Proceedings – ICAMEB
International Conference on Accounting, Management, Entrepreneurship and Business (ICAMEB)

Exploring the Financial Wellbeing Landscape: An Exploratory Factor Analysis of Financial Satisfaction and Financial Stress

Putri Puspita Ayu
Management Science, Faculty of Economic and Business
Universitas Negeri Jakarta
Jakarta, Indonesia, puspitaayu12@gmail.com

Hamidah
Management Science, Faculty of Economic and Business
Universitas Negeri Jakarta
Jakarta, Indonesia, hamidah@unj.ac.id

Agung Dharmawan Buchdadi
Management Science, Faculty of Economic and Business
Universitas Negeri Jakarta
Jakarta, Indonesia, agungdharmawan@feunj.ac.id

Abstract

Financial wellbeing is a key indicator of household economic resilience, yet empirical evidence from emerging economies such as Indonesia remains limited. This study aims to examine the factor structure of financial satisfaction, financial stress, and financial well-being and to explore how these constructs interact within the socio-economic context of Cirebon City and Regency. Using a quantitative, cross-sectional survey of 270 adult respondents selected through stratified random sampling, data were analyzed with Exploratory Factor Analysis (EFA) employing Principal Axis Factoring (PAF) and Oblimin rotation. The results confirmed a three factor solution with strong statistical support (Kaiser–Meyer–Olkin = 0.84, Bartlett's Test of Sphericity $p < 0.001$), explaining 75.4% of total variance. Financial well-being emerged as the most dominant factor, while financial stress showed a significant negative correlation with financial well-being ($r = –0.54$, $p < 0.001$), and financial satisfaction was validated as a single global indicator. Urban respondents reported higher financial satisfaction and lower financial stress than rural counterparts. These findings provide empirical evidence that financial satisfaction, financial stress, and financial well-being are distinct yet interrelated constructs, extending the structural determinants framework to the Indonesian context and offering practical insights for financial literacy programs, emergency-savings initiatives, and inclusive digital financial services aimed at strengthening household financial resilience.
Keywords : ***financial well-being; financial satisfaction; financial stress; exploratory factor***

I. INTRODUCTION

Changes in economic structure, the rise of digital financial services, and fluctuations in the price of basic necessities pose new challenges in household financial management. In Cirebon City and Regency, which are trade and tourism nodes in West Java as well as having an agricultural base, this situation seems real. In urban areas, the growth of commercial centers and urban lifestyles is driving up the cost of living and credit-based consumption. In the district area, seasonal income from the agricultural sector causes family financial uncertainty. This phenomenon gives rise to declining financial satisfaction, increased financial stress, and threats to overall financial well-being.

International research shows that financial satisfaction and financial stress are important determinants of financial well-being. Prakash et al. (2022) emphasized that low financial satisfaction and high financial stress lower financial well-being. Lu Fan and Henager (2022) reinforce these findings by showing that financial satisfaction has a direct positive effect, while financial stress has a negative effect on financial well-being. Similar findings were presented by Jitender Kumar et al. (2023) which highlight financial stress as an inhibiting factor for financial well-being. The structural *determinants framework theory* developed by Lu Fan and Robin Henager explains that financial well-being is the result of the interaction of objective economic conditions with psychological factors such as satisfaction and financial pressure, which is relevant to the condition of the people of Cirebon who face pressure on the cost of living and uncertain income patterns.

The novelty of this research lies in the application of Exploratory Factor Analysis (EFA) to identify and validate the structure of financial welfare factors based on the variables of financial satisfaction, financial stress, and financial well-being in the local context of Cirebon. Previous research has mostly been conducted in developed countries or metropolitan cities, while integrated studies linking the psychological dimension of financial well-being with the socio-economic reality of urban-rural communities in Indonesia, especially Cirebon, are still very limited. The results of this study are expected to have a practical impact in the form of contextual financial policy intervention recommendations for local governments and financial institutions, such as financial literacy programs, debt management education, and secure and inclusive digital financial services.

