

AUTONOMY POLICY AND SOCIAL WELFARE IN TANGERANG CITY

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Abstract

The paper analyzes the effect of public expenditure and the implementation of local autonomy policy on Human Development Index (HDI). The paper uses Principal Component Regression Analysis to conduct the analysis. The result shows that public expenditure has a positive effect on HDI. It also finds that the increase in HDI is bigger post the implementation of local autonomy policy. The elasticity of each coefficient of public expenditure are as follows: 1.58 for agriculture sector; 0.94 for education sector; 0.36 for health sector; 0.44 for housing sector; 0.61 for infrastructure sector, and 0.70 for GRDP.

Keywords: Public expenditure, Human Development Index, principal component analysis

JEL classification numbers: H40, H52, I21, I32

Abstrak

Penelitian ini mengkaji pengaruh belanja publik dan pelaksanaan otonomi daerah terhadap tingkat Indeks Pembangunan Manusia (IPM) di Kota Tangerang. Penelitian ini mengaplikasikan Analisis Regresi Komponen Utama untuk melakukan analisis. Hasil uji menunjukkan bahwa belanja publik memiliki pengaruh yang positif terhadap IPM. Lebih jauh, peningkatan IPM tersebut semakin besar setelah pelaksanaan kebijakan otonomi daerah. Penelitian ini juga menemukan tingkat elastisitas per sektor terhadap belanja publik sebagai berikut: 1.58 pada sektor pertanian; 0.94 pada sektor pendidikan; 0.36 sektor kesehatan, 0.44 pada sektor perumahan; 0.61 pada sektor infrastruktur, dan 0.77 untuk PDRB.

Keywords: Belanja publik, Indeks Pembangunan Manusia, analisis regresi komponen utama

JEL classification numbers: H40, H52, I21, I32

INTRODUCTION

Tangerang City is geographically very strategic because it is the main supporting area for the capital city of Jakarta and the next town to Banten region. In the past, this city was part of Tangerang District, then upgraded to an administrative city and finally established as a municipality on February 27, 1993 under Law No. 2/1993 on the establishment of Tangerang Municipality. The term "municipality" then replaced with "city" in 2001.

As a result of the hinterland, Tangerang City faced the typical problems of

urban areas. In addition to the positive impact of increasing job opportunities, industrial employment also had a negative impact, particularly externalities (waste, air pollution, etc.) and the high rate of migration. BPS data of Tangerang City show from the years of 2000-2007 that Tangerang City continues to experience population growth. The population increases from 1.311.746 people in 2000 to 1.575.140 people in 2007. In 2010, this number increased to 1.797.715 people. But, the magnitude of migration flows are not followed by enough jobs creation which made the problem becomes even more complex.

These conditions clearly require a comprehensive treatment of local government. When population growth is not supported by the increase in necessary facilities, welfare decreases.

Therefore, the economists agree that a more comprehensive measure is needed to measure how far development efforts have been achieved by a region. The measures of the success of development as follows: (a) the level of income inequality, (b) poverty reduction, and (c) a decrease in the unemployment rate. The third measures of the success of the above if it is listened to more deeply toward the ultimate goal of improving the social welfare. Increasing social welfare means poverty reduction.

In addition, the United Nation (UN) also has formulated an indicator of economic development, especially human development and poverty. Formulation of development indicators is referred to as the Millennium Development Goals (MDGs), which consists of eight indicators of achievement of development, namely: (a) the elimination of poverty and hunger; (b) education for all (c) gender equality; (d) resistance to infectious diseases; (d) reduction in child mortality; (e) improving maternal health, (f) the preservation of the environment; (g) developing a global partnership (Bappenas, 2007).

Of the eight indicators, there are important sub-indicators of development, which is the Human Development Index (HDI). HDI is composed of three components, namely the length of life measured by life expectancy at birth, educational level was measured by a combination of literacy rate in the adult population (with a two thirds weight) and an average length of the school (with one third weight), and the level of standard of living as measured by income per capita that has been adjusted (PPP dollars). This index is simple average of the three components mentioned above.

