

The Possibility of VAT Decentralization in Indonesia

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Abstract

This research is conducted to find out the possibility of implementation of Value Added Tax as Indonesia local government's potential revenue. There are not many forms of state or local government revenue in Indonesia and to include Value Added Tax as a local government source of income could help to boost the local economy. While the introduction of new taxes is always challenging, it is still possible to improve the performance of the tax administration and thereby increase revenues by improving the efficiency and effectiveness of the tax administration. This paper is using a literature review of other countries experiences that already implements the policy of state value-added tax in their economy from a legal standpoint and how it will fit into Indonesia's condition. This research uses a simple Cost and Benefit Analysis method that compares variables that are affected by possible options implemented in Indonesia. Variables are categorized into administrative, economic, and regulatory variables. A very striking variable is the economic variable related to the central government's revenue, where there is a significant potential loss of the central government revenue compared to the reduction of regional transfer if the VAT decentralization is implemented. This research also shows that some rules and regulations need to be prepared to both implement and adjust to apply the state/local government Value Added Tax in Indonesia. Some approaches to improving the efficiency of tax administration have been pointed out in this report. Sharing of the VAT could be implemented in ways that would raise the efficiency of tax administration, including through increased administrative responsibilities and motivation by subnational government revenue officials.

- Key Word: Tax; Value Added Tax (VAT); A Local Government; Decentralization
- JEL Classification: H20; H21; H27; H71

1. INTRODUCTION

Indonesia is a unitary state which employs the fiscal decentralization since 2001. Thus the local governments are granted a fiscal flexibility in determining and managing its local revenue (Kelly, Gyat, Nordiawan, & Harahap, 2011). Due to the enactment of this policy, the central government is given the responsibility to reduce the inequality between regions by providing transfer funds and investments in infrastructure development to underdeveloped regions, directly. This action is driven by the theory that the decentralization creates inequality between regions (Aritenang & Sonn, 2018).

In many countries, local governments finance their expenditures from a combination of revenues derived from Local Revenue (PAD) and transfer funds from the central government (Yesegat & Krever, 2018), as well as in Indonesia. Transfers from the central government create the central-local government fiscal relationship. Within a few decades, this interaction has become a concern and has become the object of research where many researchers conclude that the scale of decentralization is determined by the increase of the authority level of local governments in managing revenue sources, especially taxes. This increase of local government autonomy is supported by international institutions such as the World Bank, OECD, and the United Nations, which hope that this mechanism can improve economic growth and prosperity of the community and increase efficiency and transparency in the public sector (OECD, 2002).

Decentralization is considered important because of several factors such as [1] Economics. Countries in Southeast Asia, including Indonesia, show good results related to poverty alleviation efforts in the past 30 years. This poverty reduction is indicated by the amount of investment spent on infrastructure and human resources development. With decentralization, now, local government becomes the investment center that manages its own regulatory and fiscal activities independently which can affect regional economic growth directly. [2] Government. The crisis of 1997/1998 proved that there were too many inefficiencies if the economic policy is entirely controlled by the central government. Therefore, decentralization is expected to improve governance by strengthening accountability at the local government level. [3] Distribution of public services. In some cases in Southeast Asia, inequality has occurred in the health, education, and clean water supply sectors due to geographic characteristics differences between regions. By delegating the authority to distribute public services to local governments, it is hoped that inequality between regions can be minimized (White & Smoke, 2005). In addition, the local government is closer to the community, making it easier for the government to understand the needs and preferences of local communities (Oates, 1999). Decentralization is expected to improve efficiency and accuracy in the distribution of public services which are usually constrained by geographical problems and the distance between policymakers and the policy object location (Tiebout, 1956).

Nevertheless, some researchers argue that decentralization creates horizontal inequality caused by differences in natural resource potential between regions (Kanbur & Zhang, 1999). This inequality will lead some regions not having sufficient economic capacity to fail, providing equal public services as other regions (Rodríguez-Pose & Gill, 2005).

Indonesia and the Philippines are countries that implement fiscal decentralization earlier and within a relatively short period of time than other countries (White & Smoke, 2005). In 2009, with the enactment of Law No. 28 of 2009 revised by Law No. 34 of 2000, the Indonesian government issued a list of types of taxes and levies that were allowed to be included as local government revenues that put Land and Building Tax (PBB) and Land and Building Title Transfer Duty (BPHTB) as the parts of local taxes. Before the enactment of this Act, PBB and BPHTB are taxes that managed by the central government. This action is influenced by a similar implementation in other countries that include the immovable property-based taxes as one of the local government revenues. The transfer of this type of tax to the local government administration is one of the efforts to succeed in the decentralization policy that was implemented eight years earlier (Kelly, Gyat, Nordiawan, & Harahap, 2011). If the local government is given the responsibility of providing public services that require large funds, the local government should be given greater access to the tax base so that regional revenues become larger and sustainable (Bustad & Glimeus, 2011).

To suppress fiscal imbalances between the central and regional governments, as well as between local governments, and to improve fiscal capacity to local governments to be more independent, Indonesian Government use transfer funds. This policy is done by providing transfer funds to local governments in the form of [1] General Allocation Funds (Dana Alokasi Umum - DAU), [2] Special Allocation Funds (Dana Alokasi

Khusus - DAK), and [3] Revenue Sharing Funds (Dana Bagi Hasil - DBH). In addition, Nangroe Aceh Darussalam Province, Papua Province, and West Papua Province get Special Autonomy Funds.

The effort to improve the fiscal sustainability of the local governments is by giving authority to local governments to access the new, potential, and sustainable tax bases. Some researchers suggest that the local government could be given the authority to manage or obtain such a tax base, like Income Tax or VAT. However, it should be noted that tax collection in the local government could be an obstacle to the investment and business climate in the region (Wibowo, 2011).

After the idea of decentralization of the PBB and BPHTB in Indonesia was realized, it can be seen that this tax became the backbone of local revenue. This policy triggered the awareness that other types of central taxes with a more established tax base such as VAT would also be delegated to local governments (Wibowo, 2011; Sidik, 2011). The scheme commonly used in various countries to decentralize the VAT is the profit-sharing mechanism or fiscal autonomy (fully decentralized). Australia is a country that is quite extreme in implementing the profit-sharing scheme, where 100% of VAT or Sales Tax revenues are distributed to local governments. On the other hands, Spain gives 35% of VAT income (*The Spanish Comunidades Autonomas*) to the local government, China distributes 25% of VAT on sales of securities, and Macedonia distributes 3% of VAT revenue. Meanwhile, Canada, India, and Brazil impose full autonomy on VAT management to local governments/states (Bird, 2015).

