

# The Efficiency Of Local Governments And Its Influence Factors

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**Abstract:** Assessing the relative efficiency of local governments using Data Envelopment Analysis, which are used as input aggregate total expenditure per capita and *Local Government Output Indicator (LGOI)* is used as an aggregate output of each local government. Results showed that local governments can improve the services performance without increasing the spending. Furthermore, the efficiency scores is associated with socio-economic variables and demographic by using analysis of Tobit, the results show that the variable fiscal as transfer funds and silpa negatively and significantly to the local government efficiency, while the variable population density and degree of fragmentation of political parties and positive effect significantly to the local government efficiency.

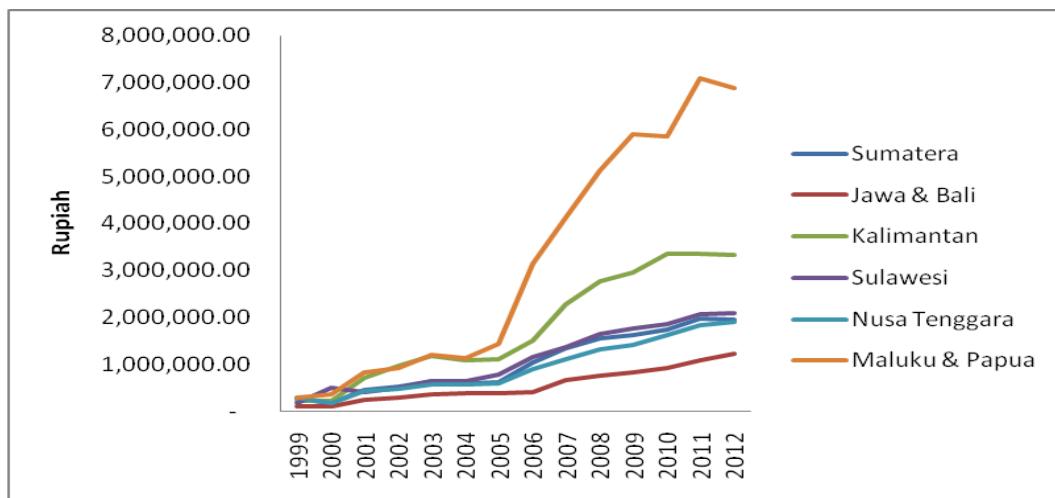
**Keywords:** Local Government Output Indicator, Technical Efficiency, Sosio-Economic and Demographic Factors, DEA and Tobit.

## Introduction

Regional autonomy policy gives rights and responsibilities of local governments extensively to organize and manage the affairs of government, in order to improve the efficiency and effectiveness of governance and public service adapted to the conditions, potential and uniqueness of the area concerned, the principle of funding following the government functions that become obligations and responsibilities of each level of government. The regional

autonomy policy, on the one hand has magnified the role, functions and responsibilities of local governments in the provision of public services. While on the other hand, the consequences on the increasing need for funding sources to finance the provision of those services. The implications of this are shown in Figure 1, where during the period 1999 to 2012 the allocation of regional spending continues to show improvement, overall regional spending has increased by about 1,261 percent.

**Figure 1 : The development of the District Government and Expenditure Per Capita Cities in Indonesia According Region Year 1999-2012**



**Source:** Adapted from Regional Financial Statistics, Ministry of Finance RI.

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Nonetheless, the public output as measured by the achievements of indicators of the performance of some service functions held by each local government is relatively different. As are shown in Table 1, the gains of a particular service area is relatively higher than the gains of other service areas, both viewed by the regions and among local governments. The achievements of local governments with public output is below average in the region, showed that the ability of local governments to provide public services with the same standard type and relatively lower compared to other local government capacity. Instead, local authorities with the achievements of public output above

the average area showed a better ability to use the shopping area to the provision of public services.

**Table 1.** Output indicators and the City District Government in Indonesia  
By Region Period Year 1999-2012

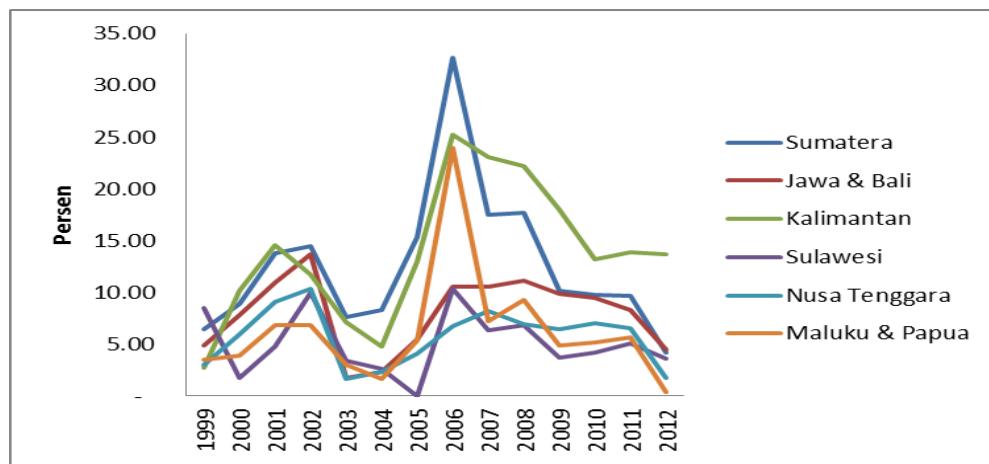
	Sumatera	Jawa & Bali	Kalimantan	Sulawesi	Nusa Tenggara	Maluku & Papua	Average Area
The average enrollment at primary school	97,3	97,9	96,5	95,2	94,8	91,0	<b>95,5</b>
The ratio of the average elementary school teachers per primary school students	49,6	46,1	55,2	55,1	46,9	47,3	<b>50,0</b>
The average ratio of Total Puskesmas per 100,000 population	7,6	4,1	10,5	10,4	7,4	15,8	<b>9,3</b>
The average length of road per Population	0,08	0,03	0,08	0,14	0,09	0,12	<b>0,09</b>
On average households with Drinking Water Plumbing	13,2	16,8	24,6	19,2	15,7	16,8	<b>17,7</b>
The average rate of economic growth	4,3	5,1	4,7	6,4	5,1	4,1	<b>4,9</b>

**Source:** Education Statistics, Health, Water, Transport and Regional Economics, BPS

Another indicator that shows the level of efficiency in the use of public expenditures is fiscal residuum. According to Kalb (2010) fiscal residuum measure the degree of inefficiency of production, which is defined as the difference between the total budget with minimum production costs are reflected in the actual amount of the budget spent. With this assumption, bureaucrats face a constrained area where

the total budget must be equal to or greater than the total minimum cost. As shown in Figure 2, the ratio of fiscal residuum of total regional spending relatively tinggi, ie an average of 8.70 percent. This indicates that local governments are facing problems related to the efficiency in the use of public expenditure.

**Figure 2** Fiscal developments ratio residuum Against Total Budget and the City District Government in Indonesian By Region Period 1999-2012



**Source:** Adapted from Regional Financial Statistics, Ministry of Finance RI.

Efficiency is a critical issue for many in Indonesia. At every government, whether central, provincial and district and city, the policy instruments in the management of public finances has been widely applied and implemented, but there is still a lot of waste and irregularities found against the use of public resources. Indications of this issue is reinforced by the results of the examination/audit Audit Agency (BPK) to report information accountability of local governments (LKPD) in 2011, where from 426 LKPD already examined, 67 areas are given an unqualified opinion (WTP), 316 area with a qualified opinion (WDP), 5 opinions unnatural given area and 38 area given disclaimer opinion. Thus, it is necessary to evaluate the performance of local governments. One way to evaluate it according to GEYS and Moesen (2009) is to analyze whether the local government to use its resources in an economically efficient manner, which provides a maximum output at a certain input level.

