The Influence of the Gross Regional Domestic Product of the Trade and Manufacturing Industry and Services Sector on the Amount of Labor Absorption in the City of Samarinda and the City of Balikpapan

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Abstract. *The purpose of this study was to determine the effect of the Gross Regional Domestic Product of the Trade and Processing Industry Sectors and Services on the Amount of Labor Absorption in Samarinda City and Balikpapan City.*

This study uses panel data from 2013 – 2022 in the two cities of Samarinda and Balikapapan using secondary data. Data analysis used a dummy variable multiple linear regression model using SPSS (Statistical Program Social Science) version 23.

The results of this study indicate that the GRDP variables in the trade, manufacturing and service sectors together have a significant effect on the amount of labor absorption. The Trade Sector Variable partially has a significant positive effect on Total Labor Absorption. The Processing Industry Sector Variable partially has no significant effect on Total Labor Absorption. And the Service Sector Variable partially has a significant negative effect on Total Labor Absorption.

Keywords: *Trade Sector GRDP, Processing Industry Sector GRDP, Services Sector GRDP, Amount of Labor Absorption*

INTRODUCTION

Labor is basically one of the factors of production that is used to produce goods and services to meet their own needs as well as for the community at large. In production activities, labor is the most important input besides raw materials and also capital. According to Payaman quoted (A.Hamzah, 1990) labor is (man power) a product that has or is working or is looking for work, as well as those who are carrying out other work. Like going to school, or housewives. Practically speaking, the workforce consists of two things, namely the work force and non-work force: a) the labor force consists of those who are working and those who are unemployed or are looking for work; b) groups that are not in the labor force consist of those who attend school, those who take care of the household, and other groups or receive income from other parties, such as retirees and others.

In several countries with a large population such as Indonesia, labor is an important asset because it provides income to the country concerned for the creation of sustainable economic development activities. The Indonesian Central Statistics Agency (BPS) reports that based on data in 2021 and 2022, Indonesia's population will reach

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275.7 million people, this number has increased from 2021 which amounted to 272.6 million people.

The large population in the economy can be both a driver and a hindrance to development. An optimistic view of the role of population growth in economic development, one of which was put forward by Adam Smith (1729 – 1790), a pioneer of classical economics. According to Smith, viewed from the demand side, population growth will expand the market. If the market develops, there will be a division of labor and production specialization.

As for Samarinda, the capital city of East Kalimantan Province, the population in 2022 will be 825,490 people, and the city of Balikpapan in the same year will be 704,110 people. Samarinda as the Capital City of East Kalimantan Province has the largest population when compared to other Regencies or Cities which also exist in East Kalimantan. While the City of Balikpapan ranks second after the City of Samarinda. With a population that has reached more than eight hundred thousand people, it is hoped that it will also be followed by a large number of workers as one of the factors in the success of development economic activities.

LITERATURE REVIEW

Labor

The workforce is the population aged within the working age limit. The working age limit varies from country to country. The working age limit adopted by Indonesia is a minimum year, without a maximum age limit. And according to Law No. 13 of 2003, labor is everyone who is able to do work to produce goods and services, both to meet their own needs and those of the community.

The workforce (manpower) is also divided into two groups, namely the labor force and non-labor force. Included in the labor force are workers or residents of working age, or those who have a job but are temporarily not working, and those looking for work. While those who are not included in the labor force are workers or residents of working age who are not working, do not have a job and are not looking for work.

Employment

Absorption of labor is the acceptance of labor actors to carry out tasks as they should or a condition that describes the availability of jobs or jobs to be filled by job seekers (Todaro, 2003: 307). Absorption of labor in general shows the magnitude of a

company's ability to absorb labor to produce a product. The ability to absorb the large workforce is not the same between one sector and another.

Economic growth

Economic growth is defined as an increase in the ability of an economy to produce goods and services. Economic growth is a very important indicator in analyzing the economic development that occurs in a country. Economic growth will generate additional income for the community in a certain period. Because basically economic activity is a process of using factors of production to produce output, this process will in turn produce a flow of remuneration for the factors of production owned by the community (Basri, 2002), with economic growth it is expected to increase income society as the owner of factors of production.

METHOD

In this study the data analyzed were secondary data or data obtained from several existing sources, while the data collection technique was carried out through library research, namely research conducted with literature by quoting parts of books, notes, browsing the internet. and other sources deemed appropriate. This data was specifically obtained from the Samarinda Central Statistics Agency (BPS) and the East Kalimantan Province Central Statistics Agency (BPS).

