The Shortfall Tax Impact from Local General Revenue in Javanese Provinces: How to Increase the Effectiveness of Land and Building Tax

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This research intends to analyze whether the shortfall that has happened at a national level for the last 10 years also happened at the provincial level, and how the provincial governments can overcome this shortfall happening in the future. The focus of this research is directed to find solutions by intensifying the sources of tax at the local level. Meanwhile, the locus of research comprises four provinces on Java Island, namely Jakarta, West Java, Central Java and East Java. The research method is a mixed methodology employing both qualitative and quantitative methods. The results found that of the four provinces of the locus, three need to push the revenue from land and building tax (LBT). The important role of LBT to increase local tax revenue to date is not well managed and it is found that from 2013 to 2018, the tax revenue in these three largest provinces has never reached target.

Key words: Shortfall, Original Local Government, Revenue.
Introduction

The International Monetary Fund (IMF) in the updated outlook of the World Economy reminds countries around the world that in 2020 there will be an economic crisis in that the world economy will only grow at a maximum of 3.5%. According to IMF Chief Economist Gita Gopinath this is caused more by the trade war between the USA and China as well as the uncertainty of the pull-out of Great Britain from the European Union without agreement. This slow growth has started evidence in various countries, especially developing countries like Indonesia.

Indonesia, which experienced rapid growth in the era of 1980-1990 of up to 7.7%, showed continuous slowing down afterward. This is marked by the export rate which is lower than the import rate, the level of tax revenue which did not achieve the target in terms of Value Added Tax and Income Tax. In July 2019 the government of Indonesia stated a shortfall to illustrate the condition of Indonesia for the past 10 years. Shortfall is a condition where the realization of state revenue is lower than the target in the National Revenue and Expenditure Budget or Anggaran Pendapatan Belanja Negara (APBN). This means state debts will continuously increase to cover the deficit of APBN (CNBC Indonesia, 23 July 2019).

Based on the report issued by the government of the Republic of Indonesia, the realization of tax revenue until the end of June 2019 was only 38.2% of the target. The lowest income realization was of VAT (32.4%) and income tax (42.1%) of the target. It is predicted that in 2019 the income from the tax sector will reach only 91% of the total target in APBN. The shortfall at the end of 2019 is predicted to achieve only IDR 140 trillion. Data of shortfall for 10 years is depicted in Figure 1 below:

![Figure 1. Data of shortfall for 10 years](source: Edwar Ricardo, CNBC Indonesia, June 2019)

The shortfall in the tax sector, is also evident in the oil and gas investment sectors. In 2018, Indonesia’s oil and gas production was less than 800,000 barrels per day. The impacts of the
shortfall are that the state balance sheet becomes deficit or the fiscal physical endurance deteriorates and debtor trust decreases due to lack of ability to manage the economy which results in consequent distrust in the market. The same circumstance has previously occurred in Brazil where in 2016, Rio De Janeiro experienced extreme anxiety over the Olympics due to shortfall (Burke and Kennedy, 2017; Deborah, 2018).

However, not all government incomes subsequently experience a shortfall. The government of Indonesia certainly has experienced a shortfall in the tax and oil and gas investment sectors, but Indonesia has never made a surplus income (157%) from oil and gas. Likewise, there has been no form of state non-tax revenue (PNBP) in the oil and gas sector coming from the natural resource commodities, including crude palm oil which reached 118.5%. The revenue from State-Owned Enterprises reached 107.1% of the target of revenue in the APBN.

From the problem presented above, it is apparent that the tax sector has experienced some obstacles. This might also be reflected in how the provincial government and local government avoids the shortfall. In this research covering 34 provinces in Indonesia, the focus is on four provinces: Jakarta Province, West Java Province, Central Java Province and East Java Province. The reasons for selecting this locus is that those four provinces have the highest level of revenue and expenditure in comparison with other provinces and that they have the most population.

Research Questions

This research seeks to determine whether:
1. the shortfall at the national level also occurs in the local governments of Jakarta, West Java, Central Java and East Java provinces?
2. the local governments maintain the level of local income and avoid shortfall?

Research Methodology

In this study, the four Java Island provinces are the research sample. The phenomenon of a shortfall for the last 10 years becomes the central issue in the tax administration and economic system. The selection of this sample is due to the fact that: the provinces are close to the capital city of Jakarta; the provinces are the most quickly influenced by the state economic system; have the highest population (60% of Indonesian population are domiciled in the Java Island) and the highest level of ease in business.

