



## Financial Behaviour Outsourced Workers in Batam City: Analysis Of Financial Technology and Social Influence

Etty Sri Wahyuni<sup>1\*</sup>, Rozaini Rosli<sup>2</sup>

<sup>1</sup> Faculty Of Business, Lincoln University College, Kuala Lumpur, Malaysia

<sup>2</sup> Faculty Of Economy And Business, Universitas Batam, Batam, Indonesia

Author Correspondence : [ettywahyunie@gmail.com](mailto:ettywahyunie@gmail.com)\*

**Abstract.** *The purpose of this research is to know and analyze the influence of financial technology and social influence partially and simultaneously on financial behavior of outsourced workers in Batam City. The method used in this research uses a method, namely the type of research used in this research is a quantitative research method. This research uses an analytical tool is SPSS Version 23. The population in this study was all students at Stambuk Potensi Utama University in 2023 totaling 1253 students. The population in this study are all outsourced workers scattered in Batam City whose numbers cannot be known and recorded with certainty. The sampling method in this study uses accidental sampling technique. By using the Zikmund formula, the final sample size used was 100 people. The results of this research are (1) Financial technology partially has a positive and significant effect on financial behaviour, (2) Social influence partially has a positive and significant effect on financial behaviour (3) Financial technology and social influence together or simultaneously have a positive effect and significant to the financial behavior of outsourced workers in Batam City.*

**Keywords:** *Financial Technology, Social Influence, Financial Behaviour, Outsourced Workers*

### 1. INTRODUCTION

Outsourced workers in Indonesia are an important part of the labor market, especially in sectors that require labor flexibility such as manufacturing, hospitality, and services. The outsourcing system was adopted to meet companies' needs for a more cost-efficient workforce and flexibility in human resource management. According to data from the Ministry of Manpower, the number of outsourced workers continues to increase in line with economic growth and the need for companies to reduce operational costs. However, outsourced workers often face challenges such as job insecurity, lack of social security, and unstable income, which impacts their financial well-being. Batam City, as one of the largest industrial areas in Indonesia, has a significant population of outsourced workers. The city is home to a variety of industries, including electronics manufacturing, shipbuilding and tourism, which rely heavily on outsourced labor. Outsourced workers in Batam often face unstable working conditions and fluctuating incomes, as industry demand and company policies change. Limited access to training and skills upgrading is also a challenge for outsourced workers in Batam, affecting their ability to improve their living standards and financial stability.

Outsourced workers in Batam City play a crucial role in supporting the fast-growing industrial activities in the region. Many companies in Batam, especially in the manufacturing

and service sectors, rely on outsourced labor to fulfill their operational needs. Outsourced workers in Batam are often engaged in contractual and temporary work, which allows companies to adjust their workforce according to fluctuating production needs. However, while providing flexibility for companies, this outsourcing system also poses challenges for workers. One of the main challenges faced by outsourced workers in Batam is job insecurity. Due to the short-term nature of employment contracts and the fact that they depend on the needs of the company, many workers have no guarantee of continued employment. This makes them vulnerable to sudden termination in the event of a drop in demand or company restructuring. This uncertainty leads to financial stress and difficulties in long-term financial planning, such as saving for the future or paying for basic needs consistently. In addition, outsourced workers in Batam often face limited access to social security and other employment benefits. Many of them do not receive facilities such as health insurance, old-age benefits, or paid leave, which are usually provided to permanent workers. This lack of social security increases their vulnerability to financial risks, such as unexpected medical expenses or loss of income during illness. This worsens their financial situation and reduces their overall quality of life.

Another obstacle faced by outsourced workers in Batam is limited skills development and training. Many outsourced workers only receive the basic training required to complete specific tasks in their jobs. Lack of access to advanced training or skills development programs hampers their ability to improve their competencies and seek better job opportunities. This leaves them trapped in a cycle of unstable employment and low income. On the other hand, there are also cultural and social challenges affecting outsourced workers in Batam. As a city with a large population of migrant workers, many of them live far from their families and communities of origin. Living away from family and limited social support can lead to social isolation and emotional distress. These conditions can negatively impact their mental and emotional well-being, which in turn affects their work productivity and ability to manage their finances well. However, amidst these challenges, there are also opportunities for outsourced workers in Batam to improve their welfare. One way is to improve their financial literacy and understanding of personal financial management. With a better understanding of how to manage income, save, and invest, outsourced workers can take steps to achieve financial stability despite their fluctuating income.

