

## THE INFLUENCE OF FINANCIAL TECHNOLOGY AND E-COMMERCE ON MSME INCOME IN SUMENEP

Arie Setyo Dwi Purnomo<sup>1</sup>, Avinda Dwi Purnamasari<sup>2</sup>

<sup>1,2</sup>Fakultas Ekonomi dan Bisnis, Universitas Trunojoyo Madura

### ARTICLE INFO

**Keywords:**  
Financial technology;  
E-commerce;  
MSME Income.

**E-mail:**  
[arie.dwip@trunojoyo.ac.id](mailto:arie.dwip@trunojoyo.ac.id)

### ABSTRACT

This study aims to determine how MSMEs' incomes are affected by e-commerce and financial technology in the tourist area of Slopeng Beach, Sumenep Regency. A quantitative method was used in this study. Participants on this study is members of the MSME business community who live near Sumenep's Slopeng Beach tourism. With a total of fifty respondents, the technique of purposeful sampling was used for the sampling. Multiple linear regression analysis was used for the data analysis. The study demonstrates that financial technology has not effect on MSME income. Nevertheless, income increases as a result of e-commerce. Sumenep's SME sector. E-commerce and financial technology, on the other hand, simultaneously raise SMEs' incomes in Sumenep.

Copyright © 2023 Economic Journal. All rights reserved.  
is Licensed under a [Creative Commons Attribution-NonCommercial 4.0 International License \(CC BY-NC 4.0\)](https://creativecommons.org/licenses/by-nc/4.0/)

### 1. INTRODUCTION

MSMEs play an important role in the growth and development of the national economy. UMKM" is a business that is able to survive in various conditions such as the monetary crisis and the economic crisis that has hit Indonesia. Therefore, MSMEs in Indonesia are still an important factor in improving the national economy [1]. UMKM is a type of business carried out individually, households and business entities. Classification is based on the amount of annual sales, wealth or assets. Based on RI Law no. 20 of 2008 the criteria for SMEs are: a. Micro businesses have a maximum asset value of 50,000,000 million rupiahs, which includes buildings and land, while the maximum annual turnover is 300,000,000 million rupiahs. b. Small businesses have maximum assets of >50,000,000-500,000,000 million rupiah, not including buildings and land, and annual turnover of >300,000,000-2,500,000,000 billion rupiah. c. Medium Enterprises have assets >500,000,000-10,000,000,000 billion, and annual turnover >2,500,000,000-50,000,000,000 billion rupiah.

From 2019 to 2021, the world economy experienced an unstable condition due to the COVID-19 outbreak. The results of a survey by the Asian Development Bank (ADB) stated that 50% or around 37,000 MSMEs were declared bankrupt due to the COVID-19 pandemic. The decline in people's purchasing power has an impact on decreasing the income of business actors, coupled with the existence of social restrictions imposed by the government which is one of the reasons many Indonesian MSMEs have gone bankrupt [2]. The thing that can be done to maintain a business is to take advantage of existing technological developments because this can indirectly expand market share which will have an impact on revenue.

Today, technology is used to support almost every activity. The global economy has moved in a more modern, effective and efficient direction as a result of technological innovations such as financial technology. In essence, financial technology is an innovative financial service that uses online technology to facilitate transaction processes, including installment payments, insurance, money transfers, balance checks, loans and investments [3]. Financial technology (fintech) is a financial service that facilitates financial services so that they are more effective and efficient, especially in terms of payments, loans and investments [4]. According to [2] financial technology is a new type of technology that uses various financial service models to benefit from businesses related to the provision of financial services. [5] states that fintech is a financial technology system that offers products, technology, and services that have the potential to affect economic stability. Business actors can take advantage of fintech as a way for digital payments and also financial regulators. If in the past when we wanted to make payments, we had to meet in person and had to bring cash so we could make transactions, but now only by using gadgets we can make transactions in a short time [6]. Based on the above understanding, fintech can be concluded as a financial service that utilizes advances in technology and the financial industry to make the financial transaction process safer, modern, and effective.

