

THE EFFECT OF PRICE FACTORS ON DEMAND FOR WEAVING AT HOME INDUSTRY DUA PELITA BENGKALIS

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Abstract

Backgrounds : This research focuses on the home weaving industry, which has an important role in supporting the local economy. The uniqueness and artistic value of woven products is often the main attraction for consumers, but the price factor has now become critical in the developing market dynamics. **Objectives :** This research aims to investigate the effect of price on demand for woven products in the context of a home industry. Although the industry contributes to cultural preservation and job creation, fluctuations in product demand are a major challenge. This research shows a significant decline in demand for homewoven products in recent years, creating a need for a deeper understanding of the relationship between price and demand. **Methods :** Using quantitative methods, this research uses sample sales price and sales volume data throughout 2022 to analyze the effect of price on demand. **Result and conclusions:** The analysis results show that selling price has a significant influence on demand, providing strategic insight for the home weaving industry to increase their competitiveness and economic sustainability.

Keywords: Selling Price, Demand, Weaving.

INTRODUCTION

Price has a very important role in the exchange of goods and services. In a business context, price is one of the factors that determine the success of selling a product or service. Every company, both small and large scale, always sets product prices in the hope of increasing sales and getting maximum profit. A number of definitions of price have been put forward by experts. according to (Mulyadi, 2022) Price is an important factor influencing various activities within the company to create a competitive advantage.

Meanwhile, the price according to (Herawati et al., 2018) states that price is a factor that has a significant impact on company profits. In addition, prices also indirectly affect costs because sales that occur are related to production efficiency. Price is often used as a marker of the value of a good or service based on the benefits provided. In addition, prices also have flexibility that allows companies to quickly change them if needed (Muhammad Irvan Noor Maulana, 2021) stated that price is a crucial factor in marketing a product or service, which has an important role in winning the competition in promoting the product. Therefore, pricing is a must, because it has a direct impact on purchasing decisions taken by consumers. Maulana explained that the selling price is the amount of money charged for a product or service, or the value exchanged by consumers in exchange for the benefits obtained from owning or using the product or service. In principle, the selling price must be able to cover production costs and generate a reasonable profit. Setting an appropriate selling price is a key strategy to attract buyers and achieve the profit goals desired by the company.

Selling price, according to (Fauzi Zulkarnaen et al., 2022), Price can be defined as the amount of money that the buyer must pay to the seller in exchange for the goods he buys. In other words, price is the value of an item set by the seller.

Demand refers to the amount of goods desired or demanded in a particular market at a particular price level. *Permintaan merujuk pada jumlah barang yang diinginkan atau diminta di suatu pasar tertentu pada tingkat harga tertentu.* (Kasdi, 2016). Demand is influenced by certain factors that affect the amount of products demanded by consumers. Factors such as income and the price of a product can affect the level of demand. Consumer demand theory is based on the theory of consumer behavior, which reflects how consumers determine the consumption of goods. Demand is the amount of goods or services that consumers want and are able to buy at a certain price and time according to their income. (Sukatin et al., 2022) .(Ritonga et al., 2022) states that market demand or aggregate demand for a commodity shows the number of alternatives to the commodity demanded per period of time, at various alternative prices by all individuals in the market.

Demand according to (Elvira, 2016) is the level of demand for a good or service from consumers, demand shows the relationship between the amount of goods demanded by consumers and the price of goods. (Venny & Asriati, 2022) explains that the demand function describes the relationship between the amount of goods or services demanded by consumers and the price of these goods or services. The law of demand states that when prices rise, the amount of goods or services demanded will fall, and vice versa, when prices fall, the amount of goods or services demanded will increase. Demand functions are of two types, namely:

1. The demand function is derived from the satisfaction function (Marshallian demand function), which is obtained through satisfaction maximization by considering income restrictions.
2. The demand function derived from the expenditure function (Hicksian demand function), which is obtained through expenditure minimization taking into account restrictions in the form of the level of satisfaction

According to (Kevin et al., 2019) Weaving is a handicraft product in the form of material (fabric) made using yarn (such as cotton, silk, and so on), produced by inserting weft transversely on the warp. According to (Maylinda Ambarwati, 2020) Weaving is a form of textile craft art which is part of the archipelago's craft art. This textile craft is considered one of the art heritages that deserves to be preserved.

