

Analysis of The Effect of Capital and Employee Expenditure on The Expenditure Index Through Labor Absorption in Jambi City

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Abstract

The purpose of this study was to determine capital expenditures and personnel expenditures had an effect on expenditures through labor absorption as an entrepreneurial variable in Jambi City in 2001-2021. To achieve the objectives of the study, a path analysis model was used with a qualitative descriptive research method. The conclusions of this study were: 1) Capital expenditure had a positive and insignificant effect on employment in Jambi City. 2) Personnel expenditure had a positive and significant effect on labor absorption in Jambi City. 3) Capital expenditure had a positive and significant effect on the expenditure index in Jambi City. 4) Personnel expenditure had a positive and significant effect on the expenditure index in Jambi City. 5) Labor absorption had a positive and significant effect on the expenditure index in Jambi City. 6) Employment was able to mediate the effect of capital expenditure and personnel expenditure on the Expenditure Index in Jambi Province. For these reasons, the strategy needed is that the government must increase the allocation of capital expenditures and personnel expenditures in its budget, as well as develop employment expansion programs.

Keywords: Capital Expenditure, Expenditure Index, Labor, Personnel Expenditure

Introduction

Development must be viewed as a multidimensional process that includes various fundamental changes to social structures, public attitudes, and national institutions, in addition to pursuing economic growth acceleration, handling income inequality, and poverty alleviation. The development must reflect a total change in society or the adjustment of the social system as a whole without ignoring the diversity of basic needs and desires of individuals and social groups in it, to move forward towards a better living condition (Todaro & Stephen, 2006). The development paradigm has undergone a change because it no longer places humans as objects or targets of development, but is involved in the development process as subjects who take part in making decisions which in development terminology is known as people centered development. This change is very important to improve human quality, so that it becomes a very valuable capital for overall development. The success of

human development can be seen from changes in the structure of the people's economic life, in this case seen from the index of the people's own expenditures.

Based on the description above, this research has several objectives to be achieved, including: 1) To determine the effect of capital expenditure on employment. 2) To determine the effect of personnel spending on employment. 3) To determine the effect of capital expenditure on the expenditure index. 4) To determine the effect of personnel spending on the expenditure index. 5) To determine the effect of employment on the expenditure index. 6) To determine the effect of capital expenditures and personnel expenditures on the expenditure index through employment as an intervening variable. The differences between this study and previous studies, in previous studies, the dependent endogenous variable used was HDI, while in this study the Expenditure Index was used as the dependent endogenous variable.

Theoretical Review

Capital Expenditure

Referring to Keynes' view which illustrates the importance of the government's role in the economy through fiscal policy it can be explained that when economic performance worsens and investment decreases thereby slowing down economic activity, the government must stabilize the level of investment. The government should borrow money to cover the budget deficit and participate in public investment, such as building new roads, bridges, building schools to promote better education. On the other hand, if business investment is high because of great optimism, the government should stop borrowing and reduce public investment.

Mangkoesoebroto (2001) describes a macro theory of governance following Rostow and Musgrave, Wagner's law, and Peacock and Wiseman's, rules. According to Rostow (1991), the transition from underdevelopment to development can be described in terms of a series that links the development of government spending with its stages, economic development distinguishing between initial, intermediate and advanced stages. In the early stages of economic development, the percentage of total government investment is a good investment. Because at this stage the government must provide infrastructure, such as education, health, infrastructure, transportation, and so forth.

Government spending in the form of capital expenditure allocations is based on the need for facilities and infrastructure both for the smooth implementation of government tasks and for public facilities in the form of land, equipment and machinery, buildings and structures, roads, irrigation and networks, and other fixed assets. Through the increase of State Income and Expenditure Budget and capital spending, it is hoped that it will become a driving factor for the emergence of various new investments in the regions in optimizing the utilization of various resources for production activities so that in the end it can increase regional economic growth.

The endogenous growth model Barro (1990) explains that productive government spending will affect the growth rate. One of the government expenditures that can increase economic growth is capital expenditure in the form of providing infrastructure such as electricity, transportation, education and health.

