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### Factors affecting Duty on Acquisition of Rights to Land and Building (BPHTB) with economic growth as the mediating variable in Indonesia

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# Factors Affecting Duty on Acquisition of Rights to Land and Building (BPHTB) with Economic Growth as the Mediating Variable in Indonesia

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**Abstract** *The objective of the research was to analyze and determine the influential factors towards Duty on Acquisition of Rights to Land and Building (BPHTB) in North Sumatra, Indonesia, with economic growth as the Mediating Variable. The type of this research is causal design to analyze the relationship between one variable to another variable. The dependent variable is BPHTB, whilst the independent variables are Land and Building Tax (PBB), Total Area, Total Population and Inflation. Mediating variables is the economic growth proxies by Gross Regional Domestic Product (PDRB). The model of data analysis used is Structural Equation Modelling (SEM). The population in the present research is the Regencies/Cities located in North Sumatra Province. The total population used in this research is 33 Regencies/ Cities with the selected samples amounted to 25 Regencies/Cities with the sampling technique use purposive sampling method. The testing concludes factors, such as PBB, Total Population and Inflation have influence on Duty on Acquisition of Rights to BPHTB. Total area has no significant influence on BPHTB. The Economic Growth serves as Mediating Variable upon the relationship between Land and Building Tax, Total Population and Inflation on BPHTB in North Sumatra, Indonesia.*

**Key words** Tax on acquisition of land and building, land and building tax, total area, total population and inflation

**JEL Codes:** E62

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## 1. Introduction

The goals of a country's development in general is in the form of increasing national income per capita, employment, equitable distribution of income and balance in international balance of payments. Several general goals of such development frequently go in unconformity in the achievement. However, in the achievement efforts of one goal commonly reduces the success of other goals. For instance, to reaching high economic growth rates results in the income inequality.

The issuance of Law No. 28/2009 includes two types of central tax, namely Duty on Acquisition of Rights to Land and Building (BPHTB) as well as Land and Building Tax for Rural and Urban Sector (PBB P2) as regional tax. It is a major change in

favor of fiscal decentralization in line with the common understanding and international experience indicating that property tax is better handled to the region as a source of income in the regencies/ cities level. The diversion of Duty on Acquisition of Rights to Land and Building (BPHTB) from the central government to the local government is a step forward made by Indonesia in the national taxation system structuring. A number of parties view that the policy has been appropriately carried out. Nonetheless, what's less important is how this policy being implemented that the regions can actually tax BPHTB properly. Various problems emerging in the effectiveness of BPHTB income, including data update existing in regional government database. Besides, the role of Human Resources (HR) is highly crucial in the operation of BPHTB management in regional level. The application of information technology is urgently done in order to create a more transparent process and improved service to the taxpayers.

In addition, due to these factors, the BPHTB income in region is also caused by a low potential, where most transaction value lies under Non- Taxable Income Value of Tax Object (NPOPTKP). Law No. 28 of 2009 determines that NPOPTKP shall be at least IDR 60 Millions. This NPOPTKP value for some areas, especially those with not to mentioned that previously via Law No. 20 on 2000 on the Amendment upon Law No. 21 of 1997 on BPHTB, NPOPTKP, it sets that the maximum value is IDR 60 Millions regionally. Several other factors also need to be considered, those affecting BPHTB are income of Land and Building Tax, Total Area, Total Population and Inflation play a major role in the realization of BPHTB in a region. Besides, instrumental variable playing a role in determining the relationship of these variables is the Economic Growth in a region. Currently, the average economic growth in North Sumatra reaches 5.9% above the national average, which is 5.5%. Zhang (2006) states that fiscal globalization and decentralization grants protection to the interests of investors; on the other hand, regional governments seek to acquire the land at the lowest price as possible by taking profits. Individual land becomes one of the main promoters of economic growth in China. However, as the same factor, land becomes a source of social violence that may damage China's social stability and long term economic growth. Widiowati (2014) states that the factors affecting the rise and fall of a region's independence before and after BPHTB are including the fall of non realization upon Local Revenue (PAD) income as results from non-tax/ natural resources from contribution sector of forest concessions, and the balance funds provided by the government increases each year, thus affecting the calculation result of independency ratio and impacting the region's economic growth. Clarke and Evans (1999) state that fees act as a quasi-pricing mechanism, regulating the amount of capital investment demanded by developers.

