THE IMPACT OF NEW FISCAL DECENTRALIZATION POLICY ON ECONOMIC GROWTH IN INDONESIA* †

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ABSTRAK

1. Research Background

Starting from the fiscal year of 2001 Indonesia has been implementing the new decentralization policy. The implementation was based on law 22 of 1999, concerning the issue of politics and administration (governance), and law 25 of 1999, which regulates the fiscal relationship between central government and regions.3

From the general perspective, decentralization has been a major theme of governance all over the world in the last few decades, especially in developing countries. There are many different driving forces behind the interest of implementing the policy. In Latin America, decentralization was applied as part of a democratization process that has been implemented, especially in the search for a more participatory approach to development (Nickson, 1995). In some African and Asian countries, the policy was implemented in a top-down approach, driven by international donation institution to press the more efficiency practice in the administration field. In the case of China, the stress lies on the connection to economic process- the central and local governments have strengthened their

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3 This study uses “local government” to indicate the second level region, i.e. Kabupaten (districts) and Kota (cities). “Regions” and “subnational governments” refers to provinces, district and cities altogether.
position in exploiting their local economic advantages (Shirk, 1993).

In the case of Indonesia, decentralization has been the major political issue since the era of reformation began in the middle of 1997. This era was marked by openness and democratization in all aspects of the society. The freedom of speech and expressing idea in mass media are flourishing since then. However some “old problems”, inherited from the previous regime, still remains; these are including the mounting nation’s debt, the corrupt bureaucracy, and the most important of all, from this paper perspective, the imbalanced economic development between regions. All of those facts have been the causes of local people’s dissatisfaction, especially in some regions outside Java, such as Aceh, Papua and East Timor. As this new era began in 1997, they saw it was the right time for a change; that was to break up from the unitary state of Indonesia.

Indonesian new fiscal decentralization was first implemented on January 2001. After the initial stage of implementation, some evaluations had been made by many observers. Most of them were emphasizing on the administrative and political impact. On these matters, everything seemed to run smoothly. No major disruptions occurred in the public service activities, as it was feared before. The salaries of regions’ civil servants were adequately paid. It is fair to say that the
program started off much better than many, including World Bank, expected (Hoffman and Kaiser, 2002).

However in many other cases, some disturbing problems still occur in this beginning phase of implementation. There are confusions among local governments in carrying out their responsibility due to the vagueness of the new decentralization law, especially in the area of expenditure assignment. It is understandable; beside the lack of operating regulations that can guide the local apparatus in conducting their tasks, other factors such as their lack of experiences and skills also contributing many difficulties. These obstacles cause the declining in quality level of public services.

Despite positive donor institution assessment on the implementation in terms of administration and political transformation, the big question on how effective is this new policy, still remains unanswered. The effectiveness of the policy can be measured by the degree of success in achieving its goal. In this case, since the decentralization policy is aimed to diminish the desire of regions to disintegrate from the unitary state by equalizing the economic development across regions, the effectiveness indicator can be found by answering the question: does this new decentralization policy really affect the economic growth in Indonesian
regions? If it does, then what is the pattern of that impact? This study tries to answer this question by conducting an empirical investigation in all regions in Indonesia that comprises of 30 provinces during the period of new fiscal decentralization policy implementation, from 2001 until 2002.

2. PREVIOUS RESEARCH

The empirical research on the relationship of fiscal decentralization and economic growth is relatively new. Even though the conceptual framework has been developed by Tiebout (1956), Musgrave (1959) and Oates (1972), the estimations concerning the direct impact of fiscal decentralization on economic growth have only been performed since 1995 by Oates. Since then many empirical studies with different sample coverage regions, time periods and various methodologies have been conducted by many researchers. According to Breuss and Eller (2004) in total there are 14 studies of this subject, which can be categorized into two: cross-country studies and particular country studies. There are six cross-country studies: Oates 1995, Davoodi and Zou 1998 (mixed set of developing countries and OECD countries), Woller and Phillips 1998 (set of Least Developed Countries), Yilmaz 1999, Thießen 2000 and Thießen 2003 (high income OECD countries).
The studies on particular countries: three on China (Zhang and Zou 1998, Lin and Liu 2000, Zhang and Zou 2001), two on United States (Xie, Zou and Davoodi 1999; Akai, Nishimura and Sakata 2004), one on Germany (Behnisch, Buettner, and Stegarescu 2001), one on India (Zhang and Zou 2001), and one on Russia (Desai, Freinkman and Goldberg 2003).

