ECONOMIC JOURNAL OF EMERGING MARKETS Augusts 2011 3(2) 189-198

REGIONAL FISCAL INDEPENDENCE IN EAST JAVA PROVINCE POST REGIONAL AUTONOMY

Irdam Ahmad
STEKPI School of Business and Management
e-mail: irdam@stekpi.ac.id

Abstract

Fiscal dependence has been critized as one of the obstacles in the success of economic development post the regional autonomy. This paper evaluates the level of fiscal independence in districts and cities in East Java Province and the impact of General Allocation Fund and Special Allocation Fund on tax effort of regional government in East Java Province. The result shows that General Allocation Fund significantly affects tax effort, while Special Allocation Fund does not significantly affect tax effort. It also finds that General Allocation Fund influences economic growth, where for one percent increase in General Allocation Fund, regional economic growth increase by 0.28 percent.

Keywords: Fiscal independence, general allocation fund, special allocation fund, tax effort
JEL classification numbers: H21, H53, H71, H72

Abstrak

Ketergantungan fiskal telah ditengarai sebagai salah satu penghalang keberhasilan pembangunan pasca pelaksanaan otonomi daerah. Makalah ini mengevaluasi tingkat kemandirian fiskal di kabupaten dan kota di Provinsi Jawa Timur dan dampak dari Dana Alokasi Umum dan Dana Alokasi Khusus pada upaya pajak pemerintah daerah (kabupaten dan kota) di Provinsi Jawa Timur. Hasilnya menunjukkan bahwa Dana Alokasi Umum secara signifikan mempengaruhi upaya pajak, sementara Dana Alokasi Khusus tidak mempengaruhi upaya pajak secara signifikan. Penelitian ini juga menemukan bahwa Dana Alokasi Umum mempengaruhi pertumbuhan ekonomi, dimana untuk satu persen peningkatan di Dana Alokasi Umum, pertumbuhan ekonomi daerah tumbuh 0.28 persen.

Keywords: Kemandirian fiskal, dana alokasi umum, dana alokasi khusus, upaya pajak
JEL classification numbers: H21, H53, H71, H72

INTRODUCTION

Since the enactment of Act No. 22/1999 on Regional Governance, and Act No. 25/1999 on Equalizing Funds between Central and Local Government, which then both acts were updated to Act No. 32 and Act No. 33/2004, respectively, Indonesian central government has been giving greater authorities to local governments to manage more resources.

These greater authorities through regional autonomy demands the districts to be more fiscally independent, where each region is expected to experience accelerated economic growth, which in turn can increase local financial capacity and improve its service to the community. The implementation of regional autonomy is also expected to reduce local dependence on central government, where local governments are expected to become more independent in terms of fiscal management, and able to finance regional development in accordance with the fiscal capabilities sourced from its own potential.

One of the constraints in implementing regional autonomy is the fiscal capability gap across districts. To overcome this obstacle, the central government provides assistance in the form of transfers to local governments through various financing schemes, namely the General Allocation Funds (*GAF*), the Special Allocation Fund (*SAF*) and Revenue Share Funds (RSF). In accordance with the regulations, districts with a relatively low fiscal capacity will get a larger share of *GAF*, compared to those with high fiscal capacity. Thus, through the provision of *GAF*, it is expected that fiscal disparities across regions can be reduced.

In addition, the *GAF* is also expected to increase local government capability in allocating these funds to productive sectors which could increase investment in the region, which in turn increase economic growth, thus increasing the contribution of the community in terms of taxes and or retribution. In such a case, the district governments will be more independence as their fiscal capacity increase.

However, after several years, most districts still not able to increase their fiscal independence. The contribution of *RII* on their total spending has not increased significantly. In some districts, the contribution of *GAF* to the total spending is greater than the contribution of *RII* to total spending. Local governments tend to retain the receipts *GAF*. It seems that the *GAF* scheme has made these local governments become more dependence on central government, and therefore discourage the local tax effort.

