Abstract

The purpose of this study is to examine the effect of Regional Own-source Revenue, Tax Revenue-sharing Fund, General Allocation Fund and Special Allocation Fund to Human the Development Index (HDI). The HDI is used as a benchmark to assess the performance of provincial governments in terms of providing public services. Population in this research is all Provincial Government in Indonesia and the data used is Provincial Government financial data of 2013, 2014, and 2015, which were analyzed using multiple regression. The results of this study show that the Regional-own Source Revenue has a significant positive impact on the Human Development Index, while the Tax Revenue-sharing Funds, General Allocation Funds and Special Allocation Funds have significant negative impacts on the Human Development Index.

Keywords: Regional-own Source Revenue, Tax Revenue-sharing Funds, General Allocation Funds and Special Allocation Funds, Human Development Index

1. Introduction

According to the Indonesian Central Bureau of Statistics, the Human Development Index (HDI) explains how people can access development results in term of income, health, education and so on. In 1990, the United Nations Development Program (UNDP) introduced this HDI and was published periodically in the annual report of Human Development Reports (HDR).

According to the Central Bureau of Statistics, there are 3 (three) benefits of HDI. First, HDI is an important indicator to measure success in efforts to build the quality of human life. Second, HDI can determine the ranking or level of development of a region. Third,
for Indonesia, HDI is a strategic data because HDI is also used as one of the allocation factor of General Allocation Fund.

The Human Development Index is an important indicator to measure the success in building the quality of human life (community/population) and HDI can determine the ranking or level of development of a region/country. This indicates that HDI is used to assess the success of human development performance in a region through the provision of good public services. In this context, providing good public services means higher degree of social welfare, which in turn leads to increase Human Development Index.

According to Law no. 32 year 2004 article 1 states that regional autonomy is the right, authority and obligation of autonomous regions to manage their own governmental affairs and the interests of local communities in accordance with the laws and regulations.

This means giving authority to regions to carry out regional autonomy accompanied by granting of rights and obligations in the unity of the state administration system. Therefore, with the existence of regional autonomy, local government has wider authority in managing its area to improve the welfare of society, public service and regional competitiveness.

One of the manifestations of regional autonomy is the implementation of decentralization. According to Law no. 32 of 2004, the definition of decentralization is the transfer of government authority to the autonomous regions to regulate and administer government affairs within the system of Republic of Indonesia. Within the framework of fiscal decentralization, delegation of authority from the central government to the local government will certainly be accompanied by the handover of responsibilities in terms of financial management, infrastructure and facilities and also human resources improvement. In terms of funding, the authority given can be implemented through optimizing the regional financial potential and also with balancing mechanism between central-regional and inter-regional financial.

Optimization of local financial potential is achieved through the optimization of Regional-own Source Revenue (PAD). Regional-own Source Revenue (PAD) is revenue derived by the domestic source and collected in accordance with the laws and regulations. The demand to have highest level of PAD will increase in line with the increase of delegation of authority to local government. PAD aims to grant local governments the authority to fund the implementation of regional autonomy in accordance with regional potentials as a manifestation of decentralization.
The source of Regional-own Source Revenue comes from Regional Taxes, Regional Retributions, Local Own Source Asset.

On the other hand, the implementation of financial balance is achieved through the mechanism of Balancing Fund. Balancing Funds are fund sourced from State Budget (APBN) which is then allocated to regions to fund regional needs in the context of decentralization implementation. Balancing Fund consists of Revenue Sharing Fund (DBH), General Allocation Fund (DAU) and Special Allocation Fund (DAK).

Balancing funds are provided by the central government in order to cover the regional fiscal gap caused by the inability of regions to finance development with its Regional-own Source Revenue [1]. Besides intended to assist the region in funding its authority, the Balancing Fund also aims to reduce the imbalance of government funding sources between the Central and Regional and to reduce the interregional government funding gap. These three components of the Balancing Fund are funds transfer system from the Government and are a unified whole.