In addition, the government and companies can play an important role in improving the welfare of outsourced workers in Batam. Policies that support labor protection, such as fair minimum wage setting, access to social security, and skills training programs, can help improve their quality of life. These programs not only provide financial protection, but also

open up opportunities for workers to develop their careers and increase their income in the future. Overall, outsourced workers in Batam City face various challenges that affect their financial stability and well-being. However, with the right approach and support from various parties, there are opportunities to improve their quality of life and create a more equitable and inclusive working environment. Efforts to improve financial literacy, access to social security, and skills development can help outsourced workers in Batam overcome their challenges and achieve better welfare.

The development of financial technology (fintech) and social influence play an important role in shaping the financial behavior of outsourced workers. In the digital era, fintech provides easy access to financial services, such as online loans, digital payments and investments. Meanwhile, social influence, whether from family, friends or social media, also influences individual financial decisions. However, outsourced workers often face difficulties in optimally adopting fintech and face social pressures that influence their financial behavior. The combination of these two factors can affect their ability to manage their finances effectively and achieve financial well-being.

Financial behavior refers to how individuals manage their finances, including spending, saving, investing, and debt management. Good financial behavior is key to achieving financial stability and well-being (Elrayah & Tufail, 2024; Yadav & Banerji, 2024). For agency workers, financial behavior is particularly important as their incomes tend to be unstable and they often do not have adequate access to financial education. Without a good understanding of financial management, outsourced workers risk facing financial problems, such as uncontrollable debt and lack of savings for the future. In Batam City, many outsourced workers face challenges in managing their finances. Fluctuations in income and lack of job security make it difficult for them to plan long-term finances. In addition, limited access to formal financial services and financial education means that many outsourced workers do not have the habit of saving or investing. This problem is exacerbated by uncontrolled consumption habits, especially amidst the temptation to consume luxury goods that are often promoted through social media and neighborhoods. As a result, many outsourced workers are trapped in a cycle of debt and financial hardship.

Financial technology or fintech refers to the use of technology to provide financial services. Fintech has revolutionized the way individuals access and manage their finances, by providing easy access to a range of financial products and services, such as digital payments, online loans, investments and insurance (Kanaparathi, 2024; Rubini, 2024). Fintech offers more inclusive solutions for those who previously did not have access to formal financial services,

such as outsourced workers. However, the adoption of fintech also requires a good understanding of how to use it wisely so as not to create new financial risks, such as excessive debt or fraud. In Batam City, the use of fintech among outsourced workers still faces some challenges. Although fintech offers convenience in accessing financial services, many outsourced workers lack understanding on how to use it wisely. This ignorance often leads them to get trapped in online debt with high interest rates or become victims of fraud. In addition, their lack of financial education makes it difficult for them to harness the potential of fintech to improve their financial well-being. This suggests the need for stronger interventions in the form of financial education and consumer protection to prevent the negative impacts of fintech use.

Social influence refers to how individuals' perceptions, attitudes and behaviors are influenced by the people around them, such as family, friends, co-workers and social media. In the context of financial behavior, social influence can affect individuals' financial decisions, including in terms of spending, saving, and investing (Spears, 2021; Tedeschi, 2017; Jamal et al., 2015). Social influence can be positive, such as encouragement to save or invest, but it can also be negative, such as pressure to consume luxury goods or follow a lifestyle that is not in line with financial capabilities. In Batam City, social influence plays an important role in shaping the financial behavior of outsourced workers. A consumptive social environment, coupled with pressure from social media, often encourages outsourced workers to adopt lifestyles that exceed their financial capabilities. The pressure to follow trends or meet social expectations can lead them to make unwise financial decisions, such as going into debt to buy non-essential items. In addition, the lack of positive social support in financial matters, such as education or encouragement to save, makes it difficult for many outsourced workers to build healthy financial habits. Therefore, it is important to increase awareness and education about social influences on financial behavior so that outsourced workers can make wiser financial decisions.

