The Effect of Economic Growth and Locally Generated Revenue on Financial Independence on Regions

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ABSTRACT

The purposes of this research are to analyze the effect of economic growth on financial independence on regions in the Province of Bali, to analyze the effect of locally generated revenue toward financial independence on regions in the Province of Bali, to analyze the effect of economic growth and locally generated revenue on financial independence on regions in the Province of Bali, and to analyze each regions financial independence in the Province of Bali. Samples are collected using a purposive sampling method for the last 5 (five) years from each region. The results show that economic growth has positive significant effects on the financial independence of regions in the Province of Bali. The second result shows that locally generated revenue has a positive and significant effect on financial independence on regions in the Province of Bali. The third finding shows that economic growth and locally generated revenue simultaneously give a significant positive effect on financial independence on regions in the Province of Bali. In general, the financial independence of each region in the Province of Bali still depends on the central government. The study concludes from the low and very low ratio of districts/cities financial independence. Only region of Badung has high ratio on financial independence thus the region of Badung’s locally generated revenue is able to fund its own expenditure in their duty to perform regional autonomy.

INTRODUCTION

Bali is very famous for its tourism development. The governments of regions in Bali depend on the tourism sector as one of the economic drivers. Ekanayake (2012) stated that governments of developing countries must focus on economic policies that promote tourism as a potential source
of economic growth. The development of tourism does not only increase foreign exchange earnings but also creates employment opportunities, stimulates the growth of the tourism industry and triggers overall economic growth. Alhowaish (2016) proved that tourism development contributes to economic growth where there is a positive relationship between tourism and economic growth.

Kaur and Singh (2016) explained that economic growth is the main focus that is tried to be achieved by the government in developing countries. Fosu (2011) stated that in the development process, rapid economic growth is very essential as a tourism destination, regions in Bali are expected to have high economic growth that will result in regional financial independence. Renyaan et al. (2012) found that when fiscal autonomy was managed, economic growth was able to improve regional financial performance. While different results are shown by Gaghana, Kindangen, & Rotinsulu (2018), and Tolosong (2018) which shows that economic growth does not have a significant effect on regional financial independence.

Mostafa and Pramanik (2015) explained that the tourism sector is an integrated sector which combines culture, scenic beauty, archaeology and history, social politics and infrastructure development. Regions in Bali have committed to developing cultural tourism. However, the presence of beautiful scenery, friendliness of the population and other factors create other possibilities besides cultural tourism. Therefore, regional revenues from the tourism sector are very potential regional revenues. Thus, the government of Bali has the opportunity to continue exploring local revenue sources from the tourism sector in order to develop the economy as well as to increase the local revenue. Olutunji et al. (2009) stated that local government revenues mainly come from taxes. The locally generated revenue is the main source which is used to finance regional expenditure.

Muharsono et al. (2016) explained that locally generated income is an indicator of the success of fiscal decentralization in Indonesia. The consequence of the implementation of regional autonomy is that the governments in Bali must explore the potential sources of income so that they can increase local revenue. With the increase of locally generated revenue, it is expected that the governments of Bali can gradually reduce dependence on the central government, regarding the financial independence of the local government. This is a challenge, where, on one hand, they need to increase regional independence by increasing locally generated revenue, and on the other hand it is necessary to find a way that does not burden the community.

In general, the financial dependence of local governments in Indonesia still varies and depends on the central government. Korompot & Warongan (2017) found that the independence ratio of North Sulawesi Province had increased and categorized in the participatory category, meaning that it was quite independent and had reduced the level of dependence on the central government. Ruliana (2015) states that the level of independence of the governments of East Kalimantan still depends on the balance of funds from the central government, but the dependence of balance funds tends to decrease with increasing regional local revenue. Sebastiania & Cahyo (2016) states that the proportion of regional income contribution and the ratio of regional financial capacity in East Java is very low, which implies that the level of independence in East Java is very low. From this description, it turns out that regional financial independence in Indonesia is very diverse.
Therefore, the financial independence of the regional government in Bali needs to be examined closely to find out its condition.

As a tourism area, the rate of economic growth in each region in Bali Province varies. Likewise, locally generated revenue between regions fluctuates. There is a fact that Badung regions have distributed its locally generated revenue to the 7 other regencies in Bali except for Denpasar, indicating that economic growth, revenue from locally generated revenue is not fully able to support regional financial independence in each of these districts. The number of researches on regional financial independence in regions in the Province of Bali is still low, there is an empirical gap in the results of research, so this research is interesting to study. In addition, it is necessary to look at the relationship between variables of economic growth, locally generated revenue and regional financial independence, so that efforts to follow up on regional financial independence in each region in the Province of Bali are very relevant in the current era of regional autonomy.