Revenue Sharing Fund (DBH) is fund sourced from State Budget which are distributed to regions based on certain percentage figures. The General Allocation Fund aims at equal distribution of inter-regional financial capabilities to reduce the inequality of inter-regional financial capacity through the application of a formula that takes into consideration local needs and potentials.

General Allocation Fund (DAU) is determined by the size of the fiscal gap of an area. Fiscal gap is the difference between the needs of the region (fiscal need) and the potential area (fiscal capacity).

Special Allocation Fund (DAK) is intended to finance specific activities in certain areas in accordance with national priorities. In particular, DAK is intended to finance the needs of basic community service facilities and infrastructure that have not reached certain standards or to encourage the acceleration of regional development.

This research refers to previous research that is conducted by Adiputra et al. (2015), which concluded that PAD had direct effect on the quality of human development, DAU had no effect on the quality of human development, DAK had no effect on the quality of human development, DBH had no effect on quality of human development. Research conducted by Ardiansyah et al., which concluded that DAU and DAK had a significant negative effect on HDI, while PAD had a significant positive effect on HDI. Simultaneously, DAU, DAK and PAD had an effect on the HDI.

Based on the foregoing, this study aims to examine the effect of Regional-own Source Revenue, Tax Revenue-sharing Funds, General Allocation Funds, and Special Allocation Funds to Human Development Index (HDI) in Indonesia. This study uses...
secondary data from 2012-2015 obtained from the State Audit Board and the Central Bureau of Statistics with a sample coverage of all provincial governments in Indonesia.

2. Review of Literature and Hypotheses Development

2.1. Agency theory and signaling theory in government

According to Jensen et al. (1976), agency relationship is a contract which one or more persons (principals) engage with others (agents).

According to Zimmerman (1977), agency problems also exist within the context of government organizations. The people as the principal mandate the government as an agent, to carry out government duties in order to improve the welfare of the people. According to Fadzil and Nyoto (2011), there is a principal relationship between central and local government agencies. The central government is the principal and the local government acts as an agent. This is because Indonesia as a unitary state, local government is responsible to the community as a voter and also to the central government.

Signaling theory explains that the government as a party given the mandate from the people trying to show a signal to the community [8]. The goal is that people can continue to support the current government so that the government can run well. The financial statements can be used as a mean to signal to the public. Good governance performance needs to be informed to the people both as a form of accountability and as a promotion for public purposes.

2.2. Locally generated revenue

According to Law no. 33 of 2004 on the financial balance between the central government and regional governments, Regional-own Source Revenue is the right of local government, recognized as an increase in net worth value in the period of the year concerned. Furthermore, in Article 5 paragraph 2 stated that the Regional-own Source Revenue is derived from the Original Income, Balancing Fund and Other Income.

Meanwhile, Regional-own Source Revenue (PAD) is income earned by an area which is collected based on Local Regulation in accordance with regulation of law. PAD aims to grant local governments the authority to fund the implementation of regional autonomy in accordance with regional potentials as a manifestation of decentralization.
The source of Regional-own Source Revenue comes from Regional Taxes, Regional Retributions, Local Own Source Asset.

The demand to have highest level of PAD will increase in line with the increase of delegation of authority to local government. Local governments are expected to explore the potential of the region’s wealth optimally. PAD is the basic capital of local government to develop the region and to reduce its dependence on the central government.

2.3. Fiscal balance transfer

According to Law no. 33 of 2004 on Financial balance between the central government and regional governments, Fiscal Balance Transfer is a fund comes from State Budget (APBN) which is allocated to the Region to fund the needs of implementing the decentralization. This fund aims to reduce the fiscal gap between the Government and the Regional Government and between the Regional Governments. The amount of Fiscal Balance Transfer is set forth every budget year in the State Budget. This fund consists of Revenue Sharing Fund, General Allocation Fund and Special Allocation Fund.