Based on the phenomenon and the background of the problems above, the problem formulation is “What are the dominant factors determining Duty on Acquisition of Rights to Land and Building (BPHTB) in North Sumatra – Indonesia, with economic growth as the Mediating Variable?”

## 2. Literature review

### 2.1. Theoretical Basis

#### *A. Duty on Acquisition of Rights to Land and Building (BPHTB)*

Duty on Acquisition of Rights to Land and Building is the tax imposed on duty on acquisition of rights to land and or buildings. In this discussion, BPHTB hereinafter referred to tax. (Kosasih *et al.*, 2012). The acquisition of rights to land or buildings is a legal act or event which results in the acquisition of rights to land and or buildings by private or entities. Duty on Acquisition of Rights to Land and Building (BPHTB) which a state revenue results from Land and Building Tax income, over the idea that taxpayers with the acquisition over rights to land and buildings have benefited economically from the ownership of the land and thereby considered reasonable if they ought to submit the economic value they possess to the state obtained through the payment of BPHTB. The Office of the Comptroller General (2014) says capitalized land are land acquired by purchase, trade or donation, to support ministry program delivery, including Crown Land that has been converted to a specific use such as a park or protected area.

#### *B. Land and Building Tax*

The realization of PBB is the tax potential on land and/or buildings owned, controlled and/ or utilized by an individual or institution, with the exception to the area used for plantation, forestry, and mining (Giddings, 2009).

#### *C. Total Population*

The population in a region reflects the amount of populations settled in a region. The greater number of population, the more requirements for settlement to live, hence results in the great number of transactions in land and buildings at a region. The greater number of population, the higher efforts for population requirement efforts to fulfill the needs of health, education and employment preparation (Haveri, 2006), and Dalimunthe *et al.* (2014). The larger total population, the greater the drives of the community to the government on adequate facilities to improve their life quality. Furthermore, the Government seeks to increase the total spending in order to meet the needs of the community.

#### *D. Total Area*

The total area is the geographic territory of a region. The broader a region, the larger the spatial planning related to settlement, green spaces, forest areas, etc. The broader a region, the greater the potential income of acquisition, both land and buildings, Haveri (2006).

#### *E. Inflation*

In order to improve the service, the government requires facilities and infrastructure, such as buildings, roads, bridges, and irrigation. The geographical condition of Indonesia leads to financing gap in constructing these facilities. The higher the difficulty level of a geographic area, the higher the price level in the given area (Haveri, 2006). It underlies the usage of building price index as fiscal need differentiator of a region, seen from the construction sector.

#### *F. Economic Growth*

The economic growth is commonly measured using Gross Domestic Product (PDB/ PDRB). The Gross Domestic Product (PDRB) is basically the total value added generated by all business units within a given area or the total value of final goods and services produced by the entire economic unit. The presentation of figures in PDRB is divided into two, namely the PDRB at current price and PDRB at constant price, (Central Bureau of Statistics, 2014).

The income approach, the PDRB is the total remuneration received by production factors partaking in the production process in a region within a certain period (usually one year). The remuneration on production factors mentioned is wages, land rent, capital interest and profits; all before income tax and other direct taxes. Expenditure approach, the PDRB is the entire final demand components, comprised of: 1) consumption expenditure of households and non-profit private institutions, 2) government consumption, 3) gross domestic fixed capital formation, 4) changes in the stock and 5) in net exports (net exports is exports minus imports). In such definition, PDRB includes depreciation and net indirect tax (indirect taxes minus subsidies). Tax is closely related to economic growth (Johansson, et al, 2005). The government will make taxation policy including the tax in the scope of hectare acquisition upon land and buildings, partly because of the policy will result in efficiency, equity, simplicity and revenue growth in a region.