The selected research methodology is a qualitative analysis which is based on a literature study with analysis from experts at both national and local levels as well as from key informants. The selection of the sample is purposive and designed according to the research questions. In this
research, the selection of a scenario is used to support the solution to prevent the shortfall from recurring in the following year.

**Theory**

The classic theory explains that the effort to increase the tax revenue can be achieved through tax intensification and extensification. Therefore, the important things to be paid attention by local governments are tax bases and tax rates. Sommerfeld (1983:3) explains that local governments tend to apply a high tariff to obtain the maximum total amount of local tax revenue. The same explanation is provided by Neumark with the concept of revenue productivity (Somerfeld 1983:5), who states that a tax system should ensure the income to finance government expenditure.

Theoretically, a high tax tariff does not always result in high total income, but rather depends on the response from the taxpayers. The formulation of this model is known as Levithan model which explains that the increase of local tax revenue is not necessarily achieved by applying high tariff of tax but through the application of relatively low tariff combined with the tax structure which minimizes tax avoidance in response to price and quantity of goods against the taxation, to achieve the maximum total income will be achieved (Brennan and Buchanan, 2004:20). Moreover, the tax should also be perceived as fair from the standpoint of two factors: who pays and the amount of tax paid and the result from tax must be clear in the use of its financing (Ronald and Waugh Jr: 1985: 16). In addition to fairness, it should entail social justice, universality principle and ease of administration and compliance.

Behind it, all, no less important is the tax system. The tax system is a system consisting of mutually-influencing elements that are composed to reach the target of tax collection. To achieve this target, attention must be paid to who the tax subjects will be attracted to become taxpayers, the tax object, the tax tariff to be applied and the base of taxation (Nightingale, 2000:34). A similar opinion can be seen in other literature. For example, Devas explains that there are three benchmarks to assess the administration of local tax. One of the benchmarks to assess the administration of local tax is tax effectiveness (Devas, 2008:144). This indicates the importance of the tax administration role. Overall, tax administration is a process of performing activities in the field of tax starting from the setting up to the achievement through the tax instruments and management based on the control equipment with the available supporting facilities. The ability to pay principle means that people with the same ability must pay tax in the same amount (Musgrave and Musgrave: 1989:28).

Tax is compulsory. Simon James says that “A tax is a compulsory levy made by public authorities for which nothing is received in return” (James and Nobes: 1996:237). Due to its nature of enforceability, the government has the authority to exercise coercion in tax collection,
such as the determination of sanction which must be based on the constitution. Likewise, the opinion of Roth, Scholz and Witte quoted by Hasseldine (1993:424) is that “Compliance with reporting requirements means that taxpayer files all required tax returns at proper time and that the returns accurately report tax liability in accordance with the Internal Revenue Code, regulation and court decision applicable at the time return is filled.” According to Kantona, changes in the tax system do not always result in changes in people’s tax behavior. It is the change of perception toward the government in the forms of trust and confidence through which the government serves people that influence economic behavior, one of which is tax compliance. Thus, the emergence of compliance itself may be caused by the government or the taxpayers themselves. Kelman explains some motives owned by taxpayers to fulfill their obligation. First, people pay tax since they are afraid of punishment if they do not or if they hide it and Kelman (1966:22) calls such behavior as compliance. At this level, people pay tax not based on their awareness of the importance of tax for the state and themselves but due to the fear of punishment if they avoid paying the tax.

**Discussion**

In Indonesia, one of the indicators of local government independence is Original Local Government Revenue (OLGR) or Pendapatan Asli Daerah (PAD). The source of local income is not only OLGR but also other sources such as revenue sharing from tax revenue from the central government or other income in the form of subsidy to the need for local development. In Article 157 of Regional Tax and User charges Law, the explanation of those regional financial sources is clearer, i.e. the sources of local income comprise:

a. Original local government revenue (OLGR); that is the revenue resulting from local/regional taxes, regional user charges, the management of separated regional assets and other legitimate OLGR, balance fund and other legitimate local incomes.

b. Balance fund consists of Revenue Sharing Fund (DBH); Block Grant (DAU); and Special Grant (DAK). Revenue Sharing Fund comes from taxes and natural resources. Revenue Sharing Fund from taxes includes Land and Building Tax (LBT) in the rural, urban, plantation, mining and forestry sectors and Acquisition Fee for Land and Building Rights (BPHTB) in the rural, urban, plantation, mining and forestry sectors; Income Tax (PPh) Article 21, Article 25, and Article 29 domestic personal taxpayers.