## Method

### Specific Input and Output Specification

To calculate scores efficiency of local governments, the total regional spending per capita is used as input aggregate, as has been used previously by Borger and Kerstens (1996), Ibrahim Karim and Zaini, (2004), Jorge, Camoes, Carvalho and Fernandes (2006), Afonso and Fernandes (2008), Borge, Falch and Tovmo (2008), GEYS and Moesen (2009) and Nieswand and Seifert (2011) as a specific input from the local government to provide a wide range of public service functions. The use of total regional spending is more specific because it allows the incorporation of the entire input relevant information and implicitly assumes that the price of input factors are the same for all institutions. While specific output an aggregate output as measured by 12 indicators of the performance of the five areas of service organized by the local government according to Government Regulation No. 38 Year 2007 on the Division of Government Affairs between the Government, Provincial Government and the City District Government. Performance indicators include: (1) the basic

education sector consists of primary school enrollment rate, the ratio of primary schools per primary school-age population, and the ratio of primary school teachers per primary school student; (2) basic health sector consists of health centers per population ratio, the ratio of doctors per population, and the ratio of medical staff per resident; (3) public works, namely the ratio of road length per resident; (4) housing and residential areas consisting of the percentage of households-access water tap and a percentage of household electricity-access; and (5) the economic field consists of regional economic growth, the unemployment rate (100-unemployment), and poverty (100-poverty). In addition to referring to Government Regulation No. 38 of 2007, the performance indicators above been: (1) according to Borger and Kerstens (1996) these indicators has covered important aspects of the relevant services provided by the local government; (2) according to Afonso and Fernandes (2008) the performance indicators reflect homogeneous services that must be provided by each local government and can be better measured because it is directly controlled by local authorities over a given period; and (3) by Borge et al. (2008) these indicators are indicators of production from some areas of service that the average use about 75 percent of local government budgets. Furthermore, various performance indicators selected are accumulated into aggregate output. Specifically aggregate output is defined by Afonso and Fernandes (2008) as the local government output indicator (LGOI) which is a measure of the performance of local governments which have the purpose to evaluate the performance of local governments globally and drive efficiency of local governments is measured based approach frontier use a composite indicator as a measure of output. Indicators of the performance of the local government or local government output indicator (LGOI) formulated by Nieswand and Seifert (2011) in the following equation: wherein, shows the output to a local government-m i and represents the average output of all m. Local governments have LGOI value equal or above 1 indicates that the local government is able to provide more public services, and vice versa.

## Data Envelopment Analysis (DEA)

DEA include the use of linear programming method for constructing the frontier of data. Furthermore, the size of the computed relative efficiency of the frontier. DEA method is done by using a Variable Return to Scale (VRS) oriented output. Assuming each local government consists of N input and M output. Vector input and output for local governments to i is described by the vector  $x_i$  and  $q_i$ . Data for all local authorities indicated by  $N \times I$  matrix inputs (X) and  $M \times I$  matrix output (Q), then according Coelli, Rao, O'Donnell and Battese (2005) output-oriented model of envelopment VRS can be formulated as follows:

$$\text{Max } \theta, \lambda \text{, subject to: } -\theta q_i + Q\lambda \geq 0, \quad (2)$$

$$x_i - X\lambda \geq 0,$$

$$I\lambda = 1$$

$$\lambda \geq 0,$$

where,  $1 < \theta < \infty$ , and  $\theta - 1$  is a proportional increase in output that can be achieved by local governments to the quantity of input i is considered constant. For the record, that  $1 / \theta$  defines different technical efficiency score between zero and one. Consideration of the efficiency of the use of measurement-oriented approach VRS output refers to income Afonso and Fernandes (2008) which states that measurement of the efficiency with output-oriented approach of the VRS is intended to determine how much quantity of output can be increased proportionally without changing the quantity of inputs used. Achieve efficiencies gained value equal to 1 if the local government is at the frontier (called efficient), or below 1 if local governments are not on the frontier (called inefficient).

## Regression Econometric

After a score of efficiency obtained through DEA method, the next step is to identify the influence of several socio-economic variables and demographic variables were chosen as exogenous to the efficiency. For this purpose, the exogenous variables regressed with efficiency score includes values between zero and one. Relationships between these variables in the regression model Tobit formulated as follows:

$$\theta_i = \beta_0 + \beta_1 P_{Ri} + \beta_2 T_{Ri} + \beta_3 I_{Ci} + \beta_4 D_{Si} + \beta_5 H_{Hi} + \beta_6 S_{Li} + \epsilon_i \quad (3)$$

where,  $i$  is the government to  $i$  ( $i = 1, \dots, I$ ),  $\theta$  is the efficiency score,  $P_{Ri}$  is the receipt of taxes / levies per capita,  $T_{Ri}$  is the acceptance of transfer per capita,  $I_{Ci}$  is income per capita,  $D_{Si}$  is population density,  $H_{Hi}$  (Herfindahl-Hirschman Index) is the inverse of the fragmentation of political parties,  $S_{Li}$  is the substantial amount of the previous year's budget, and  $\epsilon$  is the error term. Herfindahl-Hirschman Index (HHI) is calculated using the formula that has been put forward previously by Borge et al, (2008), as follows: ( $i = 1, \dots, I$ ) (4) where  $S_{pi}$  is the share of seats a party  $p$  in the Regional Representatives Council (DPRD) in region  $i$  of the total seats in the House of Representatives (DPRD) in region  $i$ , and  $P$  is the total political party in the House of Representatives (DPRD) in the region  $i$ . The index value shows the number of parties in the legislature and the regional distribution of seats among the political parties. The index value decreased (increased fragmentation) when the number of parties increases, and when the relatively more balanced distribution of seats among the political parties. Likewise, the value of the index increases (decreases fragmentation) when the number of parties decreases, and when the distribution of seats is relatively unbalanced among the political parties.

## Results and Discussion

### Local Government Output Indicator (LGOI)

Based on the table 2, it can be explained that the performance of service provision between local governments and between regions is relatively very different. It can be seen from the number of standard deviations of 0.26, indicating that the performance of service provision between the regions, on average, relatively very different from region to region with other regions. So also be seen by the number of standard deviations per region, where Maluku-Papua, Kalimantan, Java, Bali and Sumatra has a number of standard deviations are relatively high, so that the performance of the provision of ministry among local governments in the four regions are relatively very different between local governments one with other local governments.

**Table 2.** Value LGOI Local Government Year 2010

Region	Maximum	minimum	Average	Stdev.
Sumatera	1,69 Bharat)	(Pakpak		
Jawa-Bali	2,94	(Kota	0,64 (Pringsewu)	0,22
Kalimantan	Magelang)		0,59 (Bogor & Kota Depok)	0,26
Sulawesi	2,20 (Tana Tidung)		0,69 (Kubu Raya)	0,29
Nusa Tenggara	1,58	(Kota	0,80 (Parigi Moutong)	0,16
Maluku-Papua	Tomohon)		0,57 (Sumba Barat Daya)	0,15
	1,17 (Ngada)		0,44 (Intan Jaya)	0,30
Nasional	1,85 (Supiori)			
	2,94		0,44	1,00
				0,26

**Source:** Adapted from appendix 1

LGOI rate differences between the local government was influenced, first, the local government which has a population of relatively little value performance indicators are relatively high, so that its value LGOI tend to be relatively higher. Instead, local governments which has a population that is relatively more value performance indicators are relatively low, so the value of its LGOI tend to be relatively lower. Second, different types of local government in the form of local government and municipal authorities also cause differences in the value of LGOI among local governments.