Based on the aforementioned explanation, this paper investigates the nature of fiscal independence. It also finds out whether the implementation of the *GAF* and *SAF* could stimulate regional tax effort. Last but not least, it also investigates the impact of *RII*, *GAF*, and *SAF* on economic growth.

Research on the fiscal independence pre and post the implementation of regional autonomy has been done by many authors. A fairly comprehensive study on the impact of fiscal decentralization and economic growth and income inequality across regions in Indonesia has been carried out by Waluyo (2007), using a panel data from 33 provinces during the 2001-2005, employing a simultaneous equation model Income inequality among regions is approximated by Williamson weighted index. Waluyo assumes that there is no linkage between regions, namely, there is no migration and movement of capital and goods between regions. He applies a two-stage least square (TSLS) technique. Evaluation of the quality of the model is done by using the RMSE, MAE, MAPE, and TIC.

Waluyo finds that fiscal decentralization increases economic growth in the districts government, where an increase in the central business district and regions rich in natural resources is higher than that of in an area that is not a business centre and with poor natural resources. He suggests that it is influenced by the mechanism of transfer of funds Balancing Regional Financial Centre through the mechanism of sharing of natural resources. This is because the allocation of funds for the natural resources used for investment in key sectors in the economy will improve regional economic growth. Revenue Share Funds (*RSF*) are more profitable for urban areas which is the centre of business and industry, due to higher local tax base, while for the district with poor natural resources and not the centre of business and industry, they should rely solely on local revenues from the *GAF* and *SAF*.

He also finds that fiscal decentralization reduces the income inequality between regions, especially between the regions in Java and outside Java, and between the western and eastern regions of Indonesia. This is caused by the Equalizing Funds transfer mechanism intended to reduce the impression of Java-centric economic development. The scarcity of natural resources (such as oil, gas, and forestry) on the island of Java have an impact on natural resources revenue-sharing funds in Java is relatively smaller than the area which are rich in natural resources outside Java, although it is offset by the Revenue Sharing Tax, *GAF*, and *SAF*.

Another important research on the field, conducted in East Java Province, is that of Makrifah (2010). She investigates the effects of changes in financial management, both in terms of revenue and expenditure, on economic development in some districts and cities in East Java province. She found that the ratio of *RII* to total revenues is increasingly convergent, even though the trend is negative. One of the reasons is that the increase in *RII* is smaller than the increase in total revenue. The slow increase in *RII* is caused by the inability of the region in exploring the potential of *RII*, which stems from the limited natural and human resources. Some regions such as Surabaya and Gresik, Sidoarjo, and Kediri, have a ratio of *RII* to total revenue is greater than the other districts. This is due to the dominance of industry and trade sector in the district, which is a major contributor of tax revenues.

From the aspect of spending, almost all district or cities in East Java province have ratios above 50 percent of routine expenditure, which means that most budgets are still used for routine expenditures. Thus, the increased ratio of *RII* to total revenue, which is one of the goals of fiscal decentralization, cannot be realized.

Yuliati (2001) measures and analyzes the degree of autonomy of Malang district. She emphasizes on the degree of decentralization, aid and fiscal capacity. She finds that the dependence of Malang Districts on the central government in fiscal year 1995/1996 to 1999/2000 are still very high.

Meanwhile, Muliana (2009) finds that partially, the *RII* has a positive impact on the level of local financial independence, while the *GAF* and *SAF* have a negative influence on the level of local financial independence. Simultaneously, each of the *RII*, *GAF*, and *SAF* has a positive effect on local financial independence.

Sihite (2009) examines the effect of *RII*, *GAF*, *SAF*, and capital spending on economic growth in 15 regions in North Sumatra Province, from 2004 to 2007. The results show that partially, *RII*, *GAF* and *SAF* have a positive impact on economic growth, but the variable of capital expenditure has no effect on economic growth.

Chotimah (2006) describes the financial performance of the district Lumajang before decentralization (1997-2000) and after decentralization (2001-2004). She concludes that the level of financial independence in Lumajang district after decentralization (8.5%) is smaller than the level of independence before the regional autonomy (14.3%). However, the effectiveness and efficiency after decentralization is higher than those of before the regional autonomy. The growth in revenue, total revenue, routine expenditure and development expenditure has been good.