This study aims to analyze and validate the latent dimensions of financial satisfaction, financial stress, and financial well-being in the people of Cirebon City and Regency. Specifically, this study is expected to:

1. Finding the structure of the most representative factors in measuring people's financial well-being.
2. Uncovering the latent relationship between the three dimensions in the context of urban and rural economies.
3. Provide theoretical contributions to the development of a financial welfare model based on *the structural determinants framework* adapted to the Indonesian context.
4. Provide practical contributions to local governments, financial institutions, and educators to design programs to increase family economic resilience.

By combining the local phenomenon of Cirebon, a global theoretical framework, and previous research findings, this research seeks to make a significant scientific contribution to the development of the concept of financial welfare and its application in regional economic policies.

II. METHOD

Research Design

This study uses a quantitative approach with a cross-sectional survey design. The main goal is to identify and validate the structure of factors that form *financial satisfaction*, *financial stress*, and *financial well-being* in the people of Cirebon City and Regency.

The Exploratory Factor Analysis (EFA) method was chosen because it is effective for exploring latent constructs when the theoretical model requires empirical proof (Hair et al., 2019; Sugiyono, 2021). Through EFA, correlation patterns between indicators can be identified and relevant indicators can be summarized into valid factors before Confirmatory Factor Analysis (CFA) or Structural Equation Modeling (SEM) is carried out.

Sampling Process

The population of this study is an adult population aged ≥18 years who live in Cirebon City and Cirebon Regency. To ensure the representativeness of respondent characteristics, the study applied a stratified random sampling

technique with stratification based on gender, age, education level, occupation, and income level (Creswell & Creswell, 2018). The determination of sample size refers to the guidelines of Hair et al. (2019), where exploratory factor analysis (EFA) requires a minimum of 10 respondents for each question item. With a total of nine items (one for *financial satisfaction*, three for *financial stress*, and five for *financial well-being*), the minimum number of respondents needed is around 90 people, while this study targets 200–300 respondents so that the results obtained are more stable and have stronger generalization power. The recruitment process is carried out through community centers, community organizations at the RT/RW level, local financial institutions, and various digital platforms to reach respondents widely. The inclusion criteria were set for respondents who had lived in the Cirebon area for at least one year and had involvement in household financial decision-making, so that the data collected truly reflected the financial welfare conditions of households in the study area.

Variable Operationalization

The measurement of variables is based entirely on the indicators outlined in the article Lu Fan & Robin Henager (2022), with translation and back-translation processes to ensure equality of meaning (Brislin, 1986).

Table 1. Variable Operationalization

Variable	Operational Definition	Indicators (referring to Lu Fan & Henager, 2022)	Questionnaire Items	Measurement Scale
Financial Satisfaction (FSat)	Subjective assessment of the overall financial condition of the household.	Only 1 global question regarding financial satisfaction level.	"Overall, how satisfied are you with your current financial condition?"	Scale 1–10 (1 = very dissatisfied, 10 = very satisfied)
Financial Stress (FStr)	The level of psychological distress due to worries about financial circumstances.	3 indicators: (1) anxiety thinking about finances, (2) concerns about not having enough funds in retirement, (3) physical tension when talking about finances.	1. "I often feel anxious when thinking about my personal financial situation." 2. "I'm worried that the money I have or savings won't be enough in retirement." 3. "Talking about financial issues makes me feel tense or palpitated."	Likert scale 1–5 (1 = strongly disagree, 5 = strongly agree)
Financial Well-Being (FWB)	A financial condition that allows a person to control spending, face shocks, achieve financial goals, and enjoy freedom of choice.	The 5 indicators of the CFPB Financial Well-Being Short Scale: (1) the ability to manage daily expenses, (2) readiness to deal with sudden expenses, (3) the ability to save for future goals, (4) the freedom to make financial choices, (5) the feeling of financial security.	1. "My finances control my life." 2. "I have money left over at the end of the month." 3. "I am concerned that the money I have or will save won't last." 4. "I am just getting by financially." 5. "Because of my money situation, I feel like I will never have the things I want in life."	CFPB scale 0–100 (can be converted to Likert 1–5 when needed)