### Local Government Efficiency Value

Based on the calculation method of DEA as shown in Table 3, indicate that the general level of efficiency of local government in Indonesia is relatively low because it is still below the maximum value of 1.000. This indicates that of every public expenditure incurred by the local government the average public is able to output supplied only about 50.70 percent, or in other words that every public expenditure incurred by local governments on average about 49.30 percent used for activities that are not productive or is intended to finance the expenditure areas that are not associated with the provision of public services, so that the public output supplied from any public expenditure incurred is not maximized, therefore, the average productivity of local governments actually still relatively low.

**Table 3.** Results DEA, 1 Input (Regional Expenditure Per Capita) and 1 Output (LGOI) Year 2010

region	Amount Regency/City	Efficiency Score		
		Top	Low	Average
Sumatera	151	0,821	0,282	0,487
Jawa-Bali	121	1,000	0,272	0,624
Kalimantan	55	0,749	0,350	0,469
Sulawesi	73	0,770	0,330	0,498
Nusa Tenggara	31	0,645	0,336	0,456
Maluku-Papua	60	0,629	0,150	0,390
Nasional	491	1,000	0,150	0,507

**Source:** Adapted from attachment 2

Viewed by region, the local government in the Java-Bali is a local government that has an average value efficiency above the national average of 0.624. While the views based on the type of government, from as many as 491 local governments studied as much as 93 is the municipality with the average value of an efficiency of .520, and 398 is the district with an average efficiency value of 0,504. A total of 93 of the city government, City Government of Bandung and Magelang city government is the municipality that has the highest efficiency value that is equal to 1,000 and Government Mojokerto a city government that has the lowest efficiency value that is equal to 0.272. Meanwhile, as many as 398 of the district, Tangerang regency government is local government that has the highest efficiency value that is equal to 1,000 and Intan Jaya district government is local government that has the lowest efficiency value that is equal to 0.150.

### Factors Clarifying Efficiency

The relationship between the efficiency explanatory factors expressed with Tobit regression equation as follows:

$$\begin{aligned} \text{Eff} = 1.397 & *** - 0,007\text{PR} - 0.073 *** \text{TRANSFER} + \\ & 0,010\text{INCOME} \\ & + 0.016 + 0.029 *** \text{Dens HHI} - 0,007 * \text{SiLPA} \end{aligned}$$

N = 491

**Note:** \*, \*\* and \*\*\* are significant at 10, 5 and 1%

From these relationships can be explained that the variable TRANSFER has a negative and significant relationship to the efficiency. This negative relationship in Borger and

Kerstens (1996) interpreted that the funds received from the local governments of higher levels of government generally in the form of unconditional block grant, so that control of the use to be relatively limited. Meanwhile, according to Borge et al. (2008), a negative relationship is as a result of the implementation of a decentralized system with the procedure bottom-up which tend to be less stressed to tightening the budget, so the policy of fiscal transfers between levels of government led to the fiscal capacity of local governments to be relatively higher and encourage local governments to tend to operate with a greater surplus and deficit pressure is lower. Therefore, although basically fiscal transfer policies prioritize equity and public service standards are better, but not completely efficient. This condition, according Kuncoro (2004) was influenced by local bureaucrats who act very reactive to transfer funds received, which increased allocation of funds transfer will be responded in increased spending on higher areas mainly operational expenditure, it is according to Rondinelli, McCullough and Johnson (1989) generally intended to finance the personnel expenditure that are not associated with the provision of public services. In line with these opinions, Prud'homme (1995) also confirms that the local bureaucrats are often unresponsive, sometimes less motivated and less qualified, as well as having priority consideration for their own agenda on the agenda of the mandate giver (principal) further encourage allocative efficiency lower. For variable population density (Dens) statistically positive and significant impact on the efficiency of local government spending. This relationship according to Borger and Kerstens (1996) and Afonso and Fernandes

(2008) interpreted that a dense residential structure with a portion of the population who live in it are relatively higher will simplify network setup and use local services. Therefore, the cost of providing public services on average will be relatively low compared to areas that have a population structure that is relatively less dense. This is in line with the opinion of Schwab and Oates (1991) which states that the composition of a community to be a characteristic of a place to stay that was instrumental in determining the level of provision of public goods, and the presence of an individual in a community will have an impact on the cost per head of the supply of goods public. Therefore, the provision of public goods in relatively dense areas will be efisiens, where the average cost of supplying a minimum because the average cost function as a function of population size. For variable Herfindahl-Hirschman Index (HHI) as the inverse of the fragmentation of political parties, showed a positive and significant impact on efficiency. This positive relationship according to Borge et al. (2008) interpreted in two ways, first a strong political leadership will be easier to resist pressures to accommodate low efficiency (and subsequent low output) with use of a larger budget. Second, strong political leadership also has the power to bargain with the unity of the public sector to implement incentive schemes and understanding of other performance improvements. Thus, the degree of fragmentation of political parties in the legislature regions in Indonesia is relatively low as indicated by the value of HHI that an average of 20.40. It is interpreted: (1) although the regional government run by the multi-party system, but among individual representatives of political parties and coalition partners in the legislature region (DPRD) has unified objective function, (2) determination system chairman of the board along with institutional facilities council decided on the basis the number of seats the largest political party representatives and consensus, so there is no cross-party political control changes every time, and (3) cooperation between partners koalisis through a mechanism that ensures the cooperation is very strong. Thirdly it is beneficial in promoting the public interest and will enhance the efficiency of budget policy area. Lastly variable SiLPA previous year showed a negative and significant impact on efficiency. This negative relationship is in line with the opinion of Kalb (2010) which states that the difference between the total budget with the budget realization (minimum production costs) is defined as the fiscal residuum which measures the degree of production inefficiencies in the use of public funds. By karenja, fiscal residuum this is identical to the substantial amount of the budget (SiLPA) which is used as a component in the postal receipt of financing next year's budget. SiLPA incorporate policies in heading financing, means incorporating elements of inefficiency in the current year's budget. Thus, any increase in SiLPA will increase the inefficiency of the current year's budget. This indicates that local bureaucrats in every budget year tend to maximize the size of the budget, in order to create opportunities to use and take advantage of local budgets freely according to his personal wishes.

## Conclusions and Suggestions

Based on the above, it can be concluded that the general level of efficiency of local government in Indonesia is

relatively low because it is still below the maximum value of 1,000, where of each spending an average public spending public services which can be provided only about 50.70 percent. Statistically some fiscal variables such as fund transfers and the rest of the funds over the previous year's budget calculations significant negative effect on the efficiency of local governments. While the social and demographic variables such as population density and degree of fragmentation of political parties and significant positive effect on the efficiency of local governments. Furthermore, the results of this study can be put forward several suggestions, among others, first, from the academic side presumably similar studies need to be done further, especially related to the increase in the number of indicators and sub-indicators as a composite indicator of LGOI. Secondly, from the operational side would county and city governments to be more direct and pursue budgetary revenue and expenditure (budget) may reflect the preferences of the public in any jurisdiction, and continuously strive to build and enhance the capacity of local government institutions by improving the quality of personnel resources and application of information technology in the form of e-government.

