International Journal of Current Science Research and Review
ISSN: 2581-8341
Volume 07 Issue 12 December 2024
DOI: 10.47191/ijcsrr/V7-i12-51, Impact Factor: 7.943
IJCSRR @ 2024
www.ijcsrr.org

Determinants of Financial Literacy, Digital Literacy, Internet Penetration and Consumer Confidence Level Mediated by Fintech Growth on Retail Industry Growth in Indonesia

Anggarwati Sapta Rini
Telkom University, Indonesia.

ABSTRACT: This study evaluates how financial literacy, digital literacy, internet penetration, and consumer confidence influence retail industry growth in Indonesia, emphasizing the mediating role of fintech. In the era of industry 4.0, technology, especially fintech, has transformed conventional financial business models into digital ones, accelerating transactions and financial inclusion. The Covid-19 pandemic has further driven digitalization, although it has posed major challenges for the retail industry. This study aims to determine the actual impact of the development of fintech applications including the influence of financial literacy, digital literacy, internet penetration and consumer confidence levels on the development or growth of retail in Indonesia. This study uses a quantitative method with a focus on analyzing the relationship between financial literacy, digital literacy, internet penetration, and consumer confidence levels in the growth of the retail industry, both directly and through the mediation of fintech growth. The data used are secondary data that include information on the financial literacy index, digital literacy index, internet penetration level, consumer confidence index, fintech adoption level, and retail performance indicators. To overcome incomplete data, imputation and proxy variable methods are used. The analysis was conducted using multiple linear regression to identify direct relationships between variables, and structural equation modeling (SEM) to comprehensively evaluate the influence of fintech mediation. This study shows that financial literacy, digital literacy, and consumer confidence levels have a significant influence on retail growth, both with and without fintech growth mediation. Digital literacy and consumer confidence levels have a positive impact, reflecting that understanding of digital technology and consumer confidence contribute to retail development. Conversely, financial literacy shows a negative influence. Internet penetration does not show a significant influence on retail growth, either directly or through fintech mediation.

KEYWORDS: Consumer confidence level, Digital literacy, Financial technology, Financial literacy, Internet penetration, Retail.

I. INTRODUCTION

In the era of Industry 4.0, technology has become a vital component of modern life, enabling the efficient optimization of resources. Among the most transformative technologies today is the internet. As of January 2022, internet penetration in Indonesia reached 73.7% of the total population of 277.7 million (Annur, 2023), reflecting the nation's adaptation to technological advancements, particularly in financial technology (fintech). Fintech integrates financial services with technology, revolutionizing traditional financial operations into more advanced, user-centric models (Sung et al., 2019).

Digital financial systems, a key segment of fintech, include digital payments, mobile banking, and marketplace lending (Sahay et al., 2020). These systems played an indispensable role during the COVID-19 pandemic by driving digital transactions while supporting social distancing measures (D'Esclapon, 2021). In Indonesia, fintech platforms such as OVO, Go-Pay, and Tokopedia have simplified transactions for both Business-to-Business (B2B) and Business-to-Consumer (B2C) interactions, facilitating seamless payment processes and increasing economic efficiency. These innovations have had a direct impact on industries like retail, which is highly dependent on end consumers.

The retail industry, however, faced significant challenges and transformations during the pandemic. While many businesses suffered closures due to reduced transactions, others thrived by adopting fintech solutions, such as cashless payments through QRIS and digital platforms. Several factors have supported the successful adoption of fintech in the retail sector, including financial literacy, digital literacy, internet penetration, and consumer confidence. Financial literacy empowers individuals to manage their finances effectively, while digital literacy ensures the efficient use of fintech products. When combined with high internet penetration and strong consumer confidence, these factors drive the integration of digital finance into the retail industry, fostering its growth.

Prior research underscores the rapid expansion of fintech in Indonesia, particularly in peer-to-peer lending and digital payment systems. These advancements have significantly boosted financial inclusion and contributed to economic growth. Digital finance provides low-cost, efficient solutions that benefit households and small-to-medium enterprises (SMEs), enabling broader participation in the economy.

This study examines the impact of fintech adoption on the performance of the retail industry in Indonesia. Specifically, it investigates how financial literacy, digital literacy, internet penetration, and consumer confidence influence retail industry growth, both directly and through the mediating role of fintech. Key performance indicators such as digital transaction volume, consumer value, and profitability will be analyzed to comprehensively assess this relationship.

II. LITERATURE REVIEW

A. Financial Management

Financial management, a key component of economic systems, is heavily influenced by the advancement of industries and technologies. As these developments progress, it is imperative for users and industry practitioners to possess adequate financial literacy to maximize positive outcomes in both individual and institutional contexts.

