Role of E-Commerce and Own Capital in Income through Loan Capital as Intervenning Variables: Empirical Study in Sumenep Regency

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Keywords: E-Commerce, Equity, Equity Loans, Revenue.

Abstract: Micro, Small and Medium Enterprises (SMEs) are the most important part in the economy. Many government efforts to assist the Development SMEs by providing a forum for businesses in the form of credit loan capital is expected to encourage businesses to increase revenue. The purpose of this study was to determine the influence of their E-Commerce, own capital and loan capital directly and the indirect effect between equity and income through the business premises against the loan capital. This research was conducted in SMEs in Sumenep. Research carried out by conducting a survey with a questionnaire. The data used in this study are primary data, while the analysis method used is the analysis of lane or path analysis to determine the effect, directly and Sobel test to determine the effect indirectly. The analysis showed the capital itself has a positive influence on capital loans and E-Commerce has a positive influence on the loan capital. E-Commerce and loan capital has a positive effect on income.

1   INTRODUCTION

The development of the increasingly complex world of technology encourages each individual or group to apply in all activities. The current era of globalization is also known as the New Economy Era (New EconomyEra), the Digital Economy Era. The New Economic Era was marked by the application of Information Technology in carrying out its economic activities. The application of Information Technology is now needed in the current era of globalization. The application of Information Technology required is the development of a web-based business application model for Small and Medium Enterprises to increase competitive advantage and to increase sales.

The growth of MSMEs in Sumenep district has increased from year to year, this is evidenced by the turnover rate received by some MSMEs, but there are some MSMEs that have not increased, if we look more deeply why these players have a significant increase in turnover because of wider service coverage.

Currently in the world of commerce there is no reach of space and time, people are required to trade by providing services and goods quickly, in addition to the development of information technology can now improve performance quickly, precisely and accurately, advances in information technology encourage companies carry out new sales and marketing practices until the provision of services and goods can be done quickly. The internet is one part of advances in information technology. Consumers around the world can access the internet anywhere. The lifestyle of consumers who are now becoming more instantaneous.

One of the opportunities that must be exploited by micro, small and medium enterprises is the use of advances in information technology that can be carried out by Micro, Small and Medium Enterprises in providing fast, precise and accurate services is by using Electronic Commerce or E-Commerce.

According to previous research conducted by (Helmalia & Afrinawati, 2018) concluded that E-commerce has an effect on increasing the income of MSMEs. Another opportunity that MSMEs get is the existence of government policies that have made efforts to enable small and medium-sized businesses to broaden their horizons about opportunities and challenges through online systems or commonly known as e-commerce. The drafting of government regulations which are e-commerce regulations is mandated by Law 7/2014 on trade.

Capital is an important thing in a business to be built, in a business it is not only needed for own capital but also assisted by loan capital. The existence of loan capital will affect the increase in income and business productivity (Meisthya Pratiwi, 2013)

According to previous research conducted by Riawan & Wawan Kusnawan (2018), increased income is also influenced by capital, based on observations and interviews that it turns out that many MSME players find problems regarding the lack of capital they have so that business development is hampered.

The lack of capital in Sumenep district makes it difficult for small businesses to develop due to the lack of capital they have, and the need for additional funds from third parties, either in the form of additional from the government or in the form of loan funds from banks.

The purpose of this study was to determine the effect of Ecommerce and Own Capital on Increasing Income of Micro, Small and Medium Enterprises in Sumenep Regency through the Intervening variable of Loan Capital. Given that E-commerce has recently been favored by both large and small producers and retailers in general, this is because promotion through online media is easier to reach consumers in terms of introducing or selling their products. E-commerce makes it easier for consumers and producers to make transactions.

2 LITERATUR REVIEW

2.1 Business Process Reengineering

According to Peppard (1995, p.20), it is stated that Business Process Reengineering is a development philosophy which leads to achieving steps in developing company performance by redesigning existing processes throughout the organization. The same thing is stated by Brown (1999, p.336), that Business Process Reengineering is a radical business redesign which tries to achieve improvement in business processes by questioning business assumptions or rules related to organizational structures and procedures.