Decentralization encourages the central government to share the tax base, either by autonomization certain types or tax bases or by the profit-sharing method. The current management of VAT in Indonesia is not the profit-sharing scheme, so all the VAT revenue is recognized as the central government revenue. Although, indirectly, central government revenues are allocated to the local governments through DAU, DAK, or Special Autonomy Fund. However, the amount of the allocation fund is not affected by the VAT tax base, where VAT is a reflection of the amount of consumption from a region. Thus, it makes sense if the VAT, either with the autonomy scheme or profit-sharing scheme, becomes a part of the local government revenue for the following reasons: [1] tax sharing or transfer funds formulations could be quite complex compared to share what kind of income that is directly managed by the local government, [2] Local governments, sometimes, have no policy in determining tax bases and tariffs (Piperno, 2013).

Many studies have concluded and recommended the development of the VAT concept in developing countries. This development is driven because VAT has proven to be a very productive type of tax in generating tax revenues in various countries in the world (Keen & Lockwood, 2006). The flypaper effects issue has led to many recommendations directing the government to be wiser in providing transfer funds and encouraging local governments to increase the local income (Bahl, 2008), or, VAT autonomy or VAT sharing can be an alternative.

The background of this study is the issues related to the needs of local governments for sustainable and equal sources of revenue between regions in Indonesia. Therefore, this study aims to explore existing literature related to the possibility of applying VAT as a source of local revenue in Indonesia. Besides, this study would like to see whether the General Allocation Funds can be a suitable form of exchange of decentralized VAT in Indonesia.

2. LITERATURE STUDY

OVERVIEW OF THE FISCAL DECENTRALIZATION IN INDONESIA

Fiscal decentralization in Indonesia began with the enactment of Laws Number 22 and 25 of 1999. The spirit of this law is to bring the government closer to society by delegating some parts of the authority to the local government (Booth, 2003). The authority possessed by the central government is cut down where the central government only fully manages the authority relating to defense and security, religion, law, international affair, debt, and public finance. Additionally, the central government ought to delegate the authority managed by local governments in the sectors other than those five sectors mentioned above.

Local governments have an obligation to manage more public services than the central government, including public works, health, education and culture, agriculture, communication, industry, trade, and many others. To anticipate these changes, Law Number 25 of 1999 which was amended by Law 33 of 2004 instructed the central government to provide transfer funds to the local governments to ensure that local governments have sufficient funds to carry out their new responsibilities. This policy is known as the money follow function (Wibowo, 2011).

There are three types of transfer funds in Indonesia; there are the Revenue Sharing Fund (DBH), the General Allocation Fund (DAU), and the Special Allocation Fund (DAK). DBH comes from revenue sharing from tax revenue which is distributed with a certain percentage from the Land and Building Taxes, Income Tax, and Tobacco Products Excise. Moreover, DBH also comes from revenue-sharing from natural resource management to reduce vertical inequality between the central and local governments. DAU is allocated to ensure that each region is able to finance its expenses by reducing the level of inequality between local governments (Wibowo, 2011).

VAT ADMINISTRATIONS PRACTICE

Central VAT

This model is very commonly applied in various countries where VAT is managed and administered by the central government. Tariffs and collection procedures are applied uniformly in each region. Countries that apply this model include Germany, Austria, Belgium, Spain, Russia, and Australia. VAT revenues are divided into regions with a predetermined formula (Yesegat & Krever, 2018). In Germany, VAT revenues are directly allocated to Local Governments with regard to the population of the region (Bird, 2013).

Similar to Germany, Macedonia also administers VAT centrally. The VAT management authority is the Ministry of Finance which collects, administers, and allocates VAT revenue to the Local Governments. Of all VAT revenues, 3% are directly allocated to local governments, without conditions. Additionally, the national law states that the least percentage of VAT distributed to the local government is 50 percent. A per capita basis is used in the allocation. In 2010, total VAT grants increased the local government revenues by about 937 million denars (17.7 million USD) or about 13 percent of total local government revenue. Of course, this grant has conveniently improved the financial position of local governments effortlessly and legally (Levitas, 2011).

The model applied in Macedonia is also can be found in Colombia, where 3% of VAT revenues are excluded from the central government revenues. This 3% of VAT revenues will be categorized as local governments' revenue, automatically and directly (Acosta & Bird, 2003).

Similar to Macedonia and Colombia, the VAT administration in Romania is managed by the central government. Then, the ministry of finance will allocate it to the local government using a mechanism known as "pseudo-sharing." First, VAT revenues will be used to pay the teacher salaries and social assistance allocation in the local state (state budget), but the percentage or minimum percentage is not specified in the constitution. Additionally, the central government could fund this conditional grant using another source of revenue. This is the reason why many practitioners state this mechanism as "pseudo-sharing" mechanism (Leonardo, Martinez-Vazquez, Miller, & Sepulveda, 2006).

Different from the VAT distribution mechanism in Germany, Romania, or Macedonia, Australia distributes all of the VAT revenue to local governments (Yesegat & Krever, 2018). How about in Indonesia? Slightly different, VAT is not distributed directly to local governments, but is collected and combined with other central government revenues which are then allocated to the local governments through the transfer of DAU and DAK with certain formulas as regulated in Law Number 33 of 2004, this mechanism is clearly different with the allocation of PBB revenues which is categorized as Regional Income or the allocation of Income Tax which uses the DBH mechanism.

European Union Model

The concept of VAT in the European Union demands that each member country could act as an economic entity that has one uniform treatment. Every country in the union has an independent authority to collect and administer VAT where certain proportions must be deposited to the central authority, in this case the European Union. Cross-border issues that are usually encountered by other countries do not become a burden in this model. It is because the European Union is transformed into a "common market." This "common market" concept has been a priority since the European Union was first conceived (Bird, 2015).

Place of origin Base In China

Taxes in China consist of 3 types of distribution mechanism, specifically full tax into central government revenue, full tax revenue allocated to the local government, and tax revenue divided between central and local governments with certain mechanisms. VAT and Income Tax are tax revenues whose rights are divided between the central government and local governments with a certain percentage based on the place where they are collected or where the transaction occurs, not where the goods are consumed (Wingender, 2018).