Financial literacy is the knowledge and skills required to manage financial resources effectively. Prior studies emphasize its impact across various scales. At the individual level, financial literacy enhances one's ability to make informed financial decisions. For instance, Atkinson et al. (2006) and Xiao & O'Neill (2016) highlighted that financial knowledge acquired through general financial education or specific sources positively influences individuals' financial capabilities.

At a macroeconomic level, financial literacy fosters financial inclusion by enabling access to financial products and services across different countries (Grohmann et al., 2018; Lewbel, 2012). Within institutions, financial literacy plays a critical role in improving financial management practices. This dual impact demonstrates the far-reaching importance of financial literacy, from personal financial decisions to global economic stability.

The relevance of financial literacy became particularly evident during the COVID-19 pandemic. Financial management was both challenged and relied upon to sustain economic activities amidst widespread disruptions. D'Esclapon (2021) notes that while the pandemic adversely affected financial operations, effective financial management was crucial for ensuring economic resilience.

The integration of financial literacy with technology further amplifies its significance. With the rise of financial technology (fintech), financial literacy is essential for users to navigate digital financial systems effectively. This relationship is a focal point in studies examining how fintech innovations influence financial behaviour during crises like COVID-19.

B. Financial Technology

Fintech refers to the application of technology to financial services, enabling innovative business models, processes, and products that enhance service delivery. According to Sahay et al. (2020), fintech represents a multidisciplinary field combining finance, technology management, and innovation.

In Indonesia, fintech is governed by Bank Indonesia Regulation No. 19/12/PBI/2017, which defines fintech as the application of technology in financial systems to produce new products, services, and business models. These innovations are expected to support monetary stability, financial system stability, and efficient payment systems.

While fintech has significantly increased digital transactions, its growth during the COVID-19 pandemic was uneven. Sugandi (2021) found that physical distancing measures negatively impacted certain fintech services, such as phone banking, mobile banking, and internet banking. This underscores the need for adaptive strategies to ensure fintech's resilience in crisis situations.

C. Retail Industry

The retail industry operates at the final stage of the supply chain, delivering goods and services directly to end consumers. It includes various businesses, such as convenience stores (e.g., Indomaret, Alfamart), furniture stores (e.g., IKEA), and department stores (e.g., Ramayana, Gramedia).

International Journal of Current Science Research and Review
ISSN: 2581-8341
Volume 07 Issue 12 December 2024
DOI: 10.47191/ijcsrr/V7-i12-51, Impact Factor: 7.943
IJCSRR @ 2024
www.ijcsrr.org

This study examines retail transactions specifically within the business-to-customer (B2C) context, where businesses sell directly to end consumers. The research focuses on transaction volume and value to determine whether fintech growth influences these metrics.

While fintech has been integrated into many retail operations, its adoption varies across sectors. Digital payment systems, for instance, have facilitated seamless transactions in some businesses, while others still rely on traditional methods. By analyzing B2C transactions, this study aims to assess the extent to which fintech adoption impacts retail performance, particularly in terms of sales volume and transaction value.

D. Financial Literacy

Financial literacy encompasses the knowledge, skills, and confidence required for effective financial management. According to the 2022 OJK survey, Indonesia's financial literacy index increased to 49.68%. Financial literacy impacts individual well-being and broader macroeconomic outcomes by enabling people to use financial products and services intelligently (Lusardi & Mitchell, 2023; Yushita, 2017). The National Strategy for Financial Literacy and Inclusion 2021–2025 promotes technology-based financial literacy to enhance public welfare.

The three main components of financial literacy are as follows:

1) Knowledge: Understanding financial management, credit, savings, investment, and financial service institutions.
2) Skills: Mastering financial planning, risk management, and interest calculations.
3) Confidence: Trusting financial institutions and their services.

Financial literacy plays a critical role in driving economic growth. For example, Rani & Desiyanti (2016) found no direct impact of financial literacy on MSME performance, whereas Ferdi et al. (2022) highlighted its positive effect on Gross Regional Domestic Product (GRDP). This suggests that financial literacy can influence economic performance, both directly and indirectly, reinforcing its relevance to the retail industry's growth.

H1: Financial literacy influences the growth of the retail industry in Indonesia.

Additionally, Geriadi et al. (2023) demonstrated that financial technology (fintech) mediates the relationship between financial literacy and financial inclusion, amplifying its positive economic impact, including on retail industry growth.

H2: Financial literacy mediated by fintech growth influences the growth of the retail industry in Indonesia.

E. Digital Literacy

Digital literacy refers to the ability to use technology wisely and creatively (Suherdi et al., 2021). UNESCO defines it as the capacity to access, understand, and create information safely using digital technology. Beyond technical skills, digital literacy enhances social skills, critical thinking, and learning (Syafrial, 2019).