### **2.2. Conceptual Framework**

Based on the research problems and the theoretical basis, the conceptual framework of this study is shown in the Figure as follows:

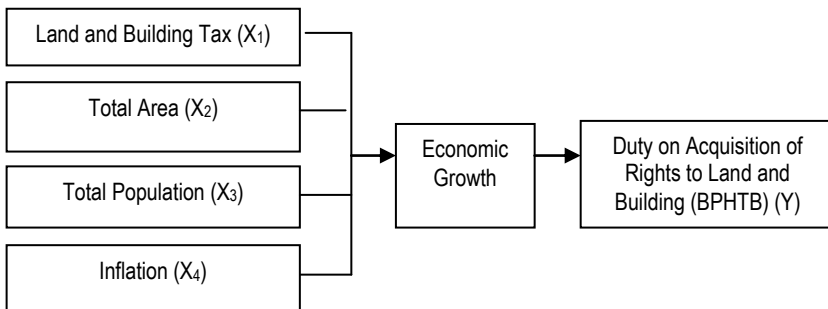


Figure 1. Conceptual Framework

### 3. Methodology of research

#### 3.1. Designs and Research Design

This employed useful causal design (causal) to analyze the relationship between one variable to another. The data used in this research were quantitative data, namely the data in the form of number, from 2005 to 2012.

#### 3.2. Research Site

The research sites were at 25 (twenty five) regencies/cities in North Sumatra Province and the Central Statistics Agency (BPS) of North Sumatra.

#### 3.3. Research Population and Samples

The total population used in this study was 33 districts/cities. The sampling technique in this research employed purposive sampling method, i.e. “sampling technique with certain criteria and consideration as desired by the researcher” (Kuncoro, 2003). The total samples studied were 25 Regencies/Cities, and the observation years was 8 (2005- 2012).

Table 1. Research Samples

No	Regencies and Cities
1	Nias Induk Regency
2	Mandailing Natal Regency
3	South Tapanuli Regency
4	Central Tapanuli Regency
5	North Tapanuli Regency
6	Samosir Regency
7	Toba Samosir Regency

No	Regencies and Cities
8	Labuhan Batu Induk Regency
9	Asahan Regency
10	Simalungun Regency
11	Dairi Regency
12	Karo Regency
13	Deli Serdang Regency
14	Langkat Regency
15	Humbang Hasundutan Regency
16	WestPakpak Regency
17	Serdang Bedagai Regency
18	Sibolga City
19	Tanjung Balai City
20	Pematang Siantar City
21	Tebing Tinggi City
22	Medan City
23	Binjai City
24	Padangsidempuan City
25	Gunung Sitoli City

Source: Processed from various sources (2015)

The sampling criteria used by researchers are:

1. The regencies and cities in North Sumatra Province, publishing statements on budget realization consistently from 2005 to 2012.
2. The government in regencies and cities that have not been expanded in the period of 2005-2012.

### 3.4. Data Collection Method

The data used in this research were time series secondary data, in the form of budget realization statements of Regencies/Cities in North Sumatra and the data obtained from the Central Statistics Agency (BPS) of North Sumatra.

### 3.5. Variable Operations

*Table 2. Definition of Operational Variables*

Variables	Operational Definitions	Indicator	Measure Scale
<b>Dependent Variables</b>			
Duty on Acquisition of Rights to Land and Building (BPHTB) (Y)	Realization on income from Duty on Acquisition of Rights to Land and Building within a period.	Total BPHTB	Ratio

Variables	Operational Definitions	Indicator	Measure Scale
<b>Independent Variables</b>			
Land and Building Tax ( $X_1$ )	Realization on local government income on Land and Building Tax in a given period	Total PBB	Ratio
Total Area ( $X_2$ )	Land and sea territory of a regency/city	Area per Km2	Ratio
Total Population ( $X_3$ )	Total population settled in a given region	Total Population in a given region	Ratio
Inflation ( $X_3$ )	Increase in price and good in a certain period	Inflation percentage	Ratio
<b>Intervening Variables</b>			
Economic Growth (Z)	The added value generated by all business units within a given region.	Annual PDRB	Ratio

