

The Effect of Fintech Payment on Household Consumption Expenditure (Study Case in West Java)

Aulia Nursafarina¹, Sita Deliyana Firmialy²

^{1,2} Business Administration, Telkom University

Abstract

This article examines the impact of fintech payments on the consumption expenditures of West Java households. Quantitative methods were used in this study. Survey information in the form of a questionnaire was distributed to 111 households in West Java utilizing a fintech payment application. This study employs both descriptive and regression analysis. This study discovered that the personal mobility (PM) fintech payment variable has a positive and statistically significant influence on the household consumption expenditure variable, total cost accommodation (TCA), total cost transportation (TCC), and total cost communication (TCC) (TCCI). In addition, the fintech payment variable, ease of use, has a positive and statistically significant effect on the household consumption expenditure variable, total cost other cost (TCOC). Moreover, the occupation control variable has a positive and statistically significant effect on total cost (TC), total cost of food and beverage (TCF), and total cost of lodging (TCL) (TCA). The control variable sex has a positive and significant effect on total cost education (TCED), while the control variable marital status has a positive and significant effect on total cost (TC), total cost household goods (TCHG), and total cost transportation (TCTC) (TCED). This study examines the relationship between fintech payments and household consumption expenditures. This study is anticipated to serve as a resource for future researchers.

Keywords: *fintech payment, household consumption expenditure*

Copyright (c) 2023 Sita Deliyana Firmialy

Corresponding author :

Email Address : sitadeliyanafirmialy@telkomuniversity.ac.id

INTRODUCTION

Bandung, the provincial capital of West Java, is the center of Sundanese culture, also known as Tatar Sunda or Pasundan. The province of West Java is 35,377.76 square kilometers in size. West Java lies between 5o50' and 7o50' south latitude and 104o 48' and 108o 48' east longitude. Due to its geographical location, West Java is immediately adjacent to the Java Sea and DKI Jakarta Province in the north, the eastern part is immediately adjacent to Central Java Province, the southern part is immediately adjacent to the Indonesian Ocean, and the western part is immediately adjacent to Banten province. Administratively, West Java consists of 27 administrative regions and cities that encompass 18 administrative regions, namely Bogor Regency, Sukabumi Regency, Cianjur Regency, Bandung Regency, Garut Regency, Tasikmalaya Regency, Ciamis Regency, Pangandaran Regency, Kuningan Regency, Cirebon

Regency, Majalengka Sudangme Regency, Regency, Indramayu Regency, Subang Regency, Purwakarta Regency. And consists of nine cities, including Bogor City, Sukabumi City, Bandung City, Cirebon City, Bekasi City, Depok City, Cimahi City, Tasikmalaya City, and Banjar City. According to the West Java Central Bureau of Statistics (2022), the most populous province in 2021 will be West Java Province, with a population of 48,782,4 thousand people and a population growth rate of 1.41 percent in 2020-2021. According to data from the Department of Population and Population Registration (Dukcapil) of the Ministry of Home Affairs, Indonesia's population in December 2021 was 273,880,000. Among this number, 87.83 million are household decision-makers (KK). In 2021, the average Indonesian family size is 3.12 members. With 16.08 million households and 48.22 million inhabitants, West Java is the province with the greatest number of people. By the end of 2021, the average family size will be 3. (databoks.katadata.co.id, 2022).

Along with the growing needs of households and individuals, business opportunities in West Java are expanding as a result of the region's growing population. Particularly with the advent of technology in the form of fintech payments, which streamline the purchasing process. In addition, numerous fintech payment apps offer discounts and/or cashback, which can increase consumer purchasing interest.

According to the findings of the Digital Literacy in Indonesia 2021 survey conducted by the Ministry of Communication and Informatics (Kominfo) in collaboration with the Katadata Insight Center, the use of fintech as a payment method is advancing rapidly (KIC). Frequently, 65.4% of respondents employ digital wallets (databoks.katadata.co.id, 2022).

According to the 2021 Digital Wallet Frequency User Survey results, 26.4% of the population uses a digital wallet at least once per month. Bank Indonesia (BI) has established standards that require all end-to-end payment service providers to use the Indonesian Rapid Response Code (QRIS) Standard as digital payments evolve.

