# THE IMPACT OF FINTECH ON FINANCIAL BEHAVIOR WITH SAVING BEHAVIOR AS MEDIATING VARIABLE ON CIVIL SERVANTS IN TANJUNGPINANG

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# **ABSTRACT**

This study investigates the impact of fintech on financial behavior with saving behavior as a mediating variable among civil servants (PNS) in Tanjungpinang. Using a quantitative approach, data were collected through structured questionnaires from 100 respondents and analyzed using Smart-PLS. The results indicate that fintech usage significantly enhances financial behavior both directly and indirectly through improved saving behavior. The mediation analysis confirms that saving behavior partially mediates the relationship between fintech usage and financial behavior, highlighting the importance of fintech in promoting better financial practices. These findings suggest potential strategies for policymakers and financial institutions to encourage fintech adoption and improve financial health among users.

**Keyword:** - Fintech, Financial Behavior, Saving Behavior

## 1. RESEARCH BACKGROUND

Fintech (financial technology) has brought significant changes in the way individuals manage their finances. In this digital era, various fintech services such as digital payments, online loans, and app-based investments are gaining popularity and influencing users' financial behavior. Fintech offers unprecedented convenience and flexibility in financial transactions. For instance, digital payment applications enable users to complete transactions quickly and securely without the need for cash or physical cards. According to the PWC Global Fintech Report (2024), fintech has revolutionized consumer interactions with financial services, driving financial inclusion and transforming financial behaviors.

Additionally, online loans provided by various fintech platforms offer easier and quicker access to funds compared to traditional banking procedures. However, this convenience comes with potential risks, such as increased consumer debt if not accompanied by adequate financial literacy. A study by the European Banking Authority (EBA) in 2024 highlights that while fintech can enhance access to financial services, there is an urgent need to improve financial literacy among users to mitigate the risks associated with easy credit availability.

Civil servants (PNS) in Tanjungpinang, as part of the community with fixed incomes, are not exempt from the impact of fintech. PNS often have better access to technology and financial services but still face challenges in managing expenditures and saving. With fintech, PNS have various options to manage their finances more efficiently. For example, app-based investment platforms allow them to invest small amounts of money and receive real-time investment information. A 2024 study by McKinsey & Company indicates that the use of financial technology can significantly enhance the efficiency and effectiveness of personal financial management.

However, there are concerns that increased access to online loans might lead to excessive consumer spending if not properly managed. In this context, saving behavior becomes an important aspect to consider. Saving is a crucial indicator of an individual's financial health. With fintech, civil servants have more options for saving, whether through digital savings accounts, online deposits, or short-term investment programs offered by fintech

platforms. Research by the World Bank in 2024 found that digital financial services, including digital savings, can significantly improve saving rates among users, providing them with better financial security and stability.

In its use, civil servants often use QRIS as a medium provided by the bank where civil servants save their money. Later the money paid will be debited from the account according to the amount issued. The use of QRIS has now become a lifestyle in minimizing the use of physical money.

Research question for this research:

- a. How is the direct effect of fintech on financial behavior?
- b. How is the direct effect of saving behavior on financial behavior?
- c. How is the indirect effect of fintech on financial behavior through saving behavior?

#### 2. LITERATURE

a. Introduction to Fintech and Financial Behavior:

Fintech (financial technology) refers to the innovative use of technology in the design and delivery of financial services. It has significantly transformed how individuals manage their finances, offering tools for digital payments, online loans, and investment platforms. Fintech solutions provide users with convenience, efficiency, and accessibility, thus reshaping their financial behaviors. According to Arner, Barberis, and Buckley (2015), fintech disrupts traditional financial services by introducing new ways of delivering financial products and services that are more user-friendly and cost-effective.

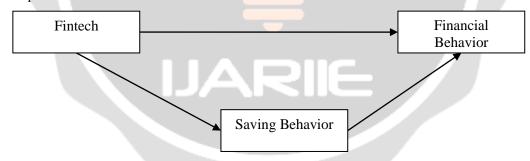
b. Influence on Financial Behavior:

The adoption of fintech services influences various aspects of financial behavior. Research indicates that fintech adoption can lead to more informed financial decisions, improved spending habits, and better access to credit. Lee and Shin (2018) discuss that fintech can enhance financial literacy by providing users with real-time data and analytics, which helps in making better financial decisions.

c. Saving Behavior as a Mediating Variable:

Saving behavior, a critical aspect of financial health, is often influenced by the availability and use of fintech services. Fintech platforms offer various saving tools, such as digital savings accounts, automated saving plans, and micro-investment options, which encourage users to save more effectively. Xiao and Porto (2017) emphasize that fintech applications can foster a saving culture by making the process more accessible and less cumbersome.

Conceptual framework for this research is:



Research hypotheses are:

- a. Fintech has a direct effect on financial behavior.
- b. Saving behavior has a direct effect on financial behavior.
- c. Fintech has an indirect effect on financial behavior through saving behavior.