Based on the description above, the objectives that would like to be achieved in this study are: (1) To analyze the effect of economic growth on financial independence on the region in the Province of Bali. (2) To analyze the effect of locally generated revenue toward financial independence on regions in the Province of Bali. (3) To analyze the simultaneous effect of economic growth and locally generated revenue on financial independence on regions in the Province of Bali. (4) To analyze each region of financial independence in the Province of Bali.

**Relationship between economic growth and regional financial independence**

Renyaan et al. (2012) found that when fiscal autonomy is well managed, economic growth will be able to improve regional financial performance by considering factors such as financial efficiency and the effectiveness of regional financing. The results of the study indicate that increasing economic growth will improve regional financial performance. Nur'ainy, Desfitrina, & Utomo (2013), Rahmadona (2017) proves that partially economic growth has an effect on regional financial independence. Rubin and Segal (2015) conclude economic growth and income disparity has positive relation. Majumdar & Partridge (2009) stated that based on an empirical study in The United States of America there is a positive relationship between economic growths and income inequality since the 1970s. The causality between economic growth and income inequality is important. Tabassum & Majeed (2009) explain that in the short run, the relation between economic growth and income inequality is positive, but as time goes more income inequality reduces economic growth. From the above understanding, the hypothesis developed is:

**H1:** Economic growth has a positive and significant effect on regional financial independence on regions in the Province of Bali.

**Relationship between locally generated revenue and regional financial independence**

Through locally generated revenue, the government can invest in various fields of activity. Ocaya et al. (2012) investment is a strong link for economic growth. Kusuma & Badrudin (2016) explain that fiscal decentralization is substantial in financial performance as measured by using financial independence ratios. Simanjuntak & Mukhlis (2017) prove that fiscal capacity has a positive and significant impact on regional financial independence. Tolosang (2018) found that local revenue has a significant influence on regional financial independence. Simultaneously, economic growth and local revenue affect region financial independence significantly in the region of Tomohon.
Gaghana, Kindangen, & Rotinsulu (2018) showed locally generated revenue has a significant influence on regional financial independence. Together, economic growth and local revenues have a significant influence on the level of regional financial independence in North Sulawesi. Mangantar (2018) stated that locally generated income affects community welfare. From the above understanding, the hypothesis developed is:

H2: Locally generated revenue has a positive and significant effect on regional financial independence on regions in the Province of Bali.

H3: Economic growth and locally generated revenue simultaneously have a positive and significant effect on regional financial independence on regions in the Province of Bali.

**Regional financial independence**

According to Halim (2007, p. 232) regional financial independence is shown by the size of regional income compared to regional income from other sources, such as central government assistance or loans. The independence ratio illustrates the regional dependence on external funding sources. The higher the independence ratio means that the level of regional dependence on the assistance of external parties (especially the central and provincial governments) is getting lower, and vice versa. The independence ratio also describes the level of community participation in regional development. The higher the level of independence ratio, the higher the community participation in paying taxes and regional retributions which are components of locally generated revenue will illustrate the higher level of community welfare. The criteria for regional financial independence are as mention below.

| Regional Financial Independence Ratio | Criteria  | Relation Pattern |
|--------------------------------------|-----------|------------------|
| 00,00% - 25,00%                      | Very Low  | Instructive      |
| 25,01% - 50,00%                      | Low       | Consultative     |
| 50,01% - 75,00%                      | Average   | Participative    |
| 75,01% -100,00%                      | High      | Delegate         |

Table 1: Regional Financial Independence Ratio Criteria
Halim (20070 [source]

The instructive pattern is a relationship pattern that describes the central government’s dominant role in region independence. While consultative patterns show decreasing central government dominant role on region independence, participative relation pattern is more decreasing role of the central government on regional independence due to the capability of the region performing autonomy, and the last pattern is delegate which is no intervention at all from the central government.