According to a Populix survey, the top five fintech payment applications used by Indonesians are as follows (Money, kompas.com, 2022)

- 1) GoPay
- 2) OVO
- 3) DANA
- 4) ShopeePay and
- 5) Linkaja

This study is focused on five fintech payment applications. The researchers chose these five applications because they are the most popular fintech payment apps among Indonesians. According to the website [cnbcindonesia.com](https://www.cnbcindonesia.com), the DSIInnovate Fintech report places Gopay and Ovo at the top of the list with the highest user awareness at 93.9%, followed by DANA at 92.3%, ShopeePay at 82.7%, and LinkAja at 72%.

RESEACRH METHODOLOGY

This study's sample consists of households in West Java that utilize fintech payment applications. A questionnaire with seven questions pertaining to the fintech payment variable and twelve questions pertaining to the household consumption expenditure variable was used to collect samples. The questionnaire was distributed to 111 respondents from October to the end of November 2022. The survey questionnaire was distributed online through the WhatsApp, Telegram, Instagram, and Line applications. The study questionnaire is divided into three sections: 1) Respondent's Identity, 2) Respondent Characteristics, and 3) Research Variables. The Fintech payment question variable employs a Likert scale with response options ranging from 1 (strongly disagree) to 5 (strongly agree) (strongly agree). While the variable for household consumption expenditures utilizes ratio scale research. This study employs quantitative approaches, including regression and descriptive analysis.

TABLE 1. SCALE MEASUREMENT

| Construct | Item | Sources |
|-----------------------------------|---|---|
| Fintech Payment | Personal Mobility (PM) Relative Usefulness Perceived Ease of Use (PEU) Service Credibility (SC) Social Influence (SI) Observance of Privacy Self efficacy (SE) | Kim et al, 2016 |
| Household Consumption Expenditure | Total cost (TC) Total cost F&B (TCF) Total cost fashion (TCC) Total cost living accommodation (TCA) Total cost household goods (TCHG) Total cost medical (TCMC) Total cost transportation (TCTC) Total cost communication (TCCI) Total cost entertainment (TCEC) Total cost other cost services (TCOG) | Luo, S., Sun, Y., & Zhou, R. (2022), Reaserchers observation |

Source: Literature Review by Researcher

RESULT AND DISCUSSION

Table 2 demonstrates that the variable total cost has a mean of 2,946 and a standard deviation of 1,143. The difference between the mean and standard deviation for the variable representing total cost is quite large. It demonstrates that the total cost variable has a fairly high data distribution for households in West Java that utilize the fintech payment application. The variable measuring user ease of use (PEAU) has the highest mean value in the fintech payment construct, while the variable measuring

social influence has the lowest mean value (SI). The variable with the greatest standard deviation in the fintech payment construct is the social influence (SI) variable, while the variable with the smallest standard deviation is the variable measuring ease of use (PEAU). The PEAU variable, with a mean value of 4,694 and a standard deviation of 0.553, has a significant difference, resulting in a distribution of user convenience values for households employing fintech payment applications that is not uniform. In contrast, the social influence variable has a mean of 3,541 and a standard deviation of 1,197, indicating that the range of values is not excessively large, and therefore the variations are not excessively diverse. This study employed sex, occupation, and marital status as independent variables. The occupation variable has the highest mean value with a mean of 3.352 and a standard deviation of 0.96, indicating that the respondents' occupations are very diverse. The types of work of the respondents include BUMN employees, private employees, entrepreneurs, civil servants, housewives, retirees, etc. The variable with the lowest mean value is sex, which has a mean of 1.154 and a standard deviation of 0.362. The distribution value is quite diverse. The wide gap between the mean and the standard deviation provides evidence for this. The majority of respondents (64.9%) were female, with 79 women filling out the survey and only 39 men contributing their perspectives (35.1%).

Table 2. Mean, Standar Deviation of Construct

| Variabel | Obs | Mean | Std. Dev | Min | Max |
|----------------|-----|-------|----------|-----|-----|
| TC | 111 | 2.946 | 1.143 | 1 | 5 |
| PM | 111 | 4.658 | 0.565 | 2 | 5 |
| RA | 111 | 4.631 | 0.602 | 2 | 5 |
| PEAU | 111 | 4.694 | 0.553 | 2 | 5 |
| SC | 111 | 4.361 | 0.761 | 2 | 5 |
| SI | 111 | 3.541 | 1.197 | 1 | 5 |
| ATP | 111 | 3.701 | 0.969 | 1 | 5 |
| SE | 111 | 4.64 | 0.56 | 2 | 5 |
| Sex | 111 | 1.154 | 0.362 | 1 | 2 |
| Occupation | 111 | 3.352 | 0.96 | 1 | 4 |
| Eucation | 111 | 2.118 | 0.922 | 1 | 3 |
| Marital Status | 111 | 2.73 | 0.632 | 1 | 3 |