*The Influence Of Financial Technology And E-Commerce On MSME Income In Sumenep. Arie Setyo Dwi Purnomo, et.al*

In the economic sector in the digital era, business actors who are dominated by MSMEs are encouraged to start learning how to make transactions online or with digital media, one of which is e-commerce. The existence of the Covid-19 pandemic has forced many people, especially entrepreneurs who have not been literate in the world of the digital economy, to be forced to learn so that their businesses can continue to exist [7].

E-commerce is the application of using the internet as a sales, purchase, marketing transaction and a means to expand market share in order to gain higher profits than before [8]. Electronic commerce or e-commerce is a series of processes of distribution, trade, and marketing of goods and services using electronic systems such as the internet and other computer networks [9]. Sales of electronic commerce-based products will increase their quantity and increase their welfare [10]. In order for MSME business actors in Indonesia to compete in the digital era as it is today, they must be able to utilize e-commerce for product marketing and payment processes [11]. E-commerce is a type of business that uses faster technology to sell products and services online, making it more flexible and efficient [12]. A business or business that can build an online system and use information technology quickly is called an e-commerce business. Developing a business through e-commerce is a strategy to maintain sales growth, especially during an epidemic and everything is digital like today. Moreover, people are now more interested in buying their needs online without having to travel outside. So, if we market our products in e-commerce, our market share will also become wider. Also the costs incurred via the web are much lower than selling in physical stores.

Sumenep Regency, which is in East Java Province, has a majority of the population making MSMEs their main source of income. The data obtained from the Cooperatives and Micro, Small and Medium Enterprises Office of the Sumenep Regency shows that the number of MSMEs in Sumenep continues to increase every year. This proves that Sumenep Regency is still dominated by people who make MSMEs their livelihood.

Table 1. Number of Sumenep MSMEs increase

Year	Number of MSMEs
2018	254
2019	287
2020	316

Source: Department of Cooperatives and SMEs Sumenep.

MSMEs in Sumenep Regency are less developed but continue to grow. The lack of knowledge, skills and expertise possessed by MSME actors is an obstacle so that they cannot take advantage of existing technological developments in carrying out their business activities and also the lack of marketing methods that can attract the attention of consumers. In addition, the existence of a pandemic outbreak has forced business actors to think about how to keep their businesses afloat. One way is by utilizing existing technology because it can indirectly increase the income of business actors (Nadya, 2016). Revenue is income derived from the provision of goods and/or services from the business activities carried out. According to PSAK No. 23 in [13], there are 3 sources of income that are obtained, namely through the sale of goods, services, and the use of resources from other parties. From the description above, a hypothesis can be proposed:

H1: Financial technology has a significant effect on MSME income.

H2: E-commerce has a significant effect on MSME income.

## 2. METHOD

### 2.1 Type and Data Source

The type of data used is primary data. Primary data is data taken from primary data sources or field data sources. This primary data was obtained directly through interviews and distributing questionnaires directly to MSME actors around the Slopeng Beach tour, Sumenep. As well as company documentation or archives in the form of social actions and words from parties related to the problems examined directly. Financial technology and e-commerce are independent variables while MSME income is the dependent variable. The population used is MSME actors around Slopeng Beach tourism, Sema'an Village, Dasuk District, Sumenep Regency. The technique used in sampling was purposive sampling technique which is a method of determining respondents to be sampled based on certain criteria. The number of samples obtained was 50 respondents.

## 2.2 Analysis Method

This study uses a quantitative method, namely analyzing data and matters relating to numbers or calculation formulas used to analyze the problem under study. The collected data will be processed and analyzed through IBM SPSS ver. 25. Data analysis uses multiple linear regression.