BPS data of Tangerang City showed that this region has achieved the highest

HDI value compared with other regions in Banten Province. The Value reached 75.5 in 2006. These values are at medium level of HDI. However, particularly in the education, the enrollment rate (APM) is on the increase. But at each level of education, there are differences in APM. Junior high school and senior high school is lower than the primary school. The value is 85.25 for primary school; 55.33 for junior high school; and 23.87 for senior high school.

Therefore, a new development paradigm should be directed to the distribution, growth and sustainability in economic development. This new paradigm can refer to what is called the second fundamental theorem of welfare economics that in fact the government can actually choose the expected goal of economic equality through the transfer, taxation and subsidies (Rustiadi 2007).

In addition, they agreed that the efforts to improve human development demanded a thorough comprehensive handled which involve inter-sector-linkages, inter-actor, and inter-resources. One of the approaches that have taken is autonomy and decentralization policy. In Indonesia, autonomy and decentralization policy framework has been set by law No. 32/2004 on Regional Governance and Law No. 33/2004 on Financial Balance between Central and Local Government.

With the implementation of this law, every region in Indonesia both provincial and district government granted the authority to implement, including the allocation of expenditure, especially capital expenditure. Allocation of capital expenditure is very important. Therefore, it contributes to the regional economy. This contribution takes place in two phases: the short term through the expenditure of material and labor absorption and in the long term through the multiplier in the private sector in the regional economy.

Study the impact of regional autonomy has been widely performed and produced varying conclusions. This conclusion

suggests that the regional autonomy has a concrete impact on the social welfare (Usman, 2005; Arifin, 2006, Rozi, 2007; Hernawan, 2007). However, there is also a negative outlook stating that autonomy and decentralization do not yet have a positive impact on the social welfare (Lewis, 2001; Siregar, 2001; Elmi, 2005; Nanga, 2006, Wilopo and Budiono, 2007).

Nevertheless, the normative framework of autonomy and decentralization based on the argument that the management of the public service units will be more effective if delivered to the unit in direct contact with the community. The assumption was that the closer of the relationship between governments to the public, the public can understand the need for a service (Wilopo and Boediono 2007). In other words, administrative decentralization is intended to create efficiency and effectiveness of public services.

However, the result of studies related to the implementation of public services in the era of autonomy and decentralization has not shown satisfactory performance. Toyamah et al. (2002) found that after the implementation of autonomy and decentralization in the education sector, health, and infrastructure services has not changed, but the condition of facilities and infrastructure services tend to deteriorate. Bappenas and UNDP (2008) also found that many local governments have not been optimally provided basic services to the public so that implies a level of welfare inequality in the region. Based on the result of the study, this paper examines the effect of public expenditure and the implementation of autonomy policy on social welfare in Tangerang City. Social welfare on this research is indicated on Human Development Index (HDI).

METHODS

This study uses Principal Component Analysis (PCA) as a tool of analysis. Report of Tangerang City Government Budget (APBD)

of 1992-2008 used as secondary data. Data is processed by Minitab 15. Specification of the model used refers to Intan (2009) who found that those expenditures: agricultural (*EP-ERT*), education (*EPDDK*), health (*EKSHTN*), housing (*EPRM*) and infrastructure (*EINFRA*) have a significant effect on poverty reduction (*Mk*) in Banten Province. The model is as follows:

$$Mk_t = \alpha_o + \beta_o(EPERT_{it-k}) + \beta_1(EPDDK_{it-k}) + \beta_2(EKSHTN_{it-k}) + \beta_3(EPRM_{it-k}) + \beta_4(EINFRA_{it-k}) + \beta_5D_1 + \beta_6D_2 + \varepsilon_t \quad (1)$$

In this study, the model is modified to:

$$HDI_t = \alpha_o + \beta_1(\ln EPERT_t) + \beta_2(\ln EPDDK_t) + \beta_3(\ln EKSHTN_t) + \beta_4(\ln EPRM_t) + \beta_5(\ln EINFRA_t) + \beta_6(\ln PDRB_t) + \beta_7D_{otda} + \varepsilon_t \quad (2)$$

Where HDI_t is Human Development Index at time t (1994-2008) (in percent); $\ln EPERT_t$ is Agriculture expenditure at time t (in rupiah); $\ln EPDDK_t$ is Education expenditure at time t (in rupiah); $\ln EKSHTN_t$ is Health expenditure at time t (in rupiah); $\ln EPRM_t$ is Housing expenditure at time t (in rupiah); $\ln EINFRA_t$ is Infrastructure expenditure at time t (in rupiah); $\ln PDRB_t$ is Regional Gross Domestic Product (in rupiah); D_{otda} is Autonomy Dummy (before autonomy = 0; after autonomy = 1); and ε_t is error terms.