Sources: Processed by Researchers

Table 3. Regretion result

| Variable | regtc | regtcf | regtcc | regtca |
|-------------|--------------------|--------------------|--------------------|---------------------|
| Fintech- PM | -0.0054 (0.982) | 0.1847 (0.334) | 0.0217 (0.868) | 0.3342** (0.033) |
| Fintech- RA | -0.060 (0.820) | -0.2460 (0.248) | -0.0509 (0.707) | 0.143 (0.351) |
| Fintech-PEU | 0.0306 (0.890) | 0.04351 (0.811) | 0.087 (0.399) | -0.1378 (0.448) |
| Fintech-SC | 0.0613 | 0.0712 | 0.0718 | 0.0472 |

| | | | | |
|-------------------------------|------------------|-------------|---------|---------|
| | (0.716) | (0.648) | (0.512) | (0.781) |
| Fintech- SI | 0.0272 | 0.0106 | 0.0178 | -0.0522 |
| | (0.751) | (0.887) | (0.789) | (0.485) |
| Fintech-ATP | -0.0216 | 0.0002 | 0.064 | -0.0663 |
| | (0.858) | (0.999) | (0.427) | (0.571) |
| Fintech-SE | 0.270 | 0.0611 | -0.0513 | -0.0013 |
| | (0.177) | (0.775) | (0.723) | (0.995) |
| sex | 0.7739 | 0.7037 | 0.1266 | 0.2232 |
| | (0.105) | (0.280) | (0.543) | (0.581) |
| Occupation | 0.3924*** | 0.2433** | 0.1071 | 0.2112* |
| | (0.004) | (0.050) | (0.251) | (0.069) |
| Education | 0.1656 | -0.032 | -0.0117 | -0.1084 |
| | (0.180) | (0.754) | (0.856) | (0.312) |
| MaritalSta~s | 0.8699*** | 0.5289 | 0.0698 | 0.3035 |
| | (0.000) | (0.100) | (0.500) | (0.117) |
| Constanta | .86982021*** | -16,409,772 | -0.0033 | -12,745 |
| | (0.022) | (0.338) | (0.997) | (0.373) |
| Number of observation | 2,442 | 2,442 | 2,442 | 2,442 |
| R-squared | 0.3016 | 0.1151 | 0.0466 | 0.1076 |
| Level of significance: | ***)1%**)5%)*10% | | | |
| | (cont) | | | |

The results of the regression are presented in Table 3. H1 asserts a connection between fintech payments and household consumption expenditures. Personal mobility (PM) items with total cost transportation (TCTC) and total cost communication (TCCI) items have a positive and significant effect with a significance level of less than 10%. In addition, fintech payment ease of use (PEU) items and household consumption expenditure items total cost other cost services (TCOC) have a positive and statistically significant effect with a significance level of less than 10%. This study also demonstrates that a person's occupation influences their consumption patterns, as measured by the total cost (TC) variable, which has a positive and statistically significant effect with a significance level of less than one percent. As indicated by the total cost f&b (TCF) variable with a significance level of less than 5%, a person's occupation has a positive and significant influence on their food consumption patterns. In addition, a person's occupation has a positive and statistically significant influence on the total cost of accommodation (TCA) with a significance level of less than 10%. A significance level of less than 5% indicates that gender has a positive and significant effect on the total cost of education (TCED). In addition, a person's marital status has an effect on his or her consumption patterns, as indicated by a positive effect total cost (TC) and a significance level of less than one percent. With a significance level of less than 5% for TCHG, marital status has a positive and significant effect on total cost of household goods (TCHG), total cost of transportation (TCTC), and total cost of education (TCED) items. less than ten percent for TCTC and less than one percent for TCED. This study included a total of 2,442 observations. In this study, the r squared value varied; the highest value was obtained in the total cost regression with a value of 30.16%, and the lowest value was obtained in the total medical cost variable with a value of 2.45%.

This study examines the relationship between fintech payments and household consumption expenditures. This study demonstrates that there is a correlation between the determinants of fintech payments, particularly personal mobility (PM), which affects the total costs of lodging, transportation, and communication. Personal mobility refers to a person's willingness to adapt in the face of change, so that the payment system based on fintech payments makes it easier for users to conduct transactions (Kim et al, 2016).

