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Testing the Determinant Model of Financial Behavior among State-Owned Enterprise Employees: The Moderating Role of Income

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Abstract: Effective financial behavior has become increasingly important as employees face rising living expenses and the rapid expansion of digital financial services. This study investigates the effects of financial anxiety, financial technology, financial knowledge, and financial confidence on the financial behavior of employees at PT Kimia Farma Diagnostika, with income examined as a moderating variable. Data were collected through questionnaires from respondents selected using purposive sampling and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The findings reveal that financial anxiety has a negative effect on financial behavior, whereas financial confidence, financial knowledge, and financial technology contribute positively. In addition, income strengthens the relationship between financial technology and financial behavior as well as between financial knowledge and financial behavior. These results provide additional evidence for behavioral finance research and highlight the importance of financial education and digital financial literacy in improving employees' financial well-being.

Keywords: financial anxiety, income, financial behavior, financial confidence, financial knowledge, financial technology, financial anxiety.

INTRODUCTION

An individual's attitude related to personal financial management, including actions related to managing financial risks, using credit, paying off debt, investing, saving, and making a real budget, is called financial behavior.(Joo & Grable, 2004)In the context of financial well-being, healthy financial behavior is categorized as a key factor in achieving long-term economic stability and security. Good financial behavior is positively related to financial well-being. Conversely, poor financial behavior, such as wastefulness, failure to budget, and excessive use of credit, can lead to financial stress, stress, and even psychological consequences.(Rahman et al., 2021).

Technological advancements and changing economic conditions have transformed the way people manage their personal finances. Easy access to various trends, from lifestyle to

fashion, encourages individuals to follow evolving consumption patterns, thus increasing the tendency for consumer behavior.(Arifa & Setiyani, 2020)This phenomenon then forms a culture of consumption that is increasingly embedded in people's lives, where market mechanisms play a role in influencing the values and social norms that develop.(Umanailo et al., 2018)This situation poses a challenge for public financial management in Indonesia. Data from the Financial Services Authority (OJK, 2022) shows that the national financial behavior index only reached 38.03%, still below the expected level. This low quality of financial behavior can increase the risk of financial anxiety, disrupt household economic stability, and encourage dependence on consumer debt.

Employees, as part of a productive society, face a series of complex financial challenges, such as rising living costs, easy access to digital loans, and the demands of a modern lifestyle. Economic challenges like inflation, rising prices of basic necessities, and the burden of family responsibilities also add to the financial pressures faced by workers. This often impacts their quality of life and productivity, especially when individuals lack the financial and psychological capacity to cope. On the other hand, poor financial understanding and management skills can lead to serious problems, including financial anxiety, poor financial behavior, and irrational financial decisions. Individual financial behavior is influenced by many factors, including financial confidence, knowledge, technology, and anxiety.

Financial anxietyIt has been proven to reduce decision-making ability, encourage consumer behavior, and cause problems with financial planning. Employees who experience financial anxiety are more likely to avoid financial planning, are incapable of managing their finances, and are at risk of making mistakes in financial decisions.(Archuleta et al., 2021)This research finding is supported by Setiawan & Iramani (2022), who found that financial anxiety can reduce healthy financial behaviors by causing stress and avoiding financial decisions. However, Perry's (2023) research on university students in the UK actually found that financial anxiety can encourage individuals to be more careful in managing their money.

Digital transformation in the financial sector has transformed the way Indonesians access and utilize various financial services. This change is driven by the development of financial technology (fintech), an innovation that integrates technology with financial services, shifting conventional business systems toward more modern models (Bank Indonesia, 2017). Despite the various conveniences offered, this development also requires the public to possess adequate digital financial literacy. This capability relates not only to an understanding of basic financial concepts but also includes knowledge and skills in using financial technology appropriately and responsibly.

The emergence of digital services such as e-wallets, paylater, and fintech investment has increased the convenience of transactions, but without adequate digital literacy, it actually increases the risk of people becoming consumptive. According to Bank Indonesia (2023), 1 in 3 fintech users do not understand the interest structure and penalties of the products they use. When people are unable to understand how to manage their finances wisely, they are more likely to make uninformed spending decisions, thereby risking their financial stability. Research by Lee & Shin (2018) states that fintech use can increase efficiency and positive financial behavior, but Ryu (2018) and Hendro & Iramani (2022) found that excessive fintech use actually encourages consumptive behavior due to the ease of access to digital credit.

In Indonesia, this phenomenon is increasingly relevant, given the high level of consumer debt, low household savings, and the widespread use of digital financial services without adequate understanding. According to a 2022 OJK survey, more than 40% of workers feel stressed about managing their finances. This anxiety can reduce their ability to make rational financial decisions. Amidst this pressure, the ability to understand finances, both in terms of financial knowledge and digital financial literacy, is crucial for improving long-term financial

well-being. Therefore, a sense of responsibility for financial management is essential to minimize consumer behavior and other financial problems.

On the other hand, the development of financial technology (fintech) is playing an increasingly important role in people's financial behavior. Understanding digital finance, which encompasses e-wallets, digital investments, online loans, and financial management through digital applications, is gaining popularity and is being used by employees from various backgrounds. Digital finance represents a new dimension in personal financial management. This situation demands digital financial literacy, namely the skills to analyze, implement, and wisely evaluate digital-based financial services.

