

# Does Supplemental Income has an Impact on Consumption Expenditure? (A Case Study of Employees in the Production of Batik Tulis Rengganis in Probolinggo)

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**Abstract:** The differences in public consumption expenditure are influenced by personal wishes and external factors. Consumption describes the level of spending on goods and services in a certain period. This study aims to see how the effect of employee salary, supplemental income, and the number of the dependent family on consumption expenditure in the employee of Batik Tulis Rengganis production. The data used are primary data obtained directly from respondents through questionnaires with a sample of 65 employees; data collection lasted for two months. This research will use the linear regression analysis method. The result is that employee salary and the number of the dependent family do not impact consumption expenditure in an employee of Batik Tulis Rengganis production. Supplemental income has a significant positive impact on consumption expenditure in Batik Tulis Rengganis production employees.

**Index Term:** consumption expenditure, employee salary, supplemental income, number of dependent families.

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## 1. INTRODUCTION

Each economic sector's behavior patterns and consumption concepts will vary in household consumption, companies, and the government (Dewi, 2015). Consumption is the expenditure on goods and services purchased by individuals or groups according to their needs. The amount of consumption expenditure made will depend on income. The higher level of income, the higher the consumption value and the greater the savings incurred. Consumer spending has an enormous contribution to state income for developing countries, including Indonesia (Ali et al., 2014). An increasing consumption pattern allows state income to come from consumption.

Individual consumption expenditures are influenced by several factors, including income, tastes, socio-cultural factors, wealth, government debt, capital gains, interest rates, price levels, money illusion, distribution, age, geographical location, and income distribution (Herman, 2020; Persaulian et al., 2013; Qazzafi, 2020; Ramya and Ali, 2016). The most influential factor on consumption is income, but it cannot be influenced by other factors that have a strong enough influence on people's consumption (Naga, 2001). The amount of income received by households can describe the welfare of a society (Atiken, 2019). Although accurate income data is difficult to obtain, household expenditure data which consists of food and non-food expenditures can describe how the population allocates their household needs. Although the prices of goods or services differ between

regions, the value of household expenditures can still show differences in the population's welfare level between regions, especially from an economic perspective.

The economic crisis that hit Indonesia in 1998 has provided important lessons and experiences about the actual condition of the Indonesian economy. The Indonesian economy is controlled by the corporate sector or large businesses controlled by a handful of people. However, MSMEs can play a role in the national economy, proven to be more able to withstand the economic turmoil that led to the multi-dimensional crisis. The MSME sector became the most vigorous economic sector during the crisis period, and in 2020 MSMEs contributed to pushing down the potential for an economic recession during the Covid-19 pandemic (Suci, 2017). MSME business development can drive economic growth in the long term. Besides that, the increasing number of MSME businesses in Indonesia can absorb 96% of the total workforce in 2019 (Hafni and Rozali, 2015).

Previous researchers have widely researched individual consumption patterns so that researchers use supplemental income as a new indicator that can influence consumption expenditure. Aziz et al. (2018) examined the factors that influence household consumption and concluded that income, number of family members, and education level affect household consumption patterns. Hone and Marisennayya (2019) analyze the determinants of household consumption expenditure in Debreworkos Town, Ethiopia, and conclude that disposable income and family size affect household consumption. Different results are presented by Illahi et al. (2018), which explains that income does not affect household consumption in Indonesia. The differences in the research results above encourage researchers to further research by including side income as a research novelty.

## **2. LITERATURE REVIEW**

Based on Keynes's consumption theory that the amount of consumption expenditure is influenced by the level of income and the pattern of consumption expenditure is not related to income based on the principle of effective demand, namely the level of consumption must be met, even though the income level is equal to zero. That is called autonomous consumption (Syukri and Rahmatia, 2016; Pujoharso, 2013). If disposable income increases, consumption also increases. However, the increase was not as significant as the increase in disposable income. Income is defined as the source of income obtained by individuals to meet the needs of life (Christopher et al., 2017).

Income is an important factor influencing consumer behavior. The level of income will affect the consumption behavior of each individual. For the individual sector, additional income will be very helpful in meeting both basic and non-basic needs. The greater the side income employees have, the more funds allocated for consumption will increase. Susandini and Jannah (2021) explained that the income of salt farmers in Pamekasan determines the number of salt farmers spend. Salary is the payment received by the individual following the agreement in the employment contract. Both salary and income will determine household consumption patterns. In addition to salary and income, the number of dependents in the family also determines consumption decisions. Hanum (2018), in his research, explains that one of the factors that influence the level of household consumption is the number of dependents of family members. The number of dependents is defined as the number of household members occupying one house.