In explaining the effect of the relationship between the gross regional domestic product (GDP) of the trade, manufacturing and service sectors on the amount of employment in the cities of Samarinda and Balikpapan, an analytical tool is needed. The analytical model used in this study is a dummy multiple linear regression analysis model or multiple linear regression econometric test which is intended to determine the effect of trade sector variables (X_1), manufacturing sector (X_2) and service sector (X_3) which are factors that influence the amount of absorption workforce (Y) in the city of Samarinda and the city of Balikpapan (D-Dummy) expressed in the function as follows:

$Y = f(X_1, X_2, X_3, D)$

The equation of the multiple linear regression form of the dummy variable is as follows:

$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 D + \mu$

RESULTS AND DISCUSSION

Calculation of Correlation Coefficient (R) and Coefficient of Determination (R^2)

Table 1. Correlation Coefficient (R) and Coefficient of Determination (R^2)

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.932[a]	.868	.833	14640.225

a. Predictors: (Constant), Dummy, Perdagangan, Industri, Jasa
b. Dependent Variable: TK

The Model Summary table shows that the correlation (R) is simultaneously between the trade sector (X_1), the manufacturing sector (X_2), the service sector (X_3), the difference in the status of the city of Samarinda and the city of Balikpapan (D) on the amount of employment (Y) obtained a value of 0.932 which means the level of relationship between the variables of the trade sector (X_1), the industrial sector (X_2), the service sector (X_3) to the amount of employment (Y) is included at a very strong relationship level.

While the magnitude of the coefficient of determination (R^2) in the above calculation is 0.868 or 86.8%. This means that the contribution made by the four independent variables to the dependent variable (Y) is 86.8% while the remaining 13.2% is influenced by other variables not examined in this study.

Hypothesis Testing with the F Test

Table 2. Calculation Results With Test F

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21135041197.833	4	5283760299.458	24.652	.000[b]
	Residual	3215042897.117	15	214336193.141		
	Total	24350084094.950	19			

a. Dependent Variable: TK
b. Predictors: (Constant), Dummy, Perdagangan, Industri, Jasa

From the results of these calculations, it shows that the Fcount value is 24,652 with a significance of 0,000 when compared to the Ftable at a 5% confidence level at n – k – 1 (20 – 4 – 1) and the Ftable value is 3.24. This shows that the Fcount is 24,652 > Ftable with a significance of 0,000 < α = 0.05 which means that Ha is accepted. Thus, it can be concluded that together the trade sector, the manufacturing sector, the service sector, have a significant effect on the amount of employment.

Hypothesis Testing With t Test

Table 3. Calculation Results With Test t

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-19998.225	28282.454		-.707	.490
	Perdagangan	.038	.007	1.370	5.836	.000
	Industri	.001	.001	.273	1.853	.084
	Jasa	-.024	.006	-1.110	-3.940	.001
	Dummy	114652.388	15747.382	1.643	7.281	.000

a. Dependent Variable: TK

Based on Table 3, it can be seen that the influence of each independent variable on the dependent variable is as follows:

1. The trade sector variable (X_1) has a significance value of 0.000 <0.05, so Ha is accepted and Ho is rejected, which means that partially the trade sector variable has a significant positive effect on the amount of employment (Y). (Hypothesis 1 is accepted).

2. The manufacturing sector variable has a significance value of 0.084 <0.05, so Ho is accepted and Ha is rejected, partially the manufacturing sector variable has no significant effect on the amount of employment (Y). (Hypothesis 2 is rejected).

3. The service sector variable has a significance value of 0.001 <0.05, so Ha is accepted and Ho is rejected, partially the service sector variable has a significant negative effect on the amount of employment (Y). (Hypothesis 3 is accepted).

CONCLUSION

After the results of the analysis and discussion in the previous chapter have been discussed, then the conclusions of this study will be presented. The trade sector simultaneously and partially influences the amount of labor absorption in the cities of Samarinda and the cities of Balikpapan ; The manufacturing industry sector has simultaneously and partially no effect on the amount of labor absorption in the cities of Samarinda and the cities of Balikpapan ; The service sector simultaneously and partially has a significant negative effect on the amount of employment in the cities of Samarinda and the cities of Balikpapan ; There are differences in the amount of labor absorption between the cities of Samarinda and the cities of Balikpapan.

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