With the 1994 tax reform, VAT and excise taxes were brought under central tax administration and a program of tax rebates was instituted for VAT. Its excise taxes, under the 1994 tax reform, will be returned a fraction of these revenues to the province of origin. The provinces were assured that under centralized collection, each province would receive at the minimum the VAT and excise tax revenues it retained in 1993. For VAT and excise taxes, they have also been assured that their current rebates would total last year's rebate plus 30% of the growth in VAT and excise tax revenues. Under central administration, the advantage is that it may eliminate the horizontal tax competitions (Shen, Jin, & Zou, 2012).

On the other hand, the problem of tax mobility across the province has not been seriously recognized in China (Shen, Jin, & Zou, 2012). VAT replaced the turnover-based product tax and was implemented at a uniform rate of 17 percent. In recent years, the central administration collects 75% out of the total tax and 25% are local governments' part.

Canadian VAT

The VAT system was introduced in Canada in 1991 (Bird & Smart, 2014). Nowadays, the VAT practice in Canada on interprovincial services was commonly applied on and not on a destination basis. Canada is the only federal OECD country in which subnational states have the independence to impose their own VATs or leave it to the administration of the federal states. By the end of 2013, six subnational states have chosen to manage their own VATs, in considerably altered ways. Four subnational states have no sales tax (Alberta and the three northern territories). Five enact the Harmonized Sales Tax (HST) which ranges from 8 to 10 percent tax rate, on fundamentally the equivalent base as the federal tax (Bird & Smart, 2014, 2016). According to many tax practitioners and researchers, Canada is one and the only example of a successful country which applies the decentralized VAT system (Bird & Gendron, 2001).

Indian VAT

Between 2003 and 2008, the states of India transformed from distortionary sales taxes to a more uniform subnational VAT (Sen, 2015). Many tax practitioners in India viewed that the centralized VAT management complex and diverse the business entities which have the subsidiary units as vertical integration of firms. Consequently, the conglomeration industries were hard to grow in these subnational governments. Of course, this problem had greatly affected the trade and commerce in India. Then, the variety of rates, Central Sales Tax, and complex tax system stimulated the subnational governments for the rate war and prohibited the diversion of trade (Mohanty, Kumar, & Patra, 2017). From 2008, the following indirect taxes are managed by the central government or by local government.

TABLE-1: The Differences between Local Taxes and Central Taxes

Local Taxes	Central Taxes
1. VAT/Sales Tax	1. Central Excise Duty
2. Entertainment Tax (unless it is levied by local bodies)	2. Additional Excise Duty
3. Luxury tax	3. The Excise Duty levied under the medical and Toiletries Preparation Act
4. Taxes on lottery, betting, and gambling	4. Service Tax
5. State check-out fee and surcharges in so far as they relate to the supply of goods, and services.	5. Additional Customs Duty, commonly known as countervailing Duty (CVD)
6. Entry tax not on in lieu of octroi	6. Special Additional duty of customs (SAD)

7. Purchase tax (this is not sure still under discussion)	7. Surcharges Cesses 8. The above taxes dissolve under GST, instead only CGST & SGST exists
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Source: compiled by the author from multiple sources.

Up until now, there is no significant problem regarding the decentralization of tax in India (Garg, 2014).

Brazilian VAT

As a federalist country, Brazil's subnational states have significant levels of fiscal autonomy, including taxation, which is constitutionally enforced. The most equivalent tax practice with VAT is *Imposto sobre a Circulação de Mercadorias e a Prestação de Serviços de Transporte Interestadual e de Comunicação* (ICMS/Tax on the Distribution of Goods and the Rendering of Communication and Interstate Transportation Services). ICMS is a tax executed from the transactions related to the distribution of goods and some of the selected services, such as interstate transportation, expedition, and telecommunication (Carvalho, 2016). The administration of ICMS is under the competence of the Federal District or local states; this includes the tax rate setting. Afterward, the horizontal interdependencies of local states in tax setting start a tax war in Brazil (Mello, 2008). Henceforth, in order to reduce the rate war between subnational states, the federal-state set the interval of national set rate (Mora & Varsano, 2001). VAT in Brazil using the principle of sub-national origin-based VAT where taxes are collected based on the origin of the goods (ITD, 2005). The following is a summary of VAT implementation in several countries as mentioned above:

TABLE-2: Summary of VAT Implementation in Several Countries

Country	Central Gov. VAT	Local Gov. VAT	Type of VAT/Sales Tax
Macedonia (Levitas, 2011)	VAT	-	3% VAT for general grant
Colombia (Acosta & Bird, 2003)	VAT	-	3% VAT is an exception of definition current revenue of central government
German (Bird R. M., 2013)	VAT	-	50% VAT revenue distributed to local gov. with a population base
Australia (Yesegat & Krever, 2018)	VAT	-	All VAT revenue distributed to local gov.
Brazil (Mello, 2008; Carvalho, 2016)	IPI (Tax of Industrial Product)	ICMS (Tax of Distribution of Goods a Rendering Communication and Interstate Transportation Services) ISS (Tax of provide services (Carvalho, 2016)	ICMS Rate and tax base by SNg Origin and destination principle Credit method with electronic invoices ISS: Turnover tax with cumulative regime without input credit RATE
China (Wingender, 2018)	VAT	VAT	75% central gov – 25% subnational gov
Canada (Bird & Smart, 2014; 2016)	GST	HST (5 subnational gov) QST (1 subnational gov) RST (3 subnational gov)	Rate: GST-HST8-10%/QST 9,975%/RST 7% (Bird & Smart, 2014; 2016)
India (Mello, 2008; Carvalho, 2016)	CGST – 2008	SGST – 2008	Credit Method (Garg, 2014)

Source: compiled by the author from multiple sources.

FISCAL DECENTRALIZATION IN INDONESIA

Indonesia is one country other than the Philippines that is considered successful in implementing decentralization without encountering many obstacles (World Bank, 2005). The legal standing for the implementation of decentralization in Indonesia is the enactment of Law Number 22 of 1999 concerning Regional Government (now Law Number 23 of 2014 as the last was amended by Law Number 9 of 2015 concerning Regional Government) and Law Number 25 of 1999 (now Law Number 33 of the Year 2004 concerning Financial Balance between Central and Regional). Transfer funds are the consequence of authority delegation of the central government to the local government by providing a source of income to the regional government as a result of the increasing tasks of the regional government and providing horizontal fiscal balance. Hopefully, this mechanism can suppress the fiscal gap between regions.