2.4. General allocation fund

According to Law no. 33 of 2004 of The Financial balance between the central government and regional governments, General Allocation Fund (DAU) is a fund derived from State Budget (APBN) which is allocated for the purpose of equitable inter-regional financial capacity to fund regional needs in the context of decentralization. Furthermore, Article 34 states that the government formulates the formula and calculation of DAU by taking into account the consideration of the council in charge of giving advice and consideration to the policy of regional autonomy.

As one element of fiscal decentralization, DAU is an important element for local governments to cover their financing. DAU is allocated to each region to exercise its authority to provide public services to the public. In this case, DAU is a block grant and the area is given the flexibility in using DAU in accordance with the needs of the region.

2.5. Tax revenue-sharing fund

According to Law no. 33 of 2004 on the financial balance between central and regional governments, Revenue Sharing Fund is a fund sourced from State Budget revenues
allocated to regions based on percentage figures to fund regional needs in the context of decentralization implementation.

Revenue Sharing comes from taxes and natural resources. Tax-sharing funds derived from taxes comprise of land and building taxes, land and building tax acquisition fees and income tax articles 25 and Article 29 Individual Tax Payers and Income Tax Article 21.

Revenue Sharing derived from natural resources such as forestry, general mining, fishery, petroleum mining, natural gas mining and geothermal mining.

Taxable Profit Sharing from Land and Building Tax (PBB) and Land & Building Acquisition (BPHTB) is divided between provinces, regencies/municipalities and the Government.

Amounting to 90% of PBB is allocated for regions with details are 16.2% for the province concerned, 64.8% for regencies/municipalities concerned, and 9% for collection fees.

While 10% of the Government’s share of PBB revenue is distributed to all districts and municipalities based on the realization of PBB revenue in the current fiscal year, 65% is distributed equally to all districts and municipalities, 35% is distributed as incentives to districts and municipalities which had reached or exceeded the revenue plan of a particular sector in last period.

The tax revenue share of BPHTB receipts is 80%, with details are 16% for the province, 64% for districts/municipalities and 20% of the government share in equal portions for all districts and cities.

Taxable Profit Sharing from Income Tax Article 25 and Article 29 Individual Personal Tax Payers who are part of the region is 20%, which is divided between provincial and district/municipal governments with a balance of 60% for districts and 40% for the province.

3. Research Method

This research is quantitative research. The data used in this study is secondary data which is collected from Central Bureau of Statistics.

The population in this study are all provincial governments in Indonesia amounting to 34 provinces from 2012–2015, taken from the website of the Central Bureau of Statistics. Purposive Sampling is used in selecting the samples and the following criteria are used, such as: Provincial Government which has presented the realization report of APBD in
The 2nd ICVHE 2013, 2014 and 2015 and Provincial Government which has Human Development Index which has been published by the Central Bureau of Statistics. Based on the sampling technique, there are 129 samples used in this research.

### 3.1. Development of hypotheses

#### 3.1.1. The effect of Regional-own Source Revenue (PAD) on Human Development Index (HDI)

Regional-own Source Revenue (PAD) is an important source of income for a region to finance its expenditure. According to Law No. 33/2004, the Regional-own Source Revenue is defined as income earned by source owned by region and collected according to local regulations and in accordance with the laws and regulations from central government.

The higher the PAD, the higher the ability of local governments to serve its people well. If the quality of public services improved then it is expected that Human Development Index can also increase.

Setyowati and Suparwati (2012) conducted research on the effect of Regional-own Source Revenue (PAD) to Human Development Index. Meanwhile, Anggraini and Sutaryo (2014) conducted a study on the effect of decentralization on HDI and concluded that the degree of decentralization has an influence on the Human Development Index.

Setyowati and Suparwati (2012) and Ardiansyah et al. (2014) examined the effect of PAD on HDI and concluded that PAD had a significant positive effect on HDI. Meanwhile, research conducted by Wenny (2012), concludes that the PAD simultaneously have a significant effect on the financial performance of local government. Similarly, research conducted by Suprianto (2013) and Julitawati (2012) concluded that PAD influences the financial performance of local governments. Research conducted by Adiputra (2015) concluded that PAD has a positive effect on HDI.