## **3. METHODS AND MATERIALS**

This research is quantitative in the form of primary numbers obtained through the distribution of questionnaires to employees of Batik Tulis Rengganis Production in Kotaanyar District, Probolinggo Regency. The population is the total number of employees in Rengganis Batik Production, Probolinggo Regency as many as 135 people. The research sample selection used the solving formula, and the results of the sample in this study were 65 employees of Batik Tulis Rengganis Production, Probolinggo Regency. In this study, the dependent variable used is the consumption of Batik Tulis Rengganis Production Employees. Probolinggo Regency (Y) is the expenditure made by households on goods and services to meet the needs where public

consumption is measured using units of rupiah. The independent variable in this study uses three proxy variables, namely Employee Salary (X1). The income obtained is a basic salary and other allowances for a certain period, measured in rupiah; Supplemental Income (X2). Those who earn income from work other than as Employees; Number of Household Dependents (X3) is the number of family members living in one house, measured by using the unit of soul/person. This study uses multiple linear regression analysis methods. This analytical method uses the OLS (Ordinary Least Square) approach to measure the magnitude of the influence between the independent and dependent variable, using the OLS (Ordinary Least Square) approach. This study uses the SPSS 16.0 application in the process of regression analysis. Based on previous research, the basic model used is the multiple linear regression equation models as follows:

$$Consumption_{it} = \alpha_{it} + \beta_1 Employee\ Salary_{it} + \beta_2 Supplemental\ Income_{it} + \beta_3 Number\ of\ Dependent\ Family_{it} + \varepsilon_{it}$$

Consumption is the household consumption of respondents in rupiah (Rp) per month. Employee Salary is the salary received by employees each month in rupiah (Rp). Supplemental income is money received for other work outside of permanent work in rupiah (Rp). The number of Dependent families describes the number of dependents of family members who live in one house in units of people. This study uses 2 data analysis techniques, a classical assumption test and multiple regression analysis. Classical assumption testing is carried out to ensure that the regression equation used is unbiased and consistent. There are four tests in the classical assumption test, namely normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test.

#### 4. RESULTS AND DISCUSSION

The normality test is a classical assumption test carried out to ensure the data distribution is normally distributed, in this study will use the Kolmogorov-Smirnov one-sample normality test with a significance level of the alpha score of 0.05. Suppose the probability value of the one-sample Kolmogorov-Smirnov result is above 0.05. In that case, the data is normally distributed while the probability value of the one-sample Kolmogorov-Smirnov result is below 0.05, indicating that the data is not normally distributed.

**Table 1. One sample Kolmogorov-Smirnoov normality test result**

		Unstandardized Residual
N		65
Normal Parameters	Mean	0.000
	Std. Deviation	452076.6
Most Extreme Differences	Absolute	0.08
	Positive	0.08
	Negative	-0.065
Kolmogorov-Smirnov Z		0.08
Asymp. Sig. (2-tailed)		0.2

Source: SPSS 16.0 Output (2021)

Based on the results of the table above, it can be seen that the Kolmogorov-Smirnov value of 0.08 is above the significant alpha score of 0.05, so it can be concluded that the data in this study are normally distributed. Furthermore, the multicollinearity test aims to determine whether there is a correlation between the independent variables or not. This study uses tolerance and variance inflation factor if the tolerance value is above 0.10 (> 0.10). The inflation factor variance value is below 10 (<10). It is concluded that the independent variables in this study do not correlate, while the tolerance value is below 0.10 (<0.10). Inflation factor

variance above 10 ( $> 10$ ) indicates that in the independent variable, there is multicollinearity.

**Table 2. Multicollinearity test result**

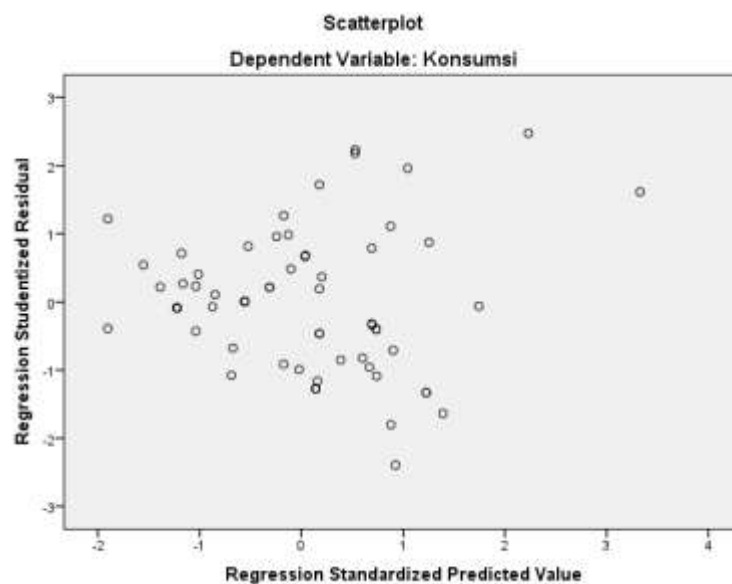
Variable	Tolerance	VIF
Employee Salary	0.771	1.298
Supplemental Income	0.627	1.596
Number of Dependent Family	0.788	1.269

Source : SPSS 16.0 Output (2021).

Based on the results of table 2 above, it can be seen that all variables have a tolerance value above 0.10 and a VIF below 10, so it can be concluded that there is no correlation between the independent variables of the study. Employee Salary has a tolerance value of 0.771 and a VIF value of 1.298, and Supplemental Income has a tolerance value of 0.627 and a VIF value of 1.596. The number of Dependent Family has a tolerance value of 0.788 and a VIF value of 1.269.