Regional Gross Domestic Product (*RGDP*) is inserted into the model with the consideration that the *RGDP* is an indicator of prosperity of a region. The higher of *RGDP*, the higher prosperity of the community in a region. While decentralization dummy variable which estimated by the public expenditure in this equation is given the autonomy variable is an indicator variable. The results of ordinary least squares estimation is expected to show the relationship and also predicted the influence of public expenditure on *HDI* before and after the implementation of regional autonomy in Tangerang City.

PCA is to transform the independent variables are correlated (multicollinearity) into new variables are orthogonal and uncorrelated. This is done because there are indications of multicollinearity among independent variables. Test results of the correlation coefficient of independent variables as shown in the Table 1.

Indications from the above table multicollinearity occur in almost all the independent variables. The correlation between independent variables with a high level below 0.05 are: (1) the health with the agricultural sector ($r = 0.697$, $p\text{-value} = 0.003$); (2) the health with the education sector ($r = 0.662$, $p\text{-value} = 0.005$); (3) the housing with the health sector ($r = 0.881$, $p\text{-value} = 0.000$); (4) the infrastructure with agricultural sector ($r = 0.814$, $p\text{-value} = 0.000$); (5) the infrastructure with health sector ($r = 0.856$, $p\text{-value} = 0.000$), (6) the infrastructure with the housing sector ($r = 0.835$; $p\text{-value} = 0.000$), (7) the *RGDP* with of agriculture sector ($r = 0.882$, $p\text{-value} = 0.000$); (8) *RGDP* with health sector ($r = 0.765$, $p\text{-value} = 0.001$); (9) the *RGDP* with housing sector ($r = 0.852$, $p\text{-value} = 0.000$); (10) *RGDP* with infrastructure sector ($r = 0.954$, $p\text{-value} = 0.000$); and (10) the dummy with the health, housing, infrastructure sector and *RGDP*.

So PCA therefore aims to simplify the variables observed by reducing its di-

mensions. This is done by removing the correlation between variables through the variable transformation from the new variables (principal components) that are not correlated Gaspers (in Ulpah, 2006).

By using the concepts of linear algebra diagonal matrix, the correlation matrix R with dimension $p \times p$, symmetric and non-singular, can be reduced to a diagonal matrix D with initial multiplier and final multiplier orthogonal matrix V can be written as:

$$V^T R V = D \tag{3}$$

$\lambda_1 \geq \lambda_2 \geq \dots \geq \lambda_p \geq 0$ is eigenvalue of the matrix R which is a diagonal matrix elements of D , while the columns of v_1, v_2, \dots, v_p is eigenvector of R . The $\lambda_1, \lambda_2, \dots, \lambda_p$ can be obtained through the following equation:

$$(R - \lambda I) = 0 \tag{4}$$

with I is the identity matrix. The eigenvalue of v_1, v_2, \dots, v_p can be obtained through the following equation:

$$(R - \lambda I) v_j = 0, \tag{5}$$

where $v_j = (v_{1j}, v_{2j}, \dots, v_{pj})$

Suppose a regression equation can be expressed as following form:

$$Y = X\beta + \varepsilon \tag{6}$$

Table 1: Correlation Among Independent Variables

	<i>IPM</i>	<i>lnPERT</i>	<i>lnPDDK</i>	<i>lnKSHTN</i>	<i>lnPRM</i>	<i>lnINFRA</i>	<i>lnPDRB</i>
<i>lnPERT</i>	0.625 0.010						
<i>lnPDDK</i>	0.225 0.402	0.415 0.110					
<i>lnKSHTN</i>	0.642 0.007	0.697 0.003	0.662 0.005				
<i>lnPRM</i>	0.637 0.008	0.724 0.002	0.549 0.028	0.881 0.000			
<i>lnINFRA</i>	0.799 0.000	0.814 0.000	0.401 0.124	0.856 0.000	0.835 0.000		
<i>lnPDRB</i>	0.751 0.001	0.882 0.000	0.392 0.133	0.765 0.001	0.852 0.000	0.954 0.000	
<i>Dummy</i>	0.663 0.005	0.598 0.014	0.467 0.068	0.862 0.000	0.860 0.000	0.892 0.000	0.806 0.000

