



Behavioral Bias in the Use of Fintech Applications Among Generation Z

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Abstract. *The rapid development of globalization and digital technology has significantly transformed financial systems and public financial behavior, particularly among Generation Z. The emergence of financial technology (fintech) has provided easier access to digital financial services such as e-wallets, online investment platforms, mobile banking, and buy now pay later (paylater) services. However, the increasing use of fintech is also associated with various psychological and behavioral biases that influence financial decision-making. This study aims to analyze the influence of behavioral bias on fintech usage among Generation Z by examining the effects of overconfidence, herding behavior, and fear of missing out (FoMO) on digital financial behavior. This research employs a quantitative approach using associative research methods. Data were collected through online questionnaires distributed to Generation Z fintech users in Indonesia. The sampling technique used was purposive sampling, and the collected data were analyzed using multiple linear regression analysis with the assistance of SPSS/SmartPLS software. The results indicate that overconfidence, herding behavior, and FoMO have positive and significant effects on fintech usage among Generation Z. FoMO was identified as the most dominant factor influencing digital financial behavior due to the strong influence of social media and digital trends. The findings support the behavioral finance theory, which explains that financial decisions are not solely based on rational considerations but are also influenced by psychological, emotional, and social factors. This study contributes theoretically to the development of behavioral finance literature in the context of digital finance and provides practical implications for fintech companies and regulators in improving financial literacy and promoting responsible digital financial behavior among Generation Z.*

Keywords: *Behavioral Finance, Financial Technology, Generation Z, Overconfidence, Herding Behavior, Fear of Missing Out (FoMO).*

1. INTRODUCTION

The development of globalization and digital transformation has driven significant changes in the global financial system, including the emergence of financial technology (*fintech*), which has become increasingly integrated into modern society. Fintech provides various digital financial services such as mobile banking, e-wallets, paylater services, and online investment platforms that facilitate public access to financial services in a fast and practical manner. This condition has influenced changes in people's financial behavior, especially among Generation Z, who grew up in the digital era.

Indonesia has become one of the countries with the fastest fintech growth in Southeast Asia. The increasing use of digital financial services is driven by high internet penetration, smartphone usage, and changing consumption patterns in the digital society. This phenomenon can be seen in the rising use of paylater services, digital investments, and online lending among young people. Data show that the largest users of fintech

services come from younger age groups, particularly Millennials and Generation Z, accounting for 57.3% compared to other age groups.

The ease of access to fintech services provides various benefits such as transaction efficiency, financial inclusion, and easier investment access. However, on the other hand, the development of fintech has also created several financial behavioral issues. Generation Z tends to exhibit consumptive and impulsive behavior and is vulnerable to irrational financial decision-making due to psychological influences and the digital environment. Social media, digital investment trends, and instant transaction facilities often trigger behavioral biases such as herding bias, overconfidence, loss aversion, and fear of missing out (FoMO).

From the perspective of behavioral finance, individual financial decisions are not always made rationally but are influenced by emotional, psychological, and social factors. This theory explains that individuals often make decisions based on subjective perceptions, experiences, and social pressure rather than objective financial analysis. In today's digital era, the use of fintech applications further strengthens the emergence of behavioral biases because all financial activities can be carried out instantly through smartphones. Behavioral finance has therefore become an important approach to understanding Generation Z's financial behavior in the digital economy era.

The increasing use of fintech among Generation Z can also be observed from the growing trend of paylater services and digital investments. Many young people utilize these services to fulfill consumptive needs such as fashion, entertainment, and digital lifestyles. This condition indicates that fintech is not only used for productive purposes but also encourages consumptive behavior and short-term financial decision-making.

Furthermore, the development of social media also affects Generation Z's investment behavior. Investment information spreads rapidly through digital platforms such as TikTok, Instagram, Telegram, and Discord, making Generation Z easily influenced by public opinions and certain investment trends without mature risk analysis. This increases the possibility of herding behavior and overconfidence bias in digital investment decision-making.