Meanwhile, Wulansari (2006) discusses the calculation of budget reports before and after decentralization. She finds that the average fiscal independence post regional autonomy implementation is 7.51 percent, lower than that of pre regional autonomy, which was 9.60 percent. The ratio of growth in *RII* after decentralization is 14.07 percent, lower than that of before regional autonomy, which was 25.36 percent. From the analysis, we can conclude that the financial performance of Asahan district after decentralization does not significantly different from that of before decentralization. This is caused by high dependency of this region to the central government.

This study analyzes the degree of fiscal independence of local governments in East Java province. The study also analyzes the effect of *GAF* and *SAF* to tax effort undertaken by the regions. In addition, this study looks at the influence of *RII*, *GAF* and the *SAF* to economic growth of the regions.

Before further analysis, this paper will explain the definition of some key variables in this study. Regional autonomy, according to Act No. 32/2004, is the right, authority, autonomous regions and obligations to regulate and administer their own affairs and interests in accordance with laws.

The implementation of regional autonomy has to face the fact that districts in Indonesia have different situation. Some are more than ready for the implementation, while some others need a lot of things to prepare. Two things cause this difference. The first is the differences in fiscal capacity between regions. The second is the existence of differences in managerial ability to manage a variety of resources, in terms of human resources, biological resources and funds.

According to Halim (2004), there are some key characteristics that need to be considered if we are to evaluate the ability of a region in implementing regional autonomy. The first is the ability of local finance, namely the ability and authority to explore the area of financial resources and manage its own finances to fund the government activities. The second characteristic is the minimum dependency on assistance from the central government. In other words, the *RII* becomes the largest regional financial resources.

The performance of regional finance can be measured using a degree of fiscal decentralization between central and local governments (detail on fiscal decentralization and fiscal relations can be seen in De Mello, 2000). The higher the degree of independence of a region, the higher the capability of that region will be to finance its own expenditures The higher the contribution of local revenues and the higher the ability to fund its own merits, the better the financial performance of the region will be.

Fiscal decentralization is a process of budget distribution from the higher levels to lower levels of government to support the delegated functions or duties. Fiscal decentralization is a logical consequence of the implementation of regional autonomy. The income sharing is done through the mechanism of equalization funds, namely the distribution of funds across levels of government. The problem of income sharing becomes a serious problem because the central government does not allow local governments to conduct public debt .

The implementation of fiscal decentralization can be done using expenditure assignment and revenue assignment approach (Waluyo, 2007). This approach states that the transfer of some tasks of public services from central government to local governments increases the role of local public goods. This policy was carried out in two stages. The first is to determine the limits of central and regional tasks. Second is to explicitly divide the central and regional government tasks. This approach requires that the Minimum Service Standards (MSS) for any matters delegated to local governments has been identified, so the magnitude of the Standard Spending Assessment (SSA) can be known .

The main characteristic of revenue assignment approach is to improve the regional financial capability in order to finance the decentralized functions (Waluyo, 2007). The determination of the financing sources which are given to regions is conducted using the tax assign. More on the five principal in conducting tax assignment can be read in Waluyo (2007).

There are at least three functions of a govnerment, namely the function of distribution, allocation, and stabilization. Distribution function aims to ensure fairness in the distribution of income. Allocation of functions aimed at improving the efficiency of the allocation of economic resources. Stabilization function aims to maintain economic stability as a whole, including employment, unemployment, economic growth and price stability (more on government function, please see Thai, 2001; and Brammer and Wakjer, 2011).

According to Act No. 33/2004, the Equalizing Funds is funds from the central government which is allocated to the regions to fund local needs in the context of decentralization. Equalizing Funds includes Revenue Share Funds (RSF), General Allocation Funds (*GAF*), and Special Allocation Funds (*SAF*). RSF is allocated to regions based on a specific percentage figure to fund needs of the region within the framework of decentralization. *GAF* is allocated for the purpose of inter-regional equity finance capabilities. Special Allocation Fund (*SAF*) is allocated to a particular area to help fund special activities that are regional affairs and in accordance with national priorities.

