asbn
The 3rd ASEAN School of Business Network International Conference 2026
www.aseansbn.org August 6-7, 2026 Pathum Thani, Thailand

What Drives Financial Stress in Indonesia?

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ABSTRACT

This study examines the determinants of financial stress and its impact on financial behavior in Indonesia's evolving digital financial ecosystem. Drawing on the Conservation of Resources (COR) Theory and the Theory of Planned Behavior (TPB), it examines how short-term financial pressure, future financial expectations, and digital knowledge influence financial stress and financial behavior in Indonesia. Using survey data analyzed with Partial Least Squares Structural Equation Modeling (PLS-SEM), the results show that current money management stress is the strongest driver of financial stress, highlighting the importance of short-term financial pressure. Expected future financial security helps reduce stress, but its effect is relatively weak, while digital knowledge does not significantly reduce financial stress. Financial stress has been found to positively affect financial behavior, suggesting that under certain conditions, it can encourage more careful and proactive financial management. Financial stress partially mediates the relationship between short-term financial pressure and financial behavior, whereas digital knowledge does not moderate this relationship. Overall, this study shows that financial stress is not always detrimental but can also play a constructive role as a catalyst for adaptive behavior. The findings offer insights into financial behavior in emerging digital economies and provide implications for financial education and policy design.

Keywords: Financial stress; Financial Pressure; Financial behavior; Digital knowledge

DOI: https://doi.org/10.64458/asbnic.v3.148

INTRODUCTION

Digital transformation has fundamentally reshaped the global financial landscape by changing how individuals access, manage, and use financial services. The rapid advancement of financial technologies has accelerated the development of digital financial ecosystems that broaden access to financial products, improve transaction efficiency, and reduce information asymmetry (Song et al., 2025; Yao & Yang, 2022). Digital financial services, including mobile banking, digital wallets, online investment platforms, and peer-to-peer lending, have become increasingly integrated into individuals' daily lives, enabling financial transactions to be conducted more quickly, conveniently, and efficiently (Yadaf et al., 2025; Cai et al., 2025; Hamid et al., 2025). Consequently, digital finance has become a major driver of financial inclusion and economic development, particularly in emerging economies where access to conventional financial services has historically been limited.

While digital transformation offers significant opportunities to stimulate economic growth and improve transaction efficiency (Liu & Xian, 2025), these benefits may be undermined when increased

financial access is not supported by adequate financial knowledge and digital capability. In such contexts, the digital financial environment may not only enhance access but also amplify financial risks, exposing individuals to additional threats such as online fraud and cybercrime, which further undermine financial stability. Therefore, financial literacy and digital knowledge have become essential resources for maintaining individual financial well-being in the digital economy (Badrudin et al., 2025).

These challenges are particularly relevant in emerging economies such as Indonesia, where digital financial adoption has grown at an unprecedented pace over the past decade. Indonesia has become one of the fastest-growing digital economies in Southeast Asia, supported by increasing internet penetration, widespread smartphone usage, and strong government initiatives promoting financial digitalization. According to Bank Indonesia's Monetary Policy Report Quarter IV (2024), digital payment transactions reached 34.5 billion transactions, representing a 36 percent increase compared to the previous year. This growth was primarily driven by the increasing use of mobile banking services and the rapid expansion of the Quick Response Indonesian Standard (QRIS), whose transaction volume increased by approximately 175 percent. These developments demonstrate that digital financial services have become an integral part of everyday economic activities, fundamentally changing how Indonesian consumers conduct financial transactions.

Despite this rapid expansion, financial capability has not developed at the same pace. Data released by the Financial Services Authority (OJK) and the Central Statistics Agency (BPS) (2025) indicate that Indonesia's financial inclusion index has reached approximately 80 percent, whereas the national financial literacy index remains considerably lower at around 66 percent. This discrepancy highlights an important concern: although more individuals are participating in formal financial systems, many still lack the knowledge and skills required to understand and manage increasingly sophisticated financial products. Previous studies consistently demonstrate that individuals with lower financial literacy tend to exhibit suboptimal financial behavior, including poor saving habits, weak investment participation, and inefficient borrowing decisions (Fong et al., 2021). Therefore, expanding financial access without simultaneously improving financial capability may expose individuals to greater financial vulnerability rather than improving their financial well-being.

The consequences of this imbalance have become increasingly visible in Indonesia's digital financial ecosystem. One of the most prominent examples is the rapid expansion of online lending services. According to the Indonesian Internet Profile published by the Indonesian Internet Service Providers Association (APJII, 2025), the proportion of online lending users increased from 5 percent in 2024 to 8 percent in 2025, with Millennials (45 percent) and Generation Z (41 percent) accounting for the largest proportion of users. Although online lending provides greater financial accessibility, particularly for individuals facing urgent financial needs, its rapid growth has also been accompanied by increasing financial vulnerability. Data from the Financial Services Authority (OJK), as reported by Kompas (2025), indicate that non-performing online loans among borrowers aged 19 to 34 increased by 54 percent year-on-year during the first half of 2025, reaching more than 438,000 loan accounts, reflecting challenges in managing financial obligations effectively. Chen et al. (2018) argue that when financial innovation expands more rapidly than individuals' financial capability, individuals are more likely to underestimate risks, overestimate repayment capacity, and engage in suboptimal financial decisions.