## **2. LITERATURE REVIEW**

### **Financial Behaviour (Y)**

Financial behavior refers to how individuals or groups manage their finances, including how they make decisions about spending, saving, investing, and debt management (Xiao et al., 2014; Rai et al., 2019; Hira, 2012). This concept is important for understanding a person's financial patterns and how they affect overall financial well-being. Financial behavior is the set of actions or habits individuals take in managing their personal finances (Bhushan &

Medury, 2014; Ingale & Paluri, 2022). This includes everyday decisions such as how much to save, invest, or spend, as well as how one manages their monthly budget. Good financial behavior is usually characterized by the ability to balance expenses and income, as well as long-term financial planning (Cera et al., 2021; Antoni et al., 2019). Financial behavior can also be understood as a reflection of one's attitudes and values towards money (Sayinzoga et al., 2016; Rahman et al., 2021). These attitudes reflect how a person views the importance of money management, as well as how much they value financial stability. For example, someone who has a positive attitude towards savings may be more disciplined in setting aside a portion of their income for the future. Financial behavior is the result of a person's financial knowledge and skills. High financial literacy tends to result in healthier financial behavior, such as the ability to understand financial products, make smart investment decisions, and avoid excessive debt. Therefore, financial education is an important element in shaping good financial behavior (Dervishaj, 2021; She et al., 2022; Yeo et al., 2024).

### **Financial Technology (X<sub>1</sub>)**

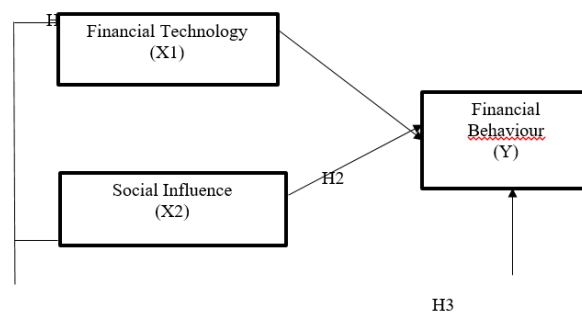
Financial technology is a term used to describe technological innovation in the financial sector (Abad-Segura et al., 2020; Sangwan et al., 2020). The first definition of fintech is the use of technology to improve financial services. In this sense, fintech encompasses a wide range of applications, products and services that enable financial transactions to be faster, safer and more efficient (Suryono et al., 2020; Broby, 2020). Financial technology is an industry that combines technology with financial services to create new services that are more accessible to consumers (Azarenkova et al., 2018; Leong & Sung, 2018). This industry covers a wide range of areas, such as digital banking, electronic payments, online investments, and peer-to-peer lending services. fintech as the use of technology to automate and improve financial services (Nguyen, 2016; Farida et al., 2021). An example is the use of mobile apps to make money transfers, bill payments, or stock purchases. With fintech, financial processes that used to take a long time can now be done in just minutes. Financial technology is an innovation that enables more inclusive financial services (Nasir et al., 2021; Lontchi et al., 2023). Through fintech, individuals who previously did not have access to traditional banking services can now enjoy a variety of financial services, such as opening accounts, borrowing money, or managing investments, through their mobile devices. financial technology is the combination of information technology and financial services to create a better user

experience. This technology enables companies to provide more personalized services tailored to customer needs, such as data analytics-based financial services that can provide investment recommendations (Mujiatun et al., 2022; Liu et al., 2021; Frost et al., 2022).

### Social Influence (X<sub>2</sub>)

Social influence is a concept that refers to how a person's attitudes, opinions, and behaviors can be influenced by others (Spears, 2021; Butera et al., 2024). In everyday life, social influence plays an important role in shaping individual decisions, both consciously and unconsciously. Social influence is often seen in the form of conformity, where individuals change their behavior to fit the norms or expectations of the social group (Chaiken, 2022; Gass & Seiter, 2022). For example, a person may dress a certain way or follow certain trends to feel accepted in their group. In the context of persuasion, social influence is an attempt to change someone's attitude or behavior through communication and argument. It is often used in advertising, political campaigns, or product promotions, where powerful messages can influence consumer decisions. By understanding the different forms of social influence, individuals can become more aware of how they are influenced by their social environment and can make more informed decisions (Jamal et al., 2015; Kuchler & Stroebel, 2021; Akhtar et al., 2018). Social influence is the phenomenon in which individuals are influenced by others in their behavior, attitudes, or decisions (Capuano & Ramsay, 2011; Rizzi et al., 2018; Zahra & Anoraga, 2021). Social influence can take many forms, including group pressure, social norms, persuasion and imitation. In everyday life, social influence affects many aspects, from clothing choices and how we speak, to major decisions such as career and political views (Tedeschi, 2017; Goldsmith & Goldsmith, 2011).