Tax effort is the effort to increase regional tax, measured from the ratio between return from all resources of regional initial income (*RII*) with all potential of resources of *RII*. Tax effort is important in boosting regional independence, measured by *RII*, in which tax and retribution are the main sources.

Regional Gross Domestic Product is the total of added value resulted from all economic sectors available in a region for a certain period, or the sum of all income gained from all production factors in that region in a certain period.

METHODS

This study uses a panel data from all districts/cities in East Java Province during the period 2003-2008. The data are in the form of District Budget (=Anggaran Pendapatan dan Belanja Daerah = *APBD*) data and the realization of the District Budget, obtained from the Directorate General of Fiscal Balance, Ministry of Finance and Regional Gross Domestic Product (*RGDP*) from the Indonesia Central Bureau of Statistics.

The variables uses in this paper are *TE* (Tax Effort), *GAF* (General Allocation Funds), *SAF* (Specific Allocation Funds), *RII* (Regional Initial Income) and Economic Growth based on Regional Gross Domestic Product (*RGDP*). Tax Effort is measured by finding the ratio of *RII* and *RGDP*, as follows:

$$TE = \frac{RII}{RGDP} \tag{1}$$

where *TE* is Tax Effort, *RII* is Regional Initial Income, in the form of tax revenue, and *RGDP* is Regional Gross Domestic Product, as the proxy for *RII* potential.

Fiscal Independence, *FI*, is formulated as

$$FI = \frac{RII}{TR} \tag{2}$$

where *TR* is Total Regenue in the region.

Economic growth (EG_t) is measured as the change in Regional Gross Domestic Product (*RGDP*) divided by the initial *RGDP*.

$$EG_t = \frac{RGDP_t - RGDP_{t-1}}{RGDP_{t-1}} x100\% \tag{3}$$

This paper uses both descriptive and inferential methods to analyse the data. The descriptive analysis includes the presentation of tables and graphs. The inferential analysis includes estimation of multiple regression models using panel data.

To determine the effect of *GAF* and *SAF* to tax effort in East Java province, the paper uses a multiple regression equation using panel data as follows:

$$\ln TE_{it} = \beta_i + \beta_1 \ln GAF_{it} + \beta_2 \ln SAF_{it} + \varepsilon_t \tag{4}$$

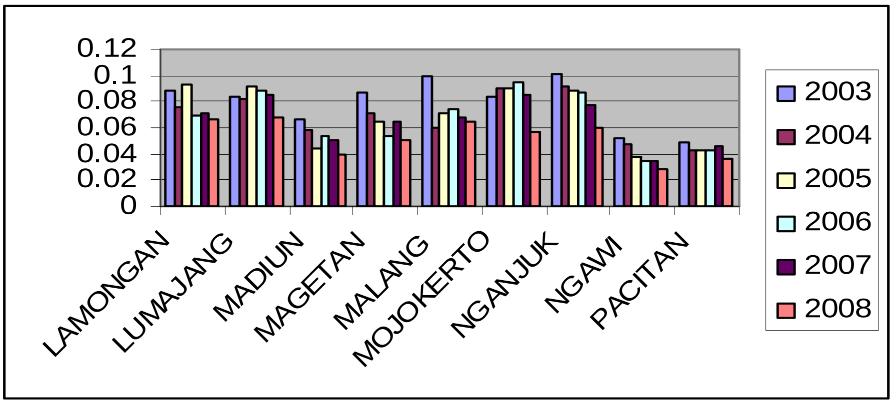
To determine the effect of *GAF*, *SAF* and *RII* to the economic growth of districts/cities in East Java province, the paper uses a multiple regression equation using panel data as follows:

$$\ln RGDP_{it} = \gamma_i + \gamma_1 \ln GAF_{it} + \gamma_2 \ln SAF_{it} + \gamma_3 \ln RII_{it} + \varepsilon_t \tag{5}$$