**METHODS**

This research uses data collected by the Central Statistical Bureau of Bali Province for 5 years from 2014 until 2018. The data consist of economic growth, locally generated revenue, and region financial independence for each region and collected using documentation technique. Sampling method used in this research is purposive sampling method with considerations such as (1) 5 year
data considered to represent the population, (2) the 5 year data showed the real condition of economic growth, locally generated revenue, and region financial independence, (3) the 5 year data can illustrate the development of the situation and the condition of the regional autonomy. Analysis technique used in this research is multiple regression analysis with model: \( Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + e \). Where, \( Y \) = Regional financial independence; \( X_1 \) = Economic growth; \( X_2 \) = Locally generated revenue; \( \beta_0 \) = constant; \( \beta_1, \beta_2 \), = regression coefficient; \( e \) = error. To calculate the regional financial independence this research use formula as follow:

\[
\text{Regional financial independence} = \frac{\text{Locally generated revenue}}{\text{Total regional revenue}} \times 100\%
\]

**RESULTS AND DISCUSSION**

Based on One-sample Kolmogorov-Smirnov test with consideration of Asymp. Sig. (2-tailed) to test data normality showed for economic growth, locally generated revenue, and financial independence respectively 0.068; 0.087; and 0.200. All the numbers are above 0.05, it can be concluded that all variable is normally distributed. Using a Lack of fit test to test the Linearity showed deviation from linearity for economic growth with financial independence is Sig. 0.491, while locally generated revenue with financial independence is 0.363. Both the number is larger than 0.05. This means the relationship between the variables is linear. To test the autocorrelation using the Durbin-Watson test. Based on the computation the D-W number is 1.501; which is between -2 and +2 thus it concludes there is no autocorrelation. To test homoskedastisitas this research using the Rho Spearman test, where Sig. (2-tailed) for economy growth (0.645), locally generated revenue (0.560) > 0.05 which mean homoskedastisitas accepted. Tolerance for economic growth and locally generated revenue = 0.114 which is larger than 0.10 and VIF = 8.786 < 10. It shows no multicollinearities occurred. Hence, the multiple regression model is proper to use. The multiple regression model as follow:

\[
Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + e
\]

The effect of economic growth on financial independence on regions in the Province of Bali

Hypothesis 1 (H1): Economic growth positively & significantly affects the financial independence of regions in the Province of Bali. To answer this hypothesis (H1) using Table 2 as follow:

| Model            | Unstandardized Coefficients | Standardized Coefficients | t     | Sig.  |
|------------------|-----------------------------|---------------------------|-------|-------|
| (Constant)       | -26.282                     | 14.614                    | -1.798| .078  |
| Economic Growth  | 6.711                       | 2.419                     | .150  | .008  |
| Locally Generated Revenue | 1.746E-8                   | .000                      | .875  | 16.189| .000  |

a. Dependent Variable: Regional Financial Independence

Table 2: Coefficients of t-Test output SPSS 24, 2019 [source]
Table 2 shows the economic growth’s $t = 2.774$ with Sig. $t = 0.008$. This means the regression coefficient for economic growth is significant. Thus, can be deducted that economic growth significantly affecting the region’s financial independence. The positive figure of the regression coefficient also showed the positive effect of economic growth on regions' financial independence. The higher economic growth will be resulting in higher regions of financial independence. Based on this finding, the first hypothesis stated economic growth positively significant affecting financial independence on regions in the Province of Bali is accepted. This finding is aligned with Renyaan et al. (2012); Nur’ainy, Desfitrina, & Utomo (2013); and Rahmadona (2017) findings, that showed increased economic growth will increase region financial performance. Partially economic growth affecting region financial independence.

The effect of locally generated revenue on financial independence on regions in the Province of Bali

Hypothesis 2 (H2) stated locally generated revenue positively significant affects financial independent on regions in the Province of Bali. Based on Table 1 above, the coefficient of t-test for locally generated revenue is $t = 16.189$ with Sig. $t = 0.000$ which is lower than 0.05. This result showed a regression coefficient for locally generated revenue is significant. Thus, locally generate revenue significantly affecting regions' financial independence. The positive number of regression coefficient show locally generated revenue has a positive effect on region’s financial independence. The larger locally generated revenue will be resulting in a higher region’s financial independence. Thus, the second hypothesis accepted or in other word locally generated revenue positively significant affecting financial independence on regions in the Province of Bali. This results in harmony with Kusuma & Badrudin (2016) finding which explains the strong effect of fiscal decentralization on region financial performance measured by region financial independence ratio. This result also coherent with Simanjuntak & Mukhlis (2017) finding that proved fiscal capacity give a significantly positive effect on region financial independence.