In this case, many employees attend financial training but remain unsure about managing debt or investments. This indicates a gap between knowledge and action (intention-behavior gap). However, not all fintech use automatically results in positive financial behavior. There is a risk that the ease of digital transactions can encourage overspending or impulsive consumption, especially if users lack discipline or lack financial self-control.

Effective personal financial management requires a thorough understanding of various financial concepts, such as interest rates, risk, diversification, and inflation. This knowledge empowers individuals to make more informed financial decisions, including budgeting, developing a habit of saving, and avoiding risky debt. However, mastery of financial concepts is not always followed by application in daily life, as other factors are needed to drive the transition from understanding to action. For employees, limited financial knowledge can hinder optimal financial management, potentially hindering the development of healthy financial behaviors and long-term financial planning.

The lack of consensus on the factors shaping financial behavior indicates that this topic still requires further empirical research. Differences in results between studies indicate a research gap, particularly regarding the role of psychological and financial aspects in influencing individual behavior. One study conducted by Iramani and Lutfi (2021) demonstrated that financial knowledge significantly contributes to financial behavior, suggesting that individuals with a better level of financial understanding tend to make more informed financial decisions. These findings are also supported by Sumani and Roziq (2020), who found that financial literacy, along with income level, plays a significant role in shaping household financial management behavior.

However, different results were found by Herawati et al. (2018) and Herlambang & Nur Wiwik (2023), which showed that financial knowledge does not always have a direct effect on financial behavior without the mediation of self-confidence or financial experience.

Another factor that shapes financial behavior is financial confidence, which is an individual's sense of self-confidence in managing and making decisions related to finances. This confidence helps translate financial knowledge into more effective actions in everyday life.(Atkinson, A., & Messy, 2012) Financially confident individuals feel more prepared and optimistic about managing their finances, even in challenging economic situations. Conversely, those who are knowledgeable but lack confidence tend to be passive or even make poor decisions.

On the other hand, income is a fundamental economic variable that directly determines an individual's financial capacity, including the amount of expenses they can cover, their ability to save, their investment opportunities, and their resilience to financial risks. Because of its function as a material resource, income not only directly impacts financial behavior but also influences the extent to which other psychological, cognitive, and technological factors influence a person's financial actions. In other words, income acts as a moderating variable that can strengthen or weaken the relationship between financial determinants such as financial anxiety, financial technology, financial knowledge, financial confidence, and financial behavior.

PT Kimia Farma Diagnostika (KFD) is a subsidiary of PT Kimia Farma Tbk., which focuses on healthcare services, including clinics and laboratories. As a state-owned enterprise in the healthcare sector, PT Kimia Farma Diagnostika employs employees from diverse educational backgrounds, ages, and work experience. As part of the healthcare sector, they are required not only to be professional in their work but also to manage their personal finances wisely, especially amidst economic pressures and post-pandemic lifestyle changes.

The phenomenon of financial stress and anxiety has also been found among healthcare workers. Based on initial observations at PT Kimia Farma Diagnostika, some employees reported difficulty controlling digital spending and still had consumer debt despite having a steady income. This situation indicates a gap between financial capability and actual financial behavior. This makes this company a relevant context for examining how psychological and cognitive factors influence employee financial behavior.

In the context of behavioral finance theory, individuals are not always rational in making financial decisions. Psychological factors such as financial anxiety, financial confidence, and financial skills and knowledge also determine how a person behaves with their money. On the other hand, the rapid development of financial technology also influences employee financial habits, both positively (facilitating transactions and record-keeping) and negatively (encouraging consumptive and impulsive behavior). Therefore, a structured and professional work environment like PT. Kimia Farma Diagnostika is the right place to observe how these various factors interact and influence employee financial behavior.

One of the main reasons for conducting this research at PT. Kimia Farma Diagnostika is the wide variation in income among healthcare sector employees. The company's organizational structure encompasses a wide range of positions, from medical personnel (laboratory analysts, nurses, technicians), administrative and financial staff, to middle and senior management. This variation in salaries across positions provides an opportunity to examine the role of income as a moderating variable in the correlation between financial factors and financial behavior.

As a modern company under the auspices of a state-owned enterprise (BUMN), PT. Kimia Farma Diagnostika has undergone a digital transformation, both in its operational systems and employee welfare. The use of digital financial applications such as mobile banking, e-wallets, and electronic payment systems for salaries and benefits is commonplace in this company. This phenomenon reflects the fact that a majority of employees are familiar with financial technology, which is one of the key variables in this study.

However, ease of digital access does not always translate into improved financial management skills. Some employees still struggle to control digital spending or understand the investment features of financial apps. This raises the important question of whether the adoption of financial technology actually encourages better financial behavior or creates new risks to employees' financial well-being. This question is relevant for further research in the context of financial literacy.

The various issues outlined above form the basis for this research. The results are expected to enrich studies on financial behavior and serve as a basis for consideration for PT Kimia Farma Diagnostika in developing financial education programs that integrate digital and psychological aspects. Based on this, this study is entitled "The Influence of Financial Anxiety, Financial Technology, Financial Knowledge, and Financial Confidence on Financial Behavior: The Role of Income as a Moderating Variable (A Study of PT Kimia Farma Diagnostika Employees)."