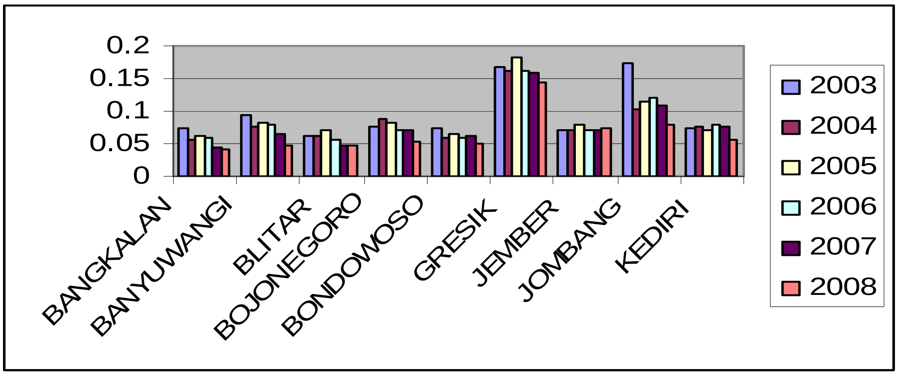
RESULTS DISCUSSION

Fiscal independence is the ratio of Regional Initial Income (*RII*) to Total Revenue of the relevant region. This ratio reflects the region's fiscal capacity in financing the development activities from its own sources. The data on fiscal independence of the districts in East Java province during the period 2003-2008 can be seen in Figure 1 (in the form of bar charts) and Figure 3 (in the form of box plots).

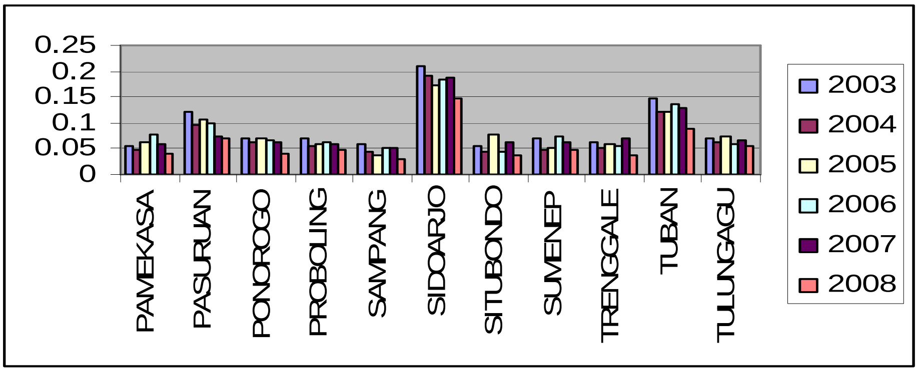
From Figure 1 we can see that the degree of fiscal independence of most districts in East Java province is between 0.05 to 0.10, except the districts of Gresik, Jombang, Tuban and Surabaya, which has a degree of fiscal independence between 12.15 until 12.20. This means that in general, these districts could only fund a maximum of 20% of local expenditures, which is come from the regional initial income (*RII*). Districts which have higher degree of fiscal independence are Tuban, Jombang, Gresik and Sidoarjo.



(i) The first 9 Districts: Bangkalan to Kediri



(ii) The second 9 Districts: Lamongan to Pacitan



(iii) The Third 9 Districts: Pamekasan to Tulungagung

Source: Ministry of Finance.