The third classical assumption test is the heteroscedasticity test, which aims to test whether there is an inequality of error variance in the regression model in the study. If the variance of the residuals of observation or another observation remains, it is called homoscedasticity. In this test using a scatterplot, if there is a regular pattern in the output, it indicates a heteroscedasticity condition. In contrast, if the pattern in the image spreads either above or below 0 on the Y axis, then the data is free from heteroscedasticity conditions.

**Picture 1. Scatterplot result**



Source : SPSS 16.0 Output (2021).

Based on the results of the image pattern above, it can be seen that the point distribution does not form a pattern and spreads above and below the 0 value on the Y source, so it can be indicated that in this study, there was no heteroscedasticity condition. This study's last classic assumption test is the autocorrelation test, which determines whether there is a correlation between residuals in the regression model. This study uses the Durbin-Watson test, a level one autocorrelation test in SPSS software.

**Table 3. Autocorrelation test result**

Model	R	R-Square	Adj. R-Square	Std. An error of the Estimate	Durbin-Watson
1	0.88	0.775	0.764	463059.77	2.312

Source : SPSS 16.0 Output (2021).

From the results of table 3 above, it can be obtained that the statistical value of the Durbin-Watson test is 2.312 while the value of  $du = 1.479$  and  $4-du = 2.521$ . So that the statistical value of the Durbin-Watson test is between the values of  $du$  and  $4-du$ , it can be concluded that there is sufficient evidence to state that there is no indication of autocorrelation. So it can be concluded that there is no autocorrelation in the linear regression model.

**Table 4. Multiple linear regression results**

Model	Unstandardized Coefficients		Standardized coefficients	t	Sig.
	B	Std. Error	B		
Constanta	952427.4	1075900.565		0.885	0.38
Employee Salary	0.014	0.818	0.001	0.017	0.987
Supplemental Income	0.587	0.055	0.824	10.727	0
Number of Dependent Family	138140.413	82545.131	0.115	1.674	0.099

Source : SPSS 16.0 Output (2021).

Based on the results of linear regression above, the model in this study is as follows:

**Consumption = 952427,472+0,014Employee Salary+0,587Supplemental Income+ 138140,413Number of Dependent Family +  $\mu$**

Employee salary and Number of Dependent families have no effect on consumption expenditure of Rengganis Batik Production Employees in Kotaanyar District, Probolinggo Regency, and Supplemental Income has a significant positive effect on consumption expenditure of Rengganis Batik Production Employees in Kotaanyar District, Probolinggo Regency. A positive relationship indicates that an increase in supplemental income of 1 rupiah will increase employee expenses by Rp. 0.014. If the amount of Supplemental Income increases, the level of consumption also increases. Consumption patterns released by each individual, especially households, will differ depending on their income. The close relationship between income and consumption is even described in Keynes's consumption theory which states that income is the most important factor in consumption decisions. An increase in income will impact increased consumption expenditure.

The income received is usually used for consumption in the form of primary or secondary goods to fulfill the necessities of life. Increased individual consumption expenditures can increase state income on the consumption side. Considering that Indonesia is still classified as a developed country, consumption is the main source of state income. Household consumption expenditure can positively influence the country's economy both short and long term. In addition to being related to the source of state income, the higher level of household consumption expenditure can affect welfare. The welfare factor is the most important thing in social life because it can be used to reward the hard work done. The findings of this study are in line with the findings of Dikanović (2018), who found that wages and income determine individual consumption expenditures in the Montenegrin community, and Iskandar (2017) stated that there is a positive relationship between income and household consumption expenditure patterns. Giang (2013), Adiana and Karmili (2012), Osak et al. (2014), Jappelli and Pistaferri (2010), and Sultan (2014) also concluded that the level of income would determine the pattern of spending on consumption both individually and in groups, that changes in consumption as a due to changes in income.

## 5. CONCLUSION

Based on the results of the research above, it is concluded that only the supplemental income variable has a positive and significant influence on the consumption expenditure of Batik Tulis Rengganis Employees in Probolinggo, additional income from outside of permanent work seems to be able to increase consumption expenditure considering the amount of disposable income they have has also increased. The increase in consumption expenditure indicates that the level of individual welfare increases due to the ability to meet the greater needs of life. In addition, the increased level of consumption expenditure will bind aggregate consumption so that national income through the consumption side will increase.

The level of household consumption expenditure is in line with the respondent's income level and secondary income. However, it would be better if the income earned is not all used for consumption purposes only. There should be some funds from the income set aside for savings. It is also essential in preparing finances for family dependents or the number of family members. However, saving is also significant to prepare for future needs, especially if unexpected needs. It is better if the consumption by the household of the Rengganis Batik Production Employees, Probolinggo Regency, prioritizes the principles of Islamic Economics, one of which is balanced, meaning that the existing income must be following consumption expenditures and do not overdo it in terms of consumption because Islam forbids it because it will have an impact on damage to it.

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#### **INFO**

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