Literature Review

Theory of Planned Behavior (TPB)

The correlation formed between behavior and attitude is closely related to "Theory of Planned Behavior(TPB)" introduced by Ajzen (1991), where this theory explains the factors that trigger the emergence of intentions to behave in a certain way, divided into three factors, namely perception, subjective norms, and behavior that contribute to controlling behavior (perceived behavioral control). Because it is able to explain the process of forming a behavior, TPB has been widely applied in various research fields, including the study of human behavior and environmental issues.

Social Cognitive Theory (SCT)

An individual's belief in their ability to perform an action (self-efficacy) is a key concept in Social Cognitive Theory. According to Bandura (1986), a person's behavior is formed through a learning process involving reciprocal interactions between cognitive factors, environmental conditions, and individual actions. These three elements influence each other, so that learning experiences shape perceptions, expectations, and behavior. This theory is a development of Social Learning Theory, which later became known as Social Cognitive Theory.

Financial Behavior

For employees, the ability to manage personal finances plays a crucial role in maintaining economic stability and supporting comfort while working. Perry and Morris (2005) define financial behavior as the management of financial resources through decision-making that supports an individual's economic well-being. This behavior is reflected in various activities, such as managing expenses, budgeting, saving, managing debt, and determining investment choices. Making the right decisions in each of these aspects can help achieve a healthier financial condition. Therefore, financial behavior is a key topic in behavioral finance because it explains how rational and psychological considerations influence a person's financial decisions.

Financial Anxiety

Financial anxietyFinancial anxiety is a psychological condition characterized by feelings of discomfort, anxiety, and excessive stress regarding one's financial situation. This anxiety reflects a negative emotional reaction to a financial situation, which can affect how a person thinks, makes decisions, and behaves in managing their money. According to Archuleta, Dale, and Spann (2013), financial anxiety is an emotional response or psychological stress related to one's financial situation, including the fear of not meeting financial obligations. These feelings can cause individuals to be reluctant to make financial decisions, avoid financial planning, or even trigger consumptive behavior as a form of escape from anxiety.

Financial Technology (Fintech)

The ease of accessing various financial services today is inseparable from the presence of Financial Technology (fintech). Gomber, Koch, and Siering (2018) explain that fintech is a technology-based innovation applied to various financial services, such as payment systems, financing, investment, insurance, and personal financial management. In line with this view, Lee and Shin (2018) state that fintech combines financial services with technology to increase service efficiency while providing a more practical experience for users. The presence of this innovation is one tangible impact of the rapid development of information technology, which has transformed the way people utilize financial services.

Financial Knowledge

The ability to make sound economic decisions is influenced by an individual's understanding of various basic financial concepts. This understanding is reflected in the ability to manage expenses, set aside funds for savings, make investments, and consider the potential risks of each financial decision. In financial literacy studies, this ability is known as financial knowledge, which is a component that indicates an individual's level of mastery of basic financial information and principles.

Financial Confidence

Financial confidenceFinancial self-confidence is a form of individual confidence in their ability to manage, plan, and make decisions related to finances effectively. This concept describes a person's confidence in facing financial challenges and in using their financial knowledge to achieve financial well-being. According to Atkinson and Messy (2012), financial confidence encompasses the extent to which an individual feels capable of making sound financial decisions and the extent to which they believe their actions will produce the desired financial outcomes. Morris et al. (2022) add that financial confidence is an individual's confidence in their ability to understand, manage, and plan finances effectively. Meanwhile, Tiento & Anwar (2023) explain that financial confidence is a person's feeling of certainty that they are capable of managing finances, making investment decisions, and assessing the effectiveness of their actions independently.Referring to Morris et al. (2022), Tiento & Anwar (2023), financial confidence indicators include:

1. Confidence in managing personal finances.
2. Confidence in making investment decisions.
3. Confidence in planning your financial future.
4. Confidence in facing financial risks and uncertainties.
5. Confidence that the financial decisions taken are appropriate and effective.

The Role of Income as Moderation

Income is one of the most fundamental economic variables influencing an individual's well-being and financial behavior. Another definition of income is the total amount of income received by an individual or household during a given period, either in cash or in kind, as a result of economic activities or work (Sukirno, 2016). In a personal context, income is a primary economic resource that determines a person's ability to meet their living needs, create financial plans, and make financial decisions. Individuals with high incomes have a greater potential to save, invest, and participate in productive economic activities than those with low incomes. Furthermore, income is also an important factor in the perception of subjective financial well-being.

The Role of Moderation

In this study, income level served as a moderating variable, determining the influence of financial confidence, knowledge, technology, and anxiety on financial behavior. Differences in income cause the relationship between these variables to be heterogeneous across individuals. Therefore, income can alter the strength and direction of the influence of the independent variables on financial behavior, either by strengthening or weakening the established relationship.