Amalia and Purbadharmaja (2014) put forward the results of their research that the ratio of local financial independence significantly affects the Human Development Index (HDI). In addition, another study conducted by Dewi and Sutrisna (2014) also suggests that the ratio of local financial independence has a significant influence on the Human Development Index (HDI).

Based on the results of previous research, the researcher formulated the following hypothesis.
H1: Regional-own Source Revenue (PAD) positively affects the Human Development Index (HDI)

3.1.2. The effect of General Allocation Fund (DAU) on Human Development Index (HDI)

According to Law no. 33 of 2004 of Financial Balance Between The Central Government and Regional Governments, General Allocation Fund (DAU) is a fund derived from State Budget revenues which is allocated for the purpose of equitable inter-regional financial capacity to fund regional needs in term of decentralization.

Ardiansyah et al. (2014) conducted a study on the effect of the General Allocation Fund (DAU) on HDI and concluded that DAU had no significant effect on HDI. Christy and Priyo (2009) concluded that the DAU affects capital expenditure and capital expenditures affect the HDI. Further, Setyowati and Suparwati (2012) concluded that DAU has a positive effect on HDI.

Based on the previous research, the researcher formulates the hypothesis as follows:

H2: General Allocation Fund (DAU) has a positive effect on Human Development Index (HDI)

3.1.3. The effect of Special Allocation Fund (DAK) on Human Development Index (HDI)

According to Law no. 33 of 2004 of Financial Balance Between The Central Government and Regional Governments, Special Allocation Fund is a fund sourced from State Budget which is allocated to a certain Region with the aim of assisting in funding specific activities which become regional affairs and also in accordance with national priorities.

Setyowati and Suparwati (2012) concluded that DAK positively affects IPM through the allocation of capital expenditure.

Based on the previous research, the researcher formulates the hypothesis as follows:

H3: Special Allocation Fund (DAK) positively affects the Human Development Index (HDI)
3.1.4. The effect of Tax Revenue-sharing Fund on Human Development Index (HDI)

Revenue Sharing Funds (DBH) are funds sourced from State Budget which is allocated to regions based on percentage figures to fund regional needs in the context of decentralization implementation.

Revenue Sharing comes from taxes and natural resources. Tax-sharing funds derived from taxes which comprises of, land and building taxes, land and building tax acquisition fees and income tax articles 25 and Article 29 Individual Tax Payers and Income Tax Article 21.

Adiputra et al. (2015) concluded that the Revenue Sharing Fund has no effect on HDI. Wulandari’s (2014) study concluded that DBH had significant effect on regional expenditure. Similarly, research conducted by Wandira (2013) concluded that DBH has a positive effect on capital expenditure.

The previous studies did not distinguish between Revenue Sharing Fund derived from Tax or derived from natural resources. This research will take the variables specifically to Tax Revenue-sharing Fund (DBHP).

In this case, researchers want to test the relationship so that researchers formulate the following hypothesis.

H4: Tax Revenue-sharing Fund (DBHP) has a positive effect on Human Development Index (HDI).

3.2. Operationalization of variables

Dependent variable used in this research is Human Development Index (HDI). The independent variables in this study consist of 4 (four) variables, namely Regional-own Source Revenue (PAD), General Allocation Fund (DAU), Special Allocation Fund (DAK) and Tax Revenue-sharing Fund (DBHP).

Data analysis in this study using multiple regression model as follows.

\[
HDI = \beta_1 + \beta_2 PAD + \beta_3 DAU + \beta_4 DAK + \beta_5 DBHP + \epsilon
\]

4. Result and Discussion

4.1. Result test
4.1.1. Normality test

Testing of normality by using Kolmogorov Smirnov as shown in Table 1 shows the value of Asymp. Sig 2 (tailed) is 0.072. This value indicates that the number is greater than the 0.05 level of significance. It can be concluded that the data used in this study has been normally distributed.