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## Appendix 1

Local Government Output Indicator (LGOI) and the City District Government in Indonesia in 2010

No.	Regency/City	LGOI	No.	Regency/City	LGOI
	<b>ACEH</b>				
1.	Simeule	1,44	43.	Padang Lawas Utara	1,23
2.	Aceh Singkil	1,06	44.	Padang Lawas	0,96
3.	Aceh Selatan	1,10	45.	Labuhan Batu Selatan	0,83
4.	Aceh Tenggara	1,23	46.	Labuhan Batu Utara	0,79
5.	Aceh Timur	1,06	47.	Nias Utara	0,85
6.	Aceh Tengah	1,54	48.	Nias Barat	0,92
7.	Aceh Barat	1,17	49.	Kota Sibolga	1,51
8.	Aceh Besar	1,28	50.	Kota Tanjung Balai	1,42
9.	Pide	1,08	51.	Kota Pematang	1,51
10.	Bireun	1,05	52.	Siantar	1,19
11.	Aceh Utara	1,06	53.	Kota Tebing Tinggi	1,07
12.	Aceh Barat Daya	1,15	54.	Kota Medan	1,36
13.	Gayo Lues	1,31	55.	Kota Binjai	0,99
14.	Aceh Tamiang	1,06	56.	Kota Pdg. Sidempuan	0,82
15.	Nagan Raya	1,00		Kota Gunung Sitoli	
16.	Bener Meriah	1,20	57.	<b>SUMATERA BARAT</b>	0,89
17.	Aceh Jaya	1,37	58.	Kepulauan Mentawai	0,81
18.	Pidie Jaya	1,31	59.	Pesisir Selatan	0,93
19.	Kota Banda Aceh	1,45	60.	Solok	0,97
20.	Kota Sabang	1,68	61.	Sijunjung	0,95
21.	Kota Langsa	1,11	62.	Tanah Datar	0,80
22.	Kota Lhokseumawe	1,05	63.	Padang Pariaman	0,90
23.	Kota Subulussalam	1,18	64.	Agam	0,87
	<b>SUMATERA UTARA</b>		65.	Lima Puluh Kota	0,91
24.	Nias	1,08	66.	Pasaman	1,30
25.	Mandailing Natal	0,90	67.	Solok Selatan	0,96
26.	Tapanuli Selatan	0,94	68.	Dharmasraya	0,76
27.	Tapanuli Tengah	1,09	69.	Pasaman Barat	0,81
28.	Tapanuli Utara	1,14	70.	Kota Padang	1,26
29.	Toba Samosir	1,27	71.	Kota Solok	1,23
30.	Labuhan Batu	0,87	72.	Kota Sawahlunto	1,12
31.	Asahan	0,87	73.	Kota Padang Panjang	0,93
32.	Simalungun	1,06	74.	Kota Bukit Tinggi	1,04
33.	Dairi	1,12	75.	Kota Payakumbuh	0,91
34.	Karo	1,29		Kota Pariaman	
35.	Deli Serdang	0,80	76.	<b>RIAU</b>	1,03
36.	Langkat	0,87	77.	Kuantan Singgingi	0,93
37.	Nias Selatan	0,75	78.	Indragiri Hulu	0,72
38.	Humbang Hasundutan	1,08	79.	Indragiri Hilir	0,88

39.	Pakpak Bharat	1,69	80.	Pelalawan	0,92
40.	Samosir	1,15	81.	Siak	0,85
41.	Serdang Bedagai	0,92	82.	Kampar	0,81
42.	Batu Bara	0,85	83.	Rokan Hulu	0,83
				Bengkalis	

No.	Kabupaten/Kota	LGOI	No.	Kabupaten/Kota	LGOI
84.	Rokan Hilir	0,71	126.	Lampung Selatan	0,71
85.	Kepulauan Meranti	1,17	127.	Lampung Timur	0,75
86.	Kota Pekanbaru	1,10	128.	Lampung Tengah	0,76
87.	Kota Dumai	1,04	129.	Lampung Utara	0,87
	<b>JAMBI</b>		130.	Way Kanan	0,80
88.	Kerinci	1,10	131.	Tulang Bawang	0,70
89.	Merangin	0,85	132.	Pesawaran	0,74
90.	Sarolangun	0,94	133.	Pringsewu	0,64
91.	Batanghari	0,91	134.	Mesuji	0,87
92.	Muaro Jambi	0,85	135.	Tulang Bawang Barat	0,75
93.	Tanjab Timur	0,81	136.	Kota Bandar Lampung	0,94
94.	Tanjab Barat	0,75	137.	Kota Metro	1,09
95.	Tebo	0,78		<b>KEPULAUAN RIAU</b>	
96.	Bungo	0,83	138.	Karimun	1,10
97.	Kota Jambi	0,87	139.	Bintan	1,04
98.	Kota Sungai Penuh	1,16	140.	Natuna	1,66
	<b>SUMATERA</b>		141.	Lingga	1,40
	<b>SELATAN</b>		142.	Kepulauan Anambas	1,61
99.	Ogan Komering Ulu	0,87	143.	Kota Batam	1,00
100.	Ogan Komering Ilir	0,71	144.	Kota Tanjungpinang	1,03
101.	Muara Enim	0,82		<b>KEPULAUAN BABEL</b>	
102.	Lahat	0,98	145.	Bangka	0,79
103.	Musi Rawas	0,77	146.	Bangka Barat	0,84
104.	Musi Banyuasin	0,83	147.	Bangka Tengah	0,73
105.	Banyuasin	0,77	148.	Bangka Selatan	0,81
106.	OKU Selatan	0,78	149.	Belitung	0,87
107.	OKU Timur	0,70	150.	Belitung Timur	0,89
108.	Ogan Ilir	0,84	151.	Kota Pangkalpinang	0,77
109.	Empat Lawang	0,77		<b>JAWA BARAT</b>	
110.	Kota Palembang	1,03	152.	Bogor	0,59
111.	Kota Prabumulih	1,02	153.	Sukabumi	0,65
112.	Kota Pagar Alam	1,06	154.	Cianjur	0,64
113.	Kota Lubuk Linggau	0,87	155.	Bandung	0,64
	<b>BENGKULU</b>		156.	Garut	0,66
114.	Bengkulu Selatan	1,23	157.	Tasimalaya	0,69
115.	Rejang Lebong	1,06	158.	Ciamis	0,77
116.	Bengkulu Utara	1,13	159.	Kuningan	0,82
117.	Kaur	1,13	160.	Cirebon	0,76
118.	Seluma	0,99	161.	Majalengka	0,71
119.	Muko-Muko	1,13	162.	Sumedang	0,81
120.	Lebong	1,10	163.	Indramayu	0,94
121.	Kepahiang	1,18	164.	Subang	0,76
122.	Bengkulu Tengah	1,24	165.	Purwakarta	0,73
123.	Kota Bengkulu	0,89	166.	Karawang	0,77
	<b>LAMPUNG</b>		167.	Bekasi	0,66
124.	Lampung Barat	0,77	168.	Bandung Barat	0,61
125.	Tanggamus	0,78	169.	Kota Bogor	0,81

No.	Kabupaten/Kota	LGOI	No.	Kabupaten/Kota	LGOI
170.	Kota Sukabumi	1,05	216.	Sleman	0,90
171.	Kota Bandung	1,50	217.	Kota Yogyakarta	1,77
172.	Kota Cirebon	1,43		<b>JAWA TIMUR</b>	
173.	Kota Bekasi	0,61			