The basic rationale of the efforts to linkage economic growth and fiscal decentralization can be traced back in 1972 when Oates proposed his theory. It stated that in a world with little externalities and heterogeneous tastes, local governments are best suited to provide local public services because they can better adapt to differences in tastes and because they have an information advantage on tastes over central government.

In addition Breuss and Eller (2004) stated three other reasons of the attempt to correlate FD on economic growth: firstly, growth is seen as an objective of FD and efficiency in the allocation of resources in the public sector; secondly, it is an explicit intention of governments to adopt policies that lead to a sustained increase in per capita income and thirdly, per capita growth is easier to measure and to interpret than other economic performance indicators (see Zhang and Zou 2001, 60).
Furthermore Yilmaz (1999) added, an efficient of local public services means that subnational government provide services up to the point at which the value placed on the last unit of services for which citizen are willing to pay is just equal to its benefits. This implies that subnational government must be free to levy “own source” revenues to match citizen’s preferences on expenditure. It then suggests a relation between efficiency and fiscal autonomy (at the margin).

The Oates theorem above had been the starting point for many researchers to find out the relationship between fiscal decentralization and economic growth. The research conducted by Oates (1995) revealed that there is a positive relationship on these two variables. On the other hand, Davoodi and Zou (1998) found different result. They used cross-countries panel regression based on averages over five and ten year period, with country and time effect. In this research, they showed that there is a negative –albeit not significant- relationship between fiscal decentralization and growth in developing countries, but none in developed countries. Zhang and Zou (1998) also found similar result to Davoodi and Zou’s work. They used China’s provinces as the case study and found a significant and robust negative impact of fiscal decentralization on provincial economic growth.
Akai and Sakata (2002) criticized Davoodi and Zou’s work for the cultural bias of their data set. They argued that using data in which the cultural, historical, and institutional differences between countries are substantial makes it difficult to determine the true effect of fiscal decentralization unless adjustments are made to the data in order to account for these differences. In this matter, Bird and Vaillancourt (1998) also have the same opinion. To control the cultural bias, Akai and Sakata use data for one country, that is 50 states of United States. They find that decentralization of government contributed to the states’ economic growth.

Those different results can be perceived in different ways. As Martinez Vazquez and McNab (2001) maintained, the theoretical foundations for the direct impact of FD on economic growth have remained largely undeveloped and have therefore weakened the validity of the empirical work on this topic. Nevertheless, the empirical studies on the direct impact of FD on economic growth during the last decade have not only provided the first corresponding empirical examinations, but have also elaborated meaningful insights into various aspect of this relationship. Therefore, they argued that it is time for a re-evaluation. The similar opinion came from Breuss and Eller (2004) that pointed out some possible direct impact of FD on allocative efficacy, redistribution, and macro economic stability.
Concerning to those variety of the study’s results, however we should also consider some other factors that caused those differences. One of them is the different methodological approaches used by different researchers. Especially the studies conducted in a particular country, which have to apply a specific proxy to match with the specific circumstances of the FD implementation in that country. In this paper, the point of view is that those differences can be perceived as a consequence of the different design of fiscal decentralization in each country.

3. **THE EMPIRICAL METHODOLOGY**

A. **Econometric Models**

We use four econometric models to estimates the linkage of economic growth and fiscal decentralization with a set of controlling variable. Each model contains the proxy of fiscal decentralization which we develop under the specific circumstances of Indonesian fiscal decentralization policy. Some control variables employed are including the real investment share of GRDP, the unemployment rate, the local-owned revenue per total local revenue, and the share of real export share of GRDP. In line with Davoodi and Zou (1998), we work with time-averaged data since the benefits of fiscal decentralization are not expected to
affect year to year fluctuation in growth. Since we only have two years of
observation data, by regressing this averaged data, we expect to get the middle-
run result of this estimated relationship.