The four basic principles of digital literacy are:

1) Understanding: Processing explicit and implicit media ideas.
2) Interdependence: Recognizing relationships between different media.
3) Social Factors: Sharing information to distribute messages effectively.
4) Curation: Storing and organizing information for deeper understanding.

By promoting the integration of these principles, digital literacy drives technological adoption for work, entrepreneurship, and daily life. Agustina et al. (2022) emphasized that strong digital literacy improves business efficiency and productivity through better technology adaptation. Similarly, Kartika & Ratnamiasih (2023) highlighted its importance in enhancing business performance.

H3: Digital literacy affects the growth of the retail industry in Indonesia.

Research by Susetyo & Firmansyah (2023) revealed that digital literacy facilitates online financial transactions through fintech, increasing business efficiency and trust.

H4: Digital literacy mediated by fintech growth impacts the growth of the retail industry in Indonesia.

F. Internet Penetration

The internet plays a transformative role in modern economies by fostering innovation, disseminating knowledge, empowering consumers, and enhancing social and business interactions (Imansyah, 2018). As a critical technological enabler, advancements in internet infrastructure—such as 5G technology—have significantly contributed to global economic indicators. For instance, Mourtzis (2021) predicted that 5G communication technology could boost global manufacturing GDP by 4% by 2030.

In Indonesia, expanding internet access has reached even remote areas, increasing internet literacy across demographics. Badan Pusat Statistik Indonesia reported a steady rise in internet users aged five years and older between 2018 and 2022, with widespread use of devices like laptops, tablets, and smartphones. This adoption underscores the potential of internet penetration as a driver of economic and retail growth.

Research by Simangunsong & Rozaini (2023) confirms that internet penetration positively contributes to Indonesia's real GDP. As internet access expands, it broadens consumer access to information, ultimately fostering retail industry growth.

H5: Internet penetration affects the growth of the retail industry in Indonesia.

Broadband technology, which facilitates internet penetration, has also shown positive economic effects (Smith & Zentner, 2021). With the integration of fintech, internet penetration is expected to create more opportunities for digital transactions, further supporting retail growth.

H6: Internet penetration mediated by fintech growth influences the growth of the retail industry in Indonesia.

G. Consumer Confidence Index (CCI)

The Consumer Confidence Index (CCI) is a short-term economic indicator introduced by Bank Indonesia to assess current and future economic conditions (Yuslin, 2022). Derived from monthly consumer surveys, the CCI gauges optimism or pessimism about economic prospects. A CCI score above 100 reflects optimism, while a score below 100 indicates pessimism. The index serves as a valuable early indicator of household consumption trends—a critical factor in economic growth.

High consumer confidence has been shown to positively impact the economy. Yuslin (2022) demonstrated that strong consumer confidence correlates with increased retail industry growth.

H7: The Consumer Confidence Index affects the growth of the retail industry in Indonesia.

Furthermore, Tatli & Koc (2021) found that higher consumer confidence boosts shopping volume, driving retail industry growth. With the presence of fintech, the influence of consumer confidence can be amplified through the convenience of digital transactions.

H8: The Consumer Confidence Index mediated by fintech growth influences the growth of the retail industry in Indonesia.

III. METHODOLOGY

This study employs a descriptive causal/comparative design using quantitative methods to explore the relationships among variables influencing retail industry growth in Indonesia. The analysis relies on secondary data sourced from various credible institutions. Retail sales data were used as a proxy for the growth of the retail industry, while the financial literacy index was obtained from the National Survey on Financial Literacy and Inclusion (SNLIK) conducted by OJK. The digital literacy index was derived from reports by KataData Insight Center and the Indonesian Ministry of Communication and Informatics (Kominfo). Internet usage rates, the consumer confidence index (sourced from Bank Indonesia), and fintech growth data, represented by electronic payment system transaction values (SPIP) reported by Bank Indonesia, were also included.

Imputation and disaggregation techniques were employed to resolve data inconsistencies and address missing values during preprocessing. Imputation methods were utilized to estimate and replace missing values, ensuring data completeness (Seu et al., 2022). Disaggregation was employed to convert annual data into monthly figures, enabling finer granularity in the analysis.

Data analysis was conducted using multiple linear regression and Structural Equation Modelling (SEM). Multiple linear regression was used to identify the direct effects of independent variables on the dependent variable. Meanwhile, SEM was employed to examine the mediated effects of independent variables on the dependent variable via an intervening variable. These

International Journal of Current Science Research and Review
ISSN: 2581-8341
Volume 07 Issue 12 December 2024
DOI: 10.47191/ijcsrr/V7-i12-51, Impact Factor: 7.943
IJCSRR @ 2024
www.ijcsrr.org

analytical methods provided a comprehensive understanding of the direct and indirect impacts of financial literacy, digital literacy, internet penetration, consumer confidence, and fintech growth on the retail industry's development.