### Conceptual Framework



Source: Researcher (2024)

Figure 1. Conceptual Framework

### **3. RESEARCH METHOD**

#### **Type of research**

The type of research used in this study is quantitative. Quantitative research is a method used to test certain theories by examining each relationship between variables. In this study, it is quantitative, namely data consisting of numbers of respondents' answers or data that can be calculated and will be included in calculations or used in quantitative analysis such as variables that will be studied for their influence on customer satisfaction. (Sugiyono, 2021).

#### **Data source**

This research uses primary and secondary data sources, as follows:

- a. According to Sugiyono, (2021), primary data is data that directly provides data to data collectors. Primary data sources are obtained through an interview activity with the research subject and by observation or observation in the field. The primary data used by the authors in the study was a questionnaire.
- b. According to Sugiyono, (2021), secondary data is a data source that does not directly provide data to data collectors, for example through other people or through documents. Secondary data sources are complementary data sources that function to complement the data needed by primary data. Secondary data referred to in this study is a source of research data obtained through intermediary media or indirectly published or unpublished in general.

#### **Research Population and Sample**

According to Sugiyono, (2021) population is the whole of the object under study. Population is a generalization area consisting of objects / subjects to study and then draw conclusions. The population in this study are all outsourced workers scattered in Batam City whose numbers cannot be known and recorded with certainty. The sampling method in this study uses accidental sampling technique. According to Sugiyono (2021) the accidental sampling method is a sampling technique using a sampling strategy based on chance, anyone who happens to meet the researcher can be used as a sample if deemed suitable as a data source. By using the Zikmund formula, the final sample size used was 100 people.

#### 4. RESULTS AND DISCUSSION

##### Respondent Characteristics

**Table 1. Characteristics of Respondents Based on Gender**

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	63	63.0	63.0	63.0
	Female	37	37.0	37.0	100.0
	Total	100	100.0	100.0	

Source: Processed by researchers (2024)

**Table 2. Characteristics of Respondents Based on Age**

Age					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-20 year	51	51,0	51,0	51,0
	20-23 year	25	25,0	25,0	76,0
	23-25 year	24	24,0	24,0	100,0
	Total	100	100,0	100,0	

Source: Processed by researchers (2024)

**Table 3. Characteristics of Respondents Based on Income**

Income					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.000.000-3.000.000	22	22,0	22,0	22,0
	3.000.001-6.000.000	51	51,0	51,0	51,0
	>6.000.001	27	27,0	27,0	100,0
	Total	100	100,0	100,0	

Source: Processed by researchers (2024)

##### Validity and Reliability Test Results

**Table 4. Validity Test Results**

Item Statement	Corrected Item Total Correlation	Information
X1.1	0,526	Valid
X1.2	0,577	Valid
X1.3	0,661	Valid
X1.4	0,543	Valid
X1.5	0,697	Valid
X2.1	0,582	Valid
X2.2	0,627	Valid
X2.3	0,637	Valid
X2.4	0,676	Valid
X2.5	0,663	Valid



Item Statement	Corrected Item Total Correlation	Information
Y.1	0,552	Valid
Y.2	0,581	Valid
Y.3	0,689	Valid
Y.4	0,671	Valid
Y.5	0,668	Valid

**Source: Processed by researchers (2024)**

Based on the statistical test results above, it is known that the corrected item correlation value  $> 0.361$ , so the data is declared valid.

**Table 5. Reliability Test Results**

No	Variable	Cronbach Alpha	Results
1	Financial Technology (X1)	0,822	Reliable
2	Social Influence (X2)	0,867	
3	Financial Behaviour (Y)	0,854	

**Source: Processed by researchers (2024)**

Based on the table above, it is known that the Cronbach's alpha value for all research variables service quality, physical evidence and student satisfaction  $> 0.60$ , it can be said that the overall reliability test results are reliable (reliable).

### Normality Test Results

**Table 6. Kolmogorov-Smirnov Normality Test Results**

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		100
Normal Parameters <sup>a,b</sup>	Mean	.0000000
	Std. Deviation	4.18367673
Most Extreme Differences	Absolute	.071
	Positive	.052
	Negative	-.071
Test Statistic		.071
<b>Asymp. Sig. (2-tailed)</b>		<b>.217<sup>c,d</sup></b>
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		
d. This is a lower bound of the true significance.		

**Source: Processed by researchers (2024)**

Based on the data in the table above, it can be seen that the asymp. sig (2-tailed) value is  $0.200 > 0.05$  so it can be concluded that this study is normally distributed and has met the requirements of the normality test.