Although price has a significant role in influencing product demand, there are still several aspects that need to be further understood. The literature review that has been described provides a basic understanding of the concepts of price and demand, but there is still a need to dig deeper into the specific factors that can influence the relationship between price and demand, especially in the context of home industries such as the Dua Pelita Weaving Home Industry.

Based on this background, the main problem that arises is how the selling price of woven products affects the level of demand in the Dua Pelita Weaving Home Industry. The hypothesis proposed is that there is a significant relationship between the selling price of woven products and the level of demand in the home industry.

To answer these problems, this research will adopt quantitative methods using simple linear regression analysis. The main purpose of this study is to determine the extent to which the selling price of woven products affects the level of demand in the Dua Pelita Weaving Home Industry..

Methods

This research is quantitative research. To see and examine a particular population or sample. Quantitative research is a research method in which it uses a lot of numbers (Ali et al., 2022). (Amin et al., 2023) explains that Population is the entire object / subject of research. In the context of this study, the population refers to the total data on selling prices and sales volumes throughout 2022 from January to December. Sample according to (Dewi, 2021) is part of the population taken through certain methods which also have certain characteristics. Samples will be taken if the researcher is unable to conduct research by taking data directly from the population. In the context of this study, the sample includes all selling price and sales volume data throughout 2022 from January to

December.

Results and discussion

Data analysis

After going through the planned research steps, the results of this study cover various aspects related to the problems raised at the beginning of the study. Descriptive statistics will provide a general overview of the data used in this study. Before carrying out hypothesis testing, the first step is to test the quality of the data used using the classical assumption test and simple linear regression test. This testing step is applied to ensure that the necessary assumptions have been met before proceeding to the regression model testing stage.

The data analyzed is the total data on selling prices and sales volume throughout 2022 from January to December at the Dua Pelita Weaving Home Industry which is listed in the table below using the SPSS program to determine the effect of variable X on variable Y.

Table. I Selling Price

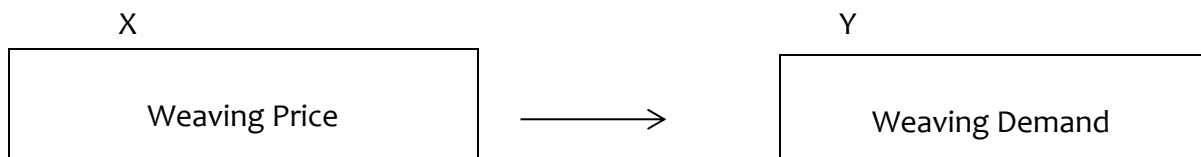
Month	Year	Unit Price Rupiah
January	2022	620,000
February	2022	600,000
March	2022	600,000
April	2022	620,000
May	2022	615,000
June	2022	630,000
July	2022	640,000
Agust	2022	640,000
September	2022	630,000
October	2022	650,000
November	2022	650,000
December	2022	645,000

In This study, the simple linear regression method was used to analyze the relationship between the selling price of woven products and the level of demand. The data used is the selling price and sales volume of woven products throughout 2022 from January to December. This provides a solid basis for investigating the effect of price factors on the demand for woven products in the home industry.

Table. II Demand For Weaving Products

Month	Year	Demand Amount
January	2022	25
February	2022	24
March	2022	25
April	2022	22
May	2022	23
June	2022	19
July	2022	18
Agust	2022	18
September	2022	16
October	2022	14
November	2022	15
December	2022	15

The results of the analysis show that there is a significant relationship between selling price and demand for woven products. The Beta coefficient of -0.913 is a measure of the effect of selling price on demand. The negative sign on the Beta coefficient indicates an inverse relationship between selling price and demand, meaning that if the selling price increases, demand tends to decrease, and vice versa. This result is consistent with the logical assumption that consumers will tend to respond to price increases by reducing demand.



Classical Assumptin Testing

Normality Test

The normality test on the regression model serves to evaluate whether the residual value resulting from regression has a normal distribution or not. The quality of the regression model is considered good if the residual value is normally distributed. The normality test method uses the Normal P-P Plot of regression standardized residual graph and the One Sample Kolmogorov-Smirnov test.