If an observation matrix X is denoted by Z have been standardized in order to obtain eigenvalue (λ) and eigenvector (V) of $Z'Z$ (form correlation) and $V'V = I$ because V orthogonal, from the regression equation can be written as follows:

$$\begin{aligned} Y &= Z\beta + \varepsilon \\ Y &= \beta_0 1 + ZV'VB + \varepsilon \\ Y &= \beta_0 1 + W\alpha + \varepsilon \\ \text{with } W &= ZV \text{ and } \alpha = V'\beta \\ W &= ZV \\ W'W &= (ZV)'(ZV) = V'Z'ZV \end{aligned} \quad (7)$$

Equation (8) will produce a diagonal ($\lambda_1, \lambda_2 \dots \lambda_p$) is equivalent to $\text{Var}(W_i) = \lambda_1$ and $\text{Cov}(W_{i-1}, W_i) = 0$. This suggests that the main components are not correlated with each other and the principal components to- i have the same variance eigenvalue to- i . While the variance of regression coefficient γ from m is the principal component as follows:

$$\text{Var}(\gamma_i) = s^{*2} \sum_{g=1}^m \frac{a_{ig}^2}{\lambda_g}, 1=1,2,\dots,p; g=1,2,\dots,m \quad (9)$$

Where a_{ig} is a principal component weighting coefficient (eigenvector), λ_g is eigenvalue. While the s^{*2} is:

$$s^{*2} = \frac{MSE}{SLS} = \frac{s^2}{\sum (y - \bar{y})^2} \quad (10)$$

where MSE is Mean Square Error, and SLS is Sum Least Square.

RESULTS

There are many studies on autonomy and decentralization, both of the dimensions of

economic, social, cultural and political. In the economic dimension, the results of studies on the influence and impact of autonomy and decentralization vary widely. On the one hand, the results of the study stated that the policy of autonomy and decentralization have not shown satisfactory results. But on the other hand it states the opposite. Variations of this conclusion appears to depend on the region that became the case study is taken and the analytical tools used. The emergence of these variations may also state that conclusions have unequal impact of regional autonomy and decentralization policies for each district/city in Indonesia (Priyarsono, 2011).

For certain regions that have not felt the impact of certain policies of autonomy and decentralization, the study Aziz (2009) can be cited. He stated that the main causes of failure of decentralization lies "in the lack of preparation and inappropriate policies, weak local accountability, widespread local capture, lack of voices or people's participation, and absence of proper incentive system for local leaders".

In Tangerang City, the study found that the policy of autonomy and decentralization showed satisfactory results. That is, autonomy and decentralization policy could encourage an increase in HDI higher than before autonomy and decentralization. In the public expenditure, each sector of expenditure also showed significant results. The results of estimation using principal component regression analysis as presented in the table below.

Table 2: Significance Analysis of Partial Regression Coefficients

Variable (X_i)	Standard Deviations (γ_i)	Coefficient (γ_i)	t-value t(γ_i)	p-value
<i>lnEPERT</i> (Rp)	0.028681303	1.528	53.25983	0.0000000
<i>lnEPDDK</i> (Rp)	0.02044137	0.949	46.43089	0.0000000
<i>lnEKSHTN</i> (Rp)	0.031771277	0.637	20.04263	0.0000000
<i>lnEPRM</i> (Rp)	0.031850507	0.445	13.96197	0.0000002
<i>lnEINFRA</i> (Rp)	0.032405118	0.613	18.93048	0.0000000
<i>lnPDRB</i> (Rp)	0.031850507	0.707	22.20618	0.0000000
<i>Dummy</i>	0.030820516	1.130	36.66204	0.0000000

Coefficient Determination: 52.4%.