These developments suggest that the rapid expansion of digital financial services has created a paradox. On the one hand, digital finance has significantly improved financial inclusion and economic opportunities. On the other hand, the growing complexity of digital financial systems has increased individuals' exposure to financial risks and heightened the importance of financial capability in maintaining financial well-being. Understanding how individuals respond to these financial pressures has therefore become an increasingly important issue within behavioral finance research.

Financial stress has consequently emerged as one of the important issues in understanding individual financial well-being within the digital economy. Financial stress is commonly defined as a psychological condition arising from individuals' perceptions that their financial resources are

insufficient to meet current obligations or future financial needs (Friedline et al., 2020). Prior research has consistently linked financial stress to negative outcomes, including reduced well-being, impaired decision-making, and poor financial behavior. However, emerging evidence suggests that financial stress may not always be purely detrimental. Under certain conditions, financial pressure may trigger adaptive responses, encouraging individuals to exert greater control over their financial decisions.

Within this context, digital knowledge has become an increasingly important individual capability. Digital knowledge refers to individuals' understanding of digital financial products, platforms, and technologies, as well as their ability to evaluate digital financial information and recognize potential financial risks (Yadav et al., 2025). However, the complexity of digital financial systems may also increase cognitive burden and financial pressure, particularly for individuals with limited experience. This raises an important question regarding whether digital knowledge consistently functions as a protective factor in financial decision-making.

Previous studies generally argue that digital knowledge contributes positively to financial outcomes. Individuals with greater digital capability tend to demonstrate stronger financial self-efficacy, healthier financial behavior, and higher levels of financial well-being because they are better equipped to utilize digital financial services effectively (Bhat et al., 2025; Yadav et al., 2025). From the perspective of the Theory of Planned Behavior (TPB), digital knowledge enhances individuals' perceived behavioral control, thereby increasing their confidence in making financial decisions and managing financial risks (Ajzen, 1991). Likewise, the Conservation of Resources (COR) Theory suggests that knowledge itself constitutes an important personal resource that helps individuals protect existing financial resources and minimize future resource loss (Hobfoll, 1989).

Nevertheless, the relationship between digital knowledge and financial stress may not be as straightforward as previously assumed. As digital financial systems become increasingly sophisticated, greater digital knowledge may also expose individuals to larger volumes of financial information, more investment alternatives, and more complex financial risks. Rather than simply reducing financial stress, greater awareness of financial opportunities and risks may increase individuals' cognitive burden, particularly when financial decisions involve uncertainty. Consequently, the extent to which digital knowledge reduces financial stress remains an open empirical question, especially within rapidly evolving digital financial environments.

Similarly, the relationship between financial stress and financial behavior deserves closer examination. Existing literature has predominantly characterized financial stress as a detrimental psychological condition associated with impulsive spending, poor budgeting practices, delayed debt repayment, and lower financial well-being (Hughes et al., 2024). These findings suggest that individuals experiencing higher financial stress are generally less capable of making rational financial decisions due to increased cognitive burden and reduced self-control. However, rather than solely impairing financial decision-making, financial stress may also encourage individuals to adopt more cautious and disciplined financial behavior as a coping strategy to protect their remaining financial resources. According to COR Theory, individuals experiencing resource threats actively seek to preserve existing resources and prevent further losses (Hobfoll, 1989). Under such circumstances, financial stress may stimulate greater financial discipline, encourage more careful spending decisions, and motivate individuals to strengthen their financial planning. This possibility indicates that financial stress may function not only as a consequence of financial pressure but also as a psychological mechanism through which individuals adapt to challenging financial conditions.

This study contributes to the literature in several ways. First, it provides a more comprehensive understanding by conceptualizing financial stress as a multidimensional construct that simultaneously incorporates short-term financial management pressure and long-term financial security expectations. Second, it offers new insights into the role of digital knowledge in shaping financial stress and behavior in digital financial environments. Third, by focusing on Indonesia as one of the fastest-growing digital financial markets in Southeast Asia, this study provides empirical evidence from an emerging economy

where digital financial inclusion has expanded more rapidly than financial capability. The findings are expected to contribute to both behavioral finance theory and digital finance research while offering practical insights for policymakers, financial institutions, and financial educators in designing interventions that strengthen financial resilience and promote sustainable financial behavior in the digital era.

LITERATURE REVIEW

Financial Stress in the Digital Financial Environment

Financial stress reflects how individuals psychologically respond to financial pressures rather than merely their objective financial conditions. Unlike traditional measures of financial well-being that emphasize income or wealth, financial stress captures individuals' perceptions that their financial resources are insufficient to meet present obligations or future financial needs (Friedline et al., 2021; Simonse et al., (2024). Consequently, two individuals with similar financial conditions may experience different levels of financial stress depending on how they evaluate and cope with financial uncertainty. Rather than viewing financial stress as a single construct, van Raaij et al. (2023) distinguish between Current Money Management Stress (CMMS) and Expected Future Financial Security (EFFS). CMMS reflects immediate pressure arising from managing everyday financial obligations, whereas EFFS represents individuals' confidence regarding future financial stability. This distinction suggests that financial stress develops through the interaction of both present financial circumstances and future financial expectations.