## 3. RESULT AND DISCUSSION

### 3.1 Result

#### A. Multiple Linear Regression Analysis

Multiple linear regression analysis is a regression model that involves more than one independent variable. Multiple linear regression analysis is used to determine the direction and how much influence the independent variables have on the dependent variable

Table 2. Multiple linear analysis test

Coefficients <sup>a</sup>						
Model	Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.	
1	(Constant)	2.595	.492		5.275	.000
	Financial Technology	.003	.060	.007	.053	.958
	E-Commerce	.377	.054	.905	6.965	.000

Based on table 2, the regression equation  $Y = 2.595 + 0.003 X_1 + 0.337 X_2$ . Based on this equation, it is known that the value of a or a constant is 2.595. This means that if the value of financial technology (X1) and e-commerce (X2) is constant, then MSME income (Y) is 2.595. The financial technology regression coefficient is 0.003, meaning that if the value of the financial technology variable (X1) increases by one unit, while the value of the e-commerce variable (X2) remains constant, then the MSME income variable (Y) will increase by 0.003. The e-commerce regression coefficient value is 0.337 meaning that if the value of the e-commerce variable (X2) increases by one unit, while the value of the financial technology variable (X1) remains constant, then the MSME income variable (Y) will increase by 0.337.

#### B. F test

The F test is used to determine the effect of the independent (free) variables jointly on the dependent (bound) variable. Simultaneous significant test can be carried out by observing the significant value of F at the  $\alpha$  level used (this study uses an  $\alpha$  level of 5%).

F table formula = (k ; n-k)

F table = (2 ; 50-2)

= 3.19

Table 3. F test

ANOVA <sup>a</sup>						
Model	Sum of Squares	Df	Mean Square	F	Sig.	
1	Regression	248.417	2	124.209	115.457	.000 <sup>b</sup>
	Residual	50.563	47	1.076		
	Total	298.980	49			

a. Dependent Variable: Peningkatan Pendapatan

b. Predictors: (Constant), E-Commerce, Financial Technology

Based on the SPSS output results in table 3, it is known that the calculated F value is 115.457 and the Sig. is equal to 0.000. Because the calculated F value is  $115.457 > F$  table 3.19 and the Sig.  $0.000 < 0.05$  then as on the basis of the decision in the F test it can be concluded that the hypothesis is accepted or in other words Financial Technology (X1) and E-Commerce (X2) simultaneously affect income (Y).

#### C. t Test

The t test shows how much influence the independent variables have individual to the dependent variable. The formula for finding the t table value:

t table = (a/2 ; n-k-1 or df residual)

t table = (0.05/2 ; 50-2-1)

t table = (0.025 ; 47)  
t table = 2.011

The results of the t test can be seen in the table coefficients contained in the sig (significance) column. Based on table 2, it is known that the calculated t value of the financial technology variable (X1) is 0.053 and a significance value of 0.958. Because the t count value is  $0.053 < t \text{ table } 2.011$  and the significance value is  $0.958 > 0.05$ , it can be concluded that H1 is rejected. This means that financial technology (X1) has no effect on income (Y). Meanwhile, the calculated t value of the E-commerce variable is 6.965 and a significance value of 0.000. Because the t-value is  $6.965 > t\text{-table } 2.011$  and the significance value is  $0.000 < 0.05$ , it can be concluded that H2 is accepted. This means that e-commerce (X2) has an effect on income (Y).

### 3.2 Discussion

#### A. The effect of financial technology on MSME income

The financial technology variable has a t-count smaller than t-table ( $0.053 < 2.011$ ) and a significance ( $0.958 > 0.05$ ) and the regression coefficient of the financial technology variable is 0.003. This means that testing on the first hypothesis is rejected. So the conclusion is that financial technology has no significant effect on the income of MSMEs around Slopeng Beach tourism, Sumenep. This research is in line with [14] and [15] which conclude that financial technology has no effect on increasing MSME income. In contrast to research [13] and [16] which concluded that the use of financial technology has an effect on increasing MSME income.

Based on the results of the questionnaire, it was found that 76% or 38 respondents indicated that they had not used fintech in their business and only 24% or 12 respondents had used fintech in the business they were running. In accordance with the results of the study, MSMEs around Slopeng Beach still have limited knowledge regarding technology. This is evidenced by the confusion among MSMEs when they want to fill out questionnaires via smartphones, as well as the limited internet network so that they experience difficulties in accessing fintech to be used as a means of payment when processing transactions. Not all MSMEs around Slopeng Beach, Sumenep have implemented payment transactions through financial technology but are still dominant using cash payment transactions because they are considered easier and more practical. Based on this, the financial technology variable has no significant effect on income. [14] states that providing education to the public, especially how to utilize financial transaction technology, will really help business people later so that later they will get more income than before.