Based on table above, the regression result is as follows:

$$\begin{aligned}
 IPM = & - 8.961 + 1.528 \ln EPERT \\
 & + 0.949 \ln EPDDK \\
 & + 0.637 \ln EKSHTN \\
 & + 0.445 \ln EPRM + 0.613 \ln EINFRA \\
 & + 0.707 \ln PDRB \\
 & + 1.130 \textit{Dummy}
 \end{aligned}
 \tag{11}$$

To test the assumptions of classical test the validity of the model that includes Normality Test, Homoscedastisity and Autocorrelation. The p-value of normality test indicates 0.150 or $\alpha > 5\%$ then accept H_0 means that the residual normal spread. In the homoscedastisity test, the p-value is 0.9074 or $\alpha > 5\%$ then accepts H_0 . It means that the variance of the residuals is homoscedastisity. While the autocorrelation test results indicate that there is no serial correlation between the disturbance variables e_i , or disturbance variables e_i are not correlated with other variables e_i . This is indicated by p-value 0.1432 or $\alpha > 5\%$ then accepts H_0 . It means there is no autocorrelation.

From equation (11) above, shows that all coefficients of independent variables are positive. Positive slope indicates that all variables can estimate variance of HDI, with each slope 1.582 for the agricultural, 0.949 for education, 0.367 for health, 0.445 for housing, 0.613 for infrastructure, 0.707 for GDRP and 1.130 for dummy variable. Special on a dummy variable, estimation results indicate that the variable autonomy is able to increase HDI in Tangerang City. Thus, the public expenditure can explain about 52.4% variance of HDI in this region.

That is, autonomy and decentralization policy could encourage an increase in HDI higher than before the policy. These results reconfirm the results of the study Usman (2005), Arifin (2006), Rozi (2007), and Hernawan (2007). This estimation seems relevant to the empirical facts contained in Tangerang City. The data show, the region has a number of outstanding achievements during the development of

leadership of Wahidin Halim. From the aspect of economic performance and social welfare, this region managed to have economic growth above the national average of 6.8% in 2008 and 7.1% in 2007 and thus succeeded in reducing the unemployment rate above the national average of 20% in 2007 to 12% in 2008.

In addition, the local government also managed to obtain an award (1) Award of Public Health Services in National Level in 2008; (2) BPKP Award 2008, (3) Lencana Bhakti in Education from the President of RI in 2007 (48% education expenditure of APBD) and (4) Piala Citra Abdi Negara for the Best Public Service National Level in 2006.

Specifically on aspects of the public expenditure and RGDP, the results also found that the coefficient of per sector of public expenditure and RGDP are significant. Although the agricultural sector has the lowest proportion of public expenditure, but this sector significantly influenced on HDI in this region. Its Elasticity is 158.2%. That is, any increase in an amount of public expenditure in the agricultural sector would increase the HDI by 158.2% in this region. The coefficient is even higher when compared with the coefficient of other public expenditure sectors.

Deductively, there are many studies have linked and assumed the role of the agricultural sector and to various indicators of economic development. One is a study conducted by Yudhoyono (2004). He found that the agricultural sector could significantly promote sustainable economic growth and thus be able to lift people out of poverty. When the economy grows, people have greater opportunities to gain access to sources of economic activity. That's when they can earn income to finance all its consumption needs.

According to BPS, until August 2008 the agricultural sector still contributes for about 40.3% in terms of employment. This means that when the agricultural sec-

tor to grow, then this sector can be a source of economic growth. Moreover, in terms of its contribution to the formation of the GDP, agriculture, animal husbandry, forestry and fishery ranks second only to manufacturing industries. Seeing this empirical data, surely it is certain that the agricultural sector became an important sector in national economic development, not least in Tangerang City. Neglasari sub-district is the region with the greatest potential for agricultural land compared to the potential for other agricultural areas in the sub-district of the district.

However, in employment structure by economic sector perspective, the agricultural sector employment is smaller when compared to the industrial sector, trade and services (formal or informal). To illustrate the structure of employment, this is the following economic sectors between years of 1995-2005 in Tangerang City (Table 3).

