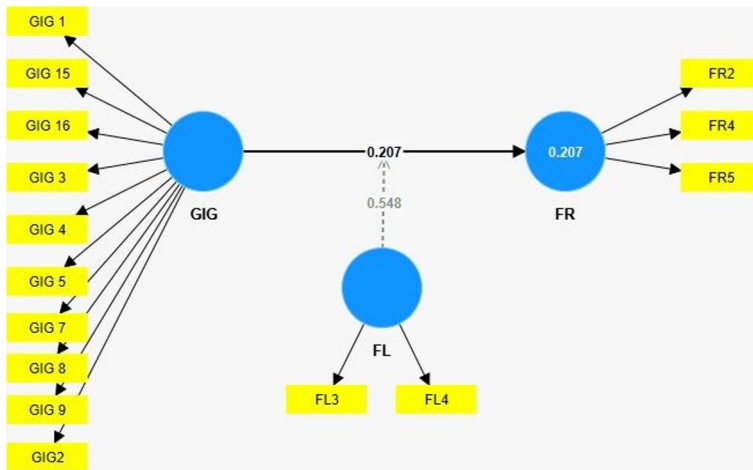


Fig. 1. Structural model

The results of the structural model analysis indicate distinct roles of gig work characteristics and financial literacy in explaining financial resilience among young gig workers.

Financial Literacy to Financial Resilience. The findings reveal that financial literacy has a positive and statistically significant effect on financial resilience. This indicates that financially knowledgeable young gig workers are better able to manage income volatility,

make informed financial decisions, and maintain financial stability despite the uncertainty inherent in gig-based employment.

The direct effect of gig work characteristics on financial resilience is not statistically significant. This suggests that the nature of gig work such as flexibility, autonomy, and income instability does not directly strengthen or weaken financial resilience.

The moderation analysis shows that financial literacy does not significantly moderate the relationship between gig work characteristics and financial resilience. This indicates that financial literacy does not strengthen nor weaken the influence of gig work characteristics on financial resilience.

3.2 Discussion

This study aimed to examine the role of gig work characteristics and financial literacy in shaping financial resilience among young gig workers to supporting decent work and economic inclusion. The findings provide important insights into how individual capability, rather than employment structure, determines financial resilience in the gig economy.

The positive effect of financial literacy on financial resilience indicates that financial capability plays a central role in enabling young gig workers to cope with income volatility and financial shocks. This finding is consistent with Financial Capability Theory, which posits that financial knowledge, skills, and behaviors allow individuals to manage resources effectively and maintain financial stability under uncertainty [11]. Financially literate gig workers are better equipped to budget irregular income, accumulate precautionary savings, and make informed financial decisions capabilities that are critical in non-standard employment settings. This result aligns with extensive empirical evidence showing that higher financial literacy is associated with improved financial well-being and resilience, particularly during periods of economic instability [8].

In contrast, the non-significant direct effect of gig work characteristics on financial resilience suggests that structural features of gig work such as flexibility, autonomy, and income instability do not independently determine individuals' capacity to remain financially resilient. This finding helps clarify mixed results in prior studies, where gig work has been portrayed as both empowering and precarious. Previous research has highlighted that flexibility and autonomy may enhance perceived job satisfaction, while income uncertainty increases vulnerability [12]. However, the present study demonstrates that these job characteristics alone are insufficient to explain financial resilience, supporting arguments that gig workers are a heterogeneous group whose outcomes depend largely on personal and contextual factors rather than job structure [13].

Unexpectedly, the moderation effect of financial literacy on the relationship between gig work characteristics and financial resilience was not significant. This indicates that financial literacy does not strengthen or weaken the influence of gig work characteristics on financial resilience. Instead, financial literacy operates as an independent and direct predictor of resilience. One plausible explanation is that financial literacy provides adaptive skills that are universally applicable across different work conditions, regardless of whether gig work offers flexibility or exposes workers to instability. However, In terms of investment, financial literacy can support better investment decisions and help minimize potential losses [14]. This interpretation is consistent with studies emphasizing that financial capability functions as a foundational personal resource rather than a conditional factor that interacts with employment characteristics [5].

Taken together, these findings suggest that financial resilience among young gig workers is primarily capability-driven rather than job driven. While gig work defines the employment environment, it does not directly shape resilience outcomes unless individuals possess sufficient financial knowledge and skills. This study contributes to the literature by shifting

the focus from employment structure toward individual financial capability as the key mechanism underpinning resilience in the gig economy, complementing prior from financial shocks [15].

From a practical standpoint, the results imply that policies aimed at enhancing financial resilience among gig workers should prioritize financial literacy and capability building interventions, such as education on income management, savings behavior, and financial planning, rather than focusing solely on modifying the inherent characteristics of gig work. This is essential for enabling individuals to compete decent jobs and it can reduce unemployment to support SDGs point 8. Nevertheless, this study is not without limitations. The use of cross-sectional and self-reported data may restrict causal inference, and the focus on young gig workers limits generalizability. Future research could adopt longitudinal designs, include objective financial indicators, or explore additional psychological and institutional factors such as financial self-efficacy or access to formal financial services to further enrich understanding of financial resilience in the gig economy.

4 Conclusion

This study investigated the relationships between gig work characteristics, financial literacy, and financial resilience among young gig workers, with the aim of understanding whether employment structure or individual capability plays a more decisive role in shaping financial resilience. The findings collectively lead to a clear and coherent conclusion regarding the nature of resilience in the gig economy.

The study demonstrates that financial resilience among young gig workers is fundamentally driven by individual financial capability rather than by the structural characteristics of gig work itself. Financial literacy emerges as a central factor enabling individuals to manage income volatility, make informed financial decisions, and maintain financial stability in uncertain employment conditions. This indicates that resilience is not an automatic outcome of flexibility or autonomy inherent in gig work, but rather a result of how effectively individuals utilize financial knowledge and skills to navigate economic uncertainty.

At the same time, the absence of a significant relationship between gig work characteristics and financial resilience suggests that gig employment does not inherently predispose workers to either financial vulnerability or strength. This finding advances current understanding of the gig economy by reinforcing the view that gig workers are a heterogeneous group whose financial outcomes cannot be generalized based solely on job structure. Furthermore, the lack of a significant moderating effect of financial literacy indicates that financial literacy functions as an independent and foundational capability, rather than as a conditional factor that interacts with gig work characteristics.

From a theoretical perspective, this study contributes to the financial resilience and gig economy literature by shifting the analytical focus from employment conditions toward capability-based explanations. It extends financial capability theory by demonstrating its relevance in non-standard employment contexts, where traditional employment protections are limited. Empirically, the study provides evidence that strengthens the argument that personal financial competence is a more reliable predictor of resilience than job related attributes.

In practical terms, the findings suggest that efforts to enhance financial resilience among gig workers should prioritize financial literacy and capability building initiatives, such as education on income management, saving strategies, and long-term financial planning. Structural changes in gig work alone may be insufficient to improve financial outcomes without corresponding improvements in individual financial competence.

Despite these contributions, this study has limitations that open avenues for future research. Future studies may employ longitudinal designs to examine how financial resilience evolves over time, incorporate objective financial indicators, or explore additional factors such as financial self-efficacy, access to financial services, or institutional support mechanisms. Such approaches would further enrich understanding of how resilience can be strengthened in the rapidly evolving gig economy.

Overall, this research advances knowledge by providing clear scientific evidence that financial resilience in the gig economy is primarily capability driven, offering a more nuanced and sustainable perspective for both theory development and policy design.

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