## 3. RESEARCH METHODS

This study employs a quantitative research design to explore the impact of fintech on financial behavior, with saving behavior acting as a mediating variable. The design focuses on collecting and analyzing numerical data to identify patterns and test hypotheses. The population for this study includes civil servants (PNS) in Tanjungpinang. A stratified random sampling method will be used to ensure that various departments and positions within the civil service are represented. The sample size will be

determined using slovin formulas to ensure representativeness and reliability of the results. The size of sample are 98. Statistic tools use Smart-PLS 3 with outer and inner model.

# 4. RESULT

Smart-PLS (Partial Least Squares Structural Equation Modeling) is a statistical tool used to analyze complex relationships between observed and latent variables. It is particularly useful for exploratory research and models with multiple constructs and indicators.

#### a. Outer Model

The result for outer model we can show in second figure below:

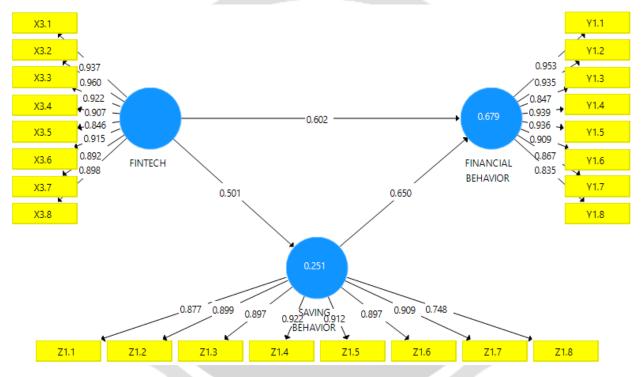


Figure 2. Confirmatory Factor Analysis

Assessed using Confirmatory Factor Analysis (CFA). All factor loadings are above the recommended threshold of 0.7, indicating good construct validity.

# b. Inner Model

The paths from Fintech Usage to Financial Behavior, and from Fintech Usage to Saving Behavior, as well as from Saving Behavior to Financial Behavior, were examined:

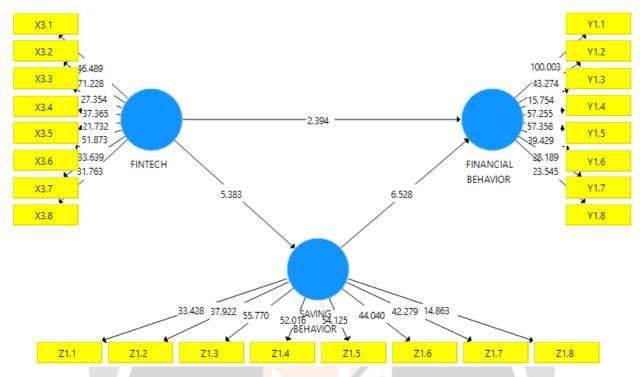


Figure 3. Path Coefficient Analysis

a. Direct Effects:

**Table 1. Direct Effect** 

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
Fintech -> Financial Behavior	0.276	0.281	0.115	2.394	0.017
Fintech -> Saving Behavior	0.501	0.511	0.093	5.383	0.000
Saving Behavior -> Financial Behavior	0.650	0.647	0.100	6.528	0.000

- 1) **Fintech**  $\rightarrow$  **Saving Behavior**: Significant ( $\beta = 0.276$ , p < 0.017), suggesting that fintech encourages better saving behavior.
- 2) Fintech  $\rightarrow$  Financial Behavior: The direct path is significant ( $\beta = 0.501$ , p < 0.000), indicating that higher usage of fintech services positively influences financial behavior.
- 3) Saving Behavior  $\rightarrow$  Financial Behavior: Significant ( $\beta = 0.650$ , p < 0.000), demonstrating that improved saving behavior positively affects overall financial behavior.
- b. Indirect Effects (Mediation Analysis):

**Table 2. Indirect Effect** 

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
Fintech -> Saving Behavior -> Financial Behavior	0.326	0.327	0.069	4.757	0.000

1) The mediating effect of Saving Behavior on the relationship between Fintech and Financial Behavior is significant (indirect effect = 0.326, p < 0.000). This indicates that part of the impact of fintech usage on financial behavior is mediated through saving behavior.

## 5. DISCUSSION

The results highlight the importance of fintech in shaping both saving and financial behaviors. Fintech not only directly enhances financial management practices but also indirectly promotes better financial habits through improved saving behavior. Policymakers and financial institutions can leverage these insights to promote fintech adoption, especially focusing on tools that enhance saving behaviors. This could lead to more stable and improved financial behaviors among users. The study is limited to civil servants in Tanjungpinang, and future research should consider a more diverse sample to generalize findings. Additionally, longitudinal studies could provide deeper insights into the long-term effects of fintech on financial behavior.

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