The data analysis procedure in this study is carried out in stages and follows strict quantitative methodological rules. The first stage is the Data Feasibility Test, which includes handling data lost less than 5% using *expectation–maximization methods*, detection of *outliers*, and testing of distribution normality (Hair et al., 2019). The feasibility of factor analysis was then tested through Kaiser–Meyer–Olkin (KMO) with a

minimum value of 0.70 and Bartlett's Test of Sphericity with a significance level of $p < 0.05$, which ensured the suitability of the data for factor analysis (Ghozali, 2021). Furthermore, Exploratory Factor Analysis (EFA) is carried out with *the appropriate Principal Axis Factoring (PAF) extraction method* if the data is not completely distributed normally. The rotation process is carried out using the Oblimin (oblique) method, considering that the analyzed factors are estimated to be correlated with each other. The determination of the number of factors was based on the results of *parallel analysis*, *scree plot*, and *eigenvalue criteria* of more than 1, while the item retention criteria included *a factor loading* of at least 0.40, a *cross-loading difference* of at least 0.20, and *communality* at least 0.50. Once the factors were formed, the reliability and validity test was carried out by calculating Cronbach's alpha and Composite Reliability (CR) which were both expected ≥ 0.70, as well as testing the convergent validity via Average Variance Extracted (AVE) with a threshold of ≥ 0.50 (Hair et al., 2019). The final stage in the form of advanced analysis is carried out by calculating the composite score of each construct that has been formed. The difference in scores between groups, for example between city and district communities, was analyzed using the t-test or ANOVA to provide an empirical basis for the formulation of policy recommendations that are more targeted.

By following the original indicators of Lu Fan & Henager (2022), especially financial satisfaction measured with one question, this study presents a measurement model that is theoretically accurate, statistically valid, and relevant to the Cirebon context. Strict EFA procedures (Hair et al., 2019; Sugiyono, 2021; Creswell & Creswell, 2018) ensure that the findings can be used as a basis for the development of Confirmatory Factor Analysis (CFA) and structural modeling for more in-depth financial well-being studies.

III. RESULTS AND DISCUSSION

Descriptive Statistics of Respondents and Key Variables

A total of 270 valid questionnaires were analyzed, exceeding the minimum required for Exploratory Factor Analysis (EFA). Respondents were proportionally selected from Cirebon City and Cirebon Regency using stratified random sampling techniques. The demographic profile of the respondents is as follows: 53% female, 47% male; 38% had a high school or equivalent education, 42% were undergraduates, and 20% were postgraduates; 30% were civil servants/teachers, 34% were private employees, 25% were micro and small business owners, and 11% belonged to other occupations. Descriptive statistics of the study variables (scores converted to a 1–5 scale for comparison) are also presented.

Table 2. Statistic Descriptive

Variable	Mean	SD	Min	Max
Financial Satisfaction (1 question, original scale 1–10 → standardized 1–5)	3,2	0,8	1,2	4,9
Financial Stress (3 questions, scale 1–5)	3,5	0,7	1,4	4,8
Financial Well-Being (5 questions, CFPB 0–100 → standardized 1–5)	3,0	0,9	1,0	4,8

Respondents in Cirebon City showed slightly higher financial satisfaction (M=3.4) and lower financial stress (M=3.3) compared to respondents in Cirebon Regency (M=3.0 and M=3.7). This indicates that there is a financial gap between the people of the city and the district in Cirebon.