In addition, PEU has an impact on the total cost of other cost services, in this case administrative costs and other unforeseen costs. This study's findings differ from those of previous research in that relative usefulness (RA), service credibility (SC), social influence (SI), self-efficacy (SE), and concern for privacy (ATP) do not significantly affect household consumption expenditure. This is due to the fact that respondents are dominated by heads of households over the age of 47 (Generation X), who prefer m-banking or cash transactions. This is not surprising, given that Generation X is not a digital generation, so application usability is a factor. that must be taken into account in order to promote the adoption of fintech payment applications (Kumala, D.C., Pranata, J.W., & Thio, S. 2020).

Consumption

Consumption, as defined by Mankiw (2013:11), is the expenditure of a household on goods and services. "Goods" refers to both durable goods such as cars and household appliances and consumables such as groceries and clothing. The term "services" encompasses intangibles such as haircuts and health care. Consumption of services also includes household expenditures on education. According to studies, aging, labor supply, life cycle, and well-being have an impact on consumption. Social security, especially pensions and other job changes, influences overall consumption levels and trends (Blundell et al., 2008; Yang & Ching, 2014; Blundell et al., 2018).

H1: Fintech payments have an impact on household consumption expenditure.

Consumer Behavior

CSchiffman, Leon, et al. (2013) define consumer behavior as the actions consumers take when searching for, purchasing, utilizing, evaluating, and consuming products and services they anticipate will meet their needs. Additionally, consumer behavior can be defined as the act of individuals or groups selecting, purchasing, utilizing, or consuming a product, service, idea, or experience to satisfy their needs and desires (Solomon, M., Russell-Bennett, R., & Previte, J., 2012). According to Sunarto (2006), cultural factors, social factors, personal factors, and psychological factors all have an impact on consumer behavior.

Family Financial

Families have a variety of financial objectives, including funding children's education, preparing for retirement, anticipating risks, managing daily finances, and balancing budgets (Senduk, S., 2000). Financial planning is the process of financial planning to achieve both short-term and long-term financial goals. The accomplishment of these objectives may involve savings, investments, budgeting, or management of the existing wealth structure (Senduk, S., 2000). The book *The Truth*

About Money, cited by Sembel et al. (2003), explains why individuals and families need to carry out financial planning, namely to protect themselves and their families from various financial risks (such as accidents, illness, death, and lawsuits), which reduce personal or clothing. Paying off family debt for life when they are no longer of working age, increasing the nation's average life expectancy, meeting the costs of raising children, increasing the cost of a child's college education, paying for a wedding, buying a house, buying a car, paying for old age care, and passing on wealth to the next generation.

Financial Technology (Fintech)

Fintech, in its broadest sense, refers to the use of technology to create financial solutions (Arner, et al., 2015). More precisely, fintech is the application of digital technology to financial intermediation problems (Aaaron, et al., 2017). The World Bank (2016) defines fintech as an industry comprised of firms that use technology to enhance financial systems and the delivery of financial services. Fintech can also be defined as technological innovation and financial services that can lead to business models, applications, processes, or products that have a substantial impact on the delivery of financial services (FSB, 2017).

According to prior research conducted by Kim et al. (2016), the dimensions of fintech payments can be measured using the following metrics:

1. Personal Mobility

Personal mobility is defined as a person's willingness to adapt to change. The existence of a new payment system based on fintech payment will facilitate personal mobility.

2. Relative Usefulness

Relative usefulness can be interpreted as the benefits and ease of use that an individual experiences when employing a system.

3. Ease of Use

User convenience is the level of user expectations regarding the amount of effort required. Someone believes the payment system is simple and straightforward to use.

4. Service Credibility

Service credibility is a person's perception of a service that can be trusted in general.

5. Social Influence

An individual's efforts and behavior that change an individual's attitudes, beliefs, and behavior.

6. Observance of Privacy

Someone has confidence and trust in the other person's commitment to privacy and personal matters.

7. Self Efficacy

Someone is self-assured and has faith in their abilities, so they can complete any task without assistance.

E-Wallets

An electronic wallet (e-wallet) is a financial technology (fintech) innovation that provides the most up-to-date wallet functionality as a user-friendly and convenient application platform. E-wallet is an application that enables anyone to make purchases via multiple online shopping and other shopping platforms. E-wallet payment is regarded as one of the most significant payment methods available today, as the transaction process uses a digital wallet that offers the benefits of convenience, flexibility, and security (Uddin, et al., 2014).