The Conservation of Resources (COR) Theory provides an appropriate framework for explaining this relationship (Hobfoll, 1989). The theory argues that individuals strive to obtain, preserve, and protect valuable resources, while psychological stress emerges when these resources are threatened or lost. In financial contexts, resources extend beyond income and assets to include financial capability, knowledge, and perceived financial security. Accordingly, individuals experiencing greater short-term financial pressure are expected to report higher financial stress, whereas stronger expectations regarding future financial security should reduce perceptions of financial vulnerability. Empirical evidence indicates that individuals facing higher financial pressure in their daily financial management are more likely to experience psychological stress related to their financial conditions (Badrudin et al., 2025; Chhillar et al., 2025). Therefore, when individuals struggle to manage their immediate financial needs, the perceived threat of resource loss becomes more salient, leading to higher financial stress.

H1: *Current Money Management Stress positively affects Financial Stress.*
H2: *Expected Future Financial Security negatively affects Financial Stress.*

Digital Knowledge and Financial Stress

While financial literacy has long been recognized as a key determinant of rational financial behavior (Fong et al., 2021; Panos & Wilson, 2020), the increasing complexity of digital financial services requires individuals to possess additional capabilities beyond basic financial knowledge. This shift has led to the emergence of digital financial literacy, which integrates financial understanding with the ability to navigate and evaluate digital financial platforms effectively and safely (Bhat et al., 2025). Higher digital knowledge is often associated with better access to financial information, greater ability to compare alternatives, and improved decision-making capability (Wu et al., 2026). In this context, digital knowledge becomes a critical resource that may influence how individuals perceive financial risk and respond to financial pressure, since it refers to individuals' ability to understand, evaluate, and use digital financial services effectively (Yadav et al., 2025).

The Theory of Planned Behavior (TPB) suggests that individuals are more likely to engage in desirable behaviors when they possess stronger perceived behavioral control (Ajzen, 1991). Within digital financial environments, digital knowledge enhances individuals' confidence in navigating financial technologies and supports more informed financial decision-making. Previous studies consistently report that greater digital capability contributes to healthier financial behavior and improved financial well-being (Bhat et al., 2025; Yadav et al., 2025). From both COR and TPB theory, digital knowledge can enhance perceived behavioral control, allowing individuals to manage financial decisions more effectively (Tan et al., 2024). Prior studies suggest that individuals with higher digital capability are less likely to experience financial stress due to increased confidence and control over financial transactions (Bhat et al., 2025; Yadav et al., 2025; Usman et al., 2025).

However, greater digital knowledge does not necessarily reduce financial stress. Increased exposure to digital financial products may also increase awareness of financial uncertainty, investment complexity, and potential financial risks. Consequently, the relationship between digital knowledge and financial stress remains inconclusive and requires further empirical examination, particularly in emerging digital economies.

H3: *Digital Knowledge negatively affects Financial Stress.*

Financial Stress as a Mechanism Linking Financial Pressure and Financial Behavior

Beyond its determinants, financial stress plays a crucial role in shaping financial behavior. The TPB framework suggests that behavior is influenced by individuals' attitudes and perceived behavioral control (Ajzen, 1991). Financial stress may disrupt both components by increasing anxiety and cognitive burden, thereby reducing individuals' ability to make rational financial decisions (Hughes et al., 2024). Consequently, financial stress is often associated with impulsive spending, poor budgeting, and reduced financial discipline. In digital environments, additional pressures such as fear of missing out (FOMO) and materialistic values may further intensify financial stress and encourage short-term, consumption-oriented behavior (Dinh & Lee, 2024; Mason et al., 2022). However, recent literature suggests that financial stress may not always produce negative behavioral outcomes. Under certain conditions, financial pressure may motivate individuals to exert greater control over their financial decisions as a coping mechanism. This dual effect indicates that financial stress can function both as a constraint and as a trigger for adaptive behavior, depending on individuals' responses to financial pressure.

H4: *Financial Stress (FS) affects Financial Behavior (FB).*

Short-term financial pressure may also directly influence financial behavior. Individuals experiencing high CMMS may prioritize immediate financial needs over long-term financial planning, leading to reactive and potentially unsustainable financial decisions (Basar et al., 2025). Continuous financial pressure reduces individuals' ability to maintain consistent financial management practices.

H5: *Current Money Management Stress (CMMS) negatively affects Financial Behavior (FB).*

Conversely, individuals with stronger expectations of future financial security tend to exhibit more disciplined financial behavior. A long-term financial outlook encourages saving, budgeting, and careful financial planning, as individuals are more motivated to maintain financial stability over time (Chhillar, 2025).