<table>
<thead>
<tr>
<th>N</th>
<th>Unstandardized Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>129</td>
<td></td>
</tr>
<tr>
<td>Normal Parameters Mean</td>
<td>0.0000000</td>
</tr>
<tr>
<td>Std Deviation</td>
<td>2.73719326</td>
</tr>
<tr>
<td>Most Extreme Differences Absolute</td>
<td>0.075</td>
</tr>
<tr>
<td>Positive</td>
<td>0.075</td>
</tr>
<tr>
<td>Negative</td>
<td>-0.062</td>
</tr>
<tr>
<td>Test Statistic</td>
<td>0.075</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>0.072</td>
</tr>
</tbody>
</table>

Source: Secondary data is processed, 2017.

4.1.2. Test of multicollinearity

<table>
<thead>
<tr>
<th>Model</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAD</td>
<td>Tolerance</td>
</tr>
<tr>
<td>0.341</td>
<td></td>
</tr>
<tr>
<td>DAU</td>
<td>0.478</td>
</tr>
<tr>
<td>DAK</td>
<td>0.510</td>
</tr>
<tr>
<td>DBHP</td>
<td>0.359</td>
</tr>
</tbody>
</table>

Source: Secondary data is processed, 2017.

Based on Table 2, it can be seen that the tolerance value (0.341; 0.478; 0.510; 0.359) for all variables indicates a number greater than 0.1. Similarly, the VIF value (2.934, 2.091, 1.962, 2.782) for all variables indicate a number smaller than 10. Therefore, it
can be concluded that there is no multicollinearity symptoms in the regression model used.

### 4.1.3. Autocorrelation test

The autocorrelation test result in Table 3, Durbin Watson’s value is 1.871. And with α = 5%, n = 129 and independent variable (k) = 4, then dl = 1.6492 and du = 1.7769 so (4 - 1.871 = 2.129) > 1.7769. This shows that there is no autocorrelation problem in the regression model.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.700</td>
<td>0.490</td>
<td>0.474</td>
<td>2.78099</td>
<td>1.871</td>
</tr>
</tbody>
</table>

Source: Secondary data is processed, 2017.

### 4.1.4. Heteroscedasticity test

The heteroscedasticity test aims to test whether there is a variance of the residual from one observation to another observation. The result of heteroscedasticity test as in Table 1 shows that the value of absolute unstandardized residual is 0.075. This value is greater than its significance value of 0.05 therefore it can be concluded that the regression model used in this study is not affected by symptoms of heteroscedasticity.

### 4.2. Test of regression model (Goodness of Fit)

#### 4.2.1. Coefficient of determination test (R^2)

R Square value of regression model test result is 0.490 as shown in Table 3. It illustrates that the independent variables contained in this study are able to describe 49% of the dependent variable. While the remaining 51% is described by independent variables that are not examined in this study.
4.2.2. Test statistic F

Based on Table 4, it can be seen that the significant value of F statistical test is 0.00. The significant value of the F statistic test shows the number is below 0.05. Therefore, it indicates that simultaneously independent variable has significant effect on dependent variables.

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>922.573</td>
<td>4</td>
<td>230.643</td>
<td>29.822</td>
<td>0.000</td>
</tr>
<tr>
<td>Residual</td>
<td>959.005</td>
<td>124</td>
<td>7.734</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1881.578</td>
<td>128</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Secondary data is processed, 2017.

4.2.3. Regression coefficient test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sig</th>
<th>Test</th>
<th>Sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAD</td>
<td>0.000</td>
<td>0.05</td>
<td>+</td>
</tr>
<tr>
<td>DAU</td>
<td>0.000</td>
<td>0.05</td>
<td>—</td>
</tr>
<tr>
<td>DAK</td>
<td>0.033</td>
<td>0.033 &lt; 0.05</td>
<td>—</td>
</tr>
<tr>
<td>DBHP</td>
<td>0.000</td>
<td>0.05</td>
<td>—</td>
</tr>
</tbody>
</table>

Source: Secondary data is processed, 2017.