To carry out its new function, the Regional Governments utilize revenue sources derived from Regional Original Revenue (*Pendapatan Asli Daerah*), transfer funds, and other sources of government revenue. PAD is obtained from local taxes, local retributions, and other sources. Meanwhile, Transfer funds obtained by local governments consist of Revenue Sharing Funds (DBH), General Allocation Funds (DAU), and Special Allocation Funds (DAK), the amount of which is postulated in the APBN. DBH comes from revenue sharing from tax and natural resources. Furthermore, the revenue sharing of tax revenues consists of the PBB from plantation and mining sector and PPh Articles 21, 25, and 29. For DBH of natural resources, the amount is determined by the PBB revenue, where the 90% of the PBB revenue is distributed to the local government, while 10% depends on the realization of revenue from each region. DBH from Income Tax is 20% of the total revenue, of which 60% is a quota from the city government and 40% of the quota from the provincial government.

Transfer funds from the DAU scheme are set at 26% of the state budget. The amount obtained by each region is based on the fiscal gap and basic allocation. The fiscal gap is measured by determining the region's fiscal needs in carrying out public services minus the fiscal capacity of the region. Basic Allocation is calculated based on the amount of local government expenditure to pay civil servant (ASN) salary, while fiscal capacity is calculated from the total PAD with DBH, and fiscal needs are the needs of local governments in providing services and public goods. Calculation of fiscal capacity is carried out by considering the population, the size of the regions, development cost index, Gross Regional Domestic Product (GRDP), and the Human Development Index (HDI). When the amount of fiscal gap is 0, the local government will get the DAU in the amount of the basic allocation. When the fiscal gap is negative, and the value is smaller than the basic allocation, the DAU obtained by the local government is the total of basic allocation minus the fiscal gap. If the fiscal gap is negative and is greater or equal to the basic allocation, then the region does not obtain DAU. DAK is allocated to certain regions to finance certain activities managed by the local government. DAK is determined by several criteria such as general, special, and technical criteria. Appendix 1 provides an overview of the amount and distribution of DAU and DAK in Indonesia over the past four years.

3. RESEARCH METHODOLOGY

This study uses secondary data from the period 2014 – 2017 of Balance Funds, both General Allocation Funds and Specific Allocation Funds, Product Domestic Regional Bruto, and Value Added Tax of each province in Indonesia. Balance Funds and Product Domestic Regional Bruto are derived from Directorate General of Fiscal Balance, while data of Value Added Tax are obtained from the Directorate General Tax. The analysis used is a descriptive statistical analysis of Balance Funds, Gross Regional Domestic Product, and Value Added Tax in addition to the literature review of best practices in other countries that have been implementing fiscal decentralization. This research uses a simple Cost and Benefit method using three groups of variables. The administrative variable consists of human resources, tools, cross administration, while the economic variables include central government macroeconomics policy, vertical imbalance, horizontal imbalance, and local responsibility. Last but not least, regulation variables consist of VAT Law, General Tax Provisions Law, and Financial Decentralization Law. The available literature identified those variables.

Noting the transfer fund formulation described in Law No. 33 of 2004, the Regional Government only receives a share of tax revenue from the PBB and Income Tax with a certain percentage. Can VAT be used as one of the taxes included in the tax-sharing scheme? Or, can VAT be decentralized to local governments similar to PBB and BPHTB? By using descriptive analysis and studying the practices in other countries through the existing literature, this study attempts to find out the possibility of the VAT to be one of the local government's revenues.

4. ANALYSIS AND DISCUSSION

Is it Possible to Decentralize the VAT in Indonesia?

The relationship and the synergy between the central government and subnational government is a determinant factor from the distribution system to solve the horizontal inequality among subnational states. The consequence of this principle the shifting of the resource from the resource surplus state to the state with the lesser resource. This resource shifting mechanism is known as an intergovernmental grant.

VAT as a source of revenue of the central government of Indonesia has to fulfill the following principle of tax collection (1) efficiency, the collector take the economic efficiency into consideration, (2) Administrative simplicity, low cost of administration and compliance, (3) flexibility, allow easy adoption to change a circumstance, (4) political responsibility, about accountability and transparency, (5) fairness, the tariff should be progressive (Stiglitz, 2000). Administratively, the subnational government could be administered the VAT if they could satisfy all of the five principles above. Whereas if you see the implementation in other countries, it is not impossible that VAT may become a local financial source in Indonesia. Of course with the adjustment because a "one size fits all solution" is not viable and every country should find some sort of tailor-made model suitable for its own institutional peculiarities (Piperno, 2013). However, not only the administrative consequences, the application of new tax always creates an excess burden that is the economic effects. Here the excess from the VAT decentralization from the economics and administration point of view.

In practice, not many countries decentralize VAT as Regional Taxes. Today, only Canada, India, and Brazil have applied this concept. However, there are other concepts from the decentralization of VAT that do not provide all VAT management to the local government, such as revenue sharing of VAT (Bird, 2015). The revenue sharing mechanism for VAT is also different for each country, for example Germany and Morocco, which divides revenues from PPB based on population and poverty level to reduce the horizontal imbalance. The local government's portion of this region is transferred as profit sharing (Bird, 2013; 2015).

On the other hand, the central government of Argentina and Colombia collect all tax revenues, including VAT, then distribute to local governments with special formulations of revenue sharing (Acosta & Bird, 2003; Bird, 2015). Whereas in China, the central government distributes VAT receipts with origin-base schemes (Wingender, 2018). Observing at many schemes of decentralization of VAT, both with profit sharing or autonomy schemes, it is possible for Indonesia to adopt one of them. But which scheme is more suitable to be applied in Indonesia?

FISCAL AUTONOMY OF VAT / DECENTRALIZATION OF VAT

The first scheme is the economy of the VAT. This scheme encouraged the central government to give all VAT authorities both administrative and tax rates to the local government. The Indonesian government could adopt two concepts of the collection, either as the destination-based or the origin-based. VAT decentralization implemented by Canada, Brazil, and India adheres to the origin-based concept, as well as other regions that embrace the single national VAT (Yesegat & Krever, 2018). One province in Canada, Quebec, uses an administrative scheme that unites VAT management managed by the central government and regional governments in one system. This can reduce economic distortions by reducing compliance costs (Bird, 1999).