IV. RESULTS AND DISCUSSION

Table 1. Descriptive Statistics

Variable	n	Mean	Std. Deviation	Min	Max
Financial Literacy	120	40.292	10.864	24.430	64.774
Digital Literacy	120	5.178	0.728	3.880	6.366
Internet Penetration	120	6.116	17.120	0.171	57.560
Consumer Confidence Index	120	114.717	12.182	77.313	128.938
Fintech Growth	120	293,766.511	229,419.458	11,784.180	731,126.206
Retail Growth	120	201.536	21.027	144.656	249.786

Table 2. Multiple Regression Linear Model Summary

	df	f-value	p-value	R^2
Model	4	51.818	<0.001	0.643

Table 1 shows the data characteristics of each variable after imputation and disaggregation. Table 2. presents the results of the regression model. The table includes a degree of freedom (df) value of four, representing the number of independent variables in the model. Additionally, the table reports an F-value of 51.818 and a p-value of <0.001, indicating that the independent variables are statistically significant predictors of the dependent variable.

The R^2 value in the model highlights the proportion of variance in the dependent variable explained by the independent variables. For this model, the R^2 is 0.643, meaning that 64.3% of the variance in retail growth can be attributed to financial literacy, digital literacy, internet penetration, and consumer confidence index. This suggests a strong explanatory power for the independent variables in predicting retail growth.

Table 3. Coefficient Variable

Variable	Unstandardized	Standardize	t-value	p-value
Intercept	-45.655		-2.480	0.015
Financial Literacy	-2.221	-1.148	-5.123	<0.001
Digital Literacy	47.605	1.647	8.650	<0.001
Internet Penetration	0.095	0.077	0.834	0.406
Consumer Confidence Index	0.781	0.476	8.124	<0.001

The analysis reveals a significant negative effect of financial literacy on retail growth ($t = -5.123$, $p = < 0.001$). The analysis reveals a counterintuitive finding where a one-unit increase in financial literacy correlates with a 2.221 reduction in retail growth, possibly reflecting cautious consumer spending habits. This counterintuitive finding suggests that as consumers become more financially literate, they may adopt more cautious spending behaviours, potentially impacting retail growth negatively. Among the independent variables, financial literacy ranks second in its influence on retail growth, based on the standardized coefficient.

The study highlights digital literacy as the most significant predictor of retail growth, evidenced by a strong positive effect ($t = 8.650$, $p < 0.001$). The unstandardized coefficient of 47.605 implies that a one-unit increase in digital literacy enhances retail growth by 47.605. This finding underscores the pivotal role of digital skills in fostering retail expansion, likely through the adoption of e-commerce and digital payment systems. Digital literacy is the most influential variable affecting retail growth, as indicated by the highest standardized coefficient.

Internet penetration demonstrates an insignificant relationship with retail growth ($t = 0.095$, $p = 0.406$), suggesting that other factors like digital literacy play a more crucial role. Although the unstandardized coefficient of 0.095 suggests a minimal positive impact, it is statistically insignificant. This result indicates that while internet access facilitates consumer engagement, other factors like digital literacy may play a more critical role in driving retail growth.

The Consumer Confidence Index significantly impacts retail growth (t = 8.124, p = < 0.001). An unstandardized coefficient of 0.781 indicates that a one-unit increase in the CCI corresponds to a 0.781 increase in retail growth. As a measure of consumer optimism, CCI ranks third in its influence on retail growth based on the standardized coefficient.

The final regression model includes variables with significant effects on retail growth—financial literacy, digital literacy, and the Consumer Confidence Index. Internet penetration, due to its insignificance, is excluded. The regression equation is:

$$y = -45.655 - 2.221\ (financial\ literacy) + 47.605\ (digital\ literacy) + 0.781\ (consumer\ confidence\ index)$$

Table 4. R^2 Structural Equation Modelling

Variable	R^2
Fintech Growth	0.917
Retail Growth	0.644

Table 4 presents the R^2 values for fintech growth and retail growth. The R^2 for fintech growth is 0.917, indicating that 91.7% of the variance in fintech growth can be explained by the four independent variables. Similarly, the R^2 for retail growth is 0.644, signifying that 64.4% of the variance in retail growth can be explained by the four independent variables when mediated by fintech growth. These results highlight the substantial explanatory power of the model in capturing the relationships between the variables.

Table 5. Total Effect Structural Equation Modelling

Variable	Estimate	z-value	p-value
Financial Literacy	-0.106	-5.233	<0.001
Digital Literacy	2.264	8.836	<0.001
Internet Penetration	0.005	0.851	0.395
Consumer Confidence Index	0.037	8.299	<0.001

The analysis indicates that financial literacy, mediated by fintech growth, has a significant negative impact on retail growth ($z = -5.233$, $p < 0.001$). The estimate of -0.106 suggests that for every unit increase in financial literacy, retail growth decreases by 0.106. This counterintuitive finding may reflect that higher financial literacy, when combined with fintech growth, encourages more cautious consumer spending habits, thereby adversely affecting retail demand.