Employee Shopping

Personnel expenditure is one type of local government expenditure contained in the APBD. Every year this expenditure is always included in the APBD. In the APBD, personnel expenditure is included in the category of operating expenses, maintenance of public facilities and infrastructure, which are regional government expenditures related to activities or services. public. Personnel expenditure is a local government expenditure for persons/personal related to an activity or in other words is a variable personnel expenditure. Personnel expenditures are all expenditures used to finance compensation in the form of money or goods given to regional employees.

Personnel expenditure is expenditure intended to finance the implementation of routine activities of a government agency, as specified in the main objectives and functions. This expenditure group has the largest portion in the expenditure structure whose budget is sourced from the State Income and Expenditure Budget in an agency or work unit. The amount of the budget for one work unit/agency varies with the variety of different types of spending. Some of the problems and risks that arise in the implementation of personnel expenditures are

1) Possibility of fictitious employee data.

The authority to manage expenditures in the work unit is not only in terms of ease of management and the achievement of program targets, this on the other hand can also lead to fictitious activities or expenditures that can be requested for disbursement of funds as long as all requirements have been met.

2) Unclear number of honorary employees

The increase in the number of honorary employees is not accompanied by clarity about the exact number of honorary employees, and there are also many shadow employees in the area.

3) Inefficient in the formation of work units.

In the formation of a work unit, the number of members often exceeds the number of members that should be. This causes the activities carried out by the work unit to be inefficient.

4) Budget wastage

The management of personnel expenditure is aimed at achieving the work unit program. However, in practice the effectiveness of the use of the budget is not carried out properly, so there are often activities that do not support or affect the achievement of the established program.

5) Implementation of activities that are not implemented

Budget planning is carried out one year before the budget of a ministry or institution is approved. In the planning, each work unit through its ministry submits proposals for activities and budgets that will be carried out for the next one year. However, in its implementation, problems often arise which ultimately lead to not carrying out an activity that has been planned

The ratio of indirect personnel expenditures to total regional expenditures reflects the portion of regional expenditures to the payment of salaries of civil servants. The greater the ratio, the greater the regional expenditure spent on paying regional employee salaries and vice versa, the smaller the ratio, the smaller the regional expenditure used to pay regional employee salaries.

The allocation of large personnel expenditures in the APBD will of course also affect the allocation of capital expenditures. Based on research Jiwatami, S. (2013), it can be said that an increase in the realization of personnel expenditure will trigger a decrease in the realization of capital expenditure. Cost-effective and efficient budgeting is the key to successful development in the region. The gap in expenditure budgeting certainly has an impact on the achievement of development success, where ideally capital expenditure should be greater than personnel expenditure because capital expenditure is directly used for public purposes.

Labor

Absorption of labor is a certain amount of labor used in a particular business unit or in other words employment absorption is the amount of labor absorbed and scattered in various sectors that produce relatively large goods and services (Simanjuntak, 2001).

For the purposes of employment analysis, broadly speaking, the population of a country is divided into two groups, namely workers and non-workers. Those who are classified as workers are people who are within the working age limit. The working age limit varies from country to country. The working limit adopted by Indonesia is a minimum of 10 years, without a maximum age. So, every person or all residents who are 10 years old are classified as workers. The World Bank's working age limit is between 15 and 64 years (Dumairy, 1996).

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 who are working, or have a job but are temporarily not working, and who are looking for work. Meanwhile, those who are not included in the labor force (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 (Dumairy, 1996).

According to the Central Statistics Agency (BPS), what is meant by the labor force is the population of working age who during the past week had a job, either working or temporarily working for a reason such as waiting for the harvest, employees who are on leave and the like. In addition, those who do not have a job but are looking for or hoping for a job are also included in the workforce. Total population aged 15-64 years, namely the population belonging to the working age group (BPS).

Expenditure Index

The basic idea of development is to improve the welfare of human life but not only human economic welfare. Development should pay more attention to improving the quality of human life. According to Sen (1999) economic growth is not the ultimate goal of development. The cent analysis is often referred to as the Human Development Index (HDI). HDI is an indicator that describes the potential of Human Resources. HDI is one of the benchmark instruments that can reflect the status of human development.