Canada, Brazil, and India are the three countries that apply the concept of VAT autonomy, where Canada is a successful one. Can Indonesia apply the same thing? Here are some consequences if Indonesia applies VAT autonomy.

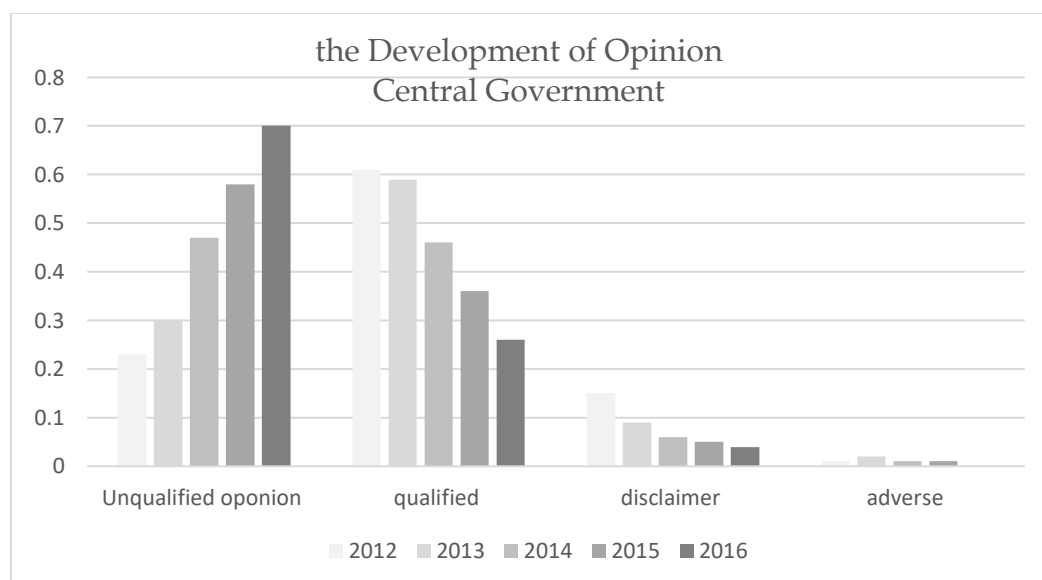
Administration

Indonesia can replicate the commonly used VAT autonomy scheme, where taxes are considered to be payable where the goods are consumed, i.e., origin-based. However, this scheme has several challenges, such as cross-border issues and tariff policies. If each province does not use the same tariff, there will be a possibility that taxpayers would move their business to the regions with lower rates. This happened in Brazil which caused the tariff wars (Carvalho, 2016). The Government of China succeeded in resolving this tariff war problem using the origin-base principle (Shen, Jin, & Zou, 2012). The application of origin-based is not ideal in Indonesia because the production center is only concentrated in several regions. Production center concentrations are often found in western Indonesia, so there will be imbalances for eastern Indonesia. The use of the destination-based principle allows equal distribution of VAT potential, but the application must be accompanied by a good administration system and synergy in the process of information exchange between regions and with the central government in conducting compliance monitoring (Bird, 2013). This problem is the answer, why only one province in Canada uses this scheme.

Regarding the simplicity principle, some researchers emphasize that the high administrative and compliance costs of commanding two sales taxes on the same base (Bird & Gendron, 2001; Bahl & Bird, 2008). Some of the administrative problems would arise infrastructure and human resource competence problems. The determination of destination principle or consumption principle. This principle helps the collector when is the right time to recognize the tax revenue, based on consumption or the production. The cross-border trade which applies the destination base often creates tax fraud by overwriting the export and underwriting the import in the tax report (Bird & Gendron, 2001). These complexities has also been found in Brazil. To minimize the fraud, the Brazilian tax authority has creates 28 regulations regarding the cross-border VAT (Mora & Varsano, 2001). The application of the origin principle could be the solution to this problem.

Another challenge to be overcome is the 30% unqualified opinion of local government financial audited (BPK, 2018). According to the level of government, Local Government Financial Settlement (LKPD) year of 2016 consist of 34 Financial Statement (BPK, 2018).

GRAPH-1: BPK Audit for Local Government Financial Settlement



Source: BPK (2018).

Noting the picture above, although the BPK audit results continue to show an improvement in financial management, there are still provinces that have not obtained the unqualified opinion. This unqualified opinion of the provinces needs to be taken into consideration because the synergy between the regional and central government as well as between regions is very important in applying this VAT management autonomy.

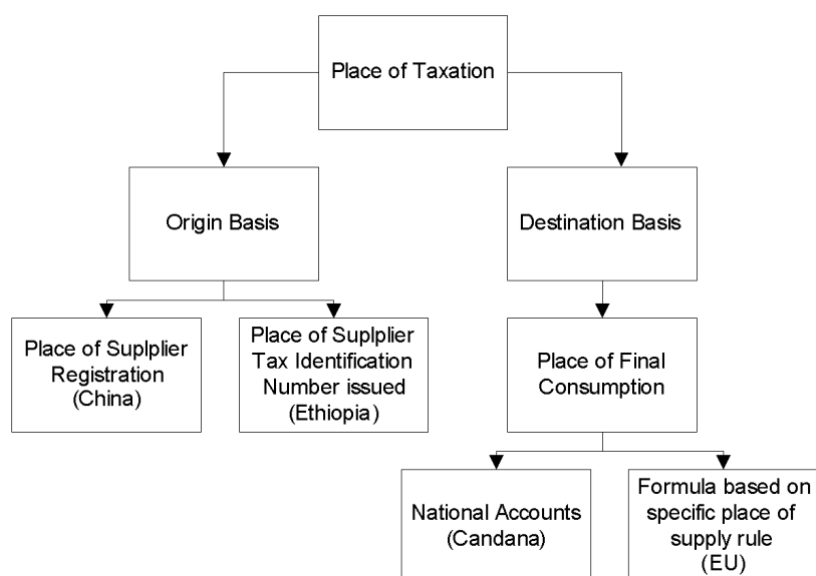
Determining the destination or origin-based scheme is very important, whether the collection is carried out where the goods are produced or when the goods are consumed. Both pose their respective problems, where there is a VAT potential inequality if established with the base origin, and the challenge of tax evasion if applying

the destination-based (Bird & Gendron, 2001) by increases the amount of exported goods and underestimates the number of imports. Problems like this are found in Brazil. To overcome this problem, the Brazilian government issued many rules to administering VAT, so that the complexity of the VAT management arises which was marked by the enactment of 28 different rules just to regulate the same thing, VAT (Mora & Varsano, 2001). The implementation of the Tax Invoice in Indonesia can be a basic capital for a good administrative system because all transactions that occur in real-time are recorded and realized by the tax authorities.