H6*: Expected Future Financial Security (EFFS) positively affects Financial Behavior (FB).*

Digital knowledge is also expected to directly influence financial behavior. Individuals with higher digital knowledge are better equipped to use digital tools for financial planning, monitoring expenses, and making informed financial decisions (Sajid et al., 2024; Yadav et al., 2025). These capabilities support more structured and rational financial behavior.

H7: *Digital Knowledge (DK) positively affects Financial Behavior (FB).*

Financial stress may also function as an underlying mechanism linking financial pressures to financial behavior. According to COR Theory, resource loss leads to stress, which then shapes individuals' behavioral responses aimed at protecting remaining resources. Empirical evidence suggests that financial stress mediates the relationship between financial pressure and financial outcomes (Badrudin, 2025; Fan & Henager, 2022). Thus, financial stress may explain how both CMMS and EFFS influence financial behavior.

H8: *Financial Stress (FS) mediates the relationship between CMMS and FB.*
H9: *Financial Stress (FS) mediates the relationship between EFFS and FB.*

Finally, digital knowledge may moderate the relationship between financial stress and financial behavior. Individuals with higher digital knowledge may be better able to cope with financial stress by utilizing financial information and digital tools more effectively. As a result, the negative impact of financial stress on financial behavior may be weaker among individuals with higher digital capability (Yadav et al., 2025).

H10: *Digital Knowledge (DK) moderates the relationship between FS and FB.*

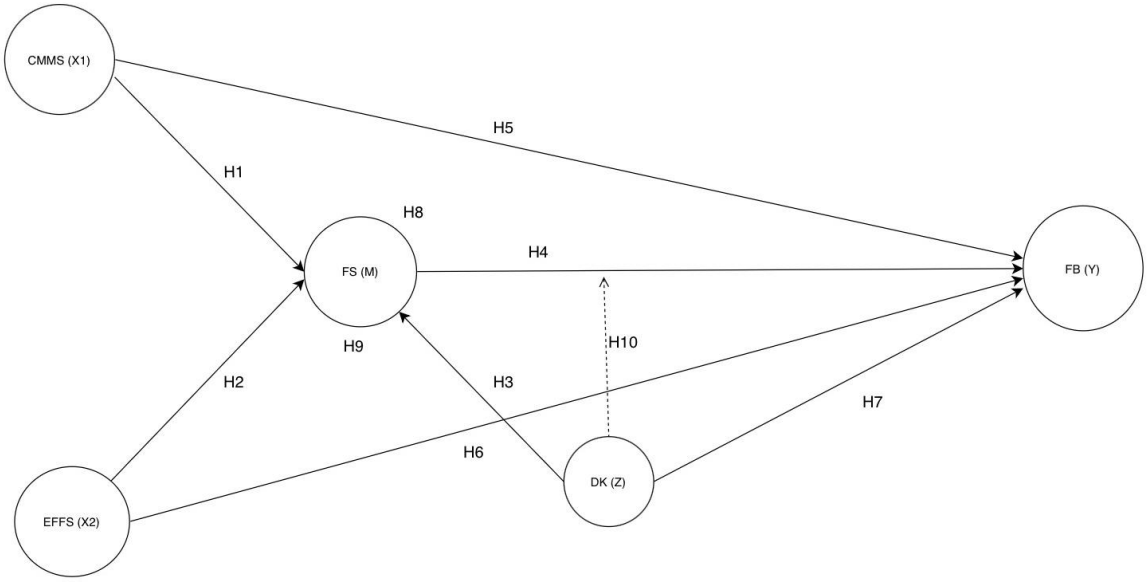


Figure 1. Research Model

METHOD

To examine the determinants of financial stress and their implications for financial behavior in the context of digital finance, this research follows an explanatory design, focusing on causal relationships derived from the Conservation of Resources (COR) Theory and the Theory of Planned Behavior (TPB). In particular, the study investigates how financial pressures, represented by current money management stress (CMMS) and expected future financial security (EFFS), influence financial stress (FS), and how FS subsequently affects financial behavior (FB). Digital knowledge (DK) is incorporated as both an explanatory and moderating variable.

Data were collected using an online questionnaire. A purposive sampling technique was employed to ensure that respondents met the following criteria: (1) be at least 18 years old, (2) actively manage their personal finances, and (3) have experience using digital financial services such as mobile banking, digital wallets, online investment platforms, or online lending applications. All measurement items were adapted from established literature, particularly Badrudin et al. (2025) and related studies, with minor modifications to fit the context of digital financial behavior. A total of 175 valid responses were obtained

and included in the final analysis. Responses were measured using a seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree).

Current Money Management Stress measures the extent to which individuals experience pressure in managing their day-to-day financial obligations. Expected Future Financial Security reflects individuals' confidence in maintaining financial stability in the future. Digital Knowledge captures individuals' ability to understand, evaluate, and utilize digital financial services effectively. Financial Stress represents psychological pressure arising from perceived financial insecurity, whereas Financial Behavior reflects responsible financial management practices, including budgeting, saving, expenditure monitoring, and financial planning.

Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS software. PLS-SEM was selected because it is well suited for examining complex causal relationships involving mediation and moderation effects while accommodating relatively small sample sizes and data that may not satisfy multivariate normality assumptions (Hair et al., 2022). The analysis followed the recommended two-stage procedure. The first stage involved evaluating the measurement model to assess construct reliability and validity. Internal consistency was examined using Cronbach's alpha and Composite Reliability (CR), while convergent validity was assessed using factor loadings and Average Variance Extracted (AVE). Discriminant validity was evaluated using the Heterotrait–Monotrait Ratio (HTMT). The second stage involved evaluating the structural model. Path coefficients were estimated using the bootstrapping procedure with 5,000 resamples to examine the significance of the hypothesized relationships. The coefficient of determination (R^2) was used to evaluate the explanatory power of the model. In addition, mediation analysis was conducted to examine the indirect effects of financial stress, while moderation analysis was performed to assess whether digital knowledge alters the relationship between financial stress and financial behavior.

RESULTS

This study is based on a sample of 175 respondents who are actively engaged in personal financial decision-making and have experience using digital financial platforms such as mobile banking, e-wallets, and online lending services. This ensures that the sample is well-aligned with the research context in capturing financial behavior within a digital financial ecosystem. The descriptive statistics reveal several patterns. First, digital knowledge exhibits relatively high mean values with low variability, indicating that respondents generally possess a high level of digital capability. However, financial stress displays moderate mean values with relatively high standard deviations, suggesting substantial variation in individuals' ability to cope with financial pressures. This variation may be attributed to the diverse backgrounds of respondents, particularly in terms of income levels and employment status. Further, current money management stress shows the highest variability among all constructs. In contrast, expected future financial security appears relatively stable. This pattern suggests that short-term financial conditions are more volatile and sensitive to immediate economic pressures, while perceptions of future financial security tend to be more stable and less reactive. These patterns provide initial evidence that short-term financial pressure may play a more dominant role in shaping financial stress compared to long-term expectations.

Table 1. Descriptive statistics

Items	Mean	Standard Deviation	Excess Kurtosis	Skewness
DK1	5.834	1.132	2.024	-1.291
DK2	6.000	1.322	2.799	-1.765
DK3	5.543	1.295	1.862	-1.314
DK4	5.863	1.071	3.399	-1.525
DK5	5.417	1.332	323	-801
FB1	4.709	1.701	-1.092	-246
FB2	5.337	1.487	-120	-805
FB3	5.663	1.303	1.704	-1.323

Items	Mean	Standard Deviation	Excess Kurtosis	Skewness
FS1	3.600	1.918	-1.135	274
FS2	5.011	1.817	-660	-657
FS3	4.789	1.881	-958	-501
FS4	4.320	1.885	-1.072	-228
FS5	4.731	1.754	-910	-359
EFFS1	5.240	1.305	-794	-283
EFFS2	4.994	1.598	-397	-575
EFFS3	4.869	1.489	-335	-516
EFFS4	4.949	1.486	-346	-575
EFFS5	5.297	1.395	677	-913
CMMS1	3.994	1.745	-1.026	-17
CMMS2	3.789	1.788	-950	165
CMMS3	3.514	1.953	-1.072	359
CMMS4	1.846	1.540	2.510	1.901
CMMS5	3.269	1.777	-967	352

The measurement model was evaluated to ensure the reliability and validity of the constructs before hypothesis testing. First, convergent validity was assessed using outer loadings and Average Variance Extracted (AVE). All constructs achieved AVE values above the recommended threshold of 0.5, indicating that the indicators adequately represent their respective constructs. Among the constructs, EFFS demonstrates the highest AVE, indicating a strong representation of its indicators, while digital knowledge shows comparatively lower AVE, suggesting greater variability across its measurement items.

Table 2. Measurement Model: Outer Loadings

Items	Outer Loading	CR	AVE
CMMS1	0.887	0.903	0.655
CMMS2	0.822		
CMMS3	0.869		
CMMS4	0.607		
CMMS5	0.830		
DK1	0.779	0.879	0.594
DK2	0.659		
DK3	0.782		
DK4	0.783		
DK5	0.840		
EFFS1	0.837	0.922	0.705
EFFS2	0.871		
EFFS3	0.875		
EFFS4	0.756		
EFFS5	0.854		
FB1	0.742	0.849	0.653
FB2	0.823		
FB3	0.854		
FS1	0.704	0.909	0.667
FS2	0.866		
FS3	0.881		
FS4	0.850		
FS5	0.770		

Second, discriminant validity was assessed using the Heterotrait-Monotrait (HTMT) ratio. All HTMT values were below the threshold of 0.9, confirming that the constructs are empirically distinct from one another.

Table 3. Discriminant Validity Assessment Using HTMT

Constructs	CMMS	DK	EFFS	FB
CMMS				
DK	0.11			
EFFS	0.25	0.30		
FB	0.26	0.58	0.56	
FS	0.80	0.09	0.29	0.19

Third, reliability was evaluated using Cronbach's alpha and composite reliability. All constructs exceeded the minimum threshold of 0.7, indicating acceptable internal consistency. Overall, the measurement model demonstrates satisfactory validity and reliability, allowing further analysis of the structural model.