174.	Kota Depok	0,59	218.	Pacitan	0,87
175.	Kota Cimahi	0,79	219.	Ponorogo	0,81
176.	Kota Tasikmalaya	0,71	220.	Trenggalek	0,80
177.	Kota Banjar	0,85	221.	Tulungagung	0,83
			222.	Blitar	0,86
	<b>JAWA TENGAH</b>				
178.	Cilacap	0,70	223.	Kediri	0,71
179.	Banyumas	0,77	224.	Malang	0,78
180.	Purbalingga	0,75	225.	Lumajang	0,83
181.	Banjarnegara	0,76	226.	Jember	0,68
182.	Kebumen	0,76	227.	Banyuwangi	0,75
183.	Purworejo	0,81	228.	Bodowoso	0,99
184.	Wonosobo	0,86	229.	Situbondo	0,88
185.	Magelang	0,73	230.	Probolinggo	0,75
186.	Boyolali	0,79	231.	Pasuruan	0,73
187.	Klaten	0,73	232.	Sidoarjo	0,74
188.	Sukoharjo	0,79	233.	Mojokerto	0,79
189.	Wonogiri	0,84	234.	Jombang	0,74
190.	Karanganyar	0,94	235.	Nganjuk	0,76
191.	Sragen	0,87	236.	Madiun	0,89
192.	Grobogan	0,72	237.	Magetan	1,03
193.	Blora	0,75	238.	Ngawi	0,85
194.	Rembang	0,80	239.	Bojonegoro	0,79
195.	Pati	0,80	240.	Tuban	0,78
196.	Kudus	1,10	241.	Lamongan	0,89
197.	Jepara	0,72	242.	Gresik	0,75
198.	Demak	0,78	243.	Bangkalan	0,69
199.	Semarang	0,86	244.	Sampang	0,74
200.	Temanggung	0,83	245.	Pamekasan	0,75
201.	Kendal	0,90	246.	Sumenep	0,84
202.	Batang	0,88	247.	Kota Kediri	0,77
203.	Pekalongan	0,73	248.	Kota Blitar	0,79
204.	Pemalang	0,72	249.	Kota Malang	0,79
205.	Tegal	0,73	250.	Kota Probolinggo	0,84
206.	Brebes	0,74	251.	Kota Pasuruan	0,93
207.	Kota Magelang	2,94	252.	Kota Mojokerto	0,78
208.	Kota Surakarta	0,98	253.	Kota Madiun	0,98
209.	Kota Salatiga	1,14	254.	Kota Surabaya	0,84
210.	Kota Semarang	0,86	255.	Kota Batu	0,98
211.	Kota Pekalongan	0,89		<b>BANTEN</b>	
212.	Kota Tegal	1,29	256.	Pandeglang	0,75
	<b>YOGYAKARTA</b>				
213.	Kulonprogo	1,02	257.	Lebak	0,72
214.	Bantul	0,82	258.	Tangerang	0,76
215.	Gunungkidul	0,86	259.	Serang	0,69
260.	Kota Tangerang		260.	Kota Tangerang	0,96
261.	Kota Cilegon				0,95

No.	Kabupaten/Kota	LGOI	No.	Kabupaten/Kota	LGOI
262.	Kota Serang	0,75	304.	Barito Kuala	1,02
263.	Kota Tangerang Selatan	0,68	305.	Tapin	1,15
			306.	Hulu Sungai Selatan	1,13
			307.	Hulu Sungai Tengah	0,96
264.	<b>BALI</b>	0,97	308.	Hulu Sungai Utara	1,06
265.	Jembrana	1,18	309.	Tabalong	1,18
266.	Tabanan	0,80	310.	Tanah Bumbu	0,92
267.	Badung	1,05	311.	Balangan	1,42
268.	Gianyar	1,31	312.	Kota Banjarmasin	1,24
269.	Klungkung	1,10	313.	Kota Banjarbaru	0,94
270.	Bangli	1,07		<b>KALIMANTAN TIMUR</b>	
271.	Karangasem	0,96	314.	Paser	1,17
272.	Buleleng	0,67	315.	Kutai Barat	1,38
	Kota Denpasar		316.	Kutai Kertanegara	1,10
273.	<b>KALIMANTAN BARAT</b>	0,81	317.	Kutai Timur	1,27

274.	Sambas	1,05	318.	Berau	1,22
275.	Bengkayang	0,87	319.	Malinau	2,12
276.	Landak	0,85	320.	Bulungan	1,35
277.	Pontianak	0,90	321.	Nunukan	1,32
278.	Sanggau	0,96	322.	Penajam Paser Utara	1,21
279.	Ketapang	0,88	323.	Tana Tidung	2,20
280.	Sintang	1,20	324.	Kota Balikpapan	0,99
281.	Kapuas Hulu	0,92	325.	Kota Samarinda	0,84
282.	Sekadau	1,07	326.	Kota Tarakan	1,06
283.	Melawi	1,37	327.	Kota Bontang	1,22
284.	Kayong Utara	0,69		<b>SULAWESI UTARA</b>	
285.	Kubu Raya	0,82	328.	Bolaang Mongondow	0,95
286.	Kota Pontianak	1,16	329.	Minahasa	1,03
	Kota Singkawang		330.	Kepulauan Sangihe	1,43
287.	<b>KALIMANTAN</b>	1,03	331.	Kepulauan Talaud	1,22
288.	<b>TENGAH</b>	1,04	332.	Minahasa Selatan	1,05
289.	Kotawaringin Barat	1,11	333.	Minahasa Utara	1,07
290.	Kotawaringin Timur	1,38	334.	Bongondow Utara	1,03
291.	Kapuas	1,38	335.	Kepulauan Sitaro	1,30
292.	Barito Selatan	1,84	336.	Minahasa Tenggara	1,10
293.	Barito Utara	1,54	337.	Bongondow Selatan	0,97
294.	Sukamara	1,03	338.	Bongondow Timur	1,04
295.	Lamandau	1,17	339.	Kota Manado	1,43
296.	Seruan	1,19	340.	Kota Bitung	1,01
297.	Katingan	1,31	341.	Kota Tomohon	1,58
298.	Pulang Pisau	1,43	342.	Kota Kotamobagu	1,06
299.	Gunung Mas	1,30		<b>SULAWESI TENGAH</b>	
300.	Barito Timur	1,22	343.	Banggai Kepulauan	1,19
	Murung Raya		344.	Banggai	1,33
	Kota Palangkaraya		345.	Morowali	1,19
301.		0,87	346.	Poso	1,13
302.	<b>KALIMANTAN</b>	0,91	347.	Donggala	0,91
303.	<b>SELATAN</b>	0,91			
	Tanah Laut				
	Kotabaru				
	Banjar				

No.	Kabupaten/Kota	LGOI	No.	Kabupaten/Kota	LGOI
348.	Toli-Toli	1,10	392.	Pohuwato	1,08
349.	Buol	1,10	393.	Bone Bolango	1,03
350.	Parigi Moutong	0,80	394.	Gorontalo Utara	0,93
351.	Tojo Una-Una	1,35	395.	Kota Gorontalo	1,45
352.	Sigi	0,93		<b>SULAWESI BARAT</b>	
353.	Kota Palu	0,99	396.	Majene	1,19
	<b>SULAWESI SELATAN</b>		397.	Polewali Mandar	1,00
354.	Kepulauan Selayar	1,22	398.	Mamasa	1,24
355.	Bulukumba	0,95	399.	Mamuju	0,96
356.	Bantaeng	1,05	400.	Mamuju Utara	1,17
357.	Jeneponto	0,93		<b>NUSA TENGGARA BARAT</b>	
358.	Takalar	1,01	401.	Lombok Barat	0,71
359.	Gowa	0,87	402.	Lombok Tengah	0,77
360.	Sinjai	1,17	403.	Lombok Timur	0,69
361.	Maros	0,94	404.	Sumbawa	0,91
362.	Pangkajene Kepulauan	1,04	405.	Dompu	0,89
363.	Barru	1,21	406.	Bima	0,83
364.	Bone	0,90	407.	Sumbawa Barat	1,08
365.	Soppeng	1,02	408.	Lombok Utara	0,69
366.	Wajo	0,96	409.	Kota Mataram	0,87
367.	Sidenrang Rappang	1,01	410.	Kota Bima	0,96
368.	Pinrang	0,82			
369.	Enrekang	1,13			
370.	Luwu	0,91			

