The Effect of Household Consumption Expenditure and Investments on Economic Growth and Regional Generated Revenue in The Regency / City of Bali Province

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ABSTRACT: The purpose of this study was to determine the effect of consumption and investment on economic growth and local generated revenue. This research was conducted in the regency / city of Bali Province, the type of data used was quantitative data, the data collection methods used were observation. The data analysis technique used is path analysis and sobel test. Based on the results of the analysis it was found that household consumption and investment expenditure had a positive and significant effect on economic growth. This shows that increasing household consumption and investment expenditure will increase economic growth. Household consumption expenditure hasn’t positive effect on the local generated revenue. Investment has no effect on local generated revenue. Economic growth has a positive and significant effect on the local generated revenue. Consumption and investment have an indirect effect on the regional generated revenue through economic growth. Household consumption expenditures and investments become a reference to be able to increase economic growth and local generated revenue, so that it is suggested that the government be able to create as many jobs as possible so as to increase people’s income so that people can pay taxes and ultimately have an impact on increasing local generated revenue.

Keywords: consumption, investment, economic growth and local generated revenue

I. INTRODUCTION

In an economy of two sectors the flow of economic expenditure consists of two components of aggregate expenditure, 1) household consumption, 2) investment. Economic growth is related to the process of increasing the production of goods and services in community economic activities. To measure economic growth, the value of GDP used is GDP based on constant prices (real GDP) so that the resulting growth rate is real growth that occurs due to additional production. The existence of a balance in an economy is one of the targets in order to improve a country's economy. A study conducted by Kim (1997) on the role of the local public sector in regional economic growth in Korea in 1990-1991 showed significant results. Regional investment and consumption have a positive effect on regional economic growth.

In total, the economy of Bali in 2017 reached 5.57 percent, this achievement was recorded to decrease compared to the previous year which had reached 6.33 percent. Growth in 2017 was recorded as the lowest growth over the last five years. The decline in growth in 2017 also occurred in all regencies / cities in the Province of Bali. The eruption of Mount Agung at the end of the year is inevitable has a less encouraging impact on the rate of economic growth in 2017. If you look at the overall rate of economic growth during the 2013-2017 period experienced an average fluctuation. However, there are two districts that tend to experience a decline in the rate of economic growth, namely Karangasem and Buleleng regencies.

In terms of usage / expenditure, Bali's economy is still dominated by public consumption. Nearly half of Bali's economy or 47.71 percent is used for household consumption (Dayuh, 2012). Even though it is still the highest, the contribution of public consumption has been recorded to continue to decline. It was noted that this decline occurred from 2016 to 2017. The year 2015 was the highest achievement of Bali consumption expenditure which reached 7.46 percent. Then it decreased 6.66 percent in 2016 and again declined in 2017 to 4.02 percent. The condition that occurred in the Province of Bali also occurred in all regencies / cities in the Province of Bali which experienced a decrease in household consumption from 2016 to 2017.

If you look at the relationship between household consumption expenditure with economic growth has a positive relationship. The theory of growth revealed by Harrod Domar, argues that the increase in production and income of the community is not determined by the capacity to produce the community, but by an increase in public spending. Thus, even though the capacity to produce increases, new national income will
increase and economic growth will be created if public spending increases compared to the past. But if you look back, the lowest economic growth both in the regencies / cities in the Province of Bali was in 2017. While the lowest household consumption expenditure occurred in 2013, this lowest number occurred in all regencies / cities in the Province of Bali.

Another phenomenon that also occurs is the highest average household consumption expenditure occurred in 2015 in all regencies / cities in the Province of Bali. However, the economy of Jembrana Regency alone experienced the highest growth in 2015 which reached 6.19 percent. Even the rate of growth in the Tabanan, Badung, Gianyar, Karangasem, Buleleng and Denpasar Cities has decreased in 2015. Looking at the phenomena that occur in regencies / cities in the Province of Bali, according to research conducted by Sudirman (2018) states that consumption households do not have a positive influence on economic growth. This research is in line with research conducted by Silva and Sumarto (2014) which states that the increase in economic growth has very little influence on household consumption expenditure, but it is not in accordance with the theory revealed by Harrod Domar.