Based on the above definitions, it can be concluded that Business Process Reengineering is a way of thinking about development by planning and redesigning business processes related to organizational structures and procedures to achieve certain goals.

2.2 E-Commerce

Electronic Commerce (E-Commerce) or better known as Online Shopping is the implementation of commerce in the form of sales, purchase, ordering, payment, or promotion of a product, goods and / or services made by utilizing computers and digital electronic communication facilities or data telecommunications. In addition, this form of commerce can also be done globally, namely by using the internet network (Kuswiratmo, 2016: 163).

E-commerce is useful in reducing administrative costs and business process cycle times, and improving relationships with both business partners and customers. (Suhartini, dwi, et al, 2018)

Several definitions have been given for e-commerce (electronic commerce). Martin et al, define e-commerce as the use of IT to carry out business activities between two or more organizations, or between an organization and one or more end-customers, through one or more computer networks (Jogianto, 2005: 286).

2.3 Capital

Capital is the main thing in running a business, including trading. Capital is all forms of wealth used in the production process or to produce output. Capital is wealth that can generate profits in the future.

The capital used can be sourced from your own capital, but if it turns out that your own capital is not sufficient, you can add loan capital. So, in general, the types of capital that can be obtained to meet their capital needs consist of own capital and loan capital. (Suyadi Prawirosentono, 2001: 118)

The definition of capital in this study is the cost used to produce or buy merchandise and day-to-day operations, either from own capital or from other sources. Capital in this study is measured by the average monthly capital in rupiah units.

Capital According to the Source:

a. Own Capital / Net Worth / Internal Resources.
   This source comes from the owners of the company or comes from within the company, for example the sale of shares, member savings in the form of a cooperative business, this wealth itself has a characteristic, namely being permanently tied to the company.

b. Foreign capital / foreign assets / external sources.
   This source comes from outside the company, namely in the form of long-term or short-term loans. Short-term loans, namely loans with a

maximum maturity of one year, while loans with a maturity of more than one year, are called long-term loans. The characteristic of this foreign wealth is that it is not permanently bound, or only temporarily bound, which at any time will be returned to the lender (Buchari Alma, 2012: 249).

2.4 Income

Income is the maximum value that can be consumed by a person in a period by expecting the same condition at the end of the period as in the original state. This definition does not emphasize the quantitative total expenditure on consumption of a period, in essence, income is the receipt or remuneration of the factors of production, revenue is the producer 's receipt in the form of money obtained from the sale of goods produced.

According to Keynes, income is changes in the number of production factors used and changes in the ability of each unit of production factors to generate income (Rosyidi, 2003: 46). Income is the result of selling production factors that are owned to the production sector. In macroeconomics, income is the value of goods and services produced in a single year period in a country.

2.5 Micro Small and Medium Enterprises

In law number 20 of 2008 concerning micro, small and medium enterprises (MSMEs), the definition of MSMEs is as follows:

a. Micro enterprises are productive businesses owned by individuals and / or individual business entities that meet the criteria of micro enterprises as regulated in this Law.

b. Small Business is a productive economic business that stands alone, which is carried out by an individual or a business entity that is not a subsidiary or branch of a company that is owned, controlled, or is a part, either directly or indirectly, of a Medium or Large Business that meets the criteria of a Business. Small as referred to in this Law.

c. Medium Business is a productive economic business that stands alone, which is carried out by an individual or business entity that is not a subsidiary or branch of a company that is owned, controlled, or is part of, either directly or indirectly, with a Small or Large Business with a total net worth or annual sales as regulated in this Law.

Criteria for Micro, Small and Medium Enterprises The criteria for Micro, Small and Medium Enterprises according to Law Number 20 of 2008 in article 6 chapter IV are as follows:

a. Micro Business Criteria are as follows:

1) Have a net worth of at most Rp. 50,000,000.00 (fifty million rupiah) excluding land and buildings for business; or

2) Have annual sales proceeds of not more than Rp. 300,000,000.00 (three hundred million rupiah).

b. Small Business Criteria are as follows:

Has a net worth of more than Rp. 50,000,000.00 (fifty million rupiah) up to Rp. 500,000,000.00 (five hundred million rupiah) excluding land and buildings for business premises; or have annual sales of more than Rp. 300,000,000.00 (three hundred million rupiah) up to a maximum of Rp. 2,500,000,000.00 (two billion five hundred million rupiah).

c. Medium Business Criteria are as follows:

1) Have a net worth of more than Rp. 500,000,000.00 (five hundred million rupiah) up to a maximum of Rp. 10,000,000,000.00 (ten billion rupiah) not including land and buildings for business premises.