#### B. The effect of e-commerce on MSME income

The e-commerce variable has a t count  $> t \text{ table } (6,965 > 2.011)$  and a significant value ( $0.000 < 0.05$ ), and the regression coefficient of the e-commerce variable is 0.337. This means that testing on the second hypothesis is accepted so that it can be concluded that e-commerce has an effect on MSME income around Slopeng Beach tourism, Sumenep. The results of this study are in line with research [17] and [18] which concluded that e-commerce has an effect on MSME income. In contrast to research conducted by [19] and [14] which concluded that the use of e-commerce has no effect on MSME income.

Based on the data obtained, it was found that MSMEs around Slopeng Beach tourism, Sumenep used e-commerce such as Shopee and Tokopedia, namely counter-type MSMEs with an average income of Rp. 5,800,000/month, while MSMEs in the field of souvenirs used e-commerce. -earn an average income of IDR 5,040,000/month. The results of this study state that the existence of e-commerce has been proven to be able to increase MSME income. and has a broad reach of potential customers.

### 4. CONCLUSION

Partially shows that the use of financial technology has no significant effect on the income of MSMEs around the Slopeng Beach tour. This is due to the lack of knowledge, skills and expertise possessed by MSME players around Slopeng Beach tourism which causes them to be unable to take advantage of existing technological developments in carrying out their business activities.

Partially the use of e-commerce has a significant effect on the income of MSMEs around the Slopeng Beach tour. This is due to the existence of e-commerce using internet media as the main place in the marketing process so that every consumer will be able to reach these products more easily and have a broad reach to potential customers.