### Multicollinearity Test Results

**Table 7. Multicollinearity Test Results**

Coefficients <sup>a</sup>			
Model		Collinearity Statistics	
		Tolerance	VIF
1	Financial Technology	.713	1.754
	Social Influence	.713	1.754

a. Dependent Variable: Financial Behaviour

**Source: Processed by researchers (2024)**

Based on the table of multicollinearity test results, it is known that the two VIF values for each variable are < 10, and the Tolerance value for each variable is > 0.10, so it can be concluded that there is no multicollinearity.

### Heteroscedasticity Test Results

**Table 8. Glejser Heteroscedasticity Test Results**

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,277	1,874		,079	,821
	Financial Technology	,054	,058	,057	1,017	,412
	Social Influence	,077	,073	,142	1,214	,634

a. Dependent Variable: ABS\_RES

**Source: Processed by researchers (2024)**

Based on the Glejser test table above, the significance value of the three independent variables is > from 0.05, it can be concluded that there is no heteroscedasticity.

### Multiple Linear Regression Test Results

**Tabel 9. Multiple Linear Regression Test Results**

Model		Unstandardized Coefficients	
		B	Std. Error
1	(Constant)	7.752	3.093
	Financial Technology	.442	.082
	Social Influence	.602	.097

**Source: Processed by researchers (2024)**

Based on the table above, the regression equation is obtained as follows:

$$Y = 7,752 + 0,442 X_1 + 0,602 X_2 + \epsilon$$

This can be seen in the following information:

- a. The constant value of 7,752 means that if all independent variables are considered constant or equal to zero the dependent variable is 7,752.
- b. The regression coefficient value of the financial technology variable (X1) is 0.442, which means that if there is an increase in financial technology by 1, then financial behaviour (Y) will increase by + 0.442
- c. The regression coefficient value of the social influence variable (X2) is + 0.602, which means that if there is an increase in social influence by 1, then financial behaviour will increase by + 0.602.

**T-test Results (Partial Test)**

**Table 10. T-test Results (Partial Test)**

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	7.752	3.093		2,754	,005
	Financial Technology	.442	.082	.457	3,215	,001
	Social Influence	.602	.097	.546	4,331	,000

a. Dependent Variable: Financial Behaviour

**Source: Processed by researchers (2024)**

Based on the t test results above, the t table value = at n-k (100-3) is 97 at a significant level of 5% (0.05) is 1.985. Thus, to find out partially, the following explanation can be described:

1. The Effect of Financial Technology on Financial Behaviour

The t-count value of Financial technology is 3.215 > t-table 1.98 (n-k = 100-3 = 97 at 0.05 / 5%) and a significance of 0.001 < 0.05, so Ha is accepted and Ho is rejected, then financial technology partially has a positive and significant effect on financial behaviour.

2. The effect of Social Influence on Financial Behaviour

Social influence t-count value of 4.331 > t-table 1.98 (n-k = 100-3 = 97 at 0.05 / 5%) and significance 0.000 < 0.05, so Ha is accepted and Ho is rejected, then social influence partially has a positive and significant effect on financial behaviour.

**F-Test Results (Simultaneous Test)**

**Table 11. F-Test Results (Simultaneous Test)**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1754,273	2	725,287	<b>51,136</b>	<b>,000<sup>b</sup></b>
	Residual	1563,247	97	19,188		
	Total	3135,771	99			
a. Dependent Variable: Financial Behaviour						
b. Predictors: (Constant), Social influence, financial technology						

Source: Processed by researchers (2024)

Based on the table above, It is known that the F-test results in an F-count of 51.136 > F-table 3.09 (n-k-1 at k = 100-3-1 = 96) so that Ha is accepted and Ho is rejected, meaning that financial technology and social influence simultaneously have a significant effect on financial behaviour.

**Determination Test Results**

**Table 12. Determination Test Results**

Model Summary <sup>b</sup>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,767 <sup>a</sup>	,624	<b>,578</b>	4,224
a. Predictors: (Constant), social influence, financial technology				
b. Dependent Variable: financial behaviour				

Source: Processed by researchers (2024)

From the table above, it can be seen that the coefficient of determination (Adjusted R Square) is 0.578 or equal to 57.8%. This figure means that the independent variables consisting of financial technology and social influence affect financial behaviour variable while the remaining 42.2% of the employee performance variable is influenced by other variables not examined in this study.