2) Have annual sales of more than Rp. 2,500,000,000.00 (two billion five hundred million rupiah) up to a maximum of Rp. 50,000,000,000.00 (fifty billion rupiah).

3 RESEARCH METHODOLOGY

3.1 Types and Design of Research

This research researchers use a quantitative approach. Quantitative method is a research method which can be interpreted as a research method based on the philosophy of positivism, used to research on certain populations or samples, data collection using research instruments, quantitative data analysis in order to test predetermined hypotheses.

3.2 Population and Sample

Population and sample in this research are all research subjects, if the researcher wants to examine all the elements in the research area, the research is called population research. The study or research is called a population study. (Arikunto S, 2006), in this case the research subjects were SMEs engaged in food in Sumenep district with a total of 30 respondents.

3.3 Data Analysis Techniques

This study uses data analysis techniques using the Smart PLS version 3 tool which runs on computer media. According to Abdillah (2018) PLS (Partial Least Square) as a prediction model does not assume a certain distribution to estimate parameters and predict quality relationships, therefore parametric techniques to test significant parameters are not needed and the evaluation model for prediction is nonparametric. PLS model evaluation is done by evaluating the outer model and inner model.

3.4 Structural Model (Inner Model)

The structural model in this study is evaluated using R^2 for the dependent construct, the path coefficient or t-values for each path to be tested for significance between constructs in the structural model. The value of R^2 is used to measure the degree of variation in changes in the independent variable on the dependent variable. The higher the R^2 value, the better the prediction model of the proposed research model. However, R^2 is not an absolute parameter in measuring the accuracy of the prediction model because the theoretical basis of the relationship is the most important parameter to explain the causality relationship.

3.5 Hypothesis Testing (Path Analysis)

The path analysis model aims to determine the effect of the independent variable on the dependent variable, either directly or indirectly. Supriyanto and Maharani (2013: 74-75) explain the steps in path analysis, namely as follows:

1. Designing models based on concepts and theories
2. An examination of the underlying assumptions. The assumptions underlying Path are:
   a. The relationship between variables is linear and adaptive
   b. Only recursion models can be considered, that is, only one-way causal systems. Meanwhile, the model containing reciprocal causal cannot be done with path analysis.
   c. Endogenous variables at least in interval measure
   d. Observed variables are measured without error (measurement instruments are valid and reliable)

The analyzed model is correctly identified based on the relevant theories and concepts, if the path analysis has been carried out based on the sample.

4 FINDING AND DISCUSSION

Based on the data presented in table 1 above, it is known that the AVE value of all variables is > 0.5. Thus it can be stated that each variable has good discriminant validity.

4.1 Reliability Test

Composite Reliability is the part used to test the reliability value of indicators on a variable. A variable can be declared to meet composite reliability if it has a composite reliability value > 0.6. The reliability test with composite reliability can be strengthened by using the Cronbach alpha value. A variable can be declared reliable or satisfies Cronbach alpha if it has a Cronbach alpha value > 0.7. The following is the composite reliability value of each variable used in this study:

Table 1: Average Variance Extracted (AVE).

	Avrage Variance Extracted (AVE)
E-Commerce	0,775
Loan Capital	0,508
Own Capital	0,602
Income SMES	0,502

Table 2: Composite Reliability.

	Cronbach's Alpha	Composite Reliability	Ket
E-Commerce	0,902	0,932	Reliabel
Loan Capital	0,859	0,891	Reliabel
Own Capital	0,869	0,900	Reliabel
Income SMES	0,858	0,889	Reliabel

Based on the data presented in table 2 above, it can be seen that the composite reliability value of all research variables is> 0.6 and the Cronbach alpha value of each research variable is> 0.7. These results indicate that each variable has met the composite reliability and Cronbach alpha so it can be concluded that all variables have a high level of reliability.