In contrast, digital literacy, when mediated by fintech growth, has a significant positive impact on retail growth ($z = 2.264$, $p < 0.001$). The estimate of 2.264 indicates that a one-unit increase in digital literacy leads to a 2.264 increase in retail growth. This underscores the complementary role of fintech in amplifying the positive influence of digital skills on retail expansion, particularly through the adoption of e-commerce and digital payment platforms.

Internet penetration, mediated by fintech growth, does not significantly influence retail growth ($z = 0.851$, $p = 0.394$). The estimate of 0.005 highlights a negligible positive effect, which is statistically insignificant. This suggests that while internet access facilitates consumer engagement, it does not, by itself, directly drive retail sector growth. Factors such as digital literacy and consumer confidence may play more prominent roles.

The Consumer Confidence Index (CCI), mediated by fintech growth, has a significant positive impact on retail growth ($z = 8.299$, $p < 0.001$). The estimate of 0.037 indicates that a one-unit increase in the CCI corresponds to a 0.037 increase in retail growth. This demonstrates that consumer optimism, supported by advancements in fintech, fosters greater consumer spending, thereby driving retail sector growth.

International Journal of Current Science Research and Review
ISSN: 2581-8341
Volume 07 Issue 12 December 2024
DOI: 10.47191/ijcsrr/V7-i12-51, Impact Factor: 7.943
IJCSRR @ 2024
www.ijcsrr.org

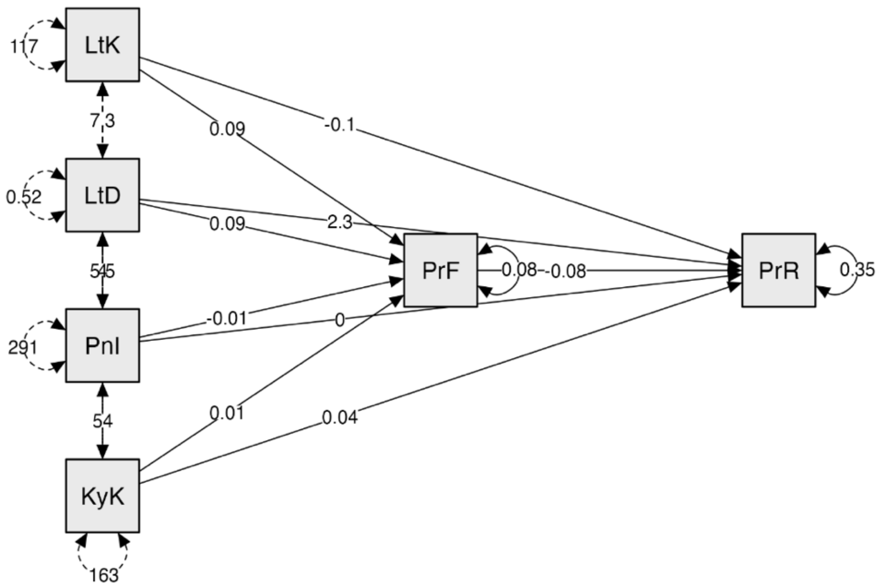

Figure 1. Path Coefficients Diagram

Table 6. Path Coefficients Value

Predictor	Outcome	Estimate	p-value
Financial Literacy	Retail Growth	-0.099	<0.001
Digital Literacy	Retail Growth	2.271	<0.001
Internet Penetration	Retail Growth	0.004	0.510
Consumer Confidence Index	Retail Growth	0.038	<0.001
Financial Literacy	Fintech Growth	0.092	<0.001
Digital Literacy	Fintech Growth	0.090	0.466
Internet Penetration	Fintech Growth	-0.010	<0.001
Consumer Confidence Index	Fintech Growth	0.006	0.006
Fintech Growth	Retail Growth	-0.075	0.691

1) Financial Literacy and Retail Growth

The study identifies a negative and significant relationship between financial literacy and retail growth, both with and without mediation by fintech. Financial literacy can increase awareness of materialism and impulsive purchasing behaviours, as noted by Pangestu & Karnadi (2020). Their findings suggest that financially literate individuals may engage in compulsive buying due to their understanding of financial concepts, which can lead to unsustainable consumption patterns and negatively impact retail demand.

Additionally, Santoso & Nainggolan (2023) observed that financially literate individuals tend to be more cautious about taking on debt. While this behaviour enhances personal financial health, it may limit retailers' opportunities to expand credit-dependent investments, such as inventory purchases or new store openings, as supported by Mitch (2024).