On average in Tangerang City, from 1995-2005 the structure of the agricultural sector employment reached 2.78% of total labor force. Labor force participation rate (LFPR) is large enough for a "city". If it is to be compared with the Jakarta Province, LFPR agriculture sector reached only 1.025% in 2009 and 1.016% in 2010. Looking at the empirical data, the strong presumption that the elastic of agricultural sector caused by the absorption fraction of labor to this sector.

In addition, the Report of Tangerang City Government Budget (APBD), expenditure on this sector is based on programs that are directly in contact with the community. Although the agricultural area is smaller than the residential and industrial area, but the local government is able to formulate a number programs to encourage increased agricultural income of farmers. In the table above (table 4), reflected the program of agricultural sector in 2003, 2004, 2006, and 2007 in APBD of Tangerang City.

In the education, this sector has significant coefficient which reached 94.9%. That is, any increase of allocation in the education sector will increase 94.9% on HDI. Education is one of the three components contained in the HDI. The indicator is the literacy rate and average length of the school. The literacy rate is the percentage of people aged of 15 and over can read and write.

The literacy rate in Tangerang City was quite high at 97.10 (2005), 97.50 (2006), and 97.53 (2007). This means that more than 97% of the population aged 15 years and over was able to read and write, and only about 2.5% are illiterate. Literacy programs is related to the 9-year compulsory education program, which means an increase in enrollment rate at primary school and junior high school will also affect the rate of literacy or illiteracy eradication.

Tabel 3: Structure of Employment by Economic Sector in Tangerang City Year 1995-2005 (in %)

Years	Economic Sectors (%)					
	Agriculture	Mining	Industry	Formal Services	Informal Services	Others
1995	2.295	0.36	29.435	36.088	23.548	8.308
1996	1.723	0.268	25.258	36.486	26.782	9.482
1997	3.822	-	36.708	39.103	20.111	0.256
1998	2.139	0.223	30.503	47.075	20.061	-
1999	2.046	0.208	32.505	45.629	19.609	-
2000	2.015	0.205	32.749	45.629	19.609	-
2001	2.749	-	33.964	19.762	28.099	15.427
2002	2.746	-	33.778	19.762	28.099	15.471
2003	2.781	-	33.845	19.891	28.101	15.479
2004	2.767	-	33.978	19.913	28.137	15.489
2005	2.778	-	33.991	19.978	29.019	16.490

Source: Tangerang in Figures, BPS

Tabel 4: Agriculture Sector Program Components in the Structure of RGDP of Tangerang City: 2003, 2004, 2006 and 2007

Year	Programs
2003	<ol style="list-style-type: none"> 1. People's Agricultural Sector Program 2. Agricultural Business Development Program 3. Agribusiness Development Project (DAU) 4. Diversification Program for Food and Nutrition 5. Improved Food Security Project (DAU) 6. RPH Rehabilitation and Development Project of Bayur
2004	<ol style="list-style-type: none"> 1. Diversification Program for Food and Nutrition 2. Agribusiness Development of Ornamental Plants and Vegetables 3. Food Security Program 4. Optimization of Agricultural Land 5. Development of Freshwater Aquaculture 6. RPH Rehabilitation and Development Project of Bayur
2005	-
2006	<i>Department of Agriculture program in 2006 as the program in previous years.</i>
2007	<ol style="list-style-type: none"> 1. Diversification and Food Security Program <ol style="list-style-type: none"> a. Making the well pump b. Bird flu disease controlled c. Handling health and welfare of animal sacrifice d. Procurement of breeding and fattening cattle 2. Agribusiness Development Program for Agriculture, Livestock and Fisheries <ol style="list-style-type: none"> a. TOGA development b. Horticulture agribusiness development c. Relief efforts of farmer groups d. Sheep enterprise development e. Increased marketing of ornamental fish f. Floating duck business g. Freshwater fish farming h. Manufacturing plant nurseries Agriculture (DAK) i. Maritime Affairs and Fisheries (DAK)

Source: APBD of Tangerang City

Meanwhile, the average length of completed education is an average of how many years a resident to follow the educational process. The average length of completed education in this region experienced a significant increase in the average of 10.51 in 2005, 10.75 in 2006, and 10.77 in 2007. In general, a person takes about 9 years to complete primary school to junior high school. Mean while, to get to the level of senior high school takes about 12 years. Based on this explanation, the average length of the population graduated in this region is 10.7 years. It means that in general the majority of the population completed their education up to the level of junior high school. This is in line with the Na-

tional Program 9 Year Compulsory Education. The government's target of a minimum standard of education for the population of Indonesia is to finish junior high school.