## REFERENCES

- [1] D. Setyorini, E. Nurhayaty, and R. Rosmita, "Pengaruh Transaksi Online (E-Commerce) terhadap Peningkatan Laba UMKM (Studi Kasus UMKM Pengolahan Besi Ciampea Bogor Jawa Barat)," *J. Mitra Manaj.*, vol. 3, no. 5, pp. 501–509, 2019, doi: 10.52160/ejmm.v3i5.228.
- [2] Y. Sugiarti, Y. Sari, and M. A. Hadiyat, "E-Commerce untuk Meningkatkan Daya Saing Usaha Mikro Kecil dan Menengah (UMKM) Sambal di Jawa Timur," *Kumawula J. Pengabd. Kpd. Masy.*, vol. 3, no. 2, p. 298, 2020, doi: 10.24198/kumawula.v3i2.28181.
- [3] R. Fahlevi, "Inklusi keuangan syariah melalui inovasi fintech di sektor filantropi," *Proceeding IAIN Batusangkar*, vol. 4, no. 1, pp. 205–212, 2019, [Online]. Available: <https://ojs.iainbatusangkar.ac.id/ojs/index.php/proceedings/article/view/1556>
- [4] A. P. Darmika, H. Usman, and Goso, "Pengaruh Financial Technology Terhadap Perkembangan Umkm Di Kota Palopo," *Repos. Univ. Muhammadiyah Palopo*, pp. 1–5, 2021.
- [5] Y. Mustikasari and A. Noviardy, "Pengaruh Financial Technology Dalam Meningkatkan Literasi Keuangan Usaha Mikro Kecil dan Menengah Kota Palembang," *JIBM (Jurnal Ilm. Bina Manajemen)*, vol. 03, no. 2, pp. 147–155, 2020.
- [6] E. R. Widayanti, "Analisis pengaruh kecenderungan pergeseran sistem pembayaran dari tunai ke non-tunai/online payment terhadap peningkatan pendapatan usaha (studi pada UMKM di Yogyakarta)," *Semin. Nas. dan Call Pap. Paradig. Pengembangan Ekon. Kreat. di Era 4.0*, pp. 187–200, 2020.
- [7] Imam Pamungkas Walton and A. Nurmandi, "Strategi Bertahan Umkm Di Tengah Pandemi Covid-19," *J. Ilmu Pemerintah. Semesta*, vol. 2, no. 2, pp. 154–168, 2021, doi: 10.47431/governabilitas.v2i2.117.
- [8] O. Joseph, J. E. Tulung, and S. Wangke, "Impact of Social Media Marketing Towards Business Performance of Msmes in Manado During Covid-19 Pandemic Dampak Pemasaran Sosial Media Terhadap Kinerja Bisnis Umkm Di Manado Di Masa Pandemi Covid-19," *596 J. EMBA*, vol. 8, no. 4, pp. 596–605, 2020.
- [9] Wulandari, Maslichah, and D. Sudaryanti, "Pengaruh E-commerce dan Penggunaan Sistem Informasi Akuntansi Pada Pengambilan Keputusan dalam Berwirausaha di Sanggam Mart Kabupaten Balangan," *E-Jra*, vol. 09, no. 04, pp. 68–82, 2020.
- [10] M. Sholihin and S. Mujilawati, "Dampak Pemanfaatan e-commerce terhadap Peningkatan Penjualan di UMKM (Studi Kasus Ninda Bros Lamongan)," *J. Tek.*, vol. 8, no. 1, pp. 765–769, 2016.
- [11] F. Ramadhani and Arifin, "Optimalisasi Pemanfaatan Teknologi Informasi Komunikasi Berbasis E-Commerce Sebagai Media Pemasaran Usaha Kecil Menengah Guna Meningkatkan Daya Saing dalam Menghadapi Masyarakat Ekonomi Asean 2015," *Econ. Dev. Anal. J.*, vol. 2, no. 2, pp. 135–139, 2013, [Online]. Available: <http://journal.unnes.ac.id/sju/index.php/edaj>
- [12] T. Hariyati, Bambang Eka Purnama, and S. Sukadi, "Analisis Dan Perancangan Ecommerce Pada Batik Tulis Tengah Sawah Ngadirojo," *J. Teknol. Inf. Dan Komun.*, vol. 9, no. 1, pp. 49–54, 2018, doi: 10.51903/jtikp.v9i1.169.
- [13] N. U. Amelia, "Peran financial technology dalam meningkatkan pendapatan usaha mikro kecil dan menengah sektor fashion di kabupaten pangkep," *J. Ekon. dan Manaj.*, vol. Vol. 2, No, pp. 1–14, 2019.
- [14] V. Agnesia, A. J. Saputra, F. Bisnis, U. Universal, F. Technology, and M. Sosial, "Pengaruh Penggunaan E-Commerce, Financial Technology dan Media Sosial Terhadap Peningkatan Pendapatan UMKM Kota Dumai," pp. 750–761, 2022.
- [15] S. N. Sari and I. Mukhlis, "Capital And The Number Of Consumers As Intervening Variables Strategi Pengembangan UMKM Melalui Financial Technology Dengan Peningkatan Modal Dan Jumlah Konsumen Sebagai Variabel Intervening," vol. 3, no. May, pp. 1846–1860, 2022.
- [16] D. R. Hasibuan, "Analisis Peranan Fintech dan E-Commerce terhadap Perkembangan UMKM," vol. 10, no. 2, pp. 19–28, 2022, doi: 10.32497/keunis.v10i2.3490.
- [17] F. Mahliza, "The Influence of E-Commerce Adoption Using Social Media Towards Business Performance of Micro Enterprises," *Int. J. Business, Econ. Law*, vol. 18, no. 5, pp. 290–299, 2019.
- [18] Y. Aprilyan, "Pengaruh E-Commerce terhadap Peningkatan Pendapatan Usaha Mikro Kecil dan Menengah (UMKM) di Kabupaten Lombok Barat," *Risma*, vol. Vol. 2 No., pp. 292–306, 2022.
- [19] N. Triandra, D. Hambali, Nurasia, and N. Rosalina, "Analisis Pengaruh E-Commerce Terhadap Peningkatan Kinerja Umkm (Studi Kasus Pada Umkm Di Kabupaten Sumbawa)," *J. Ekon. dan Bisnis Indones.*, vol. 4, no. 1, pp. 6–10, 2019, doi: 10.37673/jebi.v4i1.259.