2. LITERATURE REVIEW

Behavioral Finance

The concept of behavioral finance developed as an approach explaining that individual financial decisions are not always made rationally but are influenced by psychological, emotional, and social factors. Daniel Kahneman and Amos Tversky explained that individuals often experience behavioral biases when making economic decisions, especially under uncertain conditions. In the digital era, the development of financial technology has caused people's financial behavior to become increasingly influenced by psychological factors and the digital social environment.

Previous studies have shown that behavioral finance is closely related to investment behavior and the use of digital financial services. Behavioral biases such as overconfidence, herding behavior, and loss aversion can influence individuals' decisions in using fintech applications and conducting digital investments. Generation Z, as a digital generation, tends to experience higher levels of behavioral bias due to intensive social media use and rapid exposure to digital information.

Financial Technology (Fintech)

Financial Technology (*fintech*) refers to technological innovations used to improve the effectiveness and efficiency of digital-based financial services. Fintech includes various services such as digital payments, mobile banking, online investments, peer-to-peer lending, and buy now pay later (*paylater*) services. The development of fintech has been driven by globalization, internet advancement, and changes in societal behavior toward the digital economy.

Several studies explain that fintech has a positive impact on financial inclusion because it facilitates easier access to financial services for the wider community. However, on the other hand, fintech can also encourage consumptive and impulsive behavior due to the convenience of digital transactions. The increasingly practical use of fintech applications has made people, especially Generation Z, more likely to conduct transactions without carefully considering their financial conditions.

In addition, previous research has shown that fintech usage is influenced by factors such as ease of use, trust, financial literacy, and users' psychological conditions. This

indicates that fintech usage behavior is not only influenced by technological aspects but also by individuals' psychological conditions in making digital financial decisions.

Overconfidence Bias

Overconfidence bias is a behavioral bias in which individuals have an excessively high level of confidence in their abilities and knowledge. In the context of digital finance, individuals often feel confident in making investment decisions or financial transactions without in-depth analysis. Previous studies have shown that overconfidence can increase the frequency of digital financial transactions and high-risk investment decisions.

Among Generation Z, overconfidence bias often arises due to the ease of obtaining information through social media and the internet. Many fintech users feel financially knowledgeable based solely on brief information from influencers, online communities, or certain digital trends. This condition causes individuals to ignore risks and make impulsive decisions.

Herding Behavior

Herding behavior refers to individuals' tendency to follow the actions of groups when making financial decisions. In the digital era, this behavior has increased due to the strong influence of social media and online communities on Generation Z. Many fintech users follow investment trends, use certain applications, or adopt digital consumption patterns because they are influenced by their social environment.

Previous studies have shown that herding behavior can lead to irrational financial decisions because individuals tend to trust group opinions more than personal analysis. In fintech usage, herding behavior is often seen in viral investment phenomena, the use of paylater services, and digital transaction trends circulating on social media.

Fear of Missing Out (FoMO)

Fear of Missing Out (FoMO) is a psychological condition in which individuals feel afraid of missing information, trends, or experiences possessed by others. The development of social media has made FoMO a common phenomenon among Generation Z because they have a very high level of digital connectedness.

In the context of fintech, FoMO can influence the behavior of using digital financial services such as online investments, impulsive purchases through paylater services, and the use of certain digital transaction applications. Previous studies indicate that

individuals with high levels of FoMO are more easily influenced by investment trends and digital promotions circulating on social media. This condition may lead to irrational and high-risk financial decision-making.

Generation Z and Digital Financial Behavior

Generation Z refers to the generation born and raised during the development of the internet and digital technology. The main characteristic of Generation Z is its high level of social media and technology usage in daily life. This condition has made Generation Z the primary user group of fintech services in Indonesia.

Several studies have shown that Generation Z's financial behavior is influenced by technological factors, digital lifestyles, social environments, and psychological factors. This generation tends to be more open to digital financial innovations; however, they also face a higher risk of consumptive, impulsive, and biased financial decision-making behavior. Therefore, studies on behavioral finance among Generation Z are important for understanding fintech usage patterns in the era of digital globalization.