c. Revenue Sharing Fund coming from natural resources are derived from forestry revenue in the forms of forest concession fee (IHPH), provision on forestry resources (PSDH) and reforestation fund of the related territories; General mining revenue coming from fixed fee (land rent) as well as exploration and exploitation fees (royalty) on the related territories; Fishery revenue nationally received from levies on fishery operations and levies on fishery products; Oil mining revenue generated from the related territories; Natural gas mining revenue generated from the related territories; Geothermal mining revenue from the Government’s deposit, fixed fees and production fees generated from the related territories.
d. Block Grant (DAU) is regulated in Article 161. DAU is allocated based on a certain percentage of net domestic income specified in the APBN. DAU for a region is based on certain criteria emphasizing the aspects of equity and justice in line with the implementation of government affairs where the formula and calculation of DAU are stipulated by legislation.

e. Whereas Special Grant (DAK) is regulated in Article 162 explaining that DAK is allocated from APBN to certain regions to finance the implementation of decentralization and to finance special activities determined by the government based on the national priority and to finance special activities proposed by certain regions.

The sources of original local government revenue (OLGR) are the narrow sense definition where among all the sources of revenue only a few are original local government revenue. The examples of original local government revenue include revenue from local tax levies, regional user charges, results from regional enterprises and others which are generated by the related region. Based on the Act Number 28/2009, local tax is divided into two types: Provincial Tax, such as motor vehicle tax, transfer of motor vehicle title fee, motor vehicle fuel tax, surface water tax and cigarette tax. City/Regency tax includes: hotel tax, restaurant tax, entertainment tax, advertising tax, street lighting tax, non-metallic and stone mineral tax, parking tax, swallow bird nest tax, land and building tax in rural and urban areas, acquisition fee for land and building rights (Samudra, 2016:28).

Furthermore, this research seeks to determine the description of abilities or the trend of original local government revenue in the four provinces, as detailed below and aims to answer questions about the impacts of a shortfall on the local government income.

**Jakarta**

Jakarta is the capital city of Indonesia and has the highest original local government revenue (OLGR) compared with the other 33 provinces, meaning that it has the best independence level among the provinces. With a population of more than eight million, in 2013 it had OLGR amounting IDR 23.2 trillion which continued to increase to achieve IDR 46.5 trillion in 2017 with a slight decrease in 2018 to IDR 35.4 trillion. Although the OLGR seems to increase every year, if compared with the Regional income, a decrease can be seen from 2017 to 2018 from 58% to 53%. In other words, Jakarta's OLGR during 2017-2018 was slightly impacted by the shortfall of central government revenue as show in Figure 2 below.
According to the data from Central Bureau of Statistic (BPS) 2018, since 2013 West Java Province has experienced rapid growth marked by its Regional income from IDR 22.2 trillion to IDR 32.2 trillion in 2018. The curve dropped only in 2014, declining from IDR 25.8 trillion to IDR 23.8 trillion in 2015, but increased again to 27.7%. Although it seems that the OLGR increased every year, if the OLGR is compared with the Regional income, there was a decrease in 2016 (62%) from 2015 (66%) and again in 2017 (54%), and finally in 2018 a decrease to 53%. In other words, West Java’s OLGR has experienced continuous shortfall to date as depicted in Figure 3 below.

Central Java

From 2014 to 2018 Central Java Province experienced a declining trend of OLGR. In 2014 the ratio of OLGR to Regional income was 65.42%, in 2015 it decreased to 64.80%, in 2016 to 58.79%, in 2017 down to 50.90% and in 2018 registered 49.12%. Thus, in the period of the
last five years, there was a decrease of OLGR against the Regional income. Based on an in-depth interview with key informants, the decrease of the OLGR target indicates the pessimism of the local government in the projected plan of next year’s tax revenue. The belief is that the lower the OLGR, the lower level of regional independence and the higher the level of dependence on the central government will be as depicted in Figure 4 below.

Figure 4: Central Java OLGR 2013-2018

![Figure 4: Central Java OLGR 2013-2018](image)

Source: Central Bureau of Statistic 2018, Rmol Jatim 2018, Katadata.co.id
OLGR = Original Local Government Revenue, RI = Regional Income

This is almost the same as West Java and if the OLGR is compared with the Local Revenue, from 2014 (70%) it decreased in 2015 to 65%, decreased again in 2016 (59%), in 2017 (51%), and finally in 2018 decreased to become 50%. In other words, Central Java’s OLGR is continuously experiencing a shortfall.