Harrod Domar's theory put forward by Evsey Domar and R.F. Harrod put forward a model of economic growth which is a development of Keynes's Theory. The theory emphasizes the role of savings and investment which is crucial in regional economic growth (Arsyad, 2010). Investment is an element of production that actively determines the level of output. The large level of investment has a positive relationship with economic growth (Arta, 2013). The investment can be used by the regional government for capital development which can later be realized in various projects to support development activities. Investment can be a milestone for the success and sustainability of development in the future because it can absorb labor, so as to open new employment opportunities for the community which in turn will have an impact on increasing community income.

This is because the greater investment will cause economic growth to increase. The investment used for infrastructure development and all things for the welfare of the community will cause regional income from existing business fields in regencies / cities in the Province of Bali to increase, so that economic growth also increases. The total investment in the Province of Bali experienced fluctuations from 2013 to 2017. Recorded in 2015 the realization of investment in the Province of Bali reached its highest peak in 2013 to 2017 which amounted to 25,872,564 million rupiah. And experienced the lowest figure in 2014 which amounted to 8,923,274 million rupiah. This is not in line with the theory revealed by Keynes and research conducted by Sutawijaya (2010) which states the growth of private investment has a positive impact on economic growth. Considering Bali's economic growth in 2014 actually reached its highest number during 2013-2017 which was 6.73 percent.

The results of research conducted by Prana (2016) show that public spending or consumption will affect tax significantly. Public consumption in the form of food and non-food will be taxed, both the tax imposed on food consumption and the tax imposed on non-food. Tax is the biggest source of income, so that it is directly or indirectly. If public consumption increases it will increase local taxes and vice versa. So that along with the increase in household consumption will have an impact on increasing local generated revenue. However, household consumption expenditure declined in 2017, while in regional generated revenue it actually reached its highest increase in 2017. This is certainly not in accordance with empirical study research conducted by Prana (2016).

In addition, research conducted by Anggraini (2017) states that investment influences local generated revenue. The results of this study are not in accordance with the conditions occurring in the districts / cities of Bali Province. Considering Bali's investment realization from 2013 to 2017 has fluctuated while Bali's regional generated revenue has only decreased in 2016. Increased public consumption and investment realization which in the end will both have an impact on increasing economic growth. Economic growth has a positive and significant influence on the growth of regional generated revenue (Bhaskara & Widanta, 2014). The relationship between GRDP and regional generated revenue is a functional relationship, because local taxes are a function of GRDP, that is, with an increase in GRDP will increase government revenue from regional taxes. Furthermore, the increase in government revenue will encourage an increase in government services to the community, which in turn is expected to increase community productivity, which in turn can increase economic growth again. Vice versa, with increased economic growth and per capita income of the community, it will encourage the ability of people to pay taxes and other levies.

Research conducted by Bhaskara and Widanta (2014) is not in accordance with the conditions that occur in the Province of Bali. Bali's economic growth from 2013 to 2017 experienced fluctuations while Bali's regional generated revenue from 2013 to 2015 experienced an increase then in 2016 it actually experienced a decline, until in 2017 it again increased to reach 3,398,472,278 thousand rupiah.

**II. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT**

**Economic growth**
According to Simon Kuznets (in Rustariyuni, 2014) economic growth is an increase in the ability of a country (region) to provide economic goods to its population, which is manifested by a continuous increase in national output accompanied by technological advances and institutional adjustments, attitudes and the ideology it needs. Economic growth can be sourced from growth on the aggregate demand side and the aggregate supply side. In the economy of two sectors the aggregate demand side (use of GDP) consists of two components namely, consumption and investment so that it can be shown by the following equation (Sukirno, 2008: 133):

\[ Y = C + I \]

Information:
\[ Y = \text{GDP} \]
\[ C = \text{consumption} \]
\[ I = \text{Investment} \]

*Household consumption theory*

The consumption theory put forward by JM. Keynes said that the size of consumption expenditure is only based on the size of the level of community income. Keynes states that there is a minimum consumption expenditure that must be carried out by society (autonomous consumption) and consumption expenditure will increase with increasing income.