The theory of social welfare is basically divided into two Albert & Hahnel (1999), namely: social welfare theory and economic welfare theory. Social welfare theory can be classified into classical utilitarian, neoclassical welfare theory, and new contractarian approach. The classical utilitarian approach emphasizes pleasure or utility. Different levels of pleasure felt by the same individual can be compared quantitatively. The principle for the individual is to increase as much as possible the level of his well-being.

The Expenditure Index is a decent standard of living. The indicator measured is adjusted per capita expenditure. Per capita expenditure is calculated using a constant/real average per capita expenditure adjusted for purchasing power parity based on the Rao formula.

Research Methods

Types of Research

This type of research is quantitative and aims to determine the effect of capital expenditures and personnel expenditures on the expenditure index through employment as an intervening variable. The data used in this study are secondary time series data for 2001 – 2021 which are sourced from the Central Statistics Agency of Jambi Province.

Path Analysis

In statistics, path analysis or better known as Path Analysis is used to determine the direct dependence relationship between a set of variables. Path Analysis is a model similar to multiple regression analysis, factor analysis, canonical correlation analysis, discriminant analysis and other more common groups of multivariate analysis such as ANOVA, MANOVA, Anacova analysis.

Because the analysis looks at the causal effect between variables, the Decomposition Model is used. According to Riduwan & Kuncoro (2008) the Decomposition Model is a model that emphasizes causality between variables, both direct and indirect effects in the path analysis framework, while non-causality or correlational relationships that occur between exogenous variables are not included in this calculation.

Calculations using path analysis with a causal effect decomposition model between variables can be divided into three as follows:

- 1) Direct causal effect (Direct Causal Effect = PKL) is the effect of one exogenous variable on endogenous variables that occurs without going through other endogenous variables.
- 2) Indirect causal effect (Indirect Causal Effect = PKLT) is the effect of one exogenous variable on endogenous variables that occurs through other endogenous variables contained in a causality model being analyzed.
- 3) Total causal effect (Total Causal Effect = PKT) is the sum of the direct causal effect (PKL) and the Indirect Causal Effect (PKTL) or $PKT=PKL+PKTL$.

Path Analysis Model

In the model below, the model consists of X1 and X2 as exogenous variables. This variable has a direct influence on Y or indirectly through variables Z. Z and Y are referred to as endogenous variables. In the real model, it is possible for endogenous variables to be influenced by other variables outside of X. Other variables outside of these two variables are symbolized as e (error variable).

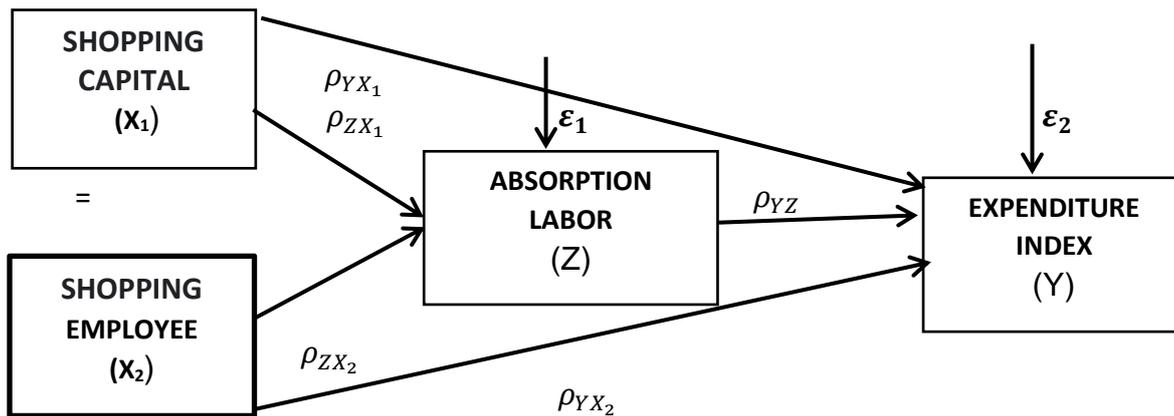


Figure 1. Path Conceptual Framework

Results and Discussion

The effect of capital expenditures, personnel expenditures and labor absorption on the Expenditure Index.