371.	Tana Toraja	1,07	<b>NUSA TIMUR</b>	
372.	Luwu Utara	0,97	411.	Sumba Barat 0,90
373.	Luwu Timur	1,17	412.	Sumba Timur 1,11
374.	Toraja Utara	1,20	413.	Kupang 0,87
375.	Kota Makasar	0,98		
376.	Kota Pare-Pare	1,40	<b>NUSA TENGGARA TIMUR</b>	
377.	Kota Palopo	1,49	414.	Timor Tengah Selatan 0,78
	<b>SULAWESI</b>		415.	Timor Tengah Utara 0,90
378.	<b>TENGGARA</b>	0,98	416.	Belu 0,72
379.	Buton	1,09	417.	Alor 0,98
380.	Muna	1,06	418.	Lembata 1,02
381.	Konawe	1,20	419.	Flores Timur 0,91
382.	Kolaka	0,98	420.	Sikka 0,96
383.	Konawe Selatan	0,97	421.	Ende 0,95
384.	Bombana	1,11	422.	Ngada 1,17
385.	Wakatobi	1,04	423.	Manggarai 0,82
386.	Kolaka Utara	1,13	424.	Rote Ndao 1,02
387.	Buton Utara	1,13	425.	Manggarai Barat 0,80
388.	Konawe Utara	1,00	426.	Sumba Barat Daya 0,57
389.	Kota Kendari	1,24	427.	Sumba Tengah 1,14
	Kota Bau-Bau		428.	Nagekeo 1,01
390.	<b>GORONTALO</b>	1,08	429.	Manggarai Timur 0,72
391.	Boalemo	0,95	430.	Sabu Raijua 0,69
	Gorontalo			

No.	Kabupaten/Kota	LGOI	No.	Kabupaten/Kota	LGOI
431.	Kota Kupang	1,01	460.	Mimika	0,60
	<b>MALUKU</b>		461.	Boven Digoel	1,53
432.	Maluku Tenggara Barat	0,89	462.	Mappi	1,08
433.	Maluku Tenggara	1,01	463.	Asmat	0,97
434.	Maluku Tengah	1,10	464.	Yahukimo	0,62
435.	Buru	0,84	465.	Pegunungan Bintang	0,92
436.	Kepulauan Aru	0,90	466.	Tolikara	0,80
437.	Seram Bagian Barat	0,90	467.	Sarmi	1,43
438.	Seram Bagian Timur	0,84	468.	Keerom	1,66
439.	Maluku Barat Daya	1,20	469.	Waropen	1,20
440.	Buru Selatan	1,00	470.	Supiori	1,85
441.	Kota Ambon	1,02	471.	Membramo Raya	1,35
442.	Kota Tual	1,17	472.	Nduga	0,98
	<b>MALUKU UTARA</b>		473.	Lanny Jaya	0,69
443.	Halmahera Barat	1,14	474.	Membramo Tengah	0,96
444.	Halmahera Tengah	1,36	475.	Yalimo	1,02
445.	Kepulauan Sula	0,94	476.	Puncak	0,58
446.	Halmahera Selatan	0,95	477.	Dogiyai	0,82
447.	Halmahera Utara	1,02	478.	Deiyai	0,50
448.	Halmahera Timur	1,20	479.	Intan Jaya	0,44
449.	Pulau Morotai	1,35	480.	Kota Jayapura	1,14
450.	Kota Ternate	1,29		<b>PAPUA BARAT</b>	
451.	Kota Tidore	1,06	481.	Fak-Fak	1,41
	<b>PAPUA</b>		482.	Kaimana	1,58
452.	Merauke	1,23	483.	Teluk Wondama	1,33
453.	Jayawijaya	0,69	484.	Teluk Bintuni	1,37
454.	Jayapura	1,41	485.	Manokwari	1,08
455.	Nabire	1,24	486.	Sorong Selatan	1,63
456.	Kepulauan Yapen	1,25	487.	Sorong	1,45
457.	Biak Numfor	1,34	488.	Raja Ampat	1,05
458.	Paniai	0,59	489.	Tambraw	1,08
459.	Puncak Jaya	0,86	490.	Maybrat	0,85
			491.	Kota Sorong	0,84

## Appendix 2

*Results DEA, 1 Input (Regional Expenditure Per Capita), 1 Output (LGOI)  
City and District governments in Indonesia Year 2010*

No.	Regency/City	VRS TE	No.	Regency/City	VRS TE
	<b>ACEH</b>		42.	Batu Bara	0,511
1.	Simeule	0,490	43.	Padang Lawas Utara	0,731
2.	Aceh Singkil	0,401	44.	Padang Lawas	0,511
3.	Aceh Selatan	0,490	45.	Labuhan Batu Selatan	0,530
4.	Aceh Tenggara	0,495	46.	Labuhan Batu Utara	0,483
5.	Aceh Timur	0,541	47.	Nias Utara	0,560
6.	Aceh Tengah	0,620	48.	Nias Barat	0,558
7.	Aceh Barat	0,479	49.	Kota Sibolga	0,516
8.	Aceh Besar	0,697	50.	Kota Tanjung Balai	0,652
9.	Pide	0,602	51.	Kota Pematang Siantar	0,706
10.	Bireun	0,611	52.	Kota Tebing Tinggi	0,550
11.	Aceh Utara	0,573	53.	Kota Medan	0,710
12.	Aceh Barat Daya	0,475	54.	Kota Binjai	0,722
13.	Gayo Lues	0,446	55.	Kota Pdg. Sidempuan	0,500
14.	Aceh Tamiang	0,556	56.	Kota Gunung Sitoli	0,541
15.	Nagan Raya	0,389		<b>SUMATERA BARAT</b>	
16.	Bener Meriah	0,436	57.	Kepulauan Mentawai	0,303
17.	Aceh Jaya	0,466	58.	Pesisir Selatan	0,431
18.	Pidie Jaya	0,521	59.	Solok	0,520
19.	Kota Banda Aceh	0,602	60.	Sijunjung	0,425
20.	Kota Sabang	0,571	61.	Tanah Datar	0,508
21.	Kota Langsa	0,474	62.	Padang Pariaman	0,410
22.	Kota Lhokseumawe	0,467	63.	Agam	0,545
23.	Kota Subulussalam	0,401	64.	Lima Puluh Kota	0,479
	<b>SUMATERA UTARA</b>		65.	Pasaman	0,478
24.	Nias	0,478	66.	Solok Selatan	0,594
25.	Mandailing Natal	0,512	67.	Dharmasraya	0,421
26.	Tapanuli Selatan	0,485	68.	Pasaman Barat	0,454
27.	Tapanuli Tengah	0,700	69.	Kota Padang	0,488
28.	Tapanuli Utara	0,558	70.	Kota Solok	0,429
29.	Toba Samosir	0,516	71.	Kota Sawahlunto	0,418
30.	Labuhan Batu	0,506	72.	Kota Padang Panjang	0,381
31.	Asahan	0,577	73.	Kota Bukit Tinggi	0,330
32.	Simalungun	0,666	74.	Kota Payakumbuh	0,381
33.	Dairi	0,575	75.	Kota Pariaman	0,310
34.	Karo	0,692		<b>RIAU</b>	
35.	Deli Serdang	0,821	76.	Kuantan Singingi	0,413
36.	Langkat	0,615	77.	Indragiri Hulu	0,468
37.	Nias Selatan	0,410	78.	Indragiri Hilir	0,430
38.	Humbang Hasundutan	0,491	79.	Pelalawan	0,372
39.	Pakpak Bharat	0,575	80.	Siak	0,313
40.	Samosir	0,435	81.	Kampar	0,386
41.	Serdang Bedagai	0,598	82.	Rokan Hulu	0,389
No.	Regency/City	VRS TE	No.	Regency/City	VRS TE
83.	Bengkalis	0,282	125.	Tanggamus	0,662
84.	Rokan Hilir	0,284	126.	Lampung Selatan	0,666
85.	Kepulauan Meranti	0,573	127.	Lampung Timur	0,551
86.	Kota Pekanbaru	0,434	128.	Lampung Tengah	0,652
87.	Kota Dumai		129.	Lampung Utara	0,535