**East Java**

The data from BPS for the regional income of East Java Provincial Government from 2015 to 2017 indicates an increasing trend which for the year 2015 showed that OLGR in 2015 was IDR 22.2 trillion, in 2016 was IDR 24.9 trillion and in 2017 was IDR 29.9 trillion and hence the trend was significant increase. However in the following year, the trend was a decrease so that the target reached 5.8% lower than the previous year. The realization of revenue from the budget of 2018 reached IDR 26.53 trillion, consisting of OLGR as much as IDR 15.82 trillion, balance fund IDR 9.04 trillion and other incomes IDR 107 trillion. In 2019, the Provincial Government of East Java set revenue at IDR 31.89 trillion, while the budgeted provincial expenditure is IDR 33.41 trillion, so it is predicted there will be a budget deficit of as much as IDR 1.47 trillion.

Figure 5 below indicates that seen from the regional income perspective, there was an increase in the amount of East Java Province’s OLGR from 2013 to 2017. However, in 2018 there was a significant decrease. This shows that the shortfall of tax revenue happens at the local level too. However if seen from the OLGR, there is almost the same pattern as West Java and Central
Java and the decreasing trend also happened in East Java. If the OLGR is compared with the Regional income from 2014 (70%) it decreased in 2015 (69%), decreased again in 2016 (63%), and again in 2017 (58%), and finally, in 2018 it decreased to 46%. In other words, East Java’s OLGR is still experiencing shortfall up to now as shown in Figure 5 below.

**Figure 5. East Java OLGR 2013-2018**


OLGR = Original Local Government Revenue,
RI = Regional Income

From the four charts above, relevant to each related province, a continuous decrease of percentage in the comparison between LGR (OLGR) and GI experienced by the provincial governments of West Java, Central Java and East Java since 2015 until 2018 can be observed with only the Provincial Government of Jakarta experiencing a decrease during 2017-2018. That is why this research attempts to find appropriate solutions so that original local government revenue always increases and equals the regional income. If the OLGR becomes increasingly lower, the burden of the central government against these regions will be higher. The four provinces are the biggest budget absorbers from the central government’s fund and it is of note that shortfall should not happen continuously to the central government.

At the local level, all the provinces in Indonesia rely on tax revenue in the forms of motor vehicle tax and transfer of motor vehicle title fees as the main income sources. Both of these tax types make up around 45%-60% of the total local tax revenue. Unfortunately, income from Land and Building Tax (LBT) did not achieve a significant result. From 2013 to 2018, the average income from LBT in the Jakarta Province reached 21.24% of the total local tax revenue, West Java reached 14.54%, Central Java reached 10.90% and East Java reached only 6.08%. This illustrates that the income from LBT in these four provinces have not been paid serious attention. Indeed, the tax potential of LBT is very strong as indicated by the growth rate of the housing and building development in big cities from year to year.
Data of BPS 2018 evidences that the level of investment in properties of housings, office buildings, hotels and restaurants grew to achieve 29% with the investment value IDR 43.4 trillion. Only in Jakarta, the income from LBT is seen to increase significantly, whereas in Central Java and East Java it is almost stagnant as seen from Figure 6 below.

**Figure 6. Land and Building Tax Acceptance Level 4 Provinces**

The tax potential of LBT described in the above figure reflects that the income from LBT, can in fact still be increased. Bird & Vailancourt (1988) explain that better tax management can reduce the gap between central and local (vertical imbalance correction) since the management of LBT, which was previously central tax, has been handed over to the local government in 2014 as part of fiscal decentralization policy. The study was conducted by Bahl and Linn (1992) in 42 OECD member cities and found that the property tax universally collected by local government reaches 40% of original local government revenue.

In this study, it was found that to approach the rate of 40% is very possible as proven by the government of Jakarta Province whose revenue from LBT in 2018 reached 25.14%. According to this study, the rate of 30% for each province is considered relevant to stabilize the regional income and improve local independence so that tax shortfall will not happen.