Data Analysis Results

EFA Data Checks and Eligibility Tests

The results of the Data Feasibility Test show that all factor analysis requirements have been met. The Kaiser–Meyer–Olkin (KMO) value of 0.84, which falls into the meritorious category, indicates that the level of sufficiency of the sample is very good for factor analysis. In addition, the significant results of Bartlett's Test of Sphericity ($\chi^2(36) = 815.4$; $p < 0.001$) confirm that the correlation matrix between items differs markedly from the identity matrix, so the correlation between measurements is quite strong. These findings confirm that the data meet the eligibility criteria for Exploratory Factor Analysis (EFA) in accordance with the quantitative methodology guidelines put forward by Hair et al. (2019).

Exploratory Factor Analysis (EFA)

The EFA analysis was carried out using the Principal Axis Factoring (PAF) method and Oblimin rotation. The results of parallel analysis and scree plots confirm three factors that fit the theoretical framework.

Factor	Items with a load of ≥0.40	Eigenvalue	Percentage of Variants Explained
F1 – Financial Well-Being	5	3,62	40,2%
F2 – Financial Stress	3	2,01	22,4%
F3 – Financial Satisfaction	1	1,15	12,8%
Total variants explained			**75,4%**

Table 2.2 shows the results of the exploratory factor analysis conducted on nine questions that measure financial well-being, financial stress, and financial satisfaction. Based on the Principal Axis Factoring (PAF) method with Oblimin rotation, the feasibility test showed a Kaiser–Meyer–Olkin (KMO) value of 0.84 which was in the meritorious category, and Bartlett's Test of Sphericity was significant ($\chi^2(36) = 815.4$; $p < 0.001$). These results indicate that the correlation between items is quite strong and the data meets the eligibility criteria for factor analysis (Hair et al., 2019).

The EFA process yielded three main factors with a total of 75.4% of variance explained, demonstrating the model's ability to explain most of the data variations. The first factor (Financial Well-Being (FWB) has an eigenvalue of 3.62 and explains 40.2% of the variance, with a factor loading range of 0.68–0.85. The second factor (Financial Stress/FStr) has an eigenvalue of 2.01 and explains 22.4% of the variance, with a load of 0.64–0.81. The third factor (Financial Satisfaction/FSat) has an eigenvalue of 1.15 and explains 12.8% of the variance, represented by one global item with a very strong load. The reliability of the construct measured by Cronbach's alpha showed excellent results, i.e. 0.90 for FWB and 0.86 for FStr, while FSat was accepted as a valid single measure.

Discussion

The results of the exploratory factor analysis (EFA) presented in Table 2.2 confirm that financial well-being, financial stress, and financial satisfaction are three distinct but interrelated constructs. The Kaiser–Meyer–Olkin (KMO) value of 0.84 which is in the *meritorious* category and the results of Bartlett's Test of Sphericity are significant ($\chi^2(36) = 815.4$; $p < 0.001$) indicate that the data has an adequate correlation between slurries and is suitable for factorial analysis. The total explainable variant of 75.4% indicates that the three factors are able to represent most of the data variations, according to the criteria suggested by Hair et al. (2019).

In detail, the first factor, namely financial well-being, contributed the largest variance, which was 40.2%, with a strong *factor loading* value (0.68–0.85). These results show that the ability to manage daily finances, readiness to face unexpected expenses, and progress in achieving financial goals are the main foundations of the financial well-being of the people of Cirebon. These findings support the structural *determinants framework theory* proposed by Lu Fan and Robin Henager (2022), in which objective economic conditions and psychological capacities interact with each other in shaping financial well-being.

The second factor, namely financial stress, appears as a stand-alone construct and is negatively related to *financial well-being* ($r = -0.54$; $p < 0.001$). These findings suggest that financial stress—such as anxiety about bill

obligations, pension worries, and emotional strain when talking about finances—actually lowers financial well-being. These results are in line with the research of Prakash et al. (2022) and Kumar et al. (2023), which emphasize the importance of managing financial stress as a strategic step to improve financial well-being.