The principle of testing data normality states that if the significance value is greater than 0.05, it can be considered that the data has a normal distribution. The

residual normality test with the graphical method involves evaluating the distribution of data on the diagonal line on the Normal P-P Plot of regression standardized residual graph. Decisions are made based on the extent to which the points spread around the diagonal line, indicating that the residual values are normal.

Normality tests using the Kolmogorov-Smirnov test are commonly used because they are simple and do not cause differences in perception. The aim is to determine whether the residual distribution is normally distributed or not. Residuals are considered to have a normal distribution if the significance value is more than 0.05 (Ritonga et al., 2022). The significance standard used in this test is 5%, so the test criteria are as follows:

1. If the sig. (p-value) ≥ 0.05 then H_a is accepted.
2. If the sig. (p-value) ≥ 0.05 , then H_a is accepted.
3. If the sig. (p-value) < 0.05 , then H_0 is rejected.

Uji Normalitas
One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		12
Normal Parameters ^{a,b}	Mean	,0000000
	Std. Deviation	1,67953642
Most Extreme Differences	Absolute	,194
	Positive	9,194
	Negative	-,121
Test Statistic		,194
Asymp. Sig. (2-tailed)		,200 ^{c,d}

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

The normality test results show that the weaving price variable has a significance value of 0.200, the weaving demand has a significance value of 0.200 which is ≥ 0.05 . So in this study both variables can be said to be normally distributed. It can be concluded that H_a is accepted.

Multicollinearity Test

According to Ghozali (2012), the multicollinearity test aims to evaluate whether there is a correlation between independent variables in a regression model. Multicollinearity testing is done by paying attention to the Variance Inflation Factor (VIF) and tolerance values. Tolerance measures the extent to which an independent variable can be explained by other independent variables. Ghozali (2016) explains that multicollinearity testing can be done by checking the Tolerance and VIF values in the regression model. The decision-making criteria related to the multicollinearity test are as follows:

1. If the VIF value < 10 or Tolerance value > 0.01 , it can be concluded that multicollinearity does not occur.
2. If the VIF value > 10 or Tolerance value < 0.01 , it can be concluded that multicollinearity occurs

Uji Multikolinearitas Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	153,749	18,942		8,117	,000		
	harga jual	,000	,000	-,913	-7,090	,000	1,000	1,000

a. Dependent Variable: permintaan

The multicollinearity test results, it can be seen that the tolerance value is $1,000 \geq 0.01$ or the VIF value is $1,000 \leq 10$. Then these two independent variables are declared to be multicollinearity.

Heteroscedasticity Test

According to Sugiyono and Susanto (2015), the heteroscedasticity test is used to evaluate whether there is an inequality of variance from residuals between observations in a regression model.

The residual is the difference between the observed and predicted values, while the absolute value is the absolute value of the difference. Homoscedasticity refers to a condition in which the variation of residuals from one observation to another is constant, while heteroscedasticity occurs when the variation of residuals differs between observations. To detect the presence of heteroscedasticity in multiple linear regression, attention can be focused on the scatterplot or the predicted value of the dependent

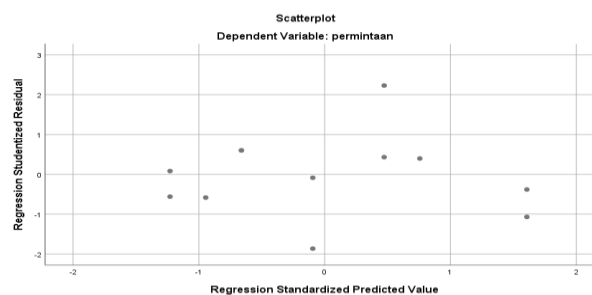
variable called SRESID with the residual error ZPRED.

Heteroscedasticity testing can be done with the Scatterplot Graph or through the predicted value of the dependent variable, namely SRESID and the residual error ZPRED. The decision-making criteria are as follows:

1. If there is a certain pattern, such as a regular pattern (wavy, widening then narrowing), this indicates heteroscedasticity.
2. If there is no clear pattern or the dots are randomly scattered above and below the number 0 on the y-axis, it can be concluded that there is no heteroscedasticity.

In other words, when there is no certain regular pattern on the scatterplot and the points are randomly scattered above and below the number 0 on the y-axis, it indicates that there is no heteroscedasticity problem. According to (Ghozali, 2016) If there is no certain pattern and it does not spread above or below zero on the y-axis, it can be concluded that heteroscedasticity does not occur.