4.2 Structural Model (Inner Model)

The structural model is used to show how strong is the effect or influence of the independent variable on the dependent variable. Meanwhile, coefficient determination (R-Square) is used to measure how much the endogenous variable is influenced by other variables.

Chin stated that the R2 result of 0.67 and above for endogenous latent variables in the structural

model indicates that the effect of exogenous variables (which influence) on endogenous variables (which are influenced) is in the good category. Meanwhile, if the result is 0.33 - 0.67, it is in the medium category, and if the result is 0.19 - 0.33 it is in the weak category.

Based on data processing that has been done using the SmartPLS 3.0 program, the R-Square value is obtained as follows.

Table 3: Nilai R-Square.

	R Square	R Square Adjusted
Modal Pinjaman	0,570	0,538
Pendapatan UMKM	0,627	0,584

Based on the data presentation in the table above, it can be seen that the R-Square value for the Loan Capital variable is 0.570, which means that Loan Capital can be explained by E-Commerce and Capital itself by 57%, while 43% is explained by other variables outside the model. Then for the R-Square value obtained by the UMKM Income variable of 0,627, which means that the variables of E-Commerce, Own Capital, and Loan Capital are able to explain MSME Income by 62.7%, while 37.3% is explained by other variables outside the model.

Based on the data processing that has been done, the results can be used to answer the hypothesis in this study. Hypothesis testing in this study was carried out by looking at the T-Statistics value and the P-Values value. The research hypothesis can be stated as accepted if the P-Values value <0.05. The following are the results of hypothesis testing obtained in this study through the inner model:

Table T-Statistic and P-Values

Based on the Beta Coefficient value and the T-statistic value above, the test results for each hypothesis are as follows:

Table 4: The Effect of E-Commerce on Borrowed Capital.

	P Values	Keterangan
E-Commerce -> Loan Capital	0.022	Signifikan
E-Commerce -> Income SMES	0,000	Signifikan
Loan Capital -> Income SMES	0.003	Signifikan
Own Capital -> Loan Capital	0.027	Signifikan
Own Capital -> Income SMES	0,033	Signifikan

The results of the hypothesis test show that the P-Values value is 0.022, which means there is an effect of E-Commerce on Borrowed Capital, with a T-Statistics value of 2.296 indicating that E-Commerce (X1) has an effect on Borrowed Capital (Y1), and it is proven that H1 is accepted.

4.3 H2: The Effect of Own Capital on Loaned Capital

The results of the path coefficient test based on the T-Statistics value show that the effect of Own Capital on MSME Income has a level of 2,950 with a P-Values value of 0.003. Which means Own Capital (X2) affects UMKM Income (Y2).

4.4 H3: The Effect of Loaned Capital on UMKM Income

The results of the path coefficient test based on the T-Statistics value show that the effect of Own Capital on MSME Income has a level of 2,950 with a P-Values value of 0.003. Which means that borrowed capital (Y1) affects MSME income (Y2), so from these results it can be concluded that H3 is accepted.

4.5 H4: The Effect of E-Commerce on UMKM Income

From the results of the hypothesis test, it is known that the P-Values that form the effect of E-Commerce on MSME Revenue is 0,000 below the significance value of 0.05 with a positive T-Statistics value, so that E-Commerce (X1) has a significant effect on MSME Income (Y2), it is proven that H4 is accepted.

4.6 H5: The Effect of Own Capital on UMKM Income

The path coefficient test results based on the T-Statistics value show a value of 2.285 with a P-Values value of 0.033, so it can be concluded that Own Capital (X2) affects MSME Income (Y2), and it is proven that H5 is acceptable.

4.7 Indirect Hypothesis Testing

Input:		Test statistic:	Std. Error:	p-value:
a .469	Sobel test:	2.47306727	0.10544153	0.01339589
b .556	Aroian test:	2.43161598	0.10723897	0.01503163
s_a .104	Goodman test:	2.51671332	0.10361291	0.01184552
s_b .188	Reset all		Calculate	

Figure 1: The Effect of E-Commerce on MSME Income through Borrowed Capital as an Intervenning Variable.