From Table 5, it can be seen that Regional-own Source Revenue (PAD) has a significance value of 0.000 (< 0.05) with a positive t-value. This can be concluded that the PAD has a significant positive effect on the Human Development Index. Meanwhile, the General Allocation Fund (DAU) has a significance value of 0.000 (< 0.05) with a negative t-value. Therefore, it can be concluded that the General Allocation Fund has a significant negative effect on the Human Development Index. Furthermore, the Special Allocation Fund has a significance value of 0.033 (< 0.05) with a negative t-value. In this case, it can be concluded that the Special Allocation Fund (DAK) has a significant negative effect on the Human Development Index. Tax Revenue-sharing Fund (DBHP) has a significance value of 0.000 with a negative t-value, therefore it can
be concluded that the Tax Revenue-sharing Fund has a significant negative effect on the Human Development Index.

This study proves that Regional-own Source Revenue has a significant positive effect on the Human Development Index. This result is in accordance with as previously hypothesized. However, the results of other variables for Tax Revenue-sharing Funds, General Allocation Funds, and Special Allocation Funds show different results than previously hypothesized. The hypothesis stated that Tax Revenue-sharing Fund, General Allocation Fund, and Special Allocation Fund have a significant positive effect on Human Development Index. While the results of this study found that Tax Revenue-sharing Fund, General Allocation Fund, and Special Allocation Fund have a significant negative effect on Human Development Index.

This result is similar to the research conducted by Ardiansyah (2014) and Adiputra (2015) which concluded that PAD has positive effect on HDI.

This is also similar to the study conducted by Ardiansyah (2014) which concluded that DAK had a significant negative effect on HDI, but on the other side, DAU had no significant effect on HDI.

It is interesting to note that DAK, DAU, DBHP have a significant negative effect on HDI. Ordinarily, the Balancing Fund is provided with the aim to assist local governments in financing its expenditure and the local expenditure should be financed from existing sources, one of which comes from the support of the Balancing Fund.

This may happen because in some level, the Balancing Fund is not used to finance direct expenditure. As supported by the theory, that direct expenditure has a direct impact on maintaining public services, which at the end it has an impact on improving the quality of human development. It is interesting to discuss in further research why balancing funds have a significant negative effect on HDI.

5. Conclusion and Recommendation

5.1. Conclusion

Based on previous exposures, the results of this study can be summarized as follows:

1. The Regional-own Source Revenue (PAD) has a significant positive effect on the Human Development Index. From this result, it can be concluded that the increase of PAD will be able to increase the HDI.
2. Tax Revenue-sharing Funds (DBHP) has a significant negative impact on the Human Development Index. From this result, it can be concluded that the increase of the DBHP of a region will be able to decrease the HDI.

3. General Allocation Funds (DAU) has a significant negative impact on the Human Development Index. From this result, it can be concluded that the increase of DAU will be able to decrease HDI.

4. The Special Allocation Fund has a significant negative impact on the Human Development Index. From this result, it can be concluded that the increase of the DAK will be able to decrease the HDI.

5.2. Limitation and recommendation

This study has limitations because it is used financial data from the Provincial Government in Indonesia so the probability of the results of this research can not be generalized to all district/city governments. Future research is expected to increase the number of samples including samples from the Regency/City Government. In addition, the coefficient of determination ($R^2$) for this study is 49% 51%, this means that 51% is explained by other variables that have not been included in this study. Further research can also add independent variables such as: PAD Effectiveness Ratio, Tax Effectiveness ratio.

References


kabupaten/kota di provinsi jawa tengah,” Simposium Nasional Akunstansi 17,2014, in press.