3. RESEARCH METHOD

Research Type and Approach

This study employs a quantitative approach using an associative research method. The quantitative approach is used because the study aims to examine the influence of behavioral bias variables on the use of financial technology (*fintech*) applications among Generation Z through numerical data measurement and statistical analysis. The associative method is used to determine the relationships and influences among research variables, namely overconfidence, herding behavior, and fear of missing out (FoMO) on fintech usage behavior. This approach was chosen because it can provide an empirical, objective, and measurable description of Generation Z's digital financial behavior.

Research Location and Time

This research was conducted on Generation Z individuals who use fintech applications in Indonesia. The research object focused on users of digital financial services such as e-wallets, mobile banking, online investments, and paylater services. The study was carried out during the year 2026, with data collection conducted through online questionnaires distributed using Google Forms to effectively reach Generation Z respondents who actively use digital technology.

Population and Sample

The population of this study consists of all Generation Z individuals using fintech applications in Indonesia. In this research, Generation Z refers to individuals born between 1997 and 2012 who have used fintech services at least once within the last six months. Since the exact population size is unknown, the sampling technique used was non-probability sampling with a purposive sampling method. This technique was applied because respondents were selected based on specific criteria aligned with the research objectives.

The respondent criteria in this study include:

1. Belonging to the Generation Z category.
2. Having used fintech applications such as e-wallets, mobile banking, digital investments, or paylater services.
3. Actively using social media and digital services.

The sample size of this study consisted of 150 respondents, determined using the Hair et al. formula, which suggests a minimum of 5–10 times the number of research indicators.

Data Collection Technique

The data collection technique in this study used primary data obtained through questionnaire distribution to respondents. The questionnaire was designed using a Likert scale ranging from 1 to 5, from strongly disagree to strongly agree. The use of the Likert scale aims to measure respondents' perceptions, attitudes, and behaviors toward the research variables quantitatively. The questionnaires were distributed online through social media and digital platforms widely used by Generation Z.

Operational Definition of Variables

1. Independent Variables (X)

a. Overconfidence (X1)

Overconfidence refers to a condition in which individuals have excessive confidence in their financial abilities and knowledge when using fintech services. The indicators used include:

- Confidence in personal financial abilities
- Confidence in making digital financial decisions

- Ignoring digital transaction risks
- Feeling sufficiently knowledgeable about investments

b. Herding Behavior (X2)

Herding behavior refers to individuals' tendency to follow group decisions or actions in using fintech services. The indicators include:

- Following fintech usage trends
- Being influenced by social media recommendations
- Following other people's investment decisions
- Using popular fintech applications

c. Fear of Missing Out/FoMO (X3)

FoMO is a psychological condition in which individuals feel afraid of missing information or certain digital trends. The indicators include:

- Fear of missing digital investment trends
- Desire to always follow fintech developments
- Feeling anxious when not using certain digital services
- Being encouraged to follow fintech promotions or trends

2. Dependent Variable (Y)

Fintech Usage (Y)

Fintech usage refers to individuals' behavior in utilizing digital financial services in their daily lives. The indicators include:

- Intensity of fintech application usage
- Frequency of digital transactions
- Usage of online investment services
- Usage of paylater services and digital wallets

Data Analysis Technique

Data analysis in this study was conducted using statistical software such as SmartPLS. The stages of data analysis include:

1. Validity Test

Used to determine whether the research instruments are capable of accurately measuring the studied variables.

2. Reliability Test

Used to determine the consistency of respondents' answers to the research instruments.

3. Classical Assumption Test

Includes normality, multicollinearity, and heteroscedasticity tests.

4. Multiple Linear Regression Analysis

Used to determine the influence of overconfidence, herding behavior, and FoMO on fintech usage among Generation Z.

5. t-Test

Used to determine the partial effect of each independent variable on the dependent variable.

6. F-Test

Used to determine the simultaneous influence of all independent variables on fintech usage.

7. Coefficient of Determination (R^2)

Used to determine the extent to which independent variables explain the dependent variable.

4. RESULTS AND DISCUSSION

Research Results

This study was conducted on Generation Z users of financial technology (*fintech*) applications in Indonesia involving 150 respondents. The respondents were dominated by university students, young workers, and active users of digital financial services such as e-wallets, mobile banking, online investments, and paylater services. Based on the questionnaire results, most respondents used fintech applications more than three times a week, indicating the high intensity of digital financial service usage among Generation Z.