Table 4. Reliability Test Results Using Cronbach's Alpha

Items	Cronbach's Alpha
CMMS	0.866
DK	0.830
EFFS	0.896
FB	0.732
FS	0.873

The structural model was assessed to examine the relationships among variables and test the proposed hypotheses. The coefficient of determination (R^2) indicates that the model explains a moderate proportion of variance in financial stress and financial behavior. This suggests that the independent variables included in the model provide meaningful explanatory power in predicting financial outcomes.

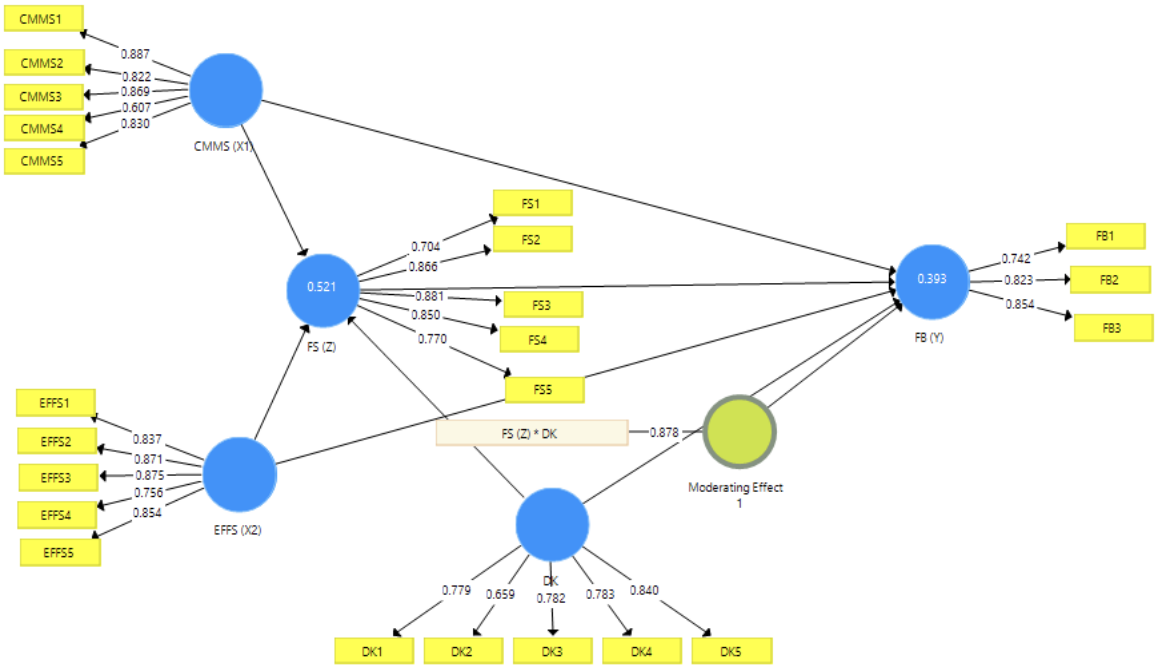


Figure 2. Measurement and Structural Model

Hypothesis testing was conducted using the bootstrapping procedure. The results are summarized as follows:

Table 5. Results of Hypothesis Testing

Hypothesis	Path	Original Sample (O)	T Statistics	P Values	Information
H1	CMMS => FS	0.684	19.326	0.000	Accepted
H2	EFFS => FS	-0.129	2.767	0.006	Accepted
H3	DK => FS	0.032	0.608	0.544	Rejected
H4	FS => FB	0.224	2.601	0.010	Rejected
H5	CMMS => FB	-0.305	3.549	0.000	Accepted
H6	EFFS => FB	0.364	5.249	0.000	Accepted
H7	DK => FB	0.380	4.715	0.000	Accepted
H8	CMMS => FS => FB	0.153	2.561	0.011	Accepted
H9	EFFS => FS => FB	-0.029	1.687	0.092	Rejected
H10	DK x FS => FB	0.034	0.406	0.685	Rejected

Note: *CMMS (Current Money Management Stress), EFFS (Expected Future Financial Security), DK (Digital Knowledge), FS (Financial Stress), FB (Financial Behavior).*

The results of the path analysis provide important insights into the determinants of financial stress and their implications for financial behavior in the digital financial environment. First, the findings clearly show that Current Money Management Stress (CMMS) is the strongest predictor of Financial Stress (FS). This indicates that short-term financial pressure, such as difficulties in managing daily expenses and financial obligations, plays a dominant role in shaping individuals' psychological financial conditions. The magnitude of this effect is substantially higher than that of other predictors, suggesting that immediate financial constraints are more influential than future-oriented perceptions in driving financial stress.