		130.	Way Kanan	0,512	
88.	<b>JAMBI</b>	0,493	131.	Tulang Bawang	0,451
	Kerinci	0,454	132.	Pesawaran	0,474
89.	Merangin	0,457	133.	Pringsewu	0,425
90.	Sarolangun	0,425	134.	Mesuji	0,563
91.	Batanghari	0,461	135.	Tulang Bawang Barat	0,625
92.	Muaro Jambi	0,299	136.	Kota Bandar Lampung	0,627
93.	Tanjab Timur	0,336	137.	Kota Metro	0,414
94.	Tanjab Barat	0,411			
95.	Tebo	0,404		<b>KEPULAUAN RIAU</b>	
96.	Bungo	0,536	138.	Karimun	0,374
97.	Kota Jambi	0,395	139.	Bintan	0,354
98.	Kota Sungai Penuh		140.	Natuna	0,565
			141.	Lingga	0,476
99.	<b>SUMATERA SELATAN</b>	0,428	142.	Kepulauan Anambas	0,548
100.	Ogan Komering Ulu	0,454	143.	Kota Batam	0,613
101.	Ogan Komering Ilir	0,493	144.	Kota Tanjungpinang	0,377
102.	Muara Enim	0,465		<b>KEPULAUAN BABEL</b>	
103.	Muara Enim	0,381	145.	Bangka	0,400
104.	Lahat	0,342	146.	Bangka Barat	0,383
105.	Musi Rawas	0,513	147.	Bangka Tengah	0,321
106.	Musi Banyuasin	0,452	148.	Bangka Selatan	0,359
107.	Banyuasin	0,466	149.	Belitung	0,324
108.	OKU Selatan	0,541	150.	Belitung Timur	0,303
109.	OKU Timur	0,541	151.	Kota Pangkalpinang	0,339
110.	Ogan Ilir	0,396		<b>JAWA BARAT</b>	
111.	Empat Lawang	0,820	152.	Bogor	0,379
112.	Kota Palembang	0,379	153.	Sukabumi	0,408
113.	Kota Prabumulih	0,408	154.	Cianjur	0,376
	Kota Pagar Alam		155.	Bandung	0,487
	Kota Lubuk Linggau		156.	Garut	0,705
114.	<b>BENGKULU</b>	0,465	157.	Tasimalaya	0,732
115.	Bengkulu Selatan	0,501	158.	Ciamis	0,621
116.	Rejang Lebong	0,564	159.	Kuningan	0,612
117.	Bengkulu Utara	0,433	160.	Cirebon	0,539
118.	Kaur	0,459	161.	Majalengka	0,817'
119.	Seluma	0,513	162.	Sumedang	0,518
120.	Muko-Muko	0,386	163.	Indramayu	0,557
121.	Lebong	0,440	164.	Subang	0,861
122.	Kepahiang	0,466	165.	Purwakarta	0,650
123.	Kepahiang	0,463	166.	Karawang	0,509
	Bengkulu Tengah		167.	Bekasi	0,463
	Kota Bengkulu		168.	Bandung Barat	0,800
124.	<b>LAMPUNG</b>	0,441			0,441
	Lampung Barat	0,519			0,687

No.	Regency/City	VRS		VRS	
		TE	TE		
169.	Kota Bogor	0,568	215.	Gunungkidul	0,569
170.	Kota Sukabumi	0,523	216.	Sleman	0,634
171.	Kota Bandung	1,000	217.	Kota Yogyakarta	0,819
172.	Kota Cirebon	0,601		<b>JAWA TIMUR</b>	
173.	Kota Bekasi	0,671	218.	Pacitan	0,537
174.	Kota Depok	0,719	219.	Ponorogo	0,538
175.	Kota Cimahi	0,502	220.	Trenggalek	0,507
176.	Kota Tasikmalaya	0,418	221.	Tulungagung	0,541
177.	Kota Banjar	0,404	222.	Blitar	0,622
			223.	Kediri	0,721
	<b>JAWA TENGAH</b>		224.	Malang	0,675
178.	Cilacap	0,685	225.	Lumajang	0,867
179.	Banyumas	0,748	226.	Jember	0,714
180.	Purbalingga	0,675			0,675

181.	Banjarnegara	0,540	227.	Banyuwangi	0,700
182.	Kebumen	0,629	228.	Bodowoso	0,670
183.	Purworejo	0,515	229.	Situbondo	0,584
184.	Wonosobo	0,691	230.	Probolinggo	0,698
185.	Magelang	0,644	231.	Pasuruan	0,724
186.	Boyolali	0,573	232.	Sidoarjo	0,665
187.	Klaten	0,564	233.	Mojokerto	0,667
188.	Sukoharjo	0,594	234.	Jombang	0,679
189.	Wonogiri	0,569	235.	Nganjuk	0,587
190.	Karanganyar	0,621	236.	Madiun	0,569
191.	Sragen	0,581	237.	Magetan	0,652
192.	Grobogan	0,783	238.	Ngawi	0,563
193.	Blora	0,555	239.	Bojonegoro	0,621
194.	Rembang	0,513	240.	Tuban	0,668
195.	Pati	0,698	241.	Lamongan	0,722
196.	Kudus	0,703	242.	Gresik	0,582
197.	Jepara	0,679	243.	Bangkalan	0,567
198.	Demak	0,730	244.	Sampang	0,569
199.	Semarang	0,713	245.	Pamekasan	0,563
200.	Temanggung	0,633	246.	Sumenep	0,661
201.	Kendal	0,630	247.	Kota Kediri	0,313
202.	Batang	0,795	248.	Kota Blitar	0,286
203.	Pekalongan	0,608	249.	Kota Malang	0,501
204.	Pemalang	0,725	250.	Kota Probolinggo	0,375
205.	Tegal	0,795	251.	Kota Pasuruan	0,422
206.	Brebes	0,888	252.	Kota Mojokerto	0,272
207.	Kota Magelang	1,000	253.	Kota Madiun	0,372
208.	Kota Surakarta	0,528	254.	Kota Surabaya	0,507
209.	Kota Salatiga	0,488	255.	Kota Batu	0,461
210.	Kota Semarang	0,560		<b>BANTEN</b>	
211.	Kota Pekalongan	0,512	256.	Pandeglang	0,675
212.	Kota Tegal	0,629	257.	Lebak	0,717
	<b>YOGYAKARTA</b>		258.	Tangerang	1,000
213.	Kulonprogo	0,564	259.	Serang	0,727
214.	Bantul	0,535	260.	Kota Tangerang	0,907

<b>No.</b>	<b>Regency/City</b>	<b>VRS</b>	<b>No.</b>	<b>Regency/City</b>	<b>VRS</b>
		<b>TE</b>			<b>TE</b>
261.	Kota Cilegon	0,489	303.	Banjar	0,503
262.	Kota Serang	0,654	304.	Barito Kuala	0,494
263.	Kota Tangerang Selatan	0,945	305.	Tapin	0,400
			306.	Hulu Sungai Selatan	0,507
			307.	Hulu Sungai Tengah	0,469
264.	<b>BALI</b>	0,494	308.	Hulu Sungai Utara	0,454
265.	Jembrana	0,601	309.	Tabalong	0,419
266.	Tabanan	0,365	310.	Tanah Bumbu	0,440
267.	Badung	0,582	311.	Balangan	0,483
268.	Gianyar	0,543	312.	Kota Banjarmasin	0,749
269.	Klungkung	0,523	313.	Kota Banjarbaru	0,445
270.	Bangli	0,588		<b>KALIMANTAN TIMUR</b>	
271.	Karangasem	0,575	314.	Paser	0,398
272.	Buleleng	0,426	315.	Kutai Barat	0,469
	Kota Denpasar		316.	Kutai Kertanegara	0,374
273.	<b>KALIMANTAN BARAT</b>	0,463	317.	Kutai Timur	0,432
274.	Sambas	0,495	318.	Berau	0,415
275.	Bengkayang	0,495	319.	Malinau	0,721
276.	Landak	0,427	320.	Bulungan	0,459
277.	Pontianak	0,496	321.	Nunukan	0,449
278.	Sanggau	0,485	322.	Penajam Paser Utara	0,412
279.	Ketapang	0,451	323.	Tana Tidung	0,748
280.	Sintang	0,432	324.	Kota Balikpapan	0,421