Heteroscedasticity Test



Based on the results of the Scatterplot output above, it can be seen that the points spread and do not form a wave pattern, widening then narrowing. So it can be concluded that the data in this study does not occur Heteroscedasticity problems.

Autocorrelation Test

According to Sugiono and Susanto (2015: 333), the autocorrelation test aims to determine whether in the regression equation there is a serial tendency between confounding variables. To evaluate the presence of autocorrelation in the regression equation, the Run test approach is used. If the Run test value is > 0.05 , then autocorrelation symptoms are considered negligible. In this context, a regression model is considered good if it shows no signs of autocorrelation.

**Autocorrelation Test
Runs Test**

	Unstandardize d Residual
Test Value	-,00732
Cases < Test Value	6
Cases >= Test Value	6
Total Cases	12
Number of Runs	8
Z	,303
Asymp. Sig. (2-tailed)	,762

a. Median

Based on the table above, it is know that the asymp sig (2-tailed) value is 0.762 or ≥ 0.05 . so it can be conluded that the regression model does not have symptoms or autocorrelation problems.

Linear Test

The linearity test is a test that aims to evaluate whether there is a linear relationship between the independent variable and the dependent variable. Sudjana (2003) explainsthat the linearity test is carried out to test whether the data being analyzed is linear or not. One of the quantitative methods that can be used for linearity testing is the lack-of-fit test. This method is used to obtain a more objective conclusion without any element of subjectivity.

The linearity test aims to determine whether the independent variable (X) and the dependent variable (Y) have a linear relationship or not. This test can be done using the lack-of-fit test, and to ensure this, both variables are tested using the F test with a significance level of 5%. The criteria for assessing linearity can be obtained through the F significance value, where the relationship between the independent variable and the dependent variable is considered linear if the F significance value is greater than 0.05.

The results of the linearity test in the table above are the sig value on linearity $0.005 < 0.05$, which means that there is no linearity relationship between variables.

T test

According to Ghozali 2018, the t test is a statistical analysis used to assess the effect of independent variables individually on the dependent variable, as explained by Ghozali (2018: 98). The t test process involves a comparison between the calculated t

value and the t table value, where the significance level of this study is set at 5%. This means that the conclusions drawn have a tolerance of 5% or a probability of 95%.

The criteria used in interpreting the t-test results are as follows:

1. If the calculated t value is greater than the t table value and the significance level is less than or equal to 0.05, it can be concluded that the null hypothesis (Ho) is rejected and the alternative hypothesis (Ha) is accepted.
2. If the calculated t value is smaller than the t table value and the significance level is greater than or equal to 0.05, it can be concluded that the null hypothesis (Ho) is accepted, and the alternative hypothesis (Ha) is rejected. This shows that partially, there is no significant influence between each variable.

Test T
Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	153,749	18,942		8,117	,000
	harga jual	,000	,000	-,913	-7,090	,000

a. Dependent Variable: permintaan

Price Variable (X):

Ho : There is no influence between Reward (X) and Teacher Work Motivation.

H1 : There is an influence between Reward (X) and Teacher Work Motivation.

The results of hypothesis testing (t test) in the table above show that the significance value of the price variable (X) is 0.001 which is ≤ 0.05 . This shows that variable X has an influence on demand.

Test Y (Model)

A regression model is a mathematical equation that can predict the value of an independent variable from the value of the independent variable.(Purnomo, 2016).

Test Y (Model)								
Coefficients ^a								
Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.	Collinearity Statistics Tolerance	VIF
1	(Constant)	153,749	18,942		8,117	,000		
	harga jual	,000	,000	-,913	-7,090	,000	1,000	1,000

a. Dependent Variable: permintaan

From the table above it can be seen :

$$Y = \alpha + \beta X + \Sigma$$

$$Y = 153,749 + 0,000 + \Sigma$$

From the results above, it can be seen that every one-level increase in Y is influenced by the value of X by 0.000 times.