Conversely, other research highlights a positive relationship between financial literacy and retail growth. Santoso & Nainggolan (2023) and Prasad et al. (2021) argue that financially literate consumers are more likely to adopt digital payment methods and exhibit better decision-making skills. These behaviours support modern retail operations by improving risk evaluation and enhancing competitiveness in the retail sector.

These mixed results align with the following hypotheses:

H1: Financial literacy significantly affects retail growth.

H2: Financial literacy mediated by fintech growth significantly affects retail growth.

2) Digital Literacy and Retail Growth

Digital literacy has a positive and significant impact on retail growth, both directly and through fintech mediation. Cahyono & Rizqi (2024) highlight that digital literacy facilitates the adoption of e-commerce, significantly enhancing market orientation and performance, particularly for small and medium enterprises (SMEs). Digitally literate consumers are more confident in online shopping, leading to higher sales and greater customer loyalty (Nazzal et al., 2022).

Rakib et al. (2024) further emphasize the importance of employee digital skills in maintaining competitiveness. Retailers that invest in employee training on digital tools experience improved operational efficiency and customer service, which further drives retail growth.

Moreover, digital literacy positively influences consumer trust in online transactions. Consumers with strong digital skills are more confident and satisfied when making purchases online, fostering repeat business and long-term growth in the retail sector (Nazzal et al., 2022).

These findings confirm the following hypotheses:

H3: Digital literacy significantly affects retail growth.

H4: Digital literacy mediated by fintech growth significantly affects retail growth.

3) Internet Penetration and Retail Growth

Contrary to expectations, the study finds that internet penetration has no significant impact on retail growth, either directly or through fintech mediation. While internet access facilitates e-commerce and operational efficiency, its impact depends on market maturity, consumer behaviour, and economic conditions. For instance, Kristianti & Adi (2024) report that increased internet access correlates with higher e-commerce activity in mature markets like the United States, where e-commerce accounted for 22% of total retail sales in 2023. However, in developing markets, such as parts of Southeast Asia, the impact remains limited due to slower adoption rates.

In Indonesia, despite internet penetration increasing from 78.1% in 2023 to 79.5% in 2024, its contribution to retail growth remains modest (Kemp, 2024). This suggests that while access to digital platforms is expanding, it does not uniformly translate into retail sector growth.

These findings contradict the following hypotheses:

H5: Internet penetration significantly affects retail growth.

H6: Internet penetration mediated by fintech growth significantly affects retail growth.

4) Consumer Confidence Index and Retail Growth

The study confirms a positive and significant relationship between consumer confidence and retail growth, with or without fintech mediation. Consumer confidence serves as a key economic indicator, reflecting overall financial sentiment. High levels of consumer confidence encourage spending on goods and services, boosting demand and retail sales. Financial Source (2024) highlights how rising consumer confidence in the post-pandemic era has led to significant retail growth in Indonesia.

Conversely, low consumer confidence results in cautious spending, with individuals prioritizing savings over non-essential purchases, thereby reducing retail demand. Rahman (2021) observes that retail sales are a reliable barometer of consumer confidence, with strong sales indicating economic optimism and declining sales signalling uncertainty.

The positive impact of consumer confidence validates the following hypotheses:

H7: Consumer confidence significantly affects retail growth.

H8: Consumer confidence mediated by fintech growth significantly affects retail growth.

V. CONCLUSION

Based on the research conducted, it can be concluded that financial literacy, digital literacy, and consumer confidence have a significant impact on the growth of the retail industry. The effects of digital literacy and consumer confidence are positive, while the influence of financial literacy is negative. Additionally, internet penetration does not have a significant effect on retail growth.

These findings remain consistent even when fintech growth is included as a mediating variable. Financial literacy, digital literacy, and consumer confidence, mediated by fintech growth, significantly influence retail growth. Digital literacy and consumer confidence maintain a positive influence, whereas financial literacy, when mediated by fintech growth, exhibits a negative influence on retail growth. Internet penetration, even when mediated by fintech growth, remains insignificant in its effect on retail growth.