Second, Expected Future Financial Security (EFFS) has a significant negative effect on Financial Stress. This implies that individuals who feel more confident about their future financial stability tend to experience lower financial stress. However, the relatively smaller coefficient compared to CMMS indicates that while future expectations provide psychological reassurance, they are less influential than present financial realities. In contrast, Digital Knowledge (DK) does not have a significant effect on Financial Stress. This finding suggests that having knowledge of digital financial services does not necessarily reduce financial stress. One possible interpretation is that digital knowledge alone may not be sufficient to alleviate financial pressure, particularly when individuals are facing immediate financial constraints.

A notable finding emerges in the relationship between Financial Stress and Financial Behavior. The results indicate a positive and significant effect, although the hypothesis was rejected due to the direction being opposite to the initial expectation. This suggests that financial stress may not always lead to poorer financial behavior. Instead, under certain conditions, higher financial stress may encourage individuals to adopt more cautious or disciplined financial practices, possibly as a coping mechanism. Further analysis shows that CMMS has a direct negative effect on Financial Behavior, indicating that short-term financial pressure may hinder individuals' ability to engage in effective financial management practices. Conversely, both EFFS and DK have significant positive effects on Financial Behavior. These findings suggest that individuals with stronger expectations of future financial stability and higher levels of digital knowledge tend to demonstrate more disciplined financial behavior. In particular, digital knowledge appears to play an important role in supporting financial decision-making in the digital financial environment.

The mediation analysis reveals that Financial Stress partially mediates the relationship between CMMS and Financial Behavior. This indicates that short-term financial pressure influences financial behavior both directly and indirectly through psychological stress. However, Financial Stress does not mediate the relationship between EFFS and Financial Behavior, suggesting that future financial expectations primarily influence behavior through direct pathways rather than through stress-related

mechanisms. Finally, the moderation analysis shows that Digital Knowledge does not significantly moderate the relationship between Financial Stress and Financial Behavior. This indicates that the effect of financial stress on financial behavior remains consistent regardless of individuals' level of digital knowledge, suggesting that digital capability may not alter how individuals respond behaviorally to financial stress. In other words, while digital knowledge contributes directly to financial behavior, it does not significantly alter how individuals respond behaviorally to financial stress.

Discussion

This study provides several contextual insights into the dynamics of financial stress and financial behavior in the digital financial environment. First, the results confirm that current money management stress is the most significant driver of financial stress. This finding is consistent with the Conservation of Resources (COR) Theory, which suggests that immediate threats to resources have a stronger psychological impact than distant or abstract concerns (Hobfoll, 1989). Difficulties in managing daily financial obligations create direct pressure, making individuals more vulnerable to financial stress. This also aligns with prior studies highlighting the dominant role of short-term financial constraints in shaping financial well-being (Van Raaij et al., 2023; Badrudin, 2023).

Second, expected future financial security is found to reduce financial stress, although its effect is weaker compared to short-term financial pressure. This suggests that while positive expectations about the future can provide psychological comfort, they are not sufficient to offset immediate financial difficulties. In other words, individuals tend to prioritize present financial conditions over future expectations when evaluating their financial situation. Third, the most interesting findings concern the role of Digital Knowledge. Although Digital Knowledge significantly improves Financial Behavior, it does not significantly reduce Financial Stress. This finding suggests that possessing greater knowledge of digital financial services does not necessarily alleviate the psychological pressure arising from financial difficulties. This result challenges the common assumption that increasing digital capability automatically enhances financial well-being. While previous studies generally report positive associations between digital knowledge and financial outcomes (Bhat et al., 2025; Yadav et al., 2025), the present findings indicate that knowledge alone cannot compensate for actual financial constraints.

One possible explanation is that increased digital knowledge may also increase awareness of financial risks and uncertainties, particularly in complex digital financial environments. As a result, digital knowledge may not always function as a protective factor but may instead expose individuals to greater cognitive burden, which can amplify perceived financial risks. Furthermore, Chhillar et al. (2025) report that in digital financial contexts, digital knowledge does not automatically reduce financial stress because psychological pressure is more strongly driven by constraints on tangible financial resources. These findings imply that financial capability programs should extend beyond improving digital literacy alone. Strengthening individuals' financial resilience requires interventions that simultaneously address financial capability and the underlying economic conditions generating financial stress.

From the perspective of the Theory of Planned Behavior (TPB), digital knowledge contributes to greater perceived behavioral control by increasing individuals' confidence in using digital financial services (Ajzen, 1991). Nevertheless, perceived behavioral control may become less effective when individuals experience severe financial pressure. Under such circumstances, objective financial constraints appear to outweigh cognitive resources, limiting the ability of digital knowledge to reduce psychological stress.

Contrary to conventional expectations, Financial Stress is found to have a positive effect on Financial Behavior. Rather than encouraging irresponsible financial decisions, financial stress appears to motivate individuals to adopt more disciplined financial management practices. This finding offers an alternative perspective on the role of financial stress within behavioral finance. Existing studies generally associate financial stress with poorer financial decision-making, impulsive spending, and

declining financial well-being (Hughes et al., 2024). However, these findings suggest that financial stress may also function as a catalyst for behavioral adjustment.