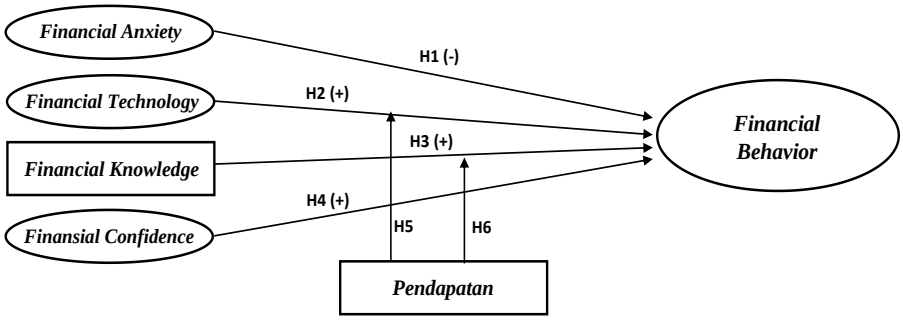


Figure 1. Thinking Framework
Source: Author, processed

METHOD

The subjects of this study were employees of PT Kimia Farma Diagnostika who work at the head office, units, and branches in Indonesia. A total of 185 respondents were selected through a purposive sampling technique with a non-probability sampling approach. These respondents were permanent employees who receive a monthly income and have used financial technology services. Primary data was obtained from a Google Forms questionnaire distributed online to 500 employees, of which only 185 questionnaires met the criteria for analysis. The study employed a quantitative approach with an explanatory and cross-sectional design to examine the influence of financial technology services on employee engagement.financial confidence, knowledge, technology, and anxietywith financial behaviorand income as moderating variables. Data collection was conducted through a survey method using an interval scale for the variables.financial confidence, technology, behavior, and anxiety, a ratio scale for financial knowledge, and an ordinal scale for income. All data were processed using SmartPLS with descriptive analysis, reliability and validity testing, inner and outer model evaluation, and hypothesis testing using the Partial Least Squares Structural Equation Modeling (PLS-SEM) approach.

RESULTS AND DISCUSSION

Research Subjects

The research questionnaire was distributed to 500 respondents to be filled in all work unit areas throughout Indonesia via Google Form and only a number of respondents filled out the questionnaire according to the criteria in answering and further testing will be carried out as represented in Table.

Table 1. Number of Respondents

Information	Total Respondents
Questionnaires distributed	500
Unresponsive questionnaires	149
Questionnaires that do not meet the criteria	166
Number of respondent samples	185

Source: Processed Primary Data

The description of the research subjects aims to describe the characteristics of the respondents' profiles, totaling 185 people as employees working at PT. Kimia Farma Diagnostika and identified according to the category of work unit area, job level, marital status, length of service, educational history, age, and gender.

Description of Research Variables

Financial Anxiety

Based on the research results, the financial anxiety variable had an average mean score of 4.01, categorized as anxious. This represents that the majority of respondents experienced anxiety regarding their financial condition. This level of anxiety is reflected in all indicators that obtained a mean value in the anxious category. The indicator with the highest mean value was the tendency to avoid discussions or decisions related to money (FA3) at 4.18. These results indicate that the majority of respondents tended to avoid discussing financial matters when facing financial pressure. Furthermore, the indicator of feeling stressed or depressed due to financial problems (FA2) obtained a mean score of 4.03, indicating that most respondents felt psychological pressure due to their financial condition. Meanwhile, the indicator of feeling worried about their personal financial condition (FA1) had a mean score of 4.01, indicating that the majority of respondents felt worried about their personal financial condition. The indicator of feeling afraid of losing financial stability in the future (FA5) obtained a mean score of 3.96, while the indicator of difficulty focusing on work due to worrying about financial conditions (FA4) had a mean score of 3.90. Both indicators are also in the anxiety category, so it can be concluded that respondents have a relatively high level of financial anxiety in all aspects measured.

Financial Confidence

Based on the research results, the financial confidence variable had an average mean score of 4.15, categorized as self-confidence. This data represents that the majority of respondents have a high level of confidence in their ability to manage their personal finances. The indicator with the highest mean score was the belief that the financial decisions taken were correct (FC5) with a value of 4.18. Furthermore, confidence in setting and achieving long-term financial goals (FC3) obtained a mean score of 4.17, followed by confidence in making investment decisions (FC2) at 4.16. The indicator of feeling calm in facing financial risks (FC4) had a mean score of 4.14, while confidence in being able to manage personal finances well (FC1) obtained a mean score of 4.13. All indicators are in the self-confidence category, so it can be concluded that respondents have good confidence in managing finances, making investment decisions, planning financial goals, facing financial risks, and believing that the financial decisions taken are appropriate.

Financial Technology

Based on the research results, the financial technology variable had an average mean score of 4.13, classified as good. These results indicate that the majority of respondents have utilized digital financial technology well in financial management activities. The indicator with the highest mean score was the ability to use digital financial applications such as mobile banking and e-wallets (FT1) with a value of 4.17. Furthermore, the use of financial applications to record expenses and savings (FT3) obtained a mean score of 4.15, while the perception that using digital financial applications is safe and easy (FT4) had a mean score of 4.13. The use of digital financial applications for financial transactions (FT2) obtained a mean score of 4.11, while the belief that digital financial services can help manage finances well (FT5) obtained a mean score of 4.10. All indicators were classified as good. Therefore, it can be concluded that respondents have good skills in using digital financial technology and utilize it to support daily financial management activities.