The growth regression equation is specified as follows:

\[ GCAP_{it} = \beta_0 + \beta_1 FD_{it} + \beta_2 LOREV_{it} + \beta_3 INV_{it} + \beta_4 UNMPL_{it} + \beta_5 \ln(EXPG)_{it} + u_t \]

Where:

- \( GCAP_{it} \) = Economic growth variable, measured as Gross Regional Domestic Product per capita in real term (1993 price).
- \( FD_{it} \) = Fiscal Decentralization variable, it will be indicated by four different proxies (see the next section).
- \( LOREV_{it} \) = Local-Owned Revenue rate variable, the ratio of local-owned revenue to total revenue.
- \( INV_{it} \) = Investment rate variable. It is the investment share of real GRDP (1993 price).
- \( UNMPL_{it} \) = Unemployment rate variable, the ratio of total unemployment to total workforce in each region.
- \( EXPG_{it} \) = Export rate variable, the ratio of real export to real GRDP (in log
\[ u_t \text{ = the error term} \]

All of those variables above are calculated for each region.

**B. Fiscal Decentralization Proxies**

We use four different proxies that can be categorized into two groups:

1. **Equalization Fund-related proxies**

   In this category we measure FD in relation with the amount of equalization fund received by each region. It consists of two proxies:

   A. **EQPOA**, which is measured by the total amount of equalization fund received by each region divided by population and area of that region. The development of this proxy is based on the rationale that the sufficiency of the transfer fund for each region should be measured in compliance with the size of region’s population and the area. Higher population and area will lower the degree of FD. We expect a positive coefficient on this variable.

   \[ FD_1 = \text{Equalization Fund/Population/Area} \]

   B. **EQREV**, which is the ratio of equalization fund per total revenue. This
measurement is another approach to indicate the fiscal decentralization level of a particular region. In cross-countries studies, this kind of ratio is widely used. They use the ratio of national level expenditure on fiscal decentralization to total expenditure. However, since this study is conducted in the regional level, so we use the regional point of view (i.e. by using revenue-based measurement) to measure the degree of FD. The higher the amount of equalization fund received by a particular region, the higher the degree of FD in that region. We expect a positive coefficient on this variable.

\[ FD_2 = \frac{\text{Equalization Fund}}{\text{Total Regional Revenue}} \]

2. Expenditure-related proxies

We also consider the composition of regions budget expenditure. In the Indonesian budget system there are two types of expenditure, i.e. development expenditure and routine expenditure. The former is used for capital and infrastructure spending, and the latter is used for current spending (e.g. civil servant salaries, benefits, etc). Based on this composition, we develop two other proxies of FD:

A. DEVEXP: the ratio of development expenditure to total expenditure of
each region. According to theory, the higher the development/capital investment expenditure the higher economic growth will be. Based on this theory we expect a positive coefficient on this variable.

\[ FD_3 = \frac{\text{Development Expenditure}}{\text{Total Expenditure}} \]

B. ROUEXP: the ratio of development expenditure to total expenditure of each region. According to theory, the higher the routine expenditure the lower economic growth will be. Based on this theory we expect a negative coefficient on this variable.

\[ FD_4 = \frac{\text{Routine Expenditure}}{\text{Total Expenditure}} \]

The equalization fund-related proxies can reveal the problem associated to the policy of fiscal transfer by central government, since this policy is the authority of central government. It means the result on this variable can be interpreted, among others, to the effectiveness of central government policy on fiscal transfer. On the other hand, the expenditure-related proxy can reveal the problem associated to the regions policy in spending their money to achieve the efficiency. Since in this era of decentralization almost all public money possessed by provinces and local governments have the discretionary aspect for them to spend. The results on these variables can be interpreted, among others, to the
effectiveness of provinces and local governments in expenditure management.

Almost all data above are taken from the Indonesian Central Statistic Bureau, except for the data of DAU (General-Purposed Transfer) and BHPBP (Revenue Sharing) which compose the Equalization Fund, are taken from the Directorate General of Fiscal Balance.

4. Regression Results Analysis

Table 4.1 below shows the results of our regression analysis. We will discuss each variable more detail as follows:

<table>
<thead>
<tr>
<th>Indep. Var</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local-Owned Revenue</td>
<td>.083</td>
<td>.479</td>
<td>.515</td>
<td>.515</td>
</tr>
<tr>
<td></td>
<td>(.438)</td>
<td>(1.511)</td>
<td>(3.489)*</td>
<td>(3.489)*</td>
</tr>
<tr>
<td>Investment share of GRDP</td>
<td>.135</td>
<td>.164</td>
<td>.175</td>
<td>.175</td>
</tr>
<tr>
<td></td>
<td>(.754)</td>
<td>(1.014)</td>
<td>(1.320)</td>
<td>(1.320)</td>
</tr>
<tr>
<td>Export share of GRDP</td>
<td>.461</td>
<td>.466</td>
<td>.135</td>
<td>.135</td>
</tr>
<tr>
<td></td>
<td>(2.374)**</td>
<td>(2.921)*</td>
<td>(.818)</td>
<td>(.818)</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>-.236</td>
<td>-.134</td>
<td>-.173</td>
<td>-.173</td>
</tr>
<tr>
<td></td>
<td>(-1.280)</td>
<td>(-.787)</td>
<td>(-1.252)</td>
<td>(-1.252)</td>
</tr>
<tr>
<td>Fiscal Decentralization</td>
<td>.016</td>
<td>.149</td>
<td>.567</td>
<td>-.567</td>
</tr>
<tr>
<td></td>
<td>(.077)</td>
<td>(.458)</td>
<td>(3.351)*</td>
<td>(-3.351)*</td>
</tr>
<tr>
<td>Adj R-square</td>
<td>.118</td>
<td>.278</td>
<td>.504</td>
<td>.504</td>
</tr>
<tr>
<td>Obs</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>F values</td>
<td>1.746</td>
<td>3.232</td>
<td>6.889</td>
<td>6.889</td>
</tr>
<tr>
<td>Prob &gt; F</td>
<td>.164</td>
<td>.023</td>
<td>.000</td>
<td>.000</td>
</tr>
</tbody>
</table>

Note: *statistics are in parentheses.

* sig 0.01    ** sig 0.05    *** sig 0.10

The estimate of FD variables in model 1 and 2 are positive but not
statistically significant. While in model 3 it is positive and significant, and in model 4 it is negative and significant. It can be interpreted that since in model 1 and 2 we use the equalization fund related proxies, the insignificant results mean the amount of money received from central government does not affect the economic growth in regions. On the other hand, based on the result of model 3, some regions that spend their money more on the capital spending will gain higher economic growth. In this case, a 10 percentage point increase in development expenditure is associated with an increasing in the growth rate of 5.67 percentage points. The opposite occurs in regions that spend more on the current spending (i.e. salary, wages, benefits, etc). If this happens their economic growth will decline at the same rate as in model 3.

In the case of local owned revenue variable, we find positive coefficients in all models, as we expected. However, only in model 3 and 4 the estimations of this variable are statistically significant at 1%. In most of regions, the share of local revenue is much smaller than the equalization fund transferred from central government. This fact might explain why this variable does not have significant value at the models that employ fund equalization-related proxies. Our research, however, is conducted using two years data observation. This result cannot catch
the long-run impact of this FD policy. It is popularly known that in this era of decentralization, regions have the authority to issue some local tax and charges to increase their own revenue. However, this opportunity was excessively used. It is suspected that in the long-run, if not anticipated, this precedence will give a counter-productive result, i.e. the negative coefficient on economic growth.

The coefficient result of rate investment variable on all models is positive, as we expected. However they are not statistically significant. The high range of this variable might explain these results. While on variable of export share of GRDP, the coefficients are positives in all models. They are statistically significant in model 1 and 2 at 5 % and 1 % respectively. It seems that in overall the economic growth in Indonesia is categorized as export-lead growth, rather investment-lead growth. It means that Indonesian regions are dependent from the foreign market in their economic activity.

In the case of unemployment rate, the coefficient of this variable on all models is negative as we expected. But none of them are statistically significant. The unbalanced of work force spread among regions might explain these results. Jakarta, as the capital city has been the focus of jobseekers and has the highest rate of unemployment. Yet, it enjoys relatively high growth due to the high level
of economic activity.

5. CONCLUSIONS

We have made an OLS regression analysis to find out the relationship between economic growth and fiscal decentralization in all regions of Indonesia. The results of the analysis show there is no significant evidence on model 1 and 2. While on model 3 and 4 we got the expected result. In this section we try to give some explanations of these results.