Meanwhile, financial satisfaction proved to be valid as a single construct even though it was only measured through a single global question that assessed respondents' satisfaction with their overall financial condition. With *a high factor loading* and a variance contribution of 12.8%, this measurement proved to be concise but able to capture the core of financial satisfaction, in line with the international measurement practices outlined by Fan and Henager (2022).

Overall, the results of this EFA show that the three factors formed are in line with the conceptual framework and previous research, while at the same time confirming the relevance of structural determinants theory in the socio-economic context of Cirebon. These findings provide practical implications for policy formulation: local governments and financial institutions can focus on financial literacy programs, debt management education, and improved access and security of digital financial services to reduce financial stress levels and increase financial satisfaction. These efforts are expected to strengthen the financial welfare of the community both in the City and Cirebon Regency areas.

Thus, the factor analysis carried out not only validates the measurement construct according to international standards, but also makes an important empirical contribution to the development of financial welfare theory and policy in Indonesia, especially in the people of Cirebon City and Regency.

IV. CONCLUSIONS

This study examines the structure of financial satisfaction, financial stress, and financial well-being factors in the people of Cirebon City and Regency using Exploratory Factor Analysis (EFA). The results of the analysis confirm three main factors that are consistent with the structural determinants framework proposed by Lu Fan and Robin Henager (2022). Among the three, financial well-being emerged as the most dominant factor, while financial stress and financial satisfaction proved to be separate but interconnected constructs.

Research Implications and Contributions

Theoretically, this study strengthens the validity of the international financial well-being measurement model in the Indonesian context, especially in Cirebon, thus making an important contribution to the development of cross-cultural financial well-being theory. Practically, these findings confirm that increased financial satisfaction and reduced financial stress play a direct role in improving household financial well-being. Local governments and financial institutions can leverage the results of this research to design financial literacy programs, emergency savings campaigns, and inclusive digital financial services, especially for rural communities that are more vulnerable to financial stress.

Research Limitations

Although it makes a significant contribution, this study has some limitations. First, cross-sectional design limits the ability to trace cause-and-effect relationships between variables over time. Second, the use of perception-based data (self-reported) has the potential to cause answer bias, especially on sensitive questions related to financial conditions. Third, measuring financial satisfaction using only one question, even though it is in accordance with international practice, makes the exploration of the deeper aspects of financial satisfaction limited. Fourth, this study focuses on the Cirebon area, so generalizing the results to other regions with different socio-economic characteristics requires caution.

As a follow-up to the limitations faced, further research is recommended to use a longitudinal design so that the dynamics of changes in financial well-being and financial stress can be monitored more deeply over time.

This approach allows for a stronger cause-and-effect relationship analysis than cross-sectional designs. Furthermore, the incorporation of qualitative methods, for example through in-depth interviews or focus group discussions, will enrich understanding of household financial decision-making behaviors and processes, as well as provide a more comprehensive context to quantitative findings. Future research also needs to extend geographical coverage to various urban and rural areas in Indonesia to increase external validity and ensure findings can be generalized to a wider population. In addition, the development of multi-item indicators to measure financial satisfaction will open up opportunities to explore the dimensions of financial satisfaction, both short-term and long-term, in more depth, thereby providing a more holistic understanding of the factors that affect people's financial welfare. Proceed to the Confirmatory Factor Analysis (CFA) or Structural Equation Modeling (SEM) stage to test the mediating and moderation relationships between variables in more depth.

Overall, this study provides strong empirical evidence that financial satisfaction, financial stress, and financial well-being are distinct but interconnected dimensions in household financial well-being. These findings not only enrich the scientific treasure trove on financial well-being, but also provide data-driven recommendations for policy makers and financial practitioners in developing programs and interventions aimed at strengthening the economic resilience of communities, especially in Cirebon City and Regency.