Financial Knowledge

Based on the research results, the respondents' overall financial knowledge level obtained an average score of 59.59%, thus falling into the low category. Based on the measured indicators, basic savings knowledge obtained an average score of 63.25% and is included in the moderate category. This result is supported by the percentage of correct answers in FK1 of

60.0% and FK2 of 66.5%. Basic investment knowledge is also in the moderate category with an average score of 61.26%, as reflected in the percentage of correct answers in FK8 of 69.7%, FK9 of 56.8%, and FK10 of 57.3%. Conversely, basic credit knowledge is classified as low with an average score of 57.10%, as indicated by the percentage of correct answers in FK3 of 55.1%, FK4 of 66.5%, and FK5 of 49.7%. Basic insurance knowledge also fell into the low category, with an average score of 56.75%, derived from 58.4% of correct answers for FK6 and 55.1% for FK7. Among all indicators, credit knowledge was the aspect with the lowest level of mastery among respondents. Furthermore, the standard deviation value of 19.15 indicates that respondents' financial knowledge levels were relatively homogeneous. This condition is thought to be influenced by the characteristics of respondents who came from the same company, namely PT Kimia Farma Diagnostika, thus having a relatively uniform level of financial knowledge.

Financial Behavior

Based on the research results, the financial behavior variable had an average mean score of 4.19, classified as good. This result represents that the majority of respondents have implemented good financial behavior in their daily lives. The indicator with the highest mean score was the habit of setting aside a portion of income for an emergency fund (FB5) with a value of 4.28, followed by adherence to a planned spending budget (FB4) with a mean score of 4.25. Both indicators are included in the very good category. Meanwhile, the habit of setting aside a portion of income for savings and investment (FB3) obtained a mean score of 4.19. Paying bills on time (FB1) and paying bills in full according to the amount of the bill (FB2) each obtained a mean score of 4.18. In addition, the habit of setting aside funds for insurance independently (FB7) had a mean score of 4.22.

Meanwhile, the allocation of funds for retirement outside of company or government programs (FB6) received a mean score of 4.07. All indicators were categorized as good to very good. Therefore, it can be concluded that respondents demonstrated positive financial behavior, particularly in budget management, establishing an emergency fund, paying financial obligations, and long-term financial planning.

Income

The distribution of respondents' income shows that the research sample is dominated by employees with a middle income level. The group receiving an income of Rp3,000,001–Rp5,000,000 per month covers 37.3% or 69 respondents. Outside this group, 23.2% (43 respondents) are still at an income level below Rp3,000,000. Meanwhile, the proportion of respondents earning Rp5,000,001–Rp7,000,000 and more than Rp10,000,000 is relatively balanced, reaching 18.4% (34 respondents) and 17.8% (33 respondents), respectively. In contrast to other categories, the income range of Rp7,000,001–Rp10,000,000 is only occupied by 6 respondents or 3.2% of the total sample. This pattern indicates that the characteristics of respondents are more concentrated in the middle income group than the high income group.

Research Result

Outer Model Analysis Results

Validity Test Results

Convergent Validity



Figure 2. PLS Algorithm Estimation Results
Source: Processed Primary Data

The outer loading value of each indicator exceeded 0.50, as represented in Table 1 of the convergent validity test results. Therefore, the convergent validity assumption for each indicator was met and declared valid in measuring the constructs of income, financial behavior, knowledge, technology, confidence, and anxiety.

Table 2. ResultsInternal Consistency Testing

Construct	Composite Reliability(rho_a)	Composite Reliability(rho_c)	Average Variance Extracted(AVE)
Financial Anxiety(X1)	0.865	0.901	0.646
Financial Confidence(X2)	0.854	0.893	0.625
Financial Technology(X3)	0.862	0.899	0.640
Financial Behavior(Y)	0.881	0.906	0.580

Source: Processed Primary Data

All indicators have passed the instrument quality test, so the regression model is suitable for entering the structural analysis stage because all indicators have passed the instrument quality test. Based on the SEM-PLS estimation results in Table 2, each construct obtained a composite reliability value, both rho_a and rho_c, exceeding the minimum limit of 0.70. This value represents that all constructs have a good level of internal consistency. Furthermore, the results of the outer model evaluation confirmed that each indicator has met the criteria for reliability, discriminant validity, and convergent validity. Therefore, the measurement model is categorized as feasible and can be implemented in the structural model analysis stage.

Reliability Testing

Table 3. Reliability Test Results

Variables	Cronbach's Alpha	Minimum Value	Information
Financial Anxiety(X1)	0.863	0.70	Reliable
Financial Confidence(X2)	0.850	0.70	Reliable
Financial Technology(X3)	0.859	0.70	Reliable
Financial Behavior(Y)	0.879	0.70	Reliable

Source: Processed Primary Data

All research instruments met the reliability criteria because each variable obtained a Cronbach's Alpha value exceeding the standard of 0.70. Based on the results in Table 4.6, the reliability values for financial anxiety (X1), financial confidence (X2), financial technology (X3), and financial behavior (Y) were 0.863; 0.850; 0.859; and 0.879, respectively. These results represent the consistency and feasibility of each question in the questionnaire for collecting research data.