Input:		Test statistic:	Std. Error:	p-value:
a .353	Sobel test:	2.06823051	0.09489658	0.03861835
b .556	Aroian test:	2.01034537	0.097629	0.04439465
s_a .122	Goodman test:	2.13142218	0.09208312	0.03305438
s_b .188	Reset all		Calculate	

Figure 2: The Effect of Own Capital on MSME Income through Borrowed Capital as an Intervenning Variable.

4.8 H6: The Effect of E-Commerce on MSME Income through Loaned Capital as an Intervening Variable

From Table 4.8 above, it is obtained that the p-value is below 5%, which means that the value is below the significance value so that it can be concluded that E-Commerce has an effect on MSME Income through Loan Capital as an Intervenning Variable. So that H6 is accepted.

4.9 H7: The Influence of Own Capital on MSME Income through Loaned Capital as an Intervenning Variable

From table 4.9 above, it can be seen that the p-value is below the 5% significance value, this means that capital itself has an indirect effect on MSME income through borrowed capital as an intervening variable. So from the description above it can be concluded that H7 is acceptable.

5 CONCLUSION

Based on the research results, several conclusions can be drawn to answer the problem formulation, namely:

1. E-Commerce has an effect on loan capital, which means that with marketing through E-Commerce, sales can increase so that it affects the acquisition of loan capital from outside parties.
2. Own capital affects the loan capital, the size of the capital used in the business can determine the size of the income of MSMEs so that it affects the size of the loan capital to be obtained.
3. Loan capital affects income, meaning that the size of the loan capital obtained affects the size of the income to be obtained.
4. E-Commerce has been empirically proven to affect the income of MSMEs, which means that using E-Commerce as a marketing medium can increase sales so that income also increases.
5. Own capital is empirically proven to have an effect on UMKM income, which means that the size of capital can also affect the level of sales so that it affects MSME income.
6. E-Commerce has been empirically proven to have an effect on MSME income through Loaned Capital as an Intervenning variable, which means that income increases due to the indirect effect of borrowed capital apart from marketing through E-Commerce.
7. Own capital has been empirically proven to have an effect on MSME Income through Loaned Capital as an Intervenning Variable, this means that with borrowed capital other than Own Capital, sales can increase, so that it will affect the amount of income to be received.
8. E-Commerce and Own Capital have an effect on MSME Income through Loaned Capital as an Intervenning variable, meaning that the existence of electronic marketing will increase sales so that it can increase income and the size of own capital and loan capital from outside can increase production which will have an effect on increasing UMKM income.

REFERENCES

Aribawa, Dwitya., 2016. E-Commerce Strategic Bussines Environment Analysis in Indonesia. International Journal of Economics and Financial Issues. ISSN: 2146-4138.

Alzahrani, Joman., 2018. The Impact of e-Commerce adoption on bussiness strategy in saudy Arabian small and medium enterprises (SMEs). Review of economics and political Science Vol. 4 No.1

Gregory N. Mankiw., 2011. Principles of Economics (Pengantar Ekonomi Mikro). Jakarta: Salemba Empat

Imam Ghozali, Structural Equation Modeling – Metode Alternatif dengan Partial Least Squares (PLS) (Semarang: Universitas Diponegoro, 2014), 39.

variabel intervenning. Jurnal Ekonomi Kuantitaif terapan. Vol 9 No.2

Ramdansyah, Agus., 2017. Adoption Model Of E-Commerce from SMEs Perspective in Developing Country Evidence-Case Study for Indonesia. Europian Research studies Journal. Vol XX Issue 4B,2017.

Robbins, Stephen dan Coulter, Mary., 2002. Manajemen, Jakarta: Gramedia

Triandini,Evi, et al. (2013 Factors influencing E-Commerce Adoption by SMES Indonesia: A Conceptual Model. LontaNr Komputer Vol. 4 No.3

Turban, Efrain, et al., 2002. Ecommerce : A managerial Perspective. Low price edition : 180-183.

Veiga, Marcelo Godke., 2019). The Financing of Small and Medium Sized Enterprises: An analysis of the Financing Gap in Brazil. Europen Bussiness Organization Law Review 20;633-664