Determination Test (R²)

According to Sugiyono (2017: 244) states that the coefficient of determination is obtained by squaring the correlation coefficient and then multiplying by 100%. This percentage shows the magnitude of the influence of the independent variable on the dependent variable, while the rest is determined by other factors. Analysis of the coefficient of determination (R²) according to (Yulia et al., 2019). Determination test Used to measure the extent to which the model's ability to explain variations in the dependent variable, the coefficient of determination (R²) value ranges between zero and one. When the R² value is small, this indicates the limited ability of the independent variables to explain variations in the dependent variable. Conversely, if the R² value is close to one, it can be interpreted that the independent variable provides significant enough information to predict the variation in the dependent variable.

Determination Test (R²)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,913 ^a	,834	,817	1,762

a. Predictors: (Constant), sale price

Based on the results of the determination efficiency test in the table above, the adjusted R-Square value is 0.817 (81.7%). This means that the ability of the independent variables in this study to influence the dependent variable is 81.7%, while the remaining 18.3% (100-0.817) is explained by other variables other than the independent variables in the study.

Homogeneity Test

According to (Sianturi, 2022). Homogeneity test is a statistical test procedure that aims to show that two or more groups of data samples are taken from populations that have the same variance. This test is carried out as a requirement in the independent sample t test and Anova analysis. The underlying assumption in the analysis of variance (Anova) is that the variances of the populations are equal. The equality test of two variances is used to test whether the distribution of data is homogeneous or not, namely by comparing the two variances. If two or more groups of data have the same variance, then the homogeneity test does not need to be done again because the data is considered homogeneous

Uji Homogenitas ANOVA					
sale price					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3204166666,667	8	400520833,333	5,654	,091
Within Groups	212500000,000	3	70833333,333		
Total	3416666666,667	11			

Based on the table above, it is known that the sig value is 0.091 or ≥ 0.05 , it can be concluded that the sig value of $0.091 \geq 0.05$ in the homogeneity test can be said to be homogeneous.

The results of this study have important implications for home-weaving industry players. Setting the right selling price is a key factor in increasing demand for woven products. Industry players need to carefully consider factors that influence selling prices, such as production costs, raw material prices, and market pricing policies, in determining competitive yet profitable prices. Appropriate adjustments to selling prices can help improve the competitiveness of the home-weaving industry and ensure its economic sustainability.

However, this study also has some limitations that need to be considered. First, the data used is limited to one industry and a specific time period. Therefore, generalizing these findings to the entire weaving industry or other contexts needs to be done with

caution. Future research could involve broader data from different types of woven products and take a longer time to analyze long-term trends.

In addition, this study only considers the price factor as an independent variable that affects the demand for woven products. There are still other factors that can influence demand, such as product quality, design, brand, promotion, and consumer preference. Further studies can integrate these variables in the analysis model, thus providing a more comprehensive picture of the factors that influence the demand for woven products.

In the context of the home-based weaving industry, this study provides strategic insights for industry players to take the right pricing policy. By understanding the strong relationship between selling price and demand, they can optimize sales of woven products. Industry players can adopt flexible and adaptive pricing strategies to cope with demand fluctuations and maintain their competitiveness in a changing market. Appropriate price adjustments can also help balance profits and improve the welfare of homeworkers involved in the production of woven products.

CONCLUSIONS

Based on data analysis and discussion conducted, it can be concluded that there is a significant influence between the selling price of woven products on the level of demand in the Dua Pelita Weaving Home Industry. The results showed that the selling price had a significant negative effect on the demand for woven products. That is, if the selling price increases, product demand tends to decrease, and vice versa.

This study proves that price has an important role in influencing product demand. Strategic decisions in determining the selling price of woven products can have a direct impact on the competitiveness and economic sustainability of the home weaving industry. Therefore, companies should consider the right pricing strategy to win market competition and increase sales.

The results of this study also show that the home weaving industry has faced significant fluctuations in demand in recent years. This suggests challenges in maintaining market share and improving economic performance. Therefore, a deeper understanding of the factors affecting demand, such as price, is crucial to improving the competitiveness and sustainability of the home-weaving industry.