**5. CONCLUSIONS AND SUGGESTIONS**

**conclusion**

Based on the results of the research and discussion, the following conclusions can be drawn:

1. Financial technology partially has a significant effect on financial behavior among outsourced workers in Batam City.

2. Social influence partially has a significant effect on financial behavior among outsourced workers in Batam City.
3. Financial technology and social influence simultaneously has a significant effect on financial behavior among outsourced workers in Batam City

### **Suggestion**

Based on the conclusions obtained from the above research, the following suggestions are made:

1. Based on the above conclusions, the researcher suggests that it is important to improve financial literacy among outsourced workers so that they can better understand and utilize fintech services wisely. With a good understanding of various fintech products, such as digital payments, online loans, or investments, outsourced workers can be more confident in managing their personal finances, reducing the risk of getting stuck in uncontrollable debt. And then by recommending the development of a specific training and education program for outsourced workers, which is focused on using fintech applications for daily financial management. For example, this training could include how to create a budget, save regularly, and utilize features in fintech apps to manage expenses and investments. This program will help outsourced workers adopt healthier and more sustainable financial habits.
2. Based on the above conclusions, the researchers provide suggestions related to social influence, namely that companies and financial institutions need to be aware of the important role of the social environment, such as friends, family, and colleagues, in shaping the financial behavior of outsourced workers. Therefore, they can organize financial education programs that involve communities or work groups to strengthen awareness and healthy financial practices among workers. Furthermore, researchers can suggest that outsourcing companies and local governments support policies that encourage workers' financial stability, such as easy access to social protection programs and affordable financial services. With this strategy, social influence can be directed to reinforce positive financial behavior, which will ultimately improve the financial well-being of outsourcing workers in Batam City.
3. Based on the above conclusions, the researchers provide advice related to financial behavior, namely that outsourcing companies should provide financial welfare programs for their workers. This program could include financial planning assistance, access to safe financial products, and education on the importance of savings and investment. With

support from the company, workers can more easily manage their finances and prepare for a more stable future. Next, encourage the government or financial institutions to provide easier and more inclusive access to financial products, such as micro-savings, low-interest loans, or affordable insurance. By doing so, outsourced workers can have better access to financial services that can help them manage risk and build wealth.

## REFERENCES

- Abad-Segura, E., González-Zamar, M. D., López-Meneses, E., & Vázquez-Cano, E. (2020). Financial technology: Review of trends, approaches and management. *Mathematics*, 8(6), 951. <https://doi.org/10.3390/math8060951>
- Akhtar, F., Thyagaraj, K. S., & Das, N. (2018). The impact of social influence on the relationship between personality traits and perceived investment performance of individual investors: Evidence from Indian stock market. *International Journal of Managerial Finance*, 14(1), 130-148. <https://doi.org/10.1108/IJMF-10-2017-0281>
- Antoni, Z. L., Rootman, C., & Struwig, F. W. (2019). The influence of parental financial socialisation techniques on student financial behaviour. *International Journal of Economics and Finance Studies*, 11(2), 72-88.
- Azarenkova, G., Shkodina, I., Samorodov, B., & Babenko, M. (2018). The influence of financial technologies on the global financial system stability. *Investment Management & Financial Innovations*, 15(4), 229-235. [https://doi.org/10.21511/imfi.15\(4\).2018.19](https://doi.org/10.21511/imfi.15(4).2018.19)
- Bhushan, P., & Medury, Y. (2014). An empirical analysis of inter linkages between financial attitudes, financial behaviour and financial knowledge of salaried individuals. *Indian Journal of Commerce and Management Studies*, 5(3), 58-64.
- Broby, D. (2021). Financial technology and the future of banking. *Financial Innovation*, 7(1), 47. <https://doi.org/10.1186/s40854-021-00261-0>
- Butera, F., Dompnier, B., & Darnon, C. (2024). Achievement goals: A social influence cycle. *Annual Review of Psychology*, 75(1), 527-554. <https://doi.org/10.1146/annurev-psych-010223-100059>
- Capuano, A., & Ramsay, I. (2011). What causes suboptimal financial behaviour? An exploration of financial literacy, social influences and behavioural economics. U of Melbourne Legal Studies Research Paper, (540). <https://doi.org/10.2139/ssrn.1744307>
- Çera, G., Ajaz Khan, K., Mlouk, A., & Brabenec, T. (2021). Improving financial capability: The mediating role of financial behaviour. *Economic Research-Ekonomika Istraživanja*, 34(1), 1265-1282. <https://doi.org/10.1080/1331677X.2020.1841587>
- Chaiken, S. (2022). Physical appearance and social influence. In *Physical appearance, stigma, and social behavior* (pp. 143-178). Routledge.
- Dervishaj, B. (2021). Psychological biases, main factors of financial behaviour - A literature review. *European Journal of Medicine and Natural Sciences*, 4(1), 27-44.