**Solutions**

The classic model of tax intensification and extensification to solve the problems faced by provincial governments needs to be continuously implemented effectively. According to this study, the low revenue from LBT is caused by many factors, namely:

a). Tax Rate and Tax Base: The low tax rate of LBT (0.5%). The government can increase the tax rate by up to 1% with the tax base 20%.

b). Human resources and online tax system: The online system of LBT payer data which has not been effective yet in some local governments are due to unskilled human resources. Local governments must recruit skilled human resources and as soon as possible provide
them with training to improve their fiscal competency. The most basic problem faced by locals to increase the sources of local income is human resources. This is very influential to the performance to be achieved. Before regional autonomy is implemented, the employees in the local government are dominated by the central government employees and automatically work for the central government interests. Their responsibility and service attitude is shown only to the central government and less attention is paid to the interests of local government. The formal implementation of regional autonomy in 2001 implies that the human resources owned by local governments should be professional in their job and willing to contribute their best ability to their region. The research also showed that the level of education and central government fiscal knowledge is much higher than at the local government level, and such a level is in the province, on average higher than in cities. Most fiscus both at central and local levels only act as tax enforcers, not as decision-makers.

c). Target System: The theoretical base and law of the target system and its realization are unclear. In Indonesia, there is a target system of 10% every year in setting tax revenue. The rate of 10% is a habit continuously followed since the Suharto regime until now. Therefore, it does not need to be changed where the tax target is not set to increase 10% from the previous year’s income, however the target is calculated from the tax potential.

d). Tax Arrears: Many property owners in housing complexes are in arrears to pay LBT so that the local government frequently grants clearance on such a tax. For example, in 2019 the city government of Surabaya in East Java removed the tax penalty from 1994 to 2018, which meant reducing the revenue from LBT. It is predicted that in the four provinces where this study was conducted that the LBT arrears reached 6% of the total income. The solutions are tax socialization and a strong fiscal control system.

e). Tax Evasion: Tax fraud, in the form of minimizing the selling price of land and building in the cases of BPHTB (taxation fees of sales on land and building) which becomes the government’s revenue, happens at fairly significant frequency. The collaboration between notary and land sellers has not been a secret and the solution is that the government needs to invite notaries to help the provincial government. Through good socialization, all these components may help increase the revenue from LBT.

Furthermore, there will be scenario simulations in three provinces. There is no simulation in Jakarta Province since its original local government revenue is considered fairly stable from year to year and able to achieve high original local government revenue. To increase revenue from LBT in West Java Province, as in the study by Bahl and Linn (1992) in 42 cities of OECD members, in order to reach 40% of the original local government revenue, the simulation is held by performing an optimistic scenario of increasing revenue from LBT 5% as shown in the Figures 7, 8 and 9 below:
If in 2019, the West Java provincial government generates regional revenue as much as IDR 32.2 trillion, then by performing optimistic scenario of increasing revenue from LBT 5%, the increase of revenue from LBT will be IDR 8.8 trillion (2019), IDR 9.7 trillion (2020), and IDR 13 trillion in 2023 which will cause significant increase in the original local government revenue (OLGR) and the regional revenue. With optimistic simulation of 5%, then in 2023, it will reach the rate of 34% as intended by Bahl and Linn.

In Central Java Province, the simulation of a 5% revenue increase is performed from 2019 to 2023. The result is that in 2022 the revenue from LBT of this province will reach 40% of the original local government revenue as illustrated in Figure 8 below.

Subsequently, in East Java Province, the simulation of a 5% revenue increase is also performed from 2019 to 2023. The result is that in 2023 the revenue from LBT of this province will reach 40% of the original local government revenue as illustrated in Figure 9 below.
Figure 9. Percentage of Optimistic Scenarios East Java in 2019-2023

Conclusion and Recommendations

The conclusion that can be drawn from this study is that the shortfall of tax revenue at the national level also occurred in the four biggest provincial governments. The highest shortfall from 2013 to 2018 was evident in the East Java Province, followed by Central Java and West Java, whereas in Jakarta this only occurred in 2017 and stability returned in 2018. The most effective way to overcome the tax shortfall is to earn effective revenue from LBT which to date has not been paid serious attention. It is necessary to have tax reform in the context of tax rate, tax base and administration systems such as a tax online system for taxpayers in housing complexes, socializing tax to community members and notaries, making effective the tax penalties, improving the control over tax evasion, simulating the effectiveness of revenue from LBT (LGT share) and by increasing the revenue plotted in the scenario by 5%. Increasing the revenue from LBT is not necessarily achieved by increasing the tax tariff but can be achieved through tax extensification by improving the administration system, imposing effective penalties, socializing tax for notaries and reducing tax evasion. From the simulation it is found that West Java Province will reach 40% LGT share of OLGR in 2024 and Central Java Province will reach this in 2022, whereas East Java Province could reach the target in 2023. If this scenario cannot be achieved, shortfall in these three provinces will occur annually.

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