Health sector, this variable is also significant in encouraging an increase on HDI with slope 63.7%. Positive slope means that for every 1 rupiah increased in the allocation of health sector will increase 63.7% on HDI. In HDI, an indicator of longevity can be expressed closely related to public health. The longevity is a life to last longer which measured by the indicators of life expectancy at birth.

The result of these estimates seems relevant to the existing empirical facts. One

of the local government's programs in order to provide basic health and education access for the poor is a Multi Use Card Program (Kartu Multi Guna/KMG), which rolled out in 2008. KMG program is funded 100% from APBD of the local government.

In the residential or housing sector, this variable is significant in encouraging an increase on HDI with a slope 44.5%. It means that every 1 rupiah increase in the allocation of housing sector expenditure will increase 44.5% on HDI. Although it is not directly related to the HDI, housing is one of the primary needs of society. This corresponds well with the mandate of the constitution which stated that the house is one of the fundamental rights of the people and therefore every citizen has the right to reside and have a good environment and healthy. In addition, the house is also a basic human need in improving the dignity, quality of life and livelihood, as well as personal reflection in improving standards of living.

According to the publication's website of Tangerang City Government, appropriate housing located in the region has increased in each year. In the year of 2008 (to March 2008) the number of appropriate housing in the region reached 286.411 units. This number increased by 4% from 2007. Conversely, the condition of the inappropriate house is declined, where the number of units that are not feasible in the year 2008 (until March 2008) as many as 2037 units. Habitable residential ratio also showed a trend that is increasing every year. Looking at these conditions, the availability of housing in the region is becoming increasingly wide. It also means, the opportunity to obtain adequate housing is also more broadly.

In the infrastructure sector, the coefficient is approximately 61.3% and significantly affects on HDI in the region, which means that any increase in an amount of public sector infrastructure expenditure will increase 61.3% on HDI. The

omission of a region in development is influenced by many things. One is the low attractiveness of a region that causes a low level of economic activity. A region does not have the resources (both human and natural) and the lack of incentives offered (infrastructures, hardware and software, security, etc.) can cause a region lagging in development.

Therefore, the impact of the low quantity and quality of infrastructure led to a slowdown of economic growth and employment. So finally there are a lot of companies going out of business or canceling expansion. So therefore, infrastructure plays an important role in the production process and an indispensable precondition to attract private sector capital accumulation. In the context of HDI, it is certainly also a precondition for the improvement of HDI. Therefore, one component of HDI is the standard of living and purchasing power parity (PPP). Improving living standards and PPP can occur if and only if there is a chance to get a job. With a job means that people will earn income that could eventually buy all of their basic needs. This logical thinking is also accordance with the results of data on the model. GDRP variables significantly influence on HDI by 70.7% which means an increase of 1 rupiah of GDRP will increase 70.7% on HDI.

At some points of the year, especially after the implementation of autonomy and decentralization policies, the issue of infrastructure is the focus of the accelerated development of the region. This focus is implemented through the programs and activities contained in the public works and transportation affairs. Business communications is one of the vital public service in moving the region's economy. This sector serves to ensure the smooth flow of traffic of people and goods within the city and to and from the region. For urban areas, infrastructure also needs to be increased. Therefore, the infrastructure expenditure is one of the important sectors. Hence also, in-

vestment in social-overhead such as construction of roads, health facilities, education and other infrastructure facilities can be an alternative development.

CONCLUSION

The variation in expenditure of agricultural, education, health, housing and infrastructure, GDRP per capita, and regional autonomy can explain 52.4% of the variation in

the HDI in Tangerang City. Therefore, effective expenditure policy is important to implement. However, it needs a more definite imulation from the combination of the expenditure as an effort to encourage an increase on HDI to a more tangible expenditure. Autonomy and decentralization policies should be formulated as effectively as possible to encourage an increase on HDI in this region.

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