The validity test results showed that all research variable indicators had correlation values above the r-table value, meaning that all statement items were declared valid. Furthermore, the reliability test results indicated that Cronbach's Alpha values were greater than 0.70, meaning that the research instruments were reliable and capable of consistently measuring the research variables.

Based on the results of multiple linear regression analysis, the variables of overconfidence, herding behavior, and fear of missing out (FoMO) had positive and significant effects on fintech usage among Generation Z. The partial test results (t-test) showed that:

- Overconfidence positively influenced fintech usage because Generation Z possesses a high level of confidence in using digital financial services.
- Herding behavior significantly influenced fintech usage because respondents tended to follow digital trends and recommendations from social media and their social environment.
- FoMO had the most dominant influence on fintech usage because Generation Z feared being left behind in rapidly developing technological and digital service trends.

In addition, the simultaneous test results (F-test) showed that all behavioral bias variables collectively had a significant influence on fintech usage among Generation Z. The coefficient of determination (R^2) indicated that overconfidence, herding behavior, and FoMO variables were able to explain a substantial portion of the variation in fintech usage behavior among the respondents.

Discussion

The results of this study indicate that behavioral bias has an important influence on fintech usage behavior among Generation Z. These findings support the behavioral finance theory, which explains that individual financial decisions are not always made rationally but are influenced by psychological, emotional, and social factors. As a digital generation, Generation Z has a high level of interaction with technology and social media, making them more vulnerable to behavioral biases in digital financial decision-making.

The positive influence of overconfidence indicates that Generation Z tends to have high self-confidence in their ability to use fintech applications and make digital financial decisions. The ease of obtaining information through the internet and social media causes respondents to feel sufficiently knowledgeable about investments and digital transactions. However, excessive confidence may increase the risk of irrational decision-making and ignoring potential financial losses. These findings are consistent with previous studies

stating that overconfidence can increase digital transaction behavior and high-risk investment decisions.

Furthermore, the study results show that herding behavior significantly influences fintech usage. This condition indicates that Generation Z tends to follow digital service usage trends that develop within social environments and social media. Recommendations from influencers, digital communities, and online investment trends become factors influencing respondents' decisions in using certain fintech applications. This phenomenon demonstrates that digital financial decisions are often influenced by social pressure and group behavior rather than rational personal analysis.

FoMO was identified as the most dominant variable affecting fintech usage in this study. The high use of social media causes Generation Z to feel the need to follow technological developments and digital trends to avoid being left behind by their social environment. This condition encourages respondents to use various fintech services such as online investments, digital wallets, and paylater services even though they may not fully understand the associated risks. These findings indicate that psychological factors have a very strong influence on Generation Z's digital financial behavior in the era of globalization and digital transformation.

The results of this study also indicate that fintech development has both positive and negative impacts on people's financial behavior. On one hand, fintech improves transaction convenience, efficiency, and financial inclusion. On the other hand, easy access to digital financial services can trigger consumptive, impulsive, and less rational financial behavior if not balanced with adequate financial literacy. Therefore, fintech companies and regulators need to improve financial education and consumer protection so that digital financial services can be used more wisely and responsibly.

5. CONCLUSION

This study concludes that behavioral bias significantly influences fintech usage among Generation Z in Indonesia, thereby confirming the initial research hypothesis. The results demonstrate that overconfidence, herding behavior, and fear of missing out (FoMO) each have a positive and significant effect on digital financial behavior, with FoMO emerging as the most dominant factor. These findings affirm that financial decisions in the digital era are not solely driven by rational considerations but are also

shaped by psychological, emotional, and social pressures. Consequently, the increasing adoption of fintech services among Generation Z must be accompanied by strengthened financial literacy and more responsible usage. For fintech companies and regulators, these results imply a need to design better consumer protection mechanisms and digital financial education programs tailored to young users. A limitation of this study is its exclusive focus on Generation Z in Indonesia, which restricts the generalizability of the findings to other generational or cultural contexts. Future research is encouraged to expand the sample scope, incorporate additional behavioral bias variables such as loss aversion or confirmation bias, and employ longitudinal methods to examine how fintech usage behavior evolves over time.

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