Sub Structure -1 Effect of capital expenditure and personnel expenditure on employment

$$\text{Structural: } Z = \rho_{ZX_1} X_1 + \rho_{ZX_2} X_2 + \epsilon_1$$

From the results of the SPSS version 24 data processing program in sub-structure-1, it can be explained as follows:

Table 1
ANOVA^a

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|-------|------------|-----------------|----|-----------------|---------|-------------------|
| 1 | Regression | 41104613410,000 | 2 | 20552306700,000 | 106,514 | ,000 ^b |
| | Residual | 3473169225,000 | 18 | 192953845,800 | | |
| | Total | 44577782630,000 | 20 | | | |

a. Dependent Variable: TK

b. Predictors: (Constant), BP, BM

Table 2
Model Summary^b

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | |
|-------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | ,960 ^a | ,922 | ,913 | 13890,78277 | ,922 | 106,514 | 2 | 18 | ,000 |

a. Predictors: (Constant), BP, BM

b. Dependent Variable: TK

Table 3

Coefficients^a

| Model | Unstandardized Coefficients | | Standardized Coefficients | | | Collinearity Statistics | |
|--------------|-----------------------------|------------|---------------------------|--------|------|-------------------------|-------|
| | B | Std. Error | Beta | t | Sig. | Tolerance | VIF |
| 1 (Constant) | 129078,718 | 6880,168 | | 18,761 | ,000 | | |
| BM | 1,381E-8 | ,000 | ,078 | ,835 | ,415 | ,498 | 2,006 |
| BP | 1,800E-7 | ,000 | ,904 | 9,697 | ,000 | ,498 | 2,006 |

a. Dependent Variable: TK

a) Simultaneous Significance Test Results (Statistical Test F)

Based on table 1, Anova obtained an F value of 106.514 with a probability value (sig) = 0.000, because the value of sig < 0.05, then the decision is Ho is rejected and Ha is accepted. So it can be concluded that capital expenditure and employee expenditure simultaneously have a significant effect on labor absorption. Therefore, individual testing can be carried out.

The results of the coefficient of determination test Rsquare or (R²) based on table 2, the summary model is known to have an R square value of 0.922 = 92.2% and the magnitude of the influence of other variables, namely:

$$\rho_{z1_{\varepsilon 1}} = 1 - 0,922 = 0,078 = 7,8\%$$

b). Individual Parameter Significance Test (Test Statistical t)

Calculate path coefficient individually

i. Capital Expenditure contributes partially to Labor Absorption.

From table.3. Coefficients obtained Sig value of 0.415 is greater than the probability value of 0.05 or a value of 0.05 < 0.415, then Ho is accepted and Ha is rejected, meaning that the coefficient of capital expenditure path analysis is not significant to employment. This is in line with research Asiri., Ardhana, A. A., Vecky A.J., Masinambow., & Wauran, P.C. (2016).

ii. Personnel Expenditure partially contributes to Labor Absorption.

From table.3. Coefficients obtained Sig 0.000 value is smaller than the probability value of 0.05 or a value of 0.05 > 0.001, then Ho is rejected and Ha is accepted, meaning that the coefficient of employee expenditure path analysis is significant to employment. This is in line with research conducted by Sun'an, M. (2018).

Table 4

The summary of coefficient path result Sub-Structure-1

| Influence between variables | Path Coefficient (Beta) | t value | F value | Test result | Coefficient of Determinant Rsquare | Other Variable Coefficient |
|-----------------------------|-------------------------|---------|---------|-------------|------------------------------------|----------------------------|
| X ₁ terhadap Z | 0,078 | 0,835 | 106,514 | Ho accepted | 0,922 atau 92,20% | 0,078 or |
| X ₂ terhadap Z | 0,904 | 9,697 | | Ho refused | | 7,80% |

Sub Structure -2 The Effect of capital expenditure and personnel expenditure on the expenditure index through labor absorption

$$\text{Structural} :: Y = \rho_{yx_1}X_1 + \rho_{yx_2}X_2 + \rho_{yz} Z + \rho_y \varepsilon$$