- Elrayah, M., & Tufail, B. (2024). Financial education, financial advice, financial attitude, and financial literacy impact on university student's financial behaviour through financial capabilities. *Arts Educa*, 40. <https://doi.org/10.47060/ae.v40i1.295>
- Farida, M. N., Soesatyo, Y., & Aji, T. S. (2021). Influence of financial literacy and use of financial technology on financial satisfaction through financial behavior. *International Journal of Education and Literacy Studies*, 9(1), 86-95. <https://doi.org/10.7575/aiac.ijels.v.9n.1p.86>
- Frost, J., Gambacorta, L., & Gambacorta, R. (2022). On the nexus between wealth inequality, financial development and financial technology. *Journal of Economic Development*, 47(1), 1-28.
- Gass, R. H., & Seiter, J. S. (2022). *Persuasion: Social influence and compliance gaining*. Routledge.
- Goldsmith, E. B., & Goldsmith, R. E. (2011). Social influence and sustainability in households. *International Journal of Consumer Studies*, 35(2), 117-121. <https://doi.org/10.1111/j.1470-6431.2011.01003.x>
- Hira, T. K. (2012). Promoting sustainable financial behaviour: Implications for education and research. *International Journal of Consumer Studies*, 36(5), 502-507. <https://doi.org/10.1111/j.1470-6431.2012.01115.x>
- Ingale, K. K., & Paluri, R. A. (2022). Financial literacy and financial behaviour: A bibliometric analysis. *Review of Behavioral Finance*, 14(1), 130-154. <https://doi.org/10.1108/RBF-04-2021-0169>
- Jamal, A. A. A., Ramlan, W. K., Karim, M. A., & Osman, Z. (2015). The effects of social influence and financial literacy on savings behavior: A study on students of higher learning institutions in Kota Kinabalu, Sabah. *International Journal of Business and Social Science*, 6(11), 110-119.
- Kanaparthi, V. (2024). Transformational application of Artificial Intelligence and Machine learning in Financial Technologies and Financial services: A bibliometric review. arXiv preprint arXiv:2401.15710.
- Kuchler, T., & Stroebel, J. (2021). Social finance. *Annual Review of Financial Economics*, 13(1), 37-55. <https://doi.org/10.1146/annurev-financial-081919-044235>
- Leong, K., & Sung, A. (2018). FinTech (Financial Technology): What is it and how to use technologies to create business value in a fintech way? *International Journal of Innovation, Management and Technology*, 9(2), 74-78.
- Liu, Z., Song, J., Wu, H., Gu, X., Zhao, Y., Yue, X., & Shi, L. (2021). Impact of Financial Technology on Regional Green Finance. *Computer Systems Science & Engineering*, 39(3), 577-589. <https://doi.org/10.32604/csse.2021.019876>
- Lontchi, C. B., Yang, B., & Shuaib, K. M. (2023). Effect of financial technology on SMEs performance in Cameroon amid COVID-19 recovery: The mediating effect of financial literacy. *Sustainability*, 15(3), 2171. <https://doi.org/10.3390/su15032171>