The effect of economic growth and locally generated revenue on financial independence on regions in the Province of Bali

Third hypothesis (H3) as follows economic growth and locally generated revenue simultaneously give positive and significant effects on financial independence on regions in the Province of Bali. To answer the third hypothesis, using the F test, which is shown in Table 2 as follows.

| Model       | Sum of Squares | df  | Mean Square | F      | Sig.  |
|-------------|----------------|-----|-------------|--------|-------|
| Regression  | 23147.164      | 2   | 11573.582   | 160.396| 0.000 |
| Residual    | 3679.975       | 51  | 72.156      |        |       |
| Total       | 26827.139      | 54  |             |        |       |

a. Dependent Variable: Regional Financial Independence
b. Predictors: (Constant), Locally Generated Revenue, Economic Growth

Table 3: F Test Result
output SPSS 24, 2019 [source]

F test is used to test the effect of economic growth and locally generated revenue simultaneously toward region financial independence are shown in Table 2. The result shows that $F = 160.369$ with Sig. 0.000. The significant $F$ (Sig. $F = 0.000$) is lower than 0.05; thus, can be interpreted that the coefficient is significant. This means economic growth and locally generated income positively significant simultaneously affecting regions' financial independence. The positive
regression coefficient shows a positive effect of economic growth and locally generated revenue toward regions’ financial independence. If the economic growth and locally generated revenue simultaneously increased it will also increase the region's financial independence significantly. The regression equation is $Y= -26.282+0.150X1+0.875X2$. Based on the discussion, the third hypothesis is accepted. This result consistent with Tolosang (2018); Gaghana (2018) results that finds a simultaneously significant effect of regional economic growth and locally generated income on region financial independence.

### Analysis of financial independence on regions in the Province of Bali

| Regions     | Region Financial Independence (%) | Average (%) |
|-------------|----------------------------------|-------------|
|             | 2014    | 2015    | 2016    | 2017    | 2018    |           |
| Jembrana    | 10.85   | 10.85   | 10.50   | 10.22   | 11.51   | 10.79     |
| Tabanan     | 20.00   | 18.61   | 17.72   | 22.79   | 21.64   | 20.15     |
| Badung      | 78.69   | 80.36   | 82.33   | 84.47   | 86.80   | 82.53     |
| Gianyar     | 30.30   | 2.99    | 31.49   | 36.64   | 36.12   | 27.51     |
| Klungkung   | 11.95   | 13.23   | 12.63   | 13.94   | 13.93   | 13.14     |
| Bangli      | 9.59    | 10.04   | 10.08   | 9.57    | 10.77   | 10.01     |
| Karangasem  | 19.18   | 17.78   | 17.72   | 13.01   | 14.98   | 16.53     |
| Buleleng    | 14.23   | 15.12   | 13.65   | 20.69   | 17.48   | 16.23     |

Table 4: Average Percentage of Financial Independence on Regions in the Province of Bali

Table 4 above shows generally regions financial independence in the Province of Bali are very low with relation pattern are an instructive pattern. It means the role of the central government is dominant compared to regions' financial independence. The average of Financial independence in regions on Bali Province as follow: Jembrana (10.79%); Tabanan (20.15%); Gianyar (27.51%); Klungkung (13.14%), Bangli (10.01%); Karangasem (16.53%) and Buleleng (16.23%), which are very low with the instructive relation pattern. This means from the financial independence aspect; these regions are very dependable on the central government. Meanwhile, for the Denpasar region, the criteria are low, mean the relation pattern is consultative thus the role of the central government is lessen because the Denpasar region is considered to be able to conduct their autonomy. Badung, on the other hand, has the highest criteria with delegate relation pattern, meaning there is not any central government interference regarding Badung’s autonomy.

The research findings above will be giving a research implication that governments in each region in Bali province have to pay attention to the region’s economic growth and locally generated income. High or increasing economic growth will have a wide effect on society, decreasing the number of unemployment, in turn, will reduce poverty and in the end, will increase the region’s locally generated income. Both variables simultaneously have a vital role in regions financial independence, the higher economic growth, and locally generated income will be increasing region financial independence and will be decreasing the level of dependable to the central government.

### CONCLUSION

Based on the discussion above, the research conclusions as follow: Firstly, economic growth positively significant affected financial independence on regions in the Province of Bali. The
second result shows that locally generated revenue has a positive and significant effect on financial independence on regions in the Province of Bali. The third findings show that simultaneously economic growth and locally generated revenue have a significantly positive effect on financial independence on regions in the Province of Bali. In general, the financial independence of each region in the Province of Bali still depends on the central government. It reflects from the low and very low ratio of regions’ financial independence. Only region of Badung have high ratio on financial independence thus the region of Badung’s locally generated revenue able to fund its own expenditure in their duty to perform regional autonomy.

Thus can be advised to regions in the Province of Bali to spur economic growth and optimize locally generated revenue sources in order to diminish financial dependence on the central government and gradually become more independent.

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