Table 5
ANOVA^a

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|---------|-------------------|
| 1 | Regression | 30083,810 | 3 | 10027,937 | 126,895 | ,000 ^b |
| | Residual | 1343,433 | 17 | 79,025 | | |
| | Total | 31427,243 | 20 | | | |

a. Dependent Variable: INDEKS

b. Predictors: (Constant), TK, BM, BP

Table 6
Model Summary^b

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | |
|-------|-------------------|----------|-------------------|----------------------------|-------------------|----------|------|------|---------------|
| | | | | | R Square Change | F Change | df 1 | df 2 | Sig. F Change |
| 1 | ,978 ^a | ,957 | ,950 | 8,88963 | ,957 | 126,895 | 3 | 17 | ,000 |

a. Predictors: (Constant), TK, BM, BP

b. Dependent Variable: INDEX

Table 7
Coefficients^a

| Model | Unstandardized Coefficients | | Standardized Coefficients | | Collinearity Statistics | | |
|--------------|-----------------------------|------------|---------------------------|--------|-------------------------|-----------|--------|
| | B | Std. Error | Beta | T | Sig. | Tolerance | VIF |
| 1 (Constant) | -69,858 | 19,962 | | -3,500 | ,003 | | |
| BM | 2,358E-11 | ,000 | ,158 | 2,185 | ,043 | ,480 | 2,084 |
| BP | 6,568E-11 | ,000 | ,393 | 2,216 | ,041 | ,080 | 12,486 |
| TK | ,000 | ,000 | ,475 | 2,642 | ,017 | ,078 | 12,835 |

a. Dependent Variable: INDEX

a) Simultaneous Significance Test Results (Statistical Test F)

Based on the table.5. Anova obtained F value of 126.895 with a probability value (sig) = 0.000, because the value of sig < 0.05, then the decision is Ho is rejected and Ha is accepted. So it can be concluded that capital expenditures, personnel expenditures and labor absorption simultaneously have a significant effect on the expenditure index. Therefore, individual tests can be carried out.

The results of the coefficient of determination test R_{square} or (R^2) based on table.6. The Summary model is known to have an R_{square} value of 0.957 = 95.7% and the magnitude of the influence of other variables, namely:

$$\rho_{z2_{\epsilon 1}} = 1 - 0,957 = 0,043 = 4,3\%$$

b). Individual Parameter Significance Test (Test Statistical t)

Calculate path coefficient individually

i) Capital Expenditures contribute partially to the Expenditure Index.

Individually the statistical test used is the t test. The path analysis significance test is sought by comparing the probability value of 0.05 with the probability value of Sig.

The basis for decision making is as follows:

- If the probability value of 0.05 is less than or equal to the probability value of Sig or (0.05 Sig), then H_0 is accepted and H_a is rejected, meaning that it is not significant.
- If the probability value of 0.05 is greater than or equal to the probability value of Sig or (0.05 Sig), then H_0 is rejected and H_a is accepted, meaning that it is significant.

Decision

From table 7, it showed that coefficients obtained Sig value of 0.043 is smaller than the probability value of 0.05 or a value of $0.05 > 0.043$, then H_0 is rejected and H_a is accepted, meaning that the coefficient of analysis of the capital expenditure path is significant to the Expenditure Index.

ii) Personnel Expenditure partially contributes to the Expenditure Index.

Decision:

From table 7, it showed that coefficients obtained Sig value of 0.041 is smaller than the probability value of 0.05 or a value of $0.05 > 0.041$, then H_0 is rejected and H_a is accepted, meaning that the coefficient of employee expenditure path analysis is significant to the Expenditure Index.

iii) Labor Absorption partially contributes to the Expenditure Index.

Decision

From table 7, it showed that coefficients obtained Sig value of 0.017 is smaller than the probability value of 0.05 or a value of $0.05 > 0.017$; then H_0 is rejected and H_a is accepted, meaning that the path analysis coefficient of Labor Absorption is significant to the Expenditure Index.