*Investment theory*

Harrod-Domar’s theory suggests that the model of economic growth which is a development of Keynes’s theory, emphasizes the role of savings and investment is crucial in regional economic growth.

*Local Revenue*

Local revenue is a regional income that comes from its own regional sources based on the applicable laws and regulations. Local revenue must be truly dominant and able to carry the workload needed so that the implementation of regional autonomy is not financed from subsidies or from third parties or regional loans. Based on the literature review and conceptual framework above, several hypotheses can be drawn as follows:

1. Household consumption expenditure and investment have a positive and significant effect on economic growth in regencies / cities in Bali Province.
2. Household consumption expenditure, investment and economic growth have a positive and significant effect on the regional generated revenue of regencies / cities in Bali Province.
3. Household consumption expenditure and investment have an indirect effect on the regional generated revenue through the economic growth of districts / cities in Bali Province.

### III. METHODS

This research is quantitative and associative in nature with the form of causal relationships from 2013-2017. The location of the study was carried out in the regencies / cities of the Province of Bali by using data released by the Central Statistics Agency (BPS) and the offices related to the object of research. This study focuses the study on four main variables, namely household consumption expenditure, investment, economic growth, and local generated revenue. Secondary data sources in this study were obtained from BPS Bali Province and other supporting literature about the object of research. The method used in this data collection is by observation. Non-participant observation is an observation that only collects data that has been available by a particular agency or institution, in which the researcher is not directly involved (Sugiyono, 2015: 247). Data analysis technique used for problem solving in this study is to use quantitative analysis techniques with the help of the SPSS program. The analytical method used in this research is the Path Analysis method. Path analysis is an extension of multiple linear regression analysis, to estimate the causality relationship between tiered variables based on theory. Path analysis is used to determine the direct relationship of independent variables to the dependent variable and the indirect relationship through intervening variables.

### IV. RESULT AND DISCUSSION

**The Effect of Household Consumption Expenditure and Investment on Economic Growth.**

Structure 1 test is conducted to see the effect of the expenditure of household consumption and investment on direct economic growth which is carried out using the SPSS Version 20.0 program, then the regression test is presented in Table 2.

**Table 2. Result Coefficient of Household Consumption Expenditures And Investment of Economic Growth Coefficients**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B Std. Error Beta</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>7,519 .186 .881</td>
<td>40,502 .000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>CONSUMPTION 1,477E-007 .000</td>
<td>.881 20,915 .000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>INVESTMENT .054 .017 .138</td>
<td>3,267 .002</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Based on the calculation above, it is known that household consumption expenditure has a positive and significant effect on economic growth, which is indicated by the path coefficient of 0.881 and a significance value of 0.000 < 0.05. This means that for every increase in household consumption expenditure of 1 million rupiah, the economic growth of regencies / cities in the Province of Bali will increase by 0.881 billion rupiah, assuming the other independent variables are constant. This research is also in line with research conducted by Nasution and Yusuf (2018), Jolianis (2012), Hakib (2019), Sarimundung and Aisyah (2018) and Sudirman (2018) which states that household consumption expenditure has a positive and significant effect on growth the economy. This means that the higher the level of household consumption expenditure will increase the economic growth of districts / cities in Bali Province.

Based on the calculation above, it is known that investment has a positive and significant effect on economic growth, which is indicated by a path coefficient of 0.138 and a significance value of 0.002 < 0.05. This means that for every increase of investment of 1 million rupiah, the economic growth of regencies / cities in the Province of Bali will increase by 0.138 billion rupiah with the assumption that other independent variables are constant. The results of this study are also consistent with research conducted by Bagus and Jember (2019), Krismajaya and Dewi (2019), Samuel Adams (2006), Emi and Kartika (2016) and Diantari and Wirathil (2017) stating that investment has a positive and significant effect on economic growth. This means that the higher the level of investment, the higher the economic growth of districts / cities in Bali Province.