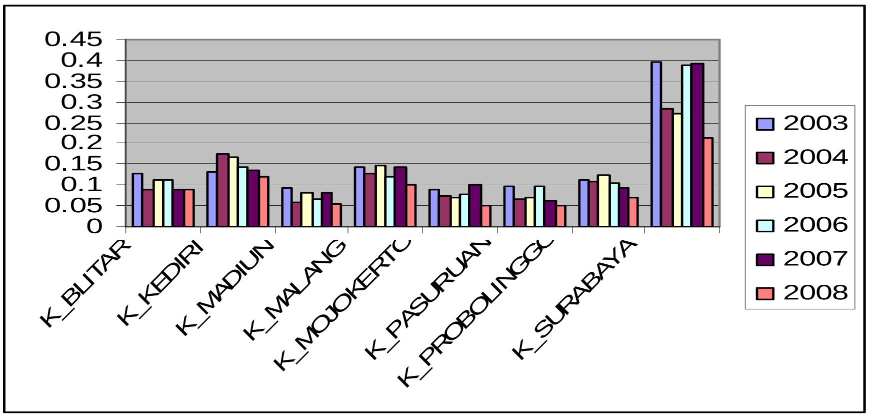
Figure 1: Fiscal Independence, Districts in East Java Province, 2003-2008

To make things worst, Figure 1 also shows that the degree of fiscal independence is getting lower from 2003 to 2008. This means that the level of financial dependence of these districts is getting bigger. Thus, it can be interpreted that one of the purposes of the implementation of regional autonomy, namely increasing local independence and gradually reduce regional dependence, is not reached.

The degree of fiscal independence of the cities in East Java can be seen from Figure 2 (in the form of bar charts) and Figure 3 (in Box Plots). It can be inferred from the figures that degree of independence in most cities is less than 0.10. This means that the ability of these cities to finance its expenditure, namely based on its Regional Initial Income (*RII*), is less than 10%, while the rest comes from central government assistance, in the form of *GAF* and the *SAF*. Some cities with a quite high degree of fiscal independence, namely between 0.10 to 1.2, is the city of Kediri and Malang. The only city in East Java which has a degree of fiscal independence between 0.20 to 0.40 is the city of Surabaya. It can be concluded that the degree of fiscal independence of most cities in East Java is very low. Furthermore, the degree of fiscal independence in the urban areas in East Java province has decreased over the period 2003-2008.

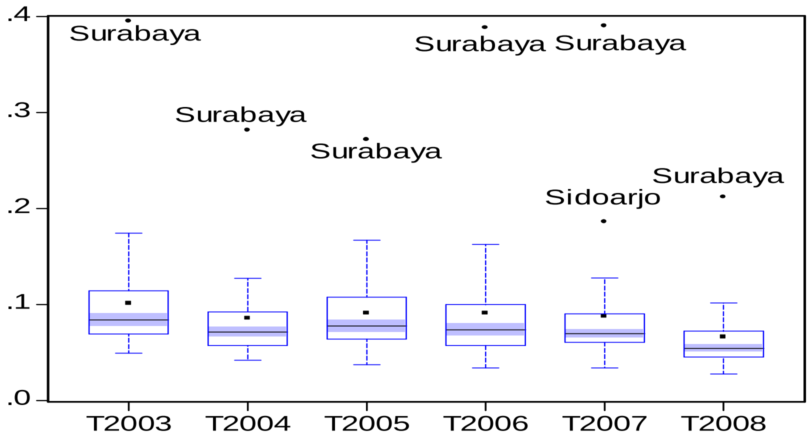
When the situation is described in the form of box plots, as in Figure 3, it can be seen that the fiscal independence of Surabaya and Sidoarjo regency in 2007 are far above the average and median degree of fiscal independence of districts/cities. Overall, the average degree of fiscal independence of all districts/cities in East Java is very low, namely below 0.10, and tended to decline during the period of 2003-2008. This can be seen from the position of the box plot that continues to decline and shrinking, especially after 2005.

Fiscal independence in a region cannot be separated from the tax effort undertaken by local governments. Tax effort is an attempt to increase taxes by a local government that is measured through a comparison between the proceeds (realization) of *RII* with the potential *RII*. Because the data of potential *RII* is not available and is hard to measure, it is approximated by Gross Regional Domestic Product (*RGDP*) from the corresponding districts. Tax effort demonstrates the government's efforts to obtain income for the district considering its potential sources. Potential is the target to be achieved within the budget year that area.