REFERENCES

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage.

Fan, L., & Henager, R. (2022). A structural determinants framework for financial well-being. Journal of Family and Economic Issues, 43(1), 77–92. https://doi.org/10.1007/s10834-020-09727-3

Ghozali, I. (2021). Application of multivariate analysis with the IBM SPSS 26 program (10th ed.). Publishing Agency of Diponegoro University.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). Multivariate data analysis (8th ed.). Cengage Learning.

Jitender Kumar, Manju Rani, Garima Rani, & Vinki Rani. (2024). What do individuals know, feel and do from a financial perspective? An empirical study on financial satisfaction. Journal of Family and Economic Issues. https://doi.org/10.1007/s10834-024-09851-2

Jitender Kumar, Vinki Rani, Garima Rani, & Tapan Sarker. (2023). Determinants of the financial wellbeing of individuals in an emerging economy: An empirical study. Journal of Behavioral and Experimental Finance, 39, 100842. https://doi.org/10.1016/j.jbef.2023.100842

Lu Fan, & Namsuk Park. (2021). Factors mediating the association between financial socialization and well-being of young adults: Testing a conceptual framework. Journal of Financial Counseling and Planning, 32(2), 331–346. https://doi.org/10.1891/JFCP-20-00056

Muhammad S. Tahir, Ahmad Usman Shahid, & Daniel W. Richards. (2022). The role of impulsivity and financial satisfaction in a moderated mediation model of consumer financial resilience and life satisfaction. Journal of Consumer Affairs, 56(3), 1125–1148. https://doi.org/10.1111/joca.12463

Nisha Prakash, Subburaj Alagarsamy, & Aparna Hawaldar. (2022). Demographic characteristics influencing financial wellbeing: A multigroup analysis. Journal of Financial Services Marketing, 27(2), 103–118. https://doi.org/10.1057/s41264-021-00121-w

Seyed Jafar Mousavi, & Davood Rasaeimanesh. (2023). Investigating the direct effect of financial knowledge, financial stress, financial risk tolerance and financial socialization on the financial behavior and financial well-being of individuals in Iran. Journal of Family and Economic Issues, 44(1), 59–75. https://doi.org/10.1007/s10834-022-09828-5

Shalini Kalra Sahi. (2021). Demographic and socio-economic determinants of financial satisfaction: A study of SEC-A segment of individual investors in India. International Journal of Consumer Studies, 45(5), 951–964. https://doi.org/10.1111/ijcs.12659

Ana Junça Silva, & Raquel Dias. (2023). The role of financial status, attitudes, behaviours and knowledge for overall well-being in Portugal: The mediating role of financial well-being. International Journal of Social Economics, 50(8), 1193–1212. https://doi.org/10.1108/IJSE-12-2022-0807

Yu Zhang, & Lu Fan. (2024). The nexus of financial education, literacy and mobile fintech: Unraveling pathways to financial well-being. Journal of Family and Economic Issues, 45(2), 215–235. https://doi.org/10.1007/s10834-023-09812-9

Julie King, et al. (2022). Australian and Canadian financial wellbeing policy landscape during COVID-19: An equity-informed policy scan. Journal of Social Policy, 51(4), 921–943. https://doi.org/10.1017/S0047279421000889

Amee Kim, Frederique J. Vanheusden, & Mamunur Rashid. (2023). Factors affecting UK household financial risk-taking and their implications for consumption of financial investments. International Review of Financial Analysis, 85, 102417. https://doi.org/10.1016/j.irfa.2023.102417

Sarah E. Jackson, et al. (2023). Paying the price: Financial hardship and its association with psychological distress during Great Britain's cost-of-living crisis. Journal of Public Health, 45(4), 651–660. https://doi.org/10.1093/pubmed/fdad047

Sugiyono. (2021). Quantitative, qualitative, and R&D research methods (3rd ed.). Alphabet.