Inner Model Analysis Results

Multicollinearity Testing

Table 4. Multicollinearity Test Results

Independent Construct	VIF Value Against Financial Behavior (Y)
Financial Anxiety(X1)	1,624
Financial Confidence(X2)	1,755
Financial Technology(X3)	1,878
Financial Knowledge(X4)	1,075
Income (M)	1,055
Income x Financial Technology	1,079
Income x Financial Knowledge	1,089

Source: Processed Primary Data

The data representation in Table 4 related to the results of the collinearity level analysis on the influence path on financial behavior, it is known that the VIF value for the variables financial anxiety, financial confidence, financial technology, financial knowledge, income, the interaction of income on financial technology and financial knowledge produces a value of less than 5, so that the test results are met and declared free from multicollinearity.

Analysis of Coefficients of Determination (R2)

One way to assess a structural model in research is by reviewing the R^2 value for each endogenous construct. This value is used to represent the extent to which the variation in endogenous variables can be explained by the exogenous variables contained in the model. Based on the opinion of Hair Jr. et al. (2017), the interpretation of R^2 is divided into three categories: strong, moderate, and weak, each with a value of 0.75; 0.50; and 0.25, respectively. A summary of the results of the R^2 calculation for each endogenous construct is shown in Table 4.18.

Table 5. Coefficient of Determination (R2)

Endogenous Construct	Mark R2	MarkAdjusted-R2	Category
Financial Behavior(Y)	0.770	0.761	Substantial

Source: Processed Primary Data

The evaluation results in Table 5 show that the financial behavior construct (Y) obtained an R-Square value of 0.770. This value indicates that 77% of the variation in financial behavior can be explained by all exogenous constructs used in the model, while the remainder is influenced by variables outside the study. The large R-Square value indicates a strong or substantial category in explaining the variation in endogenous variables by exogenous variables. The adjusted R-Square value of 0.761 confirms that after considering sample size and independent variables, the model is still able to explain 76.1% of the variation in financial behavior, so the level of model stability can be said to be good.

This value is important because it provides a more realistic picture of the model's strength, particularly to avoid bias caused by the addition of less relevant variables. The relatively small difference between the R2 and adjusted R2 values indicates that the independent variables used are indeed relevant and contribute significantly to explaining

financial behavior. Therefore, the research model can be categorized as good and suitable for application as a basis for drawing conclusions and further discussion regarding the factors influencing financial behavior.

Analysis Predictive Relevance(Q-Square)

Table 6. Predictive Relevance Values of Q2

Endogenous Construct	Q2 Value	Category
Financial Behavior(Y)	0.426	Big

Source: Processed Primary Data

The Q^2 values presented in Table 6 are all above 0, indicating the model has predictive relevance. These results indicate that variables X1, X2, X3, X4, and Z are able to contribute to predicting endogenous variables. Thus, the PLS-SEM model used has good predictive relevance, allowing exogenous constructs to explain variations in construct Y, including construct Z analyzed in the research model.

f2 analysis

Table 7. f2 Analysis Results

Construct	Markf2 Against Financial Behavior(Y)
Financial Anxiety(X1)	0.302
Financial Confidence(X2)	0.435
Financial Technology(X3)	0.144
Financial Knowledge(X4)	0.045
Income (M)	0.001
Income x Financial Technology	0.006
Income x Financial Knowledge	0.014

Source: Processed Primary Data

According to the data presented in Table 7, financial anxiety (X1) has a significant influence, with an f2 of 0.302, which is classified as a moderate to large influence. This indicates that the level of financial anxiety plays a crucial role in developing individual financial behavior; the higher or lower the financial anxiety, the more significant the changes in financial behavior. Financial confidence (X2) has an f2 value of 0.435 on financial behavior (Y). This value falls into the category of a large influence, representing financial self-confidence as a very dominant factor in explaining variations in financial behavior. This means that changes in financial confidence will have a stronger impact on financial behavior than other variables in the model.

Furthermore, financial technology (X3) showed an f2 value of 0.144, which falls into the moderate influence category. This indicates that the use of financial technology contributes moderately to financial behavior, although its influence is not as strong as financial confidence or financial anxiety. Financial knowledge (X4) had an f2 value of 0.045, which is classified as a small influence, so its contribution to financial behavior is relatively limited.

Income (M) and its moderating effect show very small f2 values. Income (M) has a value of 0.001, while the interaction of income (M) with financial technology (X3) is 0.006 and with financial knowledge (X4) is 0.014. These values are below the small influence limit, indicating that neither income nor its role as a moderating variable contributes significantly to financial behavior in this model. Thus, overall, psychological factors and financial self-confidence are more dominant than income and its interaction.

Model Fit Analysis

Table 8. Goodness of Fit Test Results

	Saturated Model	Estimated Model
SRMR	0.062	0.062
NFI	0.808	0.809

Source: Processed Primary Data

The goodness of fit evaluation indicates that the model has been constructed in accordance with the eligibility criteria. The SRMR value of 0.062 does not exceed the standard of 0.08, thus indicating that the conceptual model has an acceptable level of suitability. In addition, the NFI value reached 0.809, which reflects a high level of model suitability. Hair Jr. et al. (2017) grouped the Goodness of Fit (GoF) values into three categories: high, medium, and low, each valued at 0.36; 0.25; and 0.10, respectively. Based on these results, the research model is able to represent empirical data well so that the relationship in the measurement model and the structural model can be explained adequately.