REFERENCES

1. Agustina, A., Saputra, A. S., Indranika, D. B., Suryoto, Kusumaningsih, O., Mamuri, J., & Pazqara, E. W. (2022). Increasing Digital Literacy in Realizing Golden Indonesia. East Asian Journal of Multidisciplinary Research, 1(10), 2091–2108. https://doi.org/10.55927/eajmr.v1i10.1920
2. Annur, C. M. (2023). Literasi Digital Indonesia Naik pada 2022, tapi Budaya Digital Turun. Https://Databoks.Katadata.Co.Id/Datapublish/2023/02/01/Literasi-Digital-Indonesia-Naik-Pada-2022-Tapi-Budaya-Digital-Turun. Diakses Tanggal 23 April 2024. Pukul 18:00 WIB, 1–3.
3. Atkinson, A., Mckay, S., Kempson, E., & Collard, S. (2006). Levels of Financial Capability in the UK: Results of a baseline survey.
4. Cahyono, T. D., & Rizqi, R. M. (2024). The Impact of Digital Marketing, Financial Literacy, And Digital Literacy on Purchasing Intent for Online Products. Indonesian Business Review, 7(2), 83. https://doi.org/10.21632/ibr.7.2.83-93
5. D'Esclapon, T. de R. (2021). A Journal of the COVID Year in Fintech: Payments Edition. Banking & Finance Law Review, 36(3), 389–418.
6. Ferdi, M., Amri, M., & Zaenal, M. (2022). Literasi dan Inklusi Keuangan dalam Perekonomian Indonesia : Suatu Aplikasi Panel Data. Jurnal Eknomika Dan Dinmika Sosial, 1 (2)(2829–2324), 51–70.
7. Financial Source. (2024). Understanding Retail Sales. https://financialsource.co/retail-sales/
8. Geriadi, M. A. D., Sawitri, N. P. Y. R., Wijaya, B. A., & Tri Putri, I. G. A. P. (2023). Pengaruh Literasi Keuangan Terhadap Inklusi Keuangan Melalui Financial Technology. Jurnal Studi Manajemen Dan Bisnis, 10(2), 178–187. https://doi.org/10.21107/jsmb.v10i2.23401
9. Grohmann, A., Klühs, T., & Menkhoff, L. (2018). Does financial literacy improve financial inclusion? Cross country evidence. World Development, 111, 84–96. https://doi.org/https://doi.org/10.1016/j.worlddev.2018.06.020
10. Imansyah, R. (2018). Impact of internet penetration for the economic growth of Indonesia. Evergreen, 5(2), 36–43. https://doi.org/10.5109/1936215
11. Kartika, D., & Ratnamiasih, I. (2023). Pengaruh Literasi Digital dan Orientasi Kewirausahaan Terhadap Kinerja Usaha Di Sentra Industri Rajut Binong Jati Bandung. Brainy: Jurnal Riset Mahasiswa, 4(2), 82–97. https://doi.org/10.23969/brainy.v4i2.74
12. Kemp, S. (2024). Digital 2024: Indonesia. https://datareportal.com/reports/digital-2024-indonesia
13. Kristianti, L., & Adi, R. (2024). Indonesia's internet penetration hits 79.5 percent, trend continues. Antara. https://en.antaranews.com/news/304593/indonesias-internet-penetration-hits-795-percent-trend-continues
14. Lewbel, A. (2012). Using Heteroscedasticity to Identify and Estimate Mismeasured and Endogenous Regressor Models. Journal of Business & Economic Statistics, 30(1), 67–80. https://doi.org/https://doi.org/10.1080/07350015.2012.643126
15. Lusardi, A., & Mitchell, O. S. (2023). The Importance of Financial Literacy: Opening a New Field. Journal of Economic Perspectives, 37(4), 137–154. https://doi.org/10.1257/jep.37.4.137
16. Mitch, F. (2024). The Long-Term Impacts of Financial Illiteracy. Planned Future. https://plannedfuture.co.uk/the-long-term-impacts-of-financial-illiteracy/
17. Mourtzis, D. (2021). Towards the 5th industrial revolution: A literature review and a framework for process optimization based on big data analytics and semantics. Journal of Machine Engineering, 21(3), 5–39.
18. https://doi.org/10.36897/jme/141834
19. Nazzal, A., Thoyib, A., Zain, D., & Hussein, A. S. (2022). The Effect of Digital Literacy and Website Quality on Purchase Intention in Internet Shopping through Mediating Variable: The Case of Internet Users in Palestine. Webology, 19(1), 2414–2434. https://doi.org/10.14704/web/v19i1/web19163
20. Pangestu, S., & Karnadi, E. B. (2020). The effects of financial literacy and materialism on the savings decision of generation Z Indonesians. Cogent Business and Management, 7(1). https://doi.org/10.1080/23311975.2020.1743618