The convenience and comfort provided by e-wallet products contributes to an increase in societal users. Fed Davis identifies several factors that influence technology adoption in his Technology Acceptance Model (TAM) theory, including perceived ease of use, which is a fundamental determinant of technology adoption. Davis also mentions four easy-to-use indicators in Rithmaya, namely those that are simple to learn, versatile, and straightforward to implement. Other studies indicate that e-wallets have a significant impact on business growth, consumption, and macroeconomic developments (Beck et al., 2018). According to research on mobile payments in developing countries, mobile payment users can avoid reduced consumption due to natural disasters (Riley, 2018). Furthermore, research has demonstrated that the effects of fintech, e-payment, and e-commerce on consumption are extremely heterogeneous (Luo, S., Sun, Y., & Zhou, R., 2022)

Conceptual Model

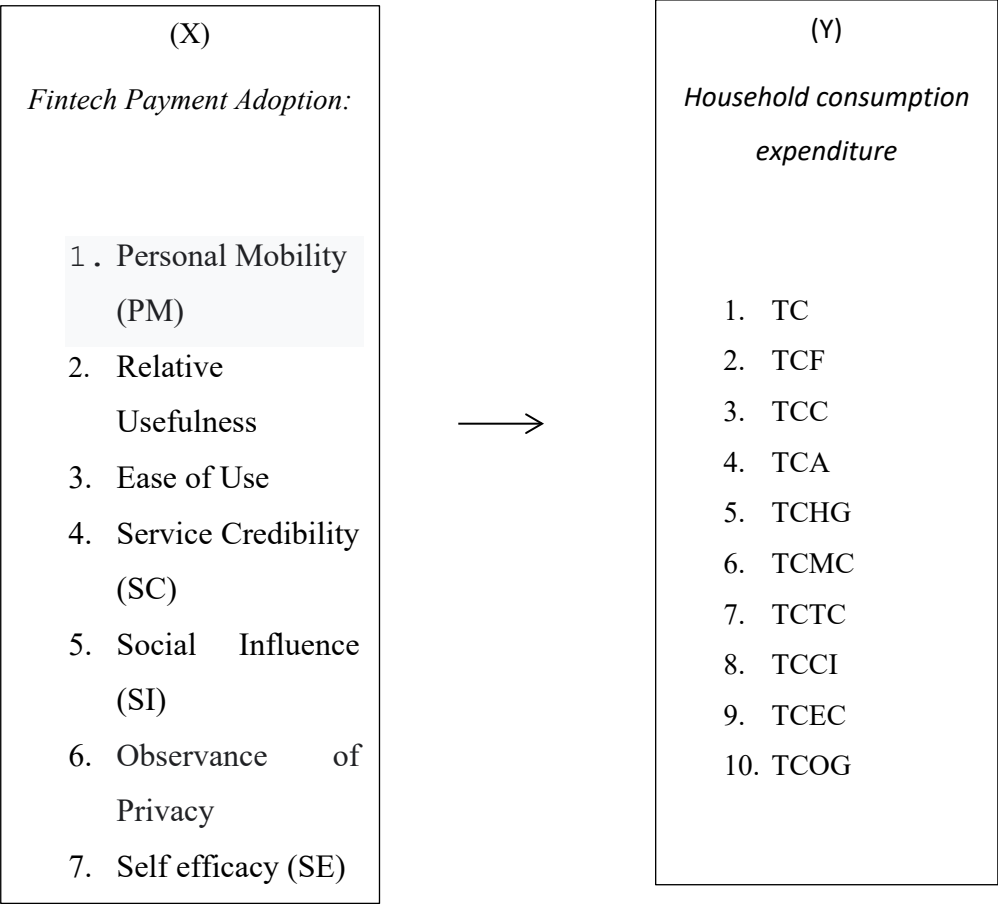


Figure 1 Conceptal Research Framework
Sources: Processed by Researcher

CONCLUSION

This study examines the relationship between fintech payments and household consumption expenditures. This research aims to determine the connection between fintech payments and household consumption expenditure. In this study, it was discovered that the personal mobility (PM) fintech payment variable has a positive and statistically significant impact on the household consumption expenditure variable, total cost accommodation (TCA), total cost transportation (TCC), and total