### 3.6. Data Analysis Method

The hypothesis was tested using Structural Equation Modeling (SEM) with the aid of AMOS software tool 21. The equation formed is as follows:

$$Y = \alpha + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + e \quad (1)$$

$$Z = \alpha + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_4Y + e \quad (2)$$

Where:

Y = Duty on Acquisition of Rights to Land and Building (BPHTB);

$X_1$  = Land and Building Tax (PBB);

$X_2$  = Total Area (LW);

$X_3$  = Total Population;

$X_4$  = Inflation;

Z = Economic Growth;

$b_1, b_2, \dots, b_4$  = Coefficient Regression;

$\alpha$  = Constant;

e = Error.

### 3.7. Analysis on Structural Equation Modeling (SEM)

The data analysis technique in this research employed Structural Equation Modeling (SEM). SEM is a set of statistical techniques allowing testing of a series of relationships simultaneously. Furthermore, in the data processing, the writer used the aid from software AMOS Structural Equation Modeling (SEM), which was one of the multivariate analyses capable of analyzing the variable relationships in complex manner. Ferdinand (2007) reveals that the SEM is able to address regressive and dimensional research (namely measuring what dimensions of a concept). SEM can



also be used simultaneously to measure the degree or effect of relationships among the factors of which dimensions already identified.

In the procedure of the measurement model, there are three steps that must be done through confirmatory factor analysis (Hair, 1998), namely: Overall model fit analysis, factor loading analysis (load factor), and reliability analysis.

### 3.8. Overall Model Fit Analysis (Goodness-of-Fit Index)

This stage was conducted to test the model suitability by evaluating goodness-of-fit index. The analysis using SEM requires several suitability indexes for measuring the data correctness and the models to be filed. According to Ghozali and Ferdinand (2008), Goodness-of-Fit of a model can be assessed based on several fit measures as follows:

*Table 3. Criteria Evaluation on Goodness of Fit Index*

Goodness of Fit	Cut off Value
Chi – Square	Expected to be small
Probability	≥ 0,05
RSMEA	≤ 0,08
GFI	≥ 0,90
AGFI	≥ 0,90
CFI	0 < GFI < 1
TLI	≥ 0,95
CMIN/DF	≤ 2,00

Source: Ferdinand (2007)

## 4. Discussions

### 4.1. Descriptive Statistics

The descriptive statistics analyzed are presented in the following table:

*Table 4. Descriptive Statistics*

	N	Minimum	Maximum	Mean	Std. Deviation
BPHTB_Y	200	43,64	259114429,00	8751679,66	29574931,865
PBB_X1	200	182,90	379342,00	39370,9331	49142,48662
LW_X2	200	10,77	12163,65	2508,2137	2448,90245
Population_X3	200	34542,00	2121053,00	475995,2300	497088,90970
Inflation_X4	200	1,59	22,91	8,1573	5,62278
PDRB_Z	200	826,00	105400,00	8375,5100	15223,80310
Valid N	200				

Source: SPSS Output 21 (2015)

BPHTB variable (Y) shows the total Rupiah of Hectare Acquisition of Land and Building collected in North Sumatera. The average amount of BPHTB in 2005-2012 is IDR 8.75 Billion, with the highest number of BPHTB in Medan of 259.14 billion; the lowest is IDR 43.64 Million. The standard deviation from average is IDR 29.57 Billion.

Land and Building Tax Variable/ PBB ( $X_1$ ) indicate the total Rupiah of Land and Building Tax collected in North Sumatera. The average number of PBB in 2005-2012 is IDR 39.37 Billions, with the highest number of PBB in Medan of IDR 379.34 Billions, the lowest being IDR182.9 Millions. The standard deviation from the average deviation is of IDR 4.91 Billions.