Based on the calculation above, it is known that household consumption expenditure has a positive and significant effect on local generated revenue which is carried out using the SPSS program Version 20.0, then the regression test is presented in Table 3.

The structure 1 regression equation model can be presented as follows : \( e_1 = \alpha = \beta = = = = = = = = \quad = 0.2 \)

\( Y_1 = 0.881X_1 + 0.138X_2 \)

Information :
- \( X_1 \): Household Consumption Expenditures
- \( X_2 \): Investment
- \( Y_1 \): Economic Growth
- \( Y_2 \): Local generated revenue

Table 3. Result Coefficient of Household Consumption Expenditures, Investment and Economic Growth of Local Generated Revenue

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>22892623271,731</td>
<td>6127582748,416</td>
<td>3,736</td>
<td>.001</td>
</tr>
<tr>
<td>CONSUMPTION</td>
<td>-1632149182,306</td>
<td>432290378,340</td>
<td>-1.058</td>
<td>.3776</td>
</tr>
<tr>
<td>INVESTMENT</td>
<td>61732086,272</td>
<td>71009557,768</td>
<td>.115</td>
<td>.869</td>
</tr>
<tr>
<td>ECONOMIC GROWTH</td>
<td>172575,726</td>
<td>27147,721</td>
<td>1.651</td>
<td>.635</td>
</tr>
</tbody>
</table>

Based on the results of the above calculation, it is known that household consumption expenditure negatively influences the local generated revenue, which is indicated by the path coefficient value of -1.058 and a significance value of 0.001 < 0.025. This means that for every increase in household consumption expenditure of 1 million rupiah, the original regency / city income in the Province of Bali will decrease by 1,058 thousand rupiah assuming the other independent variables are constant.

Household consumption expenditure since 2013-2017 has indeed continued to increase. However, this increase in household consumption expenditure is not accompanied by an increase in regional own-source income. This is due to the low realization of regency / city tax in Bali Province. The low realization of local taxation is caused by slowing local tax revenues, such as restaurant taxes and also the exemption of Land and Building Taxes in Badung Regency, down to support the reduction in local tax revenue. In line with these conditions, the fall in the price of fuel oil (BBM) throughout 2016 caused a decrease in motor vehicle fuel tax receipts received by local governments (Bank Indonesia, 2016).

Based on the results of the above calculation, it is known that the investment does not affect the local generated revenue, which is indicated by the path coefficient value of 0.115 and the significance value of 0.390 > 0.05. This research is in accordance with research conducted by Lestasi (2016), Triyanto (2016) and Utami (2013) states that investment has a positive and insignificant effect on local generated revenue. This means that the higher level of investment does not significantly influence the local generated revenue.

Based on the calculation above, it is known that the economic growth is positive and significant to the economic growth of districts / cities in Bali Province.
original regional income, which is indicated by the path coefficient value of 1.651 and the significance value of 0.000 <0.05. This means that for every increase in economic growth of 1 billion rupiah, the original income of regencies / cities in Bali Province will increase by 1,651 thousand rupiah, assuming the other independent variables are constant. The results of this study are consistent with research conducted by Bhaskara and Widanta (2014), Marliyanti and Arka (2014) and Putra and Yasa (2018), stating that economic growth has a positive and significant influence on the original income of regencies / cities in Bali Province. This means that the higher the economic growth, the higher the original income of regencies / cities in Bali Province.

The structure 1 regression equation model can be presented as follows:

\[ e_2 = \frac{e_1}{2} = \frac{0.579}{0} \quad Y_2 = -1.058X_1 + 0.115X_2 + 1.651Y_1 \]

Information:
X_1 = Household Consumption Expenditures
X_2 = Investment
Y_1 = Economic Growth
Y_2 = Local generated revenue

To check the validity of the model, there are indicators to carry out checks, namely the coefficient of determination of the total results as follows:

\[ R^2_m = 1 - \frac{(Pe_1)^2}{(Pe_2)^2} \]

\[ = 1 - (0.2)^2 (0.579)^2 \]
\[ = 0.986 \]

Information:
\( R^2_m \) = The coefficient of total determination \( e_1, e_2 \) = Standard estimated error value

Based on the calculation of the total determination coefficient of 0.986, it is obtained that the diversity of data that can be explained by the model is 98.6 percent or in other words the information contained in the data of percent can be explained by the model, while the remaining 1.4 percent is explained by other variables not in the model.