cost communication (TCC) (TCCI). In addition, the fintech payment variable, ease of use, has a positive and statistically significant effect on the household consumption expenditure variable, total cost other cost (TCOC). In addition, the occupation control variable has a positive and statistically significant impact on total cost (TC), total cost of food and beverage (TCF), and total cost of lodging (TCL) (TCA). The control variable sex has a positive and significant effect on total cost education (TCED), and the control variable marital status has a positive and significant effect on total cost (TC), total cost household goods (TCHG), and total cost transportation (TCTC) (TCED). The limitation of this study is that it only examines a few fintech payment applications as research objects, including Gopay, OVO, DANA, Shopee Pay, and LinkAja. Future researchers are encouraged to use a variety of data collection techniques, such as interviews, rather than relying solely on questionnaires, in order to obtain more in-depth information.

Reference:

- Arwani, A. (2020). Pengaruh Penggunaan Financial Technology (Fintech) Payment Terhadap Perilaku Konsumsi Mahasiswa Fakultas Ekonomi Dan Bisnis Islam (FEBI) Universitas Islam Negeri (UIN) Antasari Banjarmasin.
- Hanum, N. (2017). Analisis Pengaruh Pendapatan Terhadap Perilaku Konsumsi Mahasiswa Universitas Samudra di Kota Langsa. *Jurnal Samudra Ekonomika*, 1(2), 107-116.
- Kagan, J. (2020). Financial technology–fintech. *Datum pristupa dokumentu*, 13(6), 2020.
- Kim, Y., Choi, J., Park, Y. J., & Yeon, J. (2016). The adoption of mobile payment services for “Fintech”. *International Journal of Applied Engineering Research*, 11(2), 1058-1061.
- Kumala, D. C., Pranata, J. W., & Thio, S. (2020). Pengaruh Perceived Usefulness, Perceived Ease of Use, Trust, Dan Security Terhadap Minat Penggunaan Gopay Pada Generasi X Di Surabaya. *Jurnal Manajemen Perhotelan*, 6(1), 19-29.
- Li, Y., Xia, Z., & Fu, M. (2022). Internet fintech empowers the consumer finance industry to investigate individual consumer behavior Targeted at college students. *development*, 4, 5.
- Luo, S., Sun, Y., & Zhou, R. (2022). Can fintech innovation promote household consumption? Evidence from China family panel studies. *International Review of Financial Analysis*, 82, 102137.
- Nizar, M. A. (2017). Financial technology (Fintech): it’s concept and implementation in Indonesia. *Munich Personal RePEc Archive*, 98486, 15.
- Nofianti, L., & Denziana, A. (2010). Manajemen keuangan keluarga. *Marwah: Jurnal Perempuan, Agama dan Jender*, 9(2), 192-200
- Ramadani, L. (2016). Pengaruh penggunaan kartu debit dan uang elektronik (E-Money) terhadap pengeluaran konsumsi mahasiswa. *Jurnal Ekonomi dan Studi Pembangunan*, 8(1), 1-8.
- Saraswati, B. D., Maski, G., Kaluge, D., & Sakti, R. K. (2022). The impact of financial technology on consumption function of the theory of absolute income hypothesis: a partial adjustment model approach (the Indonesian evidence). *Business: Theory and Practice*, 23(1), 109-116.

- Schiffman, L., O'Cass, A., Paladino, A., & Carlson, J. (2013). *Consumer behaviour*. Pearson Higher Education AU.
- Senduk, S. (2000). *SPKK: Keuangan Keluarga*. Elex Media Komputindo.
- Septiana, A. (2017). *Analisis Perilaku Konsumen Dalam Perspektif Ekonomi Kreatif* (Vol. 29). Duta Media Publishing.
- Suhartini, D., & Ardhian Renanta, J. (2012). Pengelolaan keuangan keluarga pedagang etnis cina. *Jurnal Riset Ekonomi dan Bisnis*, 7(2), 70-81.
- Sukirman, S., Hidayah, R., Suryandari, D., & Purwanti, A. (2019). Pengelolaan Keuangan Keluarga dalam Rangka Peningkatan Masyarakat Mandiri dan Berperan dalam Peningkatan Literasi Keuangan Indonesia (Otoritas Jasa Keuangan). *Jurnal Abdimas*, 23(2), 165-169.
- Zhou, G., Zhu, J., & Luo, S. (2022). The impact of fintech innovation on green growth in China: Mediating effect of green finance. *Ecological Economics*, 193, 107308