- Mujiatun, S., Effendi, I., & Badawi, A. (2022). Sharia Financial Technology (Fintech) Management Model in Indonesia. *Cuadernos de Economía*, 45(128), 145-156. <https://doi.org/10.29306/cde.v45i128.10045>
- Nasir, A., Shaukat, K., Iqbal Khan, K., A. Hameed, I., Alam, T. M., & Luo, S. (2021). Trends and directions of financial technology (Fintech) in society and environment: A bibliometric study. *Applied Sciences*, 11(21), 10353. <https://doi.org/10.3390/app112110353>
- Nguyen, Q. K. (2016, November). Blockchain-a financial technology for future sustainable development. In 2016 3rd International Conference on Green Technology and Sustainable Development (GTSD) (pp. 51-54). IEEE. <https://doi.org/10.1109/GTSD.2016.20>
- Prabowo, A. (2023). Determinan peningkatan kepuasan pelanggan pada PT. Mondelez Internasional Medan. *Jurnal Ekonomi Bisnis Manajemen Prima*, 4(2), 83-97.
- Prabowo, A., & Risal, T. (2023). Peran entrepreneurial orientation dan social media marketing terhadap peningkatan strategi bersaing (UMKM) coffee shop pada era modern customer di Kota Medan. *Jurnal Menara Ekonomi: Penelitian dan Kajian Ilmiah Bidang Ekonomi*, 9(1). <https://doi.org/10.37807/jme.v9i1.589>
- Prabowo, A., Wahyuni, E. S., Bakti, S., Sari, P. B., & Rossanty, Y. (2022). Does raising environmental awareness and creating pro-environmental attitudes drive the intention to revisit among visitors? *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, 5(3). <https://doi.org/10.33258/birci.v5i3.600>
- Rahman, M., Isa, C. R., Masud, M. M., Sarker, M., & Chowdhury, N. T. (2021). The role of financial behaviour, financial literacy, and financial stress in explaining the financial well-being of B40 group in Malaysia. *Future Business Journal*, 7, 1-18. <https://doi.org/10.1186/s43093-021-00020-1>
- Rai, K., Dua, S., & Yadav, M. (2019). Association of financial attitude, financial behaviour and financial knowledge towards financial literacy: A structural equation modeling approach. *FIIB Business Review*, 8(1), 51-60. <https://doi.org/10.1177/2319714518824914>
- Rizzi, F., Pellegrini, C., & Battaglia, M. (2018). The structuring of social finance: Emerging approaches for supporting environmentally and socially impactful projects. *Journal of Cleaner Production*, 170, 805-817. <https://doi.org/10.1016/j.jclepro.2017.09.214>
- Rubini, A. (2024). *Fintech in a flash: Financial technology made easy*. De Gruyter.
- Sangwan, V., Prakash, P., & Singh, S. (2020). Financial technology: A review of extant literature. *Studies in Economics and Finance*, 37(1), 71-88. <https://doi.org/10.1108/SEF-03-2020-0160>
- Sayinzoga, A., Bulte, E. H., & Lensink, R. (2016). Financial literacy and financial behaviour: Experimental evidence from rural Rwanda. *The Economic Journal*, 126(594), 1571-1599. <https://doi.org/10.1111/eoj.12299>



- She, L., Rasiah, R., Turner, J. J., Guptan, V., & Sharif Nia, H. (2022). Psychological beliefs and financial well-being among working adults: The mediating role of financial behaviour. *International Journal of Social Economics*, 49(2), 190-209. <https://doi.org/10.1108/IJSE-03-2021-0126>
- Spears, R. (2021). Social influence and group identity. *Annual Review of Psychology*, 72(1), 367-390. <https://doi.org/10.1146/annurev-psych-032420-085907>
- Sugiyono. (2021). Metode penelitian bisnis pendekatan kuantitatif, kualitatif, kombinasi dan R&D. ALFABETA.
- Suryono, R. R., Budi, I., & Purwandari, B. (2020). Challenges and trends of financial technology (Fintech): A systematic literature review. *Information*, 11(12), 590. <https://doi.org/10.3390/info11120590>
- Tedeschi, J. T. (Ed.). (2017). *The social influence processes*. Routledge.
- Wahyuni, E., Fachrudin, K., & Silalahi, A. (2019). An empirical study on women's financial behavior: Case study of female postgraduate students in Medan, Indonesia. *International Journal of Research Culture Society*, 3(11), 155-159.
- Xiao, J. J., Ahn, S. Y., Serido, J., & Shim, S. (2014). Earlier financial literacy and later financial behaviour of college students. *International Journal of Consumer Studies*, 38(6), 593-601. <https://doi.org/10.1111/ijcs.12146>
- Yadav, M., & Banerji, P. (2024). Digital financial literacy, saving and investment behaviour in India. *Journal of Social and Economic Development*. <https://doi.org/10.1007/s40847-024-00119-2>
- Yeo, K. H. K., Lim, W. M., & Yii, K. J. (2024). Financial planning behaviour: A systematic literature review and new theory development. *Journal of Financial Services Marketing*, 29(3), 979-1001. <https://doi.org/10.1057/s41264-024-00083-1>
- Zahra, D. R., & Anoraga, P. (2021). The influence of lifestyle, financial literacy, and social demographics on consumptive behavior. *The Journal of Asian Finance, Economics and Business*, 8(2), 1033-1041. <https://doi.org/10.13106/jafeb.2021.vol8.no2.1033>