Hypothesis Testing Results



Figure 3. PLS Bootstrapping Results

Source: Processed Primary Data

The hypothesis is accepted or rejected by evaluating the path coefficient values generated from the bootstrapping process on the main model using SmartPLS software. Inter-variable relationships are interpreted based on three parameters: a T-statistic not exceeding 1.96, a path coefficient value (original sample), and a p-value below 0.05. These three indicators are used to assess the level of significance, magnitude of influence, and direction of the relationship between each variable and financial behavior (Y).

Table 9. Results of Testing the Influence Between Variables

Influence between variables	Coeff.	T-Stat	P-Value	Information
Financial Anxiety(X1)→Financial Behavior (Y)	0.336	4,262	0.000	H1 accepted
Financial Confidence(X2)→Financial Behavior (Y)	0.419	4,518	0.000	H2 accepted
Financial Technology(X3)→Financial Behavior (Y)	0.250	2,690	0.007	H3 is accepted
Financial Knowledge(X4)→Financial Behavior (Y)	-0.105	2,232	0.026	H4 is rejected
Revenue x Financial Technology (X3)→Financial Behavior (Y)	-0.034	0.662	0.508	H5 is rejected
Income x Financial Knowledge (X4)→Financial Behavior (Y)	0.055	1,271	0.204	H6 is rejected

Source: Processed Primary Data

Research data information obtained by referring to Table 9, namely:

1. H1 was accepted, stating that financial behavior (Y) of employees at PT. Kimia Farma Diagnostika was significantly positively affected by financial anxiety (X1), as evidenced by the T-statistic, p-value, and coefficient values of 4.262, 0.000, and 0.336, respectively. This finding indicates that increasing financial anxiety encourages individuals to pay more attention to their financial management.
2. H2 was accepted, stating that financial behavior (Y) of employees at PT. Kimia Farma Diagnostika was significantly positively influenced by financial confidence (X2), as evidenced by the T-statistic, p-value, and coefficient values of 4.518, 0.000, and 0.419, respectively. These results indicate that the higher an individual's confidence in managing finances, the better their financial behavior.
3. H3 was accepted, stating that financial behavior (Y) of employees at PT. Kimia Farma Diagnostika is significantly positively influenced by financial technology (X3), as evidenced by the T-statistic, p-value, and coefficient values of 2.690, 0.007, and 0.250, respectively. This finding represents that the use or utilization of financial technology can encourage more active or directed financial behavior, although its influence is not as great as financial confidence and financial anxiety.
4. There was a rejection of H4 which stated that financial behavior (Y) in employees at PT. Kimia Farma Diagnostika was negatively affected by financial knowledge (X4) as evidenced by the T-statistic, p-value, and coefficient values of 2.232; 0.026; and 0.105, respectively. This information represents an increase in financial knowledge not always followed by an increase in financial behavior. This condition indicates a gap between theoretical understanding and its application in daily financial management practices.

Testing the moderating effect of income (Z) also showed no significant results. The interaction between income and financial technology (X3) obtained a p-value of 0.508, while the interaction between income and financial knowledge (X4) produced a p-value of 0.204. These values indicate that income level does not change the strength of the relationship between the two variables and financial behavior (Y). This finding indicates that employee financial behavior is more influenced by internal factors, such as psychological aspects and individual abilities, than by differences in income levels. Therefore, the fifth hypothesis (H5) and the sixth hypothesis (H6) are declared unsupported.

Discussion

The Influence of Financial Anxiety on Financial Behavior

Financial anxiety does not always result in poor financial behavior. In PT Kimia Farma Diagnostika employees, this condition is actually associated with increased financial behavior. Test results show that financial anxiety has a significant positive effect, indicating that worry about financial circumstances can encourage individuals to be more careful in managing expenses, evaluating their financial condition, and planning for future needs. This finding differs from most previous studies that link financial anxiety to decreased financial behavior, such as poor savings habits, poor budgeting, irrational financial decisions, and an increased tendency to engage in emotional spending when facing economic pressure (Perry et al., 2023; Sabri & Falahati, 2020). These differences indicate that individual responses to financial anxiety vary. According to Archuleta et al. (2013), financial anxiety is an emotional reaction in the form of worry, tension, and fear that arises from difficulties meeting financial obligations. Within the framework of the Theory of Planned Behavior, Ajzen (1991) explains that an individual's perception of their ability to control their behavior (perceived behavioral control) influences the actions they take. Therefore, if anxiety is responded to adaptively, individuals can be motivated to improve their financial management. The findings of this study

indicate that financial anxiety among PT Kimia Farma Diagnostika employees serves more as a catalyst for increased vigilance in financial decision-making than as a barrier to developing sound financial behavior.