281.	Kapuas Hulu	0,398	325.	Kota Samarinda	0,399
282.	Sekadau	0,474	326.	Kota Tarakan	0,361
283.	Melawi	0,466	327.	Kota Bontang	0,415
284.	Kayong Utara	0,432		<b>SULAWESI UTARA</b>	
285.	Kubu Raya	0,488	328.	Bolaang Mongondow	0,460
286.	Kota Pontianak	0,500	329.	Minahasa	0,504
	Kota Singkawang		330.	Kepulauan Sangihe	0,486
287.	<b>KALIMANTAN TENGAH</b>	0,441	331.	Kepulauan Talaud	0,415
288.		0,539	332.	Minahasa Selatan	0,518
289.	Kotawaringin Barat	0,508	333.	MInahasa Utara	0,498
290.	Kotawaringin Timur	0,469	334.	Bongondow Utara	0,350
291.	Kapuas	0,469	335.	Kepulauan Sitaro	0,442
292.	Barito Selatan	0,626	336.	Minahasa Tenggara	0,431
293.	Barito Utara	0,524	337.	Bongondow Selatan	0,330
294.	Sukamara	0,350	338.	Bongondow Timur	0,354
295.	Lamandau	0,398	339.	Kota Manado	0,770
296.	Seruyan	0,412	340.	Kota Bitung	0,433
297.	Katingan	0,446	341.	Kota Tomohon	0,568
298.	Pulang Pisau	0,486	342.	Kota Kotamobagu	0,368
299.	Gunung Mas	0,442		<b>SULAWESI TENGAH</b>	
300.	Barito Timur	0,529	343.	Banggai Kepulauan	0,501
	Murung Raya		344.	Banggai	0,639
	Kota Palangkaraya		345.	Morowali	0,458
301.		0,441	346.	Poso	0,443
302.	<b>KALIMANTAN SELATAN</b>	0,368			
	Tanah Laut				
	Kotabaru				

No.	Regency/City	VRS	No.	Regency/City	VRS
		TE			TE
347.	Donggala	0,457	391.	Gorontalo	0,540
348.	Toli-Toli	0,560	392.	Pohuwato	0,404
349.	Buol	0,417	393.	Bone Bolango	0,463
350.	Parigi Moutong	0,485	394.	Gorontalo Utara	0,356
351.	Tojo Una-Una	0,502	395.	Kota Gorontalo	0,593
352.	Sigi	0,431		<b>SULAWESI BARAT</b>	
353.	Kota Palu	0,497	396.	Majene	0,490
	<b>SULAWESI SELATAN</b>		397.	Polewali Mandar	0,599
354.	Kepulauan Selayar	0,447	398.	Mamasa	0,536
355.	Bulukumba	0,536	399.	Mamuju	0,531
356.	Bantaeng	0,491	400.	Mamuju Utara	0,498
357.	Jeneponto	0,556		<b>NUSA TENGGARA BARAT</b>	
358.	Takalar	0,556	401.	Lombok Barat	0,468
359.	Gowa	0,559	402.	Lombok Tengah	0,645
360.	Sinjai	0,571	403.	Lombok Timur	0,590
361.	Maros	0,553	404.	Sumbawa	0,498
362.	Pangkajene Kepulauan	0,508	405.	Dompu	0,427
363.	Barru	0,543	406.	Bima	0,469
364.	Bone	0,605	407.	Sumbawa Barat	0,367
365.	Soppeng	0,474	408.	Lombok Utara	0,362
366.	Wajo	0,518	409.	Kota Mataram	0,523
367.	Sidenrang Rappang	0,521	410.	Kota Bima	0,401
368.	Pinrang	0,452		<b>NUSA TENGGARA TIMUR</b>	
369.	Enrekang	0,507	411.	Sumba Barat	0,336
370.	Luwu	0,508	412.	Sumba Timur	0,504
371.	Tana Toraja	0,544	413.	Kupang	0,429
372.	Luwu Utara	0,508			
373.	Luwu Timur	0,563			
374.	Toraja Utara	0,643			
375.	Kota Makasar	0,670			

376.	Kota Pare-Pare	0,476	414.	Timor Tengah Selatan	0,496
377.	Kota Palopo	0,617	415.	Timor Tengah Utara	0,469
			416.	Belu	0,403
	<b>SULAWESI</b>		417.	Alor	0,465
378.	<b>TENGGARA</b>	0,477	418.	Lembata	0,413
379.	Buton	0,559	419.	Flores Timur	0,466
380.	Muna	0,499	420.	Sikka	0,540
381.	Konawe	0,605	421.	Ende	0,494
382.	Kolaka	0,526	422.	Ngada	0,480
383.	Konawe Selatan	0,469	423.	Manggarai	0,461
384.	Bombana	0,378	424.	Rote Ndao	0,423
385.	Wakatobi	0,407	425.	Manggarai Barat	0,434
386.	Kolaka Utara	0,384	426.	Sumba Barat Daya	0,358
387.	Buton Utara	0,384	427.	Sumba Tengah	0,388
388.	Konawe Utara	0,474	428.	Nagekeo	0,441
389.	Kota Kendari	0,513	429.	Manggarai Timur	0,446
	Kota Bau-Bau		430.	Sabu Raijua	0,410
390.	<b>GORONTALO</b>	0,455	431.	Kota Kupang	0,547
	Boalemo				

No.	Regency/City	VRS	No.	Regency/City	VRS			
		TE			TE			
<b>MALUKU</b>								
432.	Maluku Tenggara Barat	0,303	462.	Mappi	0,367			
433.	Maluku Tenggara	0,344	463.	Asmat	0,330			
434.	Maluku Tengah	0,553	464.	Yahukimo	0,211			
435.	Buru	0,288	465.	Pegunungan Bintang	0,313			
436.	Kepulauan Aru	0,306	466.	Tolikara	0,272			
437.	Seram Bagian Barat	0,382	467.	Sarmi	0,486			
438.	Seram Bagian Timur	0,286	468.	Keerom	0,565			
439.	Maluku Barat Daya	0,408	469.	Waropen	0,408			
440.	Buru Selatan	0,340	470.	Supiori	0,629			
441.	Kota Ambon	0,568	471.	Membramo Raya	0,459			
442.	Kota Tual	0,398	472.	Nduga	0,333			
<b>MALUKU UTARA</b>								
443.	Halmahera Barat	0,422	474.	Membramo Tengah	0,327			
444.	Halmahera Tengah	0,463	475.	Yalimo	0,347			
445.	Kepulauan Sula	0,346	476.	Puncak	0,197			
446.	Halmahera Selatan	0,474	477.	Dogiyai	0,466			
447.	Halmahera Utara	0,441	478.	Deiyai	0,209			
448.	Halmahera Timur	0,408	479.	Intan Jaya	0,150			
449.	Pulau Morotai	0,531	480.	Kota Jayapura	0,485			
450.	Kota Ternate	0,553						
451.	Kota Tidore	0,361	<b>PAPUA BARAT</b>					
<b>PAPUA</b>								
452.	Merauke	0,418	481.	Fak-Fak	0,480			
453.	Jayawijaya	0,251	482.	Kaimana	0,537			
454.	Jayapura	0,480	483.	Teluk Wondama	0,452			
455.	Nabire	0,422	484.	Teluk Bintuni	0,466			
456.	Kepulauan Yapen	0,425	485.	Manokwari	0,367			
457.	Biak Numfor	0,456	486.	Sorong Selatan	0,554			
458.	Paniai	0,218	487.	Sorong	0,493			
459.	Puncak Jaya	0,293	488.	Raja Ampat	0,357			
460.	Mimika	0,204	489.	Tambraw	0,367			
461.	Boven Digoel	0,520	490.	Maybrat	0,289			
			491.	Kota Sorong	0,333			