Despite having cross-border issues, the VAT economy could induce economic activity in the region and encourage local governments to be more financially independent by taking responsibility for managing VAT which is also politically more accountable and transparent (Bahl & Bird, 2008; Sidik, 2011). If this can be realized, then the efficiency and effectiveness of tax collection could be increased (Bahl & Bird, 2008) which can indirectly support an increase in the national tax ratio (Sidik, 2011).

In the figure below, there are some VAT administration schemes in determining the region which receives the VAT potential. In practice, the potential VAT revenues for cross-border VAT administration are determined by the [1] destination-base scheme, and [2] origin-base. When the last consumption is determined as a place of tax payable, then the scheme used is the destination base. Conversely, if the place of production is determined as a place where the tax is payable, the scheme used is origin-base.

PICTURE-1: VAT Administration Schemes



Source: (Yesegat & Krever, 2018)

Economics

The economic issue may arise with the shift of VAT to local government as presented below:

1. Central and local government

The central government would lose its authority to control the VAT regulation, one of the central government's major fiscal instruments (Bird & Gendron, 2001; Bahl & Bird, 2008). This implies that the central government would have less fiscal policy instrument to use to manage the macroeconomics. This condition is unfavorable for the central government. Moreover, this also would increase the vertical imbalance, which might decrease the central government revenue. It is because the central government would lose a significant portion of tax revenue which shifted to the local government (Sidik, 2011).

2. Among local governments

The shifting would grant the local government the authority to manage VAT, including the authority to set the tax tariff. The evidence in India and Brazil which both implement the VAT decentralization show that the independence to set the tariff would lead to the disharmony and tariff war among the local government (Sen, 2015; Carvalho, 2016; Mohanty, Kumar, & Patra, 2017). Each local government would use this independence to benefit their own local state. This problem is still unsolvable in Brazil and becomes a national economic issue until today.

The characteristic differences between local government, natural resources endowment, infrastructure gap, and the number of residents affect the tax basis of each local government. This difference makes tax potential among local government are imbalance. Suppose there are no special allocation funds (balance funds) from central government, the horizontal imbalance will occur due to VAT scheme shifting from the central government to the local government (Sidik, 2011). In other hand, demographic imbalance among local government makes it even harder to increase the scale of production of the region which has fewer resident. Lastly, there is inequality in infrastructure factor among the regions. Regions with more vulnerable geographical structure will have more problems in addition to the lack of infrastructure.

Revenue mobilization received by central government allows local governments to mobilize revenue (Bahl & Bird, 2008) that would increase local economy activities (Sidik, 2011). On the other hand, the local government which has good characteristics in terms of infrastructure, demography, and geography, will create regional balance. It is because those local governments could more precisely identify its own potential tax base. Independency of managing its own income allows local government to increase its discretion for local development which hopefully brings multiplier effect for another local government as well as central government. Last but not least, VAT could be able to set aside of General Allocation Funds' function because it has the same function and push aside the vertical imbalance because central government expenditure for special allocation funds become unnecessary since the VAT are now already being managed by the local government (Sidik, 2011).

Regulation

If the subnational VAT scheme is implemented, it is necessary to adjust the applicable Law, among others [1] Law No. 8 of 1983 which amended by Law No. 42 of 2009 concerning VAT and Sales Tax on Luxurious [2] Law No. 28 of 2009 concerning Regional Taxes and Levies [3] Law Number 17 of 2003 concerning State Finance [4] Law No. 23 /2014 amended by Law No. 9/2015 concerning Regional Government, and [5] Law No. 33/2004 concerning Financial Balance between Central Government and Area.

EQUALIZATION OF VAT REVENUE

Revenue sharing of VAT depends on the fiscal regime in the distribution of VAT revenue. Countries like Australia appear to be very committed to fiscal equality by distributing all national VAT revenue to the regions. This is done to ensure that all citizens could get access to public services. Generally speaking, countries that deploy the VAT revenue sharing scheme use the single national VAT scheme, where the central government has all the authority to administer the VAT and determine VAT rates. Despite the positive side, some researchers who do not recommend this scheme because of these two reasons. First, this is not in line with the spirit of decentralization, because the central government still controls full authority on certain tax bases. The second, the fiscal equalization mechanism encourages local governments to be "lazy", so flypaper the effect remains an unsolved issue if this scheme is implemented (Yesegat & Krever, 2018).

The following table describes the implementation of VAT in several countries with some variations in the application of VAT autonomy.

TABLE-3: The Implementation of VAT in Several Countries with Some Variations in The Application of VAT Autonomy

Country	Central VAT Rate	Subnational share of Central VAT	Regional VAT Rates
Argentina	21		
Australia	10	100	
Austria	20	26,8	
Belgium	21	56,8	
Brazil	20	10	17 to 19
Canada	5		7 to 9,975
China	3-16	50	
Ethiopia	15		
Germany	19	47,9	
India	12		12,5
Indonesia	10		
Malaysia	None		
Mexico	16		
Nigeria	5		
Pakistan	16		
Russia	18		
South Africa	14		
Spain	18	35,7	
Switzerland	8		
UEA	None		
USA	None		
Venezuela	12		

Source: compiled by the author from multiple sources.

From the table above, it can be seen that only six countries in the world which share the VAT revenue to the local governments. Australia is the ultimate example because the Australian Central Government distributes all of its VAT revenue to the Local Government.

The most interesting country to note regarding VAT decentralization is Canada. Canada is the only country that has successfully implemented VAT autonomy, but, somehow the Canadian Central Government still collects and manages some kinds of VAT, then distributes it to the local governments.

There are several schemes used to distribute VAT to the local governments. Argentina, for example, uses unconditional grant schemes and certain formulas to determine the amount of transfer funds. In China, the central government distributes the VAT revenue to the local governments by observing the place of the registered Taxpayer. Whereas, in Spain, the central government distributes the VAT using the estimation of consumption of the total citizen in the regions (Bird, 2015).