The Influence of Financial Confidence on Financial Behavior

In Social Cognitive Theory, Bandura (1986) explains that a person's belief in their abilities (self-efficacy) plays a role in shaping their thinking, motivation, and behavior when facing a situation, including financial decision-making. In line with this concept, Morris et al. (2022) define financial confidence as an individual's level of confidence in their skills in planning, managing, and understanding personal finances. Individuals with high levels of financial confidence are generally better equipped to develop financial plans, control expenses, save, invest, and face financial risks more wisely. The results of the analysis on PT Kimia Farma Diagnostika employees indicate that financial confidence significantly influences financial behavior, even being the variable with the largest contribution compared to other independent variables. This finding reinforces the results of Morris et al.'s (2022) research, which proved the direct influence of financial confidence on financial behavior, and is in line with the findings of Mien and Thao (2015), who positioned financial confidence as a psychological factor that links financial knowledge with actual financial behavior. Therefore, increasing self-confidence in managing finances, supported by knowledge and emotional control, has the potential to encourage the formation of more rational, planned, and financial well-being-oriented financial behavior.

The Influence of Financial Technology on Financial Behavior

The findings of this study indicate that financial technology significantly positively influences the financial behavior of PT Kimia Farma Diagnostika employees. This finding indicates that the use of financial technology can encourage better financial behavior, although the impact is not as significant as financial confidence and financial anxiety. The development of digital technology has reformed the way individuals access and manage financial services. According to the Financial Services Authority (OJK) (2022) and Lee and Shin (2018), financial technology is the use of digital technology to provide more efficient, accessible, and inclusive financial services. Based on Social Cognitive Theory (Bandura, 1986), financial technology acts as an environmental factor that influences behavior through observational learning and self-regulation mechanisms, allowing individuals to monitor and control their financial condition more effectively. This finding is supported by Sabri et al. (2024), who stated that the use of digital financial applications can improve positive financial behavior by facilitating planning and monitoring of expenses. Furthermore, Dewi (2022) explained that financial technology encourages people to be more active in saving and investing because the transaction process becomes faster and more transparent. In the context of this research, the use of mobile banking, digital wallets, and online investment platforms helps employees manage income, record cash flow, conduct transactions, and plan savings more efficiently. However, these benefits can only be realized if supported by good financial literacy and self-control, because without these two factors, technology has the potential to encourage consumptive behavior such as impulse buying and excessive use of paylater facilities (Suryono et al., 2023). Therefore, the findings of this study indicate that financial technology makes a positive contribution to financial behavior by making it easier for individuals to access, manage, and monitor daily financial activities.

The Influence of Financial Knowledge on Financial Behavior

Data analysis found that financial knowledge significantly negatively affected the financial behavior of PT Kimia Farma Diagnostika employees. This finding indicates that an

increase in financial knowledge was accompanied by a decrease in financial behavior, as measured in the study, indicating a gap between knowledge and financial management practices. From the perspective of Behavioral Finance Theory and the Theory of Planned Behavior (Ajzen, 1991), adequate financial understanding is expected to encourage individuals to make more rational decisions, reduce cognitive biases, and develop positive attitudes in managing finances. In line with this view, Lusardi and Mitchell (2014) define financial knowledge as mastery of basic financial concepts, such as budgeting, savings, investment, interest, and risk, which form the basis for financial decision-making. Various previous studies have also reported that financial knowledge can improve the quality of financial behavior through income management, expenditure control, saving habits, and investment activities (Sabri et al., 2023; Tiento & Anwar, 2023; Rengga, 2024). However, the results of this study indicate a different direction of the relationship from previous studies. This condition indicates that respondents' financial knowledge has not yet been fully translated into practical financial behavior. In other words, understanding financial concepts is not necessarily followed by consistent application in daily life, so psychological factors and habits likely play a more dominant role in developing financial behavior than financial knowledge alone.

Income Moderation

In this research model, income is positioned as a moderating variable, conceptually predicted to alter the relationship between financial anxiety, financial technology, financial knowledge, and financial confidence on financial behavior. This assumption is based on the view that individuals with higher incomes generally have greater opportunities to utilize various digital financial services, such as app-based investments and automated savings, and are better able to apply financial knowledge due to the support of more adequate financial resources. Conversely, limited income often forces individuals to use financial technology only for basic transaction needs and limits the application of broader financial management strategies. Nevertheless, the analysis results indicate that income does not have a significant moderating effect on the relationship between financial technology and financial knowledge with financial behavior among PT Kimia Farma Diagnostika employees. In other words, differences in income levels do not change the direction or strength of the relationship between these two variables on financial behavior. This finding indicates that the formation of financial behavior is more influenced by internal factors, such as financial management skills, self-confidence, and psychological conditions, rather than by the amount of income received. The results of this study differ from the findings of Lusardi and Mitchell (2017) and Pranata et al. (2024), which explains that income can strengthen the influence of financial literacy on financial behavior because individuals with higher incomes have greater flexibility in allocating their financial resources. Therefore, for PT Kimia Farma Diagnostika employees, income has not been shown to play a moderating role in the relationship between financial technology and financial knowledge and financial behavior.

CONCLUSION

The research findings confirm that the model only partially supports the proposed relationships. Financial anxiety, financial confidence, and financial technology are shown to contribute significantly to explaining changes in financial behavior. Conversely, financial knowledge remains significant, but with a negative relationship. Furthermore, income has not yet demonstrated a moderating role, as it does not alter the relationship between financial technology or financial knowledge and financial behavior.

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