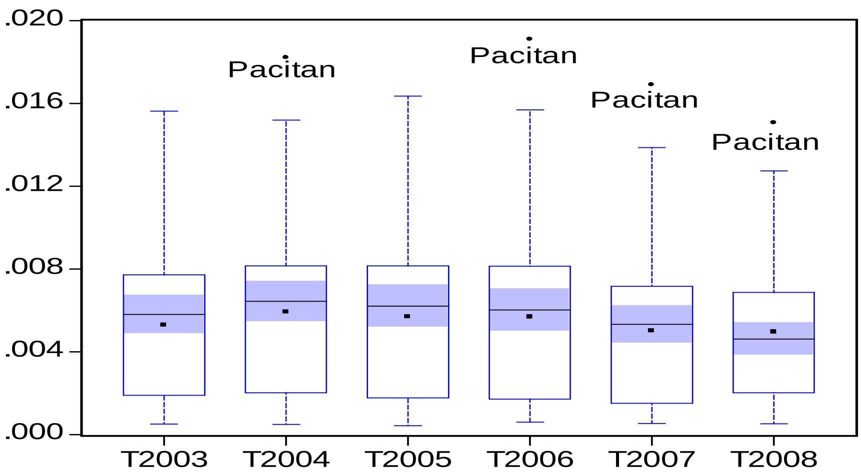
Source: Ministary of Finance.

Figure 2: Bar Chart for Fiscal Independence of District and Cities in East Java Province, 2003-2008



Source: Ministry of Finance.

Figure 3: Boxplot Diagram for Fiscal Independence of District and Cities in Est Java Province, 2003-2008



Source: Ministry of Finance and Indonesia Bureau of Central Statistics.

Figure 4: Boxplot Diagram for Tax Effort of District and Cities in East Java Province, 2003-2008

The box plot diagram in Figure 4 shows that the tax effort rises slightly in 2004, but generally declines, especially from 2004 to 2008. Except for Pacitan district, the tax effort is far above the districts/city, which is between 0.12 to 0.20, the average ratio of tax effort of districts/cities is between 0.04 to 0.08.

Impact of Funds Transfer on Tax Effort

Transfer Funds from the central government include the General Allocation Fund (*GAF*), the Specific Allocation Fund (*SAF*), and Revenue share funds (*RSF*). The study considers only *GAF* and *SAF*, because not all regions get *RSF*. The results of *GAF* and the estimated effect of *SAF* on Tax Efforts are as follows

$$\begin{aligned}\ln TE = -5.2605^{*} + 0.3847^{*} \ln GAF \\ - 0.0029 \ln SAF\end{aligned} \tag{6}$$

adj R^2 = 0,9294
Prob(F-stat) = 0,0000

where * indicates significant at $\alpha = 1\%$.

The estimation results show that *GAF* has a positive and significant impact on tax effort. However, the transfer of *SAF* does not significantly affect tax effort. Thus, *GAF* is expected to be a stimulus for local governments in East Java to explore the potential fiscal districts/cities.

In another word, if these policies continue, the region's fiscal independence is expected to be higher in the future. It is also evident from the results of simple regression between the variables of tax effort (*TE*) with Fiscal independency (*FI*) which shows that if local governments could increase tax effort (*TE*) of 1 unit, then the degree of fiscal independence of the area will increased by 1.93 units.

$$FI = 0.0769^{*} + 1.9278^{*} TE \tag{7}$$

adj R^2 = 0,9052
Prob(F_Stat) = 0,0000
* signifikan $\alpha = 0{,}01$

The Impact of *RII* and Equalizing Funds on Regional Economic Growth

The impact of *RII*, the *GAF* and *SAF* on economic growth (*RGDP*) can be seen from the following regression equation.

$$\begin{aligned}\ln RGDP = 9.7485^{*} + 0.2767^{*} \ln GAF \\ + 0.00003 \ln SAF \\ - 0.0008 \ln RII\end{aligned} \tag{8}$$

adj R^2 = 0.9985,
Prob(F-stat) = 0.0000,

where * indicates significant at $\alpha = 1\%$.