First, from the factor of central government, the ineffectiveness of transfer scheme policy may explain the insignificant findings in model 1 and 2. Furthermore if we look at the result of model 3 and 4, where the regions that spend more on the capital spending than on current spending got the positive and significant result, it can be concluded that the central government should improve the design of the transfer scheme so that regions will have the option to allocate more money on the development/capital investment spending. From the data (see appendix) we can see that of the public money spent in development expenditure in all regions relative to total expenditure is very low, i.e. 32.27% on average. It seems that local budget fund controlled by subnational governments are mostly
allocated to pay salary and benefits for the civil servants and local bureaucrats and other current expenditure. As already mentioned in the beginning of this study, the decentralization policy in Indonesia is involving the massive transfer of civil servant to the regions. Over 2 million civil servants, or almost 2/3 of the central government workforce, were reassigned to the subnational level together with their tasks and responsibilities. This brings the consequences, among others, regions must take the responsibility in paying their salaries. Even though the central government has set a scheme, called “hold-harmless” (see chapter 2), to make sure that there will be no shortage of regions’ fiscal capacity in paying the civil servants salaries, the rest of the money in the transfer package was comparatively too small to finance some other investment activities. Therefore the effort to improve the transfer scheme should be done immediately so that regions can have preference to invest more on some capital and infrastructure expenditures.

Second, from the regions’ side, the main explanation of the result is the mismanagement in the budget expenditure. As already put in the first point, the relatively small amount of money left (after much of them spent on civil servants salaries and other current expenditure) from the transfer package has resulted in
subnational governments not having much freedom in capital spending decisions.

Most of regions in Indonesia are heavily dependent on this transfer since the
amount of money from the local-owned revenue is relatively small. The ratio of
local owned revenue to total revenue in all regions is 12.41 \% on average. It
shows that almost all regions depend on the transfer from the central government
to finance their expenditure.

However, from the actual phenomena there are so many mal practice of
the budget expenditure management. Nowadays, in this era of new
decentralization, there are numerous cases of local executives and local legislature
being courted, and even jailed, for the charges of financial misconduct and
corruption. Furthermore some other similar cases that cannot be detected by law
enforcers, public and mass media due to the lack of evidence, the remoteness of
regions, or evil agreement between the corrupt and some legal staff who abuse
their authority. Other ironic cases include the allocation of public money into
activities that do not have any direct correlation to the effort of increasing public
services quality. Those activities only give benefits to the local executives and
local legislature. For example in some provinces, the salary of local legislature
were raised drastically, in North Sumatra it reaches 300\%, in West Sumatra and in
Lampung it raised 460% and 286%, respectively. In Riau province, the legislature agreed to buy some luxurious cars for the governor. They argued that this purchase was for the sake of fluency of governor’s efficiency. These facts have triggered so many critics. The popular view stated that (fiscal) decentralization in Indonesia is just transferring the corruption, collusion, nepotism from the central government to subnational level.

To overcome these problems, this study recommends some remedial actions should be taken immediately, those include the capacity building program especially for the local legislature in order to improve their skill in the budget expenditure management. Some expert and academics specialized in public budgeting should be recruited for this program. This plan should also be accompanied by the activities of empowering local people in order to make them aware and critical to all mismanagement in the public fund spending by local executives and legislature. The existence of local NGOs may help local people empower themselves.

6. FURTHER RESEARCH

After two years of implementation some obstacles and problems are too
numerous to mention. However, as Taillant has put it, the issue of decentralization is not “whether to” but “how best to”. Therefore, further research should be conducted in order to find the better implementation of new FD policy. Some recommended further researches include the improvement of transfer scheme that should reflect more equality among regions based on their fiscal capacity and it should give regions more space to spend on the development expenditure. Another research also should be conducted in finding ways to improve the local budget management control system to detect and prevent the abuse of public fund.

Finally, as Martinez and Mcnab (2003) also Breuss and Eller (2004) maintained the direct relationship between economic growth and fiscal decentralization needs to be re-evaluated, considering the lack of theory, and hence producing the divergent results. This study, however, does not try to reconfirm this statement, despite its findings. The effort to find the pattern of relationship between economic growth and fiscal decentralization, it seems that, is necessary to evaluate the effectiveness of this policy. It is just the following step that should also get equivalent focus. Especially when related to the Taillant’s statement, the need of further research to find out the relationship of fiscal decentralization to some other, more direct, indicators such as the degree of
efficiency, corruption, etc, should be conducted. By conducting this kind of study, the complete evaluation of fiscal decentralization implementation is expected to improve.


and Economic Growth”, Working Paper of Andrew Young School of Policy Studies, Georgia State University.