COR Theory provides a plausible explanation for this phenomenon as a resource-protection mechanism. When individuals perceive threats to their financial resources, they become motivated to preserve remaining resources and prevent further losses (Hobfoll, 1989). Such adaptive responses may include reducing unnecessary spending, strengthening budgeting practices, postponing discretionary consumption, and increasing financial planning. Accordingly, financial stress should not always be interpreted as a dysfunctional psychological condition; under moderate levels, it may encourage individuals to engage in more responsible financial behavior.This finding also complements the Theory of Planned Behavior (TPB), where perceived pressure may strengthen individuals' intention to engage in corrective behavior, particularly when individuals recognize the need to regain control over their financial situation. Thus, financial stress may not always be detrimental; under certain conditions, it may trigger adaptive financial behavior. This finding contributes to the growing literature suggesting that psychological stress may produce adaptive behavioral responses rather than exclusively negative outcomes.

Furthermore, the mediation analysis shows that financial stress partially mediates the relationship between short-term financial pressure (CMMS) and financial behavior, indicating that psychological responses play an important role in translating financial pressure into behavioral outcomes. However, the absence of mediation in the relationship between future financial expectations and financial behavior suggests that long-term perceptions may directly influence behavior without necessarily triggering stress.

Finally, the moderating effect of Digital Knowledge on the relationship between Financial Stress and Financial Behavior is not supported. This finding indicates that Digital Knowledge neither strengthens nor weakens the behavioral consequences of financial stress. One possible explanation is that psychological pressure associated with financial stress dominates cognitive processes during financial decision-making. Although individuals may possess adequate digital knowledge, high levels of financial stress may reduce their ability to effectively utilize that knowledge. Consequently, knowledge alone is insufficient to buffer the behavioral effects of financial stress.

This finding is consistent with recent studies reporting that the effectiveness of digital knowledge depends on individuals' financial stability and psychological conditions (Badrudin et al., 2025; Chhillar et al., 2025; Yadav et al., 2025). Under conditions of financial strain, emotional responses may become more influential than cognitive capabilities, limiting the protective role of digital knowledge. From a practical perspective, these findings suggest that digital literacy initiatives should be complemented by broader financial resilience programs that strengthen individuals' ability to cope with financial pressure rather than focusing exclusively on improving digital capability.

CONCLUSION

This study examines the determinants of financial stress and their implications for financial behavior in Indonesia's digital financial environment. The findings demonstrate that current money management stress is the most significant driver of financial stress, highlighting the dominant role of short-term financial pressure in shaping individuals' financial conditions. In contrast, expected future financial security is found to reduce financial stress, although its influence is relatively weaker, indicating that individuals tend to prioritize present financial conditions over future expectations. Contrary to common assumptions, digital knowledge does not significantly influence financial stress, indicating that digital capability alone may not be sufficient to alleviate financial pressure in complex financial environments.

Importantly, this study finds that financial stress has a positive effect on financial behavior, suggesting that financial stress may function not only as a constraint but also as a motivating factor that encourages more disciplined financial management. Furthermore, financial stress partially mediates the

relationship between short-term financial pressure and financial behavior, indicating that psychological responses play a key role in translating financial pressure into behavioral outcomes. However, the moderating role of digital knowledge is not supported, suggesting that individuals' responses to financial stress may be driven more by psychological and situational factors than by digital capability.

This study contributes to the literature in several ways. First, it extends the understanding of financial stress beyond its traditional negative role. The findings support the argument that financial stress can also trigger adaptive behavior by improving financial discipline aimed at protecting financial resources. Second, the study provides empirical evidence that psychological pressure, in the form of financial stress, may influence financial behavior not only through reduced control but also through increased motivation to regain control. Third, this study contributes to the growing literature on digital finance by questioning the widely accepted assumption that digital knowledge always reduces financial stress. The findings suggest that the role of digital knowledge is more complex and may depend on contextual factors, particularly in emerging digital financial environments.

Recommendations

The findings of this study provide several practical implications for policymakers, financial institutions, and financial educators. First, financial capability programs should place greater emphasis on strengthening individuals' ability to manage short-term financial obligations, as current financial pressure represents the primary source of financial stress. Second, digital financial literacy initiatives should be complemented by interventions that improve financial resilience, budgeting skills, and financial planning rather than focusing solely on digital knowledge. Third, financial stress may lead to more disciplined financial behavior, suggesting that financial interventions should not only aim to eliminate stress but also help individuals manage stress constructively, enabling adaptive financial decision-making.

This study is subject to several limitations that provide opportunities for future research. The use of cross-sectional data limits the ability to examine changes in financial stress and financial behavior over time. Future studies may employ longitudinal designs to better understand how financial stress evolves throughout different stages of individuals' financial lives. In addition, future research could incorporate other psychological and socioeconomic factors, such as financial resilience, self-control, income stability, or financial self-efficacy, to provide a more comprehensive understanding of financial behavior in digital financial environments.

ACKNOWLEDGEMENTS OR NOTES

We gratefully acknowledge the support from Pusat Pengembangan Manajemen (Center for Development of Management Studies), Jurusan Manajemen, Fakultas Bisnis dan Ekonomika Universitas Islam Indonesia for providing a research grant to this study.

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