If the revenue sharing scheme for VAT is applied in Indonesia, there are not many changes that need to be made, both in terms of regulations and procedures. Just like what has been done so far, the administration of VAT and tariff determination are still controlled by the central government. Economic distortion caused by the control of macroeconomic policies owned by the central government will still be held by the central government. The changes to the application of profit-sharing schemes only require a change in Law Number 33 of 2004 concerning the Central and Regional Government Financial Balance concerning the percentage of DBH or DAU formulation.

SIMPLE COST-BENEFIT ANALYSIS

By paying attention to the existing literature and VAT management practices in several countries, the following is a simple cost-benefit analysis related to several alternative VAT management policies. Options that

can be analyzed include [1] no change in regulations [2] Decentralization of VAT, or [3] Revenue sharing from VAT.

TABLE-4: Cost-Benefit Analysis Related to Several Alternative VAT Management Policies

	Subnational VAT	VAT Sharing Fund	Status Quo
Administration			
• Human Resources	-1	-	-
• Tools	-1	-	-
• Cross-border administration	-1	-	-
Economic			
• Central Government Macroeconomics Policy	-1	-	-
• Vertical Imbalance	+1		
• Horizontal Imbalance	-2	-	-
• Local Responsibility	+2	-1	-
• Local Revenues	+1	-2	-2
		+1	-
Regulation			
• Law on Value Added Tax (UU PPN)	- 1	-	-
• Law on General Tax Provisions (UU KUP)	- 1	-	-
• Law on Fiskal Balance (UU Perimbangan Keuangan)	- 1	- 1	-
Cost-Benefit Score	-5	-3	-2

The spirit of decentralization is to encourage each region to manage their respective sources of revenue and expenditure. It is highly possible to grant the autonomy of VAT management to the local government, but there are still some obstacles such as [1] political problems, where the scheme changes, it is necessary to change the legal basis or the current law, [2] the issue of VAT administration and cross-border issues, [3] and some economic governance trade-offs because the central government would lose control of one macroeconomic policy tool, which is VAT regulation.

CALCULATION OF GENERAL ALLOCATION FUNDS TO VAT SWAP OVER

The distribution of transfer funds also has its shortcoming; there is an issue from the revenue sector where the transfer funds from the central government are surpassing the Local Revenue (PAD). From the data in Appendix 2, we can see the ratio of transfer funds (DAU and DAK) to total local revenues with the ratio of PAD to total local revenues. From year to year, if we look at the ratio of transfer funds (DAU and DAK revenues) to all local revenues, the number of the provinces whose transfer funds ratio exceeds 50% is increasing. In 2014, there was only one province or 3% of provinces in Indonesia. This number increased to 5 provinces in 2015, 7 provinces in 2016, and 8 provinces in 2017.

TABLE-5: Comparison of VAT Revenue and General Allocation Fund, in trillion

	2013	2014	2015	2016	2017
VAT	384.800	409.000	423.609	412.077	480.713
General Allocation Fund	622.279	682.439	352.888	385.361	398.582
Vertical Gap	(237.478)	(273.437)	70.721	26.716	82.131

Source: Ministry of Finance

Table 5 shows the comparison of VAT revenues with the General Allocation Funds distributed to all regions in Indonesia from 2013 to 2017. There were significant gaps in 2013 and 2014, where the General Allocation Funds were distributed by the central government to the government regions almost doubled the amount of central government revenue from VAT throughout Indonesia. The realization of central government revenue from VAT has increased over the past five years. On the other hand, the General Allocation Fund distributed by the central government experienced a significant decrease from 2014 to 2015, although it showed an upward trend in the

following years. Data from 2015 to 2017 shows that the amount of revenue from VAT nationally has exceeded the General Allocation Fund disbursed to the regions. If the central government implemented the VAT decentralization policy at that time, the central government would lose VAT revenue in the amount of the existing vertical gap.

On the other hand, several provinces have a higher VAT income than receiving the General Allocation Fund from the central government. Such a province is a province that has local sources of income and is able to manage it on its own. These provinces have potential income from VAT large enough to meet their budgetary needs. That way, the loss of the General Allocation Fund will not be too big a problem if the central government implements the VAT decentralization policy in Indonesia. However, some provinces have a General Allocation Fund that is higher than VAT revenue in their area, most likely a province in eastern Indonesia. If the VAT decentralization policy is implemented in Indonesia, some provinces will lose their source of income from the General Allocation Fund to cover their budgetary needs. The conclusion is that there is a horizontal imbalance between provinces. This horizontal imbalance means that several provinces have significant differences in VAT revenues.

5. CONCLUSION AND RECOMMENDATION

Each country has a different character. Although Canada has been successfully implementing the decentralization of VAT while Brazil and India are considered as less successful, we cannot expect the same result for Indonesia. Canada's success and the experiences Brazil and India with several problems are the best international practice in terms of the possibility of implementation of decentralization of VAT in Indonesia.

- a. VAT decentralization in Indonesia can be successfully implemented in Indonesia when the positive trait of Canada could be adopted in Indonesia. Canada and Indonesia have the same principle of destination regarding the implementation of VAT (Yesegat & Krever, 2018). This policy can be developed in a country in which the tax authority already has a good administration system as well as good relationship between central and local governments (Bird, 2013). Nowadays, Indonesia has been implementing electronic tax invoice as an effort to increase good governance in its tax system. Using electronic tax invoice, every transaction can be traced back to its original source to reduce tax evasion.
- b. Since the beginning of the implementation of fiscal decentralization in Indonesia, local governments are encouraged to be more independent as well as to increase its source of revenue. The decentralization of VAT is one of the paths to increase independence at the local government level. Local government autonomy can be reached if all of the government work together to reduce the administration gap as a result of the declining revenue of central government caused by VAT decentralization (Bird, 2013).
- c. Some constraints that inhibit VAT decentralization such as administrative problems, economic distortions and regulations can be avoided by switching to the VAT revenue sharing scheme because there is no element of VAT in the formulation of transfer funds in the current law.
- d. By comparing the central government's VAT revenue and the General Allocation Fund distributed by the central government to the regions, there is the potential for loss of central government revenue from VAT if the VAT decentralization policy is implemented in Indonesia. On the other hand, there is a horizontal gap between provinces related to differences in the amount of VAT revenue in each province.