References

- Ali, M. M., Hariyati, T., Pratiwi, M. Y., & Afifah, S. (2022). Metodologi Penelitian Kuantitatif Dan Penerapannya Dalam Penelitian. *Education Journal*, 2(2), 1–6.
- Amin, N. F., Garancang, S., & Abunawas, K. (2023). Konsep Umum Populasi Dan Sampel Dalam Penelitian. *Jurnal Pilar*, 14(1), 15–31.
- Dewi, R. (2021). Pengaruh Kemampuan Kerja, Motivasi Dan Pengembangan Karier Terhadap Kinerja Karyawan Pt. Bina Buana Semesta. *Jebi) Jurnal Ekonomi Bisnis Indonesia*, 16(1), 21. Www.Jurnal.Stiebi.Ac.Id
- Elvira, R. (2016). Teori Permintaan (Komparasi Dalam Perspektif Ekonomi Konvensional Dengan Ekonomi Islam). *Islamika: Jurnal Ilmu-Ilmu Keislaman*, 15(1), 47–60. <https://doi.org/10.32939/islamika.v15i1.35>
- Fauzi Zulkarnaen, M., Fahrrozi, M., & Ashari, M. (2022). *Jurnal Ilmiah Ikip Mataram Sistem Survei Kepuasan Masyarakat Pada Pembuatan Kartu Tanda Penduduk*. 9(2). <https://ojs.ikipmataram.ac.id/index.php/jiim>
- Herawati, N., Hidayat, A., Bsi Jakarta, A., & Bsi Bogor, A. (2018). Suwarsito 3) Niken Herawati 1). *Niken Herawati*, 1(5), 522–535.
- Kasdi, A. (2016). Permintaan Dan Penawaran Dalam Mempengaruhi Pasar (Studi Kasus Di Pasar Bintoro Demak). *Bisnis: Jurnal Bisnis Dan Manajemen Islam*, 4(2), 18. <https://doi.org/10.21043/bisnis.v4i2.2688>
- Kevin, K., Hendryli, J., & Herwindiati, D. E. (2019). Klasifikasi Kain Tenun Berdasarkan Tekstur & Warna Dengan Metode K-Nn. *Computatio : Journal Of Computer Science And Information Systems*, 3(2), 85. <https://doi.org/10.24912/computatio.v3i2.6028>
- Maylinda Ambarwati. (2020). Studi Kerajinan Tenun Ikat Sarung Goyor Bapak Sudarto Di Desa Kenteng Kelurahan Pojok Kecamatan Tawang Sari Sukoharjo. *Pendidikan Seni Rupa*, 1(1), 63–70.
- Muhammad Irvan Noor Maulana. (2021). Muhamad Irvan Noor Maulana , (2021). *Muhamad Irvan Noor Maulana*, 5.
- Mulyadi, M. N. (2022). Pengaruh Harga Terhadap Keputusan Pembelian Lapis Talas Kujang Bogor Untuk Keperluan Usaha Waralaba. *Jurnal Ilmiah Manajemen Kesatuan*, 10(3), 511–518. <https://doi.org/10.37641/jimkes.v10i3.1539>
- Purnomo, R. A. (2016). Analisis Statistik Ekonomi Dan Bisnis Dengan Spss. In Cv. Wade Group.
- Ritonga, S., Zuhri, Z., Muis, M. A., Rahmatillah, N., Istiqomah, E. N., & Zakiah, N. (2022). Analysis Strategy Blended Learning Of Prospective Islamic Teacher After Covid 19 Pandemic. *Edukasi Islami: Jurnal Pendidikan Islam*, 11(02), 427–436. <https://doi.org/10.30868/ei.v11i02.2510>
- Sianturi, R. (2022). Uji Homogenitas Sebagai Syarat Pengujian Analisis. *Jurnal Pendidikan, Sains Sosial, Dan Agama*, 8(1), 386–397. <https://doi.org/10.53565/pssa.v8i1.507>
- Sukatin, Nurkhalipah, Kurnia, A., Ramadani, D., & Fatimah. (2022). Humantech Jurnal Ilmiah Multi Disiplin Indonesia. *Jurnal Ilmiah Multi Disiplin Indonesia*, 1(9), 1278–1285.
- Venny, S., & Asriati, N. (2022). Permintaan Dan Penawaran Dalam Ekonomi Mikro. *Jurnal Pendidikan Ekonomi (Jurkami)*, 7(1), 184–194. <https://doi.org/10.31932/jpe.v7i1.1583>

Yulia, Farida, Lamsah, & Periyadi. (2019). *Buku Manajemen Pemasaran_Compressed.Pdf*
(Issue April, P. 79).