From the above equation, it can be seen that *GAF* significantly influence economic growth. However, *SAF* and *RII* do not significantly influence economic growth. As it is known that the use of the *GAF* is left entirely to each local government, and apparently giving *GAF* for all districts/cities in East Java can be used by the local government for development purposes.

CONCLUSION

In this study, the design of Equalizing Funds between central and local governments applies money-follows-function principle, namely, financial resources have to be given to the regions following the delegated authority to the districts/cities in the context of decentralization. After seven years of regional autonomy, the degree of fiscal independence of most districts/cities in East Java province ranged only between 5-10 percent. This reflects the high fiscal dependence.

This study found that *GAF* had a significant positive effect on tax effort made by local governments. However, the transfer of *SAF* did not significantly increase local tax effort. This means that in the long run, central government should focus more on *GAF* to increase the regional fiscal independency. In addition, the transfer of *GAF* also had a positive and significant impact on regional economic growth.

Regarding the results of the analysis, a couple of suggestions could be made. First, districts/cities with a low level of fiscal independence need to be more creative in exploring potential sources of initial regional income levels to increase their fiscal independence. Second, the central government can continue the transfer of *GAF*. However, it needs to investigate on how far the grant will increase the tax effort before it will eventually stop. Third, local governments should be more careful in using *GAF*. It should consider the use of such funds for capital expenditures associated with the development of facilities and infrastructure that support the economy, so the economy can grow even larger

REFERENCES

Brammer, S. and H. Walker (2011) "Sustainable Procurement in the Public Sector: An International Comparative Study," *International Journal of Operations & Production Management*, 31(4), 452-476.

Chotimah, F.C. (2006), “Analisis Perbandingan Kinerja Keuangan Pemerintah Daerah Kabupaten Lumajang Sebelum dan Sesudah Otonomi Daerah,” Unpublished Paper, Faculty of Economics, Universitas Muhammadiyah Malang.

De Mello Jr., L.R. (2000),”Fiscal Decentralization and Intergovernmental Fiscal Relations: A Cross-Country Analysis,” *World Development*, 28(2), 365-380.

Halim, A. (2004), *Bunga Rampai Manajemen Keuangan Daerah*, Edisi Revisi, UPP UMP YKPN, Yogyakarta.

Makrifah, S.A. (2010), “Analisis Pengelolaan Keuangan Daerah dan Dampaknya terhadap Pembangunan Ekonomi Provinsi Jawa Timur,” PhD Thesis, Institut Pertanian Bogor.

Muliana (2009), “Pengaruh Rasio Efektivitas Pendapatan Asli Daerah, Dana Alokasi Umum, dan Dana Alokasi Khusus terhadap Tingkat Kemandirian Keuangan Daerah pada Pemerintahan Kabupaten/Kota Di Provinsi Sumatera Utara,” Thesis, Universitas Sumatera Utara.

Sihite, F. (2009), “Pengaruh PAD, DAU, DAK dan Belanja Modal terhadap Pertumbuhan Ekonomi Daerah di Kabupaten/Kota Provinsi Sumatera Utara,” Thesis, Faculty of Economics, Universitas Sumetara Utara.

Thai, K.V. ((2001), “Public Procurement Re-examined,” *Journal of Public Procurement*, 1(1), 9-50.

Waluyo, J. (2007), “Dampak Desentralisasi Fiskal terhadap Pertumbuhan Ekonomi dan Ketimpangan Pendapatan antar Daerah di Indonesia?” Workshop on Fiscal Decentralization, 12 December, Universitas Indonesia.

Wulansari, R. (2006), “Analisis Kinerja Keuangan Pemerintah Daerah Kabupaten Asahan Sebelum dan Sesudah Otonomi Daerah,” Thesis, Universitas Sumatera Utara.

Yuliati (2001), “Analisis Kemampuan Keuangan Daerah dalam Menghadapi Otonomi Daerah,” in Halim, A. (Eds), *Bunga Rampai Manajemen Keuangan Daerah*, 1st Edition, Unit Penerbit dan Percetakan (UPP) AMP YKPN, Yogyakarta.