Recommendation

- a. If the Indonesian government sees the real potential in this VAT decentralization policy, it is necessary to prepare supporting rules and regulations for the smooth process of transferring VAT revenue from the central government to the local government. The central government needs to prepare the local governments for this policy in terms of administrative readiness, human resources managing it, and exploring the potential of local VAT. On the other hand, it is necessary to increase the efficiency of tax administration so that local governments can maximize the potential of their respective regional revenues.
- b. Local governments also need to explore the types of VAT that can be decentralized to local governments to increase local government revenue in Indonesia.

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Appendix 1 --- General Allocation Funds and Special Allocation Funds (in million Rupiahs)

PROVINCE	DAU				DAK			
	2014	2015	2016	2017	2014	2015	2016	2017
Aceh	1,201,613	1,237,895	1,263,871	2,060,263	72,954	675,026	990,402	1,507,795
Sumatera Utara	1,349,132	1,139,261	1,604,506	2,629,225	59,728	2,116,491	3,114,324	3,838,053
Sumatera Barat	1,129,886	1,221,129	1,261,916	2,014,647	54,108	816,758	1,180,339	1,699,581
Riau	820,985	654,220	737,745	1,457,997	43,738	950,449	1,425,025	1,607,851
Jambi	948,338	1,009,166	1,070,452	1,397,912	49,356	508,412	692,340	934,828
Sumatera Selatan	985,543	931,915	1,071,421	1,697,898	62,755	1,166,686	1,661,136	1,950,849
Bengkulu	955,095	1,046,081	1,070,751	1,301,539	53,927	331,295	473,583	635,034
Lampung	1,136,053	1,097,129	1,321,679	1,851,595	48,852	1,254,158	1,657,819	1,927,384
Bangka Belitung	492,722	500,006	535,974	526,559	48,389	197,861	207,301	171,631
Kepulauan Riau	187,951	145,434	345,284	351,255	75,837	120,770	135,788	110,560
DKI Jakarta	85,985	-	-	-	-	2,766,919	2,883,078	2,121,802
Jawa Barat	1,687,686	1,303,654	1,247,046	3,011,001	78,215	5,465,305	7,628,704	9,118,921
Jawa Tengah	1,803,931	1,629,429	1,859,907	3,652,586	79,165	3,678,112	5,289,156	6,565,871
DI Yogyakarta	899,924	920,545	940,835	1,314,372	37,132	409,111	644,397	967,001
Jawa Timur	1,866,548	1,587,262	1,672,878	3,803,428	101,876	3,727,086	5,535,378	7,091,058
Banten	1,000,879	1,029,229	1,100,337	1,081,007	104,216	492,810	458,154	289,569
Bali	324,816	286,763	336,243	330,337	551	150,032	128,256	151,709
Nusa Tenggara Barat	771,059	806,493	895,038	879,315	90,945	331,726	376,965	328,676
Nusa Tenggara Timur	510,220	534,146	601,118	594,896	98,729	155,715	183,553	215,924
Kalimantan Barat	1,290,223	1,405,594	1,493,486	1,720,698	63,189	811,689	1,163,762	1,529,205
Kalimantan Tengah	1,152,429	1,280,596	1,294,850	1,574,383	61,930	444,228	707,008	773,947
Kalimantan Selatan	701,726	571,245	779,517	1,106,532	54,190	491,913	853,615	970,490
Kalimantan Timur	57,313	-	80,402	714,907	1,038	699,051	1,021,187	1,107,408
Kalimantan Utara	332,430	305,135	462,110	470,132	8,033	69,832	103,437	121,482
Sulawesi Utara	949,853	1,026,949	1,065,545	1,390,273	59,675	417,706	717,737	1,009,189
Sulawesi Tengah	794,840	835,943	874,297	866,617	81,721	254,747	274,402	369,792
Sulawesi Selatan	424,571	444,919	497,449	493,079	47,288	238,848	352,319	204,690
Sulawesi Tenggara	601,624	252,280	427,465	423,599	83,915	248,585	201,460	147,762
Gorontalo	389,549	405,948	460,628	452,536	72,407	206,279	174,932	211,832
SulawesiBarat	457,680	504,388	518,260	509,400	67,737	179,317	157,154	210,592
Maluku	487,860	503,539	563,465	553,890	104,053	211,364	156,914	181,282
MalukuUtara	392,180	410,815	443,124	440,306	62,552	82,798	102,166	92,851
PapuaBarat	626,894	641,657	671,140	666,020	53,400	194,492	174,658	246,054
Papua	525,097	550,028	599,366	612,106	65,694	236,666	160,516	202,990

Appendix 2

Province	(DAU+DAK)/TP			
	2014	2015	2016	2017
Aceh	11%	16%	18%	25%
Sumatera Utara	18%	38%	45%	53%
Sumatera Barat	33%	50%	53%	61%
Riau	11%	23%	31%	39%
Jambi	32%	48%	55%	54%
Sumatera Selatan	17%	35%	42%	45%
Bengkulu	51%	63%	66%	69%
Lampung	26%	49%	53%	55%
Bangka Belitung	31%	37%	38%	31%
Kepulauan Riau	9%	11%	17%	14%
DKI Jakarta	0%	6%	5%	3%
Jawa Barat	8%	28%	32%	38%
Jawa Tengah	12%	32%	36%	43%
DI Yogyakarta	30%	39%	41%	45%
Jawa Timur	9%	24%	29%	36%
Banten	16%	21%	18%	14%
Bali	7%	9%	9%	8%
Nusa Tenggara Barat	31%	33%	32%	24%
Nusa Tenggara Timur	22%	21%	20%	17%
Kalimantan Barat	36%	54%	59%	60%
Kalimantan Tengah	39%	53%	56%	57%
Kalimantan Selatan	16%	22%	31%	37%
Kalimantan Timur	1%	7%	14%	22%
Kalimantan Utara	22%	26%	24%	26%
Sulawesi Utara	43%	57%	62%	64%
Sulawesi Tengah	36%	38%	36%	34%
Sulawesi Selatan	9%	11%	12%	8%
Sulawesi Tenggara	31%	20%	22%	16%
Gorontalo	38%	44%	40%	37%
Sulawesi Barat	42%	46%	40%	39%
Maluku	32%	34%	26%	26%
Maluku Utara	30%	27%	27%	23%
Papua Barat	12%	14%	13%	12%
Papua	6%	7%	6%	6%

Source: Ministry of Finance and Statistic Agency BPS