21. Prasad, S., Kiran, R., & Sharma, R. K. (2021). Influence of financial literacy on retail investors' decisions in relation to return, risk and market analysis. International Journal of Finance and Economics, 26(2), 2548–2559. https://doi.org/10.1002/ijfe.1920
22. Rahman, D. F. (2021). Consumer Confidence, Retail Sales Recover from Delta Impact. https://www.thejakartapost.com/news/2021/11/09/consumer-confidence-retail-sales-recover-from-delta-impact.html
23. Rakib, M., Azis, M., Najib, M., & Isma, A. (2024). Impact of Digital Literacy, Business Innovation, Competitive Advantage on the Existence of SMEs: A quantitative study in Makassar City, Indonesia. Quality - Access to Success, 25(198), 277–283. https://doi.org/10.47750/QAS/25.198.30
24. Rani, G. M., & Desiyanti, R. (2016). PENGARUH LITERASI KEUANGAN, INKLUSI KEUANGAN, DAN DIGITAL PAYMENT TERHADAP KINERJA. 1–23.
25. Sahay, R., Eriksson, U., Lahreche, A., Khera, P., Ogawa, S., Bazarbash, M., & Beatin, K. (2020). Promise of Fintech Financial Inclusion in the Post COVID-19 Era. International Monetary Fund.
26. Santoso, V., & Nainggolan, R. (2023). Technology Acceptance Model (Tam): The Effect Of Financial Literacy On Effectiveness Of Using Qris On Msme Owners In Indonesia. Business and Accounting Research (IJEBAR) Peer Reviewed-International Journal, 7(4), 1770–1779. https://jurnal.stie-aas.ac.id/index.php/IJEBAR
27. Seu, K., Kang, M.-S., & Lee, H. (2022). An Intelligent Missing Data Imputation Techniques: A Review. 6(May). www.joiv.org/index.php/joiv
28. Simangunsong, Y. S., & Rozaini, N. (2023). Pengaruh Nilai Transaksi Bisnis E-Commerce Dan Jumlah Pengguna Internet Terhadap Pertumbuhan Ekonomi Di Indonesia (Studi Kasus Tahun 2012-2022). Jurnal Ilmiah Multidisipline, 1(4), 49–58.
29. Smith, M., & Zentner, A. (2021). Internet Effects on Retail Markets. Coercion, Survival, and War, 1–10. https://doi.org/10.1515/9780804795074-003
30. Sugandi, E. A. (2021). ADBI Working Paper Series THE COVID-19 PANDEMIC AND INDONESIA'S FINTECH MARKETS Asian Development Bank Institute.
31. Suherdi, D., Syarifah Fadillah Rezky, S. K. M. K., Dicky Apdilah, S. T. M. K., Junus Sinuraya, S. T. M. K., Andi Sahputra, S. E. M. M., Dinur Syahputra, S. T. M. K., & Dewi Wahyuni, S. K. M. K. (2021). Peran Literasi Digital Di Masa Pandemi. CATTLEYA DARMAYA FORTUNA. https://books.google.co.id/books?id=gs5DEAAAQBAJ
32. Sung, A., Leong, K., Sironi, P., O'Reilly, T., & McMillan, A. (2019). An exploratory study of the FinTech (Financial Technology) education and retraining in UK. Journal of Work-Applied Management, 11(2), 187–198. https://doi.org/https://doi.org/10.1108/JWAM-06-2019-0020
33. Susetyo, D. P., & Firmansyah, D. (2023). Literasi Ekonomi, Literasi Keuangan, Literasi Digital dan Perilaku Keuangan di Era Ekonomi Digital. Economics and Digital Business Review, 4(1), 261–279.
34. Syafrial, H. (2019). Literasi Digital. In Sustainability (Switzerland) (Vol. 11, Issue 1). http://scioteca.caf.com/bitstream/handle/123456789/1091/RED2017-Eng-8ene.pdf?sequence=12&isAllowed=y%0Ahttp://dx.doi.org/10.1016/j.regsciurbeco.2008.06.005%0Ahttps://www.researchgate.net/publication/305320484_SISTEM_PEMBETUNGAN_TERPUSAT_STRATEGI_MELESTARI
35. Tatli, H., & Koc, B. (2021). the Relationship Between Sales Volume and Consumer Confidence Index in the Turkish Retail Industry. Bingöl Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 22, 773–790. https://doi.org/10.29029/busbed.940072
36. Xiao, J. J., & O'Neill, B. (2016). Consumer financial education and financial capability. International Journal of Consumer Studies, 40(6), 712–721. https://doi.org/https://doi.org/10.1111/ijcs.12285
37. Yushita, A. N. (2017). Pentingnya Literasi Keuangan Bagi Pengelolaan Keuangan Pribadi. Nominal, Barometer Riset Akuntansi Dan Manajemen, 6(1). https://doi.org/10.21831/nominal.v6i1.14330
38. Yuslin, H. (2022). Determinan Indeks Keyakinan Konsumen Terhadap Kondisi Perekonomian Indonesia. IEB JOURNAL Islamic Economics and Busines Journal, 4(1), 81–95.

Cite this Article: Rini A.S. (2024). Determinants of Financial Literacy, Digital Literacy, Internet Penetration and Consumer Confidence Level Mediated by Fintech Growth on Retail Industry Growth in Indonesia. International Journal of Current Science Research and Review, 7(12), 9109-9118, DOI: https://doi.org/10.47191/ijcsrr/V7-i12-51