The results of the path analysis test for sub-structure-2 are summarized as in Table 2 below:

Table 8

The summary of coefficient path result

| Influence between variables | Path Coefficient (Beta) | t value | F value | Test result | Coefficient of Determinant R square | Other Variable Coefficient |
|-----------------------------|-------------------------|---------|---------|-------------|-------------------------------------|----------------------------|
| X_1 to Y | 0,158 | 2,185 | 126,895 | Ho refused | 0,957 atau 95,7% | 0,043 Atau 4,3% |
| X_2 to Y | 0,393 | 2,216 | | Ho refused | | |
| Z to Y | 0,475 | 2,642 | | Ho refused | | |

Empirical Causal Relationship Diagram between variables X_1 , X_2 , Z_1 , Z_2 to Y_1

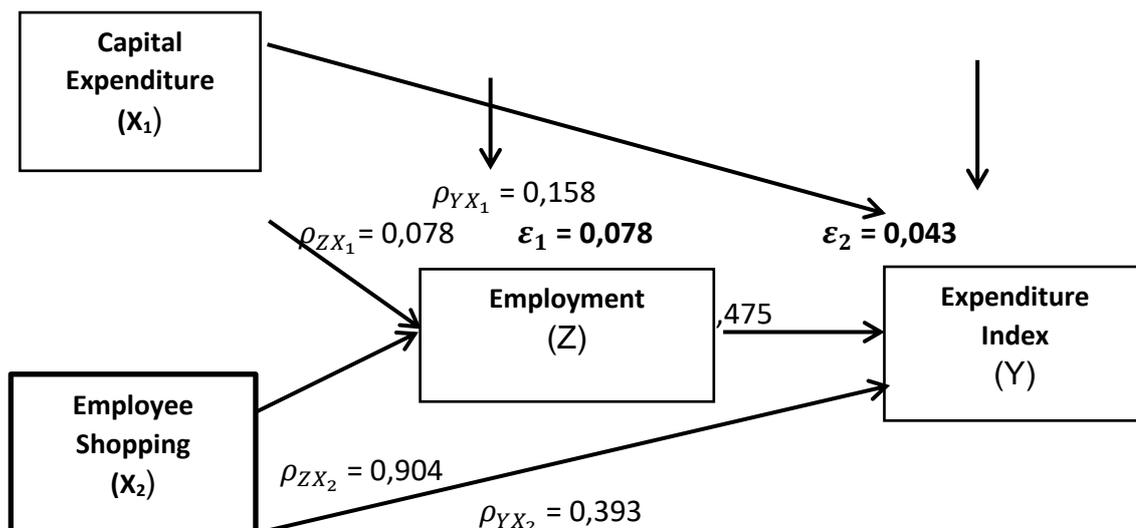


Figure 2
Empirical Causal Relationship Between Variables X_1 , X_2 , Z to Y

Table 9
Path coefficient of direct influence, indirect effect and total effect of X_1 , X_2 and Z to Y

| Variable | Influence | | |
|-----------------|-----------|----------------|-------------------|
| | Direct | Indirect via Z | Total |
| X_1 | 0,024964 | 0,225625 | 0,005633 (0,56%) |
| X_2 | 0,154449 | 0,225625 | 0,034848 (3,48%) |
| Z | 0,225625 | - | 0,225625 (22,56%) |
| ε_1 | 0,0061 | - | 0,0061 (0,61%) |
| ε_2 | 0,0018 | - | 0,0018 (0,18%) |

Conclusions and Recommendations

Conclusions

Capital expenditure has a positive and insignificant effect on employment, Personnel expenditure has a positive and significant effect on employment, Capital expenditure has a positive and significant effect on the expenditure index, Personnel expenditure has a positive and significant effect on the expenditure index, Labor absorption has a positive and significant effect on the expenditure index. significantly to the expenditure index in Jambi City, Labor is able to mediate the relationship between capital expenditure and employee expenditure on the expenditure index in the Jambi City area during the period 2001-2021.

Recommendation

In order to achieve public welfare which is marked by increased public spending, the government needs to pay attention to capital expenditures which are directly related to the employment of labor, so that people's incomes increase which is indicated by public spending.

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