**The Indirect Effect of Economic Growth Variables \( Y_1 \) on The Relationship of Household Consumption Expenditure \( X_1 \) to Regional Generated Revenue \( Y_2 \)**

If the count \( z \leq 1.96 \), then \( H_0 \) accepted, which means economic growth \( (X_1) \) instead of intervening variables. If the count \( z > 1.96 \), then \( H_0 \) is rejected, which means that economic growth \( (Y_1) \) an intervening variable.

\[ S_{b1b5} = \frac{ \text{Standard error of the regression coefficient of variable } X_1 \text{ to } Y_1 }{ \text{Standard error of the variable regression coefficient } Y_1 \text{ to } Y_2 } \]

\[ = \frac{0.004}{3.729} \]

Information:
\( S_{b1} \) = standard error of the regression coefficient of variable \( X_1 \) to \( Y_1 \) \( S_{b5} \) = standard error of the variable regression coefficient \( Y_1 \) to \( Y_2 \)

\[ Z = \frac{6.372}{1.96} \]

Information:
\( b_1 \) = regression coefficient effect of variable \( X_1 \) on \( Y_1 \)
\( b_5 \) = regression coefficient effect of the variable \( Y_1 \) on \( Y_2 \)

Based on the \( z \) count of 6.372 > 1.96, \( H_0 \) is rejected and \( H_1 \) is accepted. This means that economic growth \( (Y_1) \) as a variable that intervenes the influence of household consumption expenditure \( (X_1) \) on regional generated revenue \( (Y_2) \).

**The Indirect Effect of Economic Growth Variables \( Y_1 \) on Investment Relations \( X_2 \) on Regional Generated Revenue \( Y_2 \)**

If the count \( z \leq 1.96 \), then \( H_0 \) accepted, which means economic growth \( (X_1) \) instead of intervening variables. If the count \( z > 1.96 \), then \( H_0 \) is rejected, which means that economic growth \( (Y_1) \) an intervening variable.

\[ S_{b2b5} = \frac{ \text{Standard error of the regression coefficient of variable } X_2 \text{ to } Y_1 }{ \text{Standard error of the variable regression coefficient } Y_1 \text{ to } Y_2 } \]

\[ = \frac{3.729}{1.96} \]

Information:
\( S_{b2} \) = standard error of the regression coefficient of variable \( X_2 \) to \( Y_1 \) \( S_{b5} \) = standard error of the variable regression coefficient \( Y_1 \) to \( Y_2 \)
regression coefficient $Y_1$ to $Y_2$

$$Z = \frac{b_1}{b_2} = 2.499$$

Information:

- $b_1$ = regression coefficient effect of variable $X_1$ on $Y_1$
- $b_2$ = regression coefficient effect of the variable $Y_1$ on $Y_2$ Based on the z count of 2.499 $> 1.96$, $H_0$ is rejected and $H_1$ is accepted. This means that economic growth ($Y_1$) as a variable that intervenes the influence of investment ($X_2$) on regional generated revenue ($Y_2$).

V. CONCLUSION

Based on the results of the previous discussion and description, the following conclusions can be drawn:

1) Household consumption expenditure has a positive and significant effect on economic growth in regencies / cities in Bali Province. Investment has a positive and significant impact on the economic growth of regencies / cities in Bali Province. Investment does not affect the original regency / city revenue in Bali Province. Economic growth has a positive and significant effect on the original income of regencies / cities in Bali Province. 2) Household consumption expenditure has a negative and significant effect on the original income of regencies / cities in Bali Province. 3) Household consumption expenditure has an indirect effect on the original regency / city income in Bali Province through economic growth. Investment has an indirect effect on the original regency / city income in Bali Province through economic growth.

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