The average total area ( $X_2$ ) of regencies/ cities is 2508.21 km<sup>2</sup>, with lowest being 10.77 km<sup>2</sup>, and the largest being 12163.65 km<sup>2</sup>, with a standard deviation of 2448.90 km<sup>2</sup>.

The Total Population Variable ( $X_3$ ) shows the total population in an area in North Sumatra. From the samples obtained, it is determined that in general the average number of population in 2005-2012 is 475,995 inhabitants, with the highest in Medan, i.e. 2,121,053 inhabitants, and the lowest as many as 34,542 people in West Pakpak Regency. The deviation standard from the average is 475,995 inhabitants.

The inflation variable ( $X_4$ ) in 4 regencies/ cities with the lowest inflation is 1.59% and the highest is 22.91% with a standard deviation of 5.62%. The amount of Economic Growth proxied by the PDRB at current prices (Z) is applicable in regencies/cities in North Sumatra, the average growth is IDR 8375 Trillion from the average. The highest PDRB growth reaches IDR 105,400 Trillion and the lowest PDRB decrease is IDR 826 Billion. The decrease in the PDRB is due to expansion of the host regencies.

## 4.2. Research Analysis

### 4.2.1. Results Analysis

#### 4.2.1.1. Normality Testing Result

The testing summary judging from the critical ratio value is as follows:

Table 5. Normality Testing using Assessment of Normality

Variable	min	max	skew	c.r.	kurtosis	c.r.
Inflasi_X4	1,590	22,910	1,287	7,430	,845	2,438
Penduduk_X3	34542,000	2121053,000	1,987	11,471	3,311	9,557
LW_X2	10,770	12163,650	1,542	8,903	2,931	8,461

Variable	min	max	skew	c.r.	kurtosis	c.r.
PBB_X1	182,900	379342,000	3,171	18,308	13,412	38,717
PDRB_Z	826,000	105400,000	3,979	22,972	17,364	50,126
BPHTB_Y	4364,000	259114429,000	6,627	38,260	49,188	141,993
Multivariate					135,611	97,869

Source: Processed Data/AMOS 21 Output (2015)

Based on the table, Ghozali (2005) states that if the data distribution is normal, the critical ratio value is significant. From the output, it can be seen that the data are normally distributed.

#### 4.2.1.2. Multicollinearity Assumptions

The multicollinearity is tested to determine whether there is a strong correlation, or even perfect between measurement variable and latent variable. If there is a perfect correlation between fellow variables, the measurement model parameter or structural model cannot be estimated as the correlation matrix becomes definite positive, hence inverse of the correlation matrix cannot be calculated. In present research, the multicollinearity testing is carried out by observing the correlation matrix output in Amos program on *pairwise parameter comparison correlation of estimates*. Based on the observation results of correlation matrix, there is no correlation coefficient greater than 0.80, thus it concluded there is no multicollinearity problems between the measurement variable and latent variable.

#### 4.2.1.3. Model Fitness Testing Results

The goodness of fit testing is undertaken to determine whether the model obtained properly describes the relationship between the variables being studied, hence it can be categorized into a good model as presented in Table:

*Table 6. Summary of Goodness of Fit Results*

Conformity Index	Estimated Value	Testing Criteria of Good	Testing Results
CFI	0,781	0.96	Good
RMR	0.000	< 0.05 (fit)	Good
RMSEA	0,452	< 0.08 (fit)	Unfit
CMIN/DF	0,000	< 2 (marginal fit)	Good
p-value	<0.001	p>0.05 (fit)	Good
CMIN	41,608(DF=6)		Good
Chi-square	249,648	0,000	Good

Source: Processed Data/AMOS 21 Output (2015)

Based on the table, it can be seen that in overall, model fitness testing results can concluded that estimation result is acceptable, meaning that the empirical model obtained fits with the theoretical model.

#### 4.2.1.4. Measurement Model

The measurement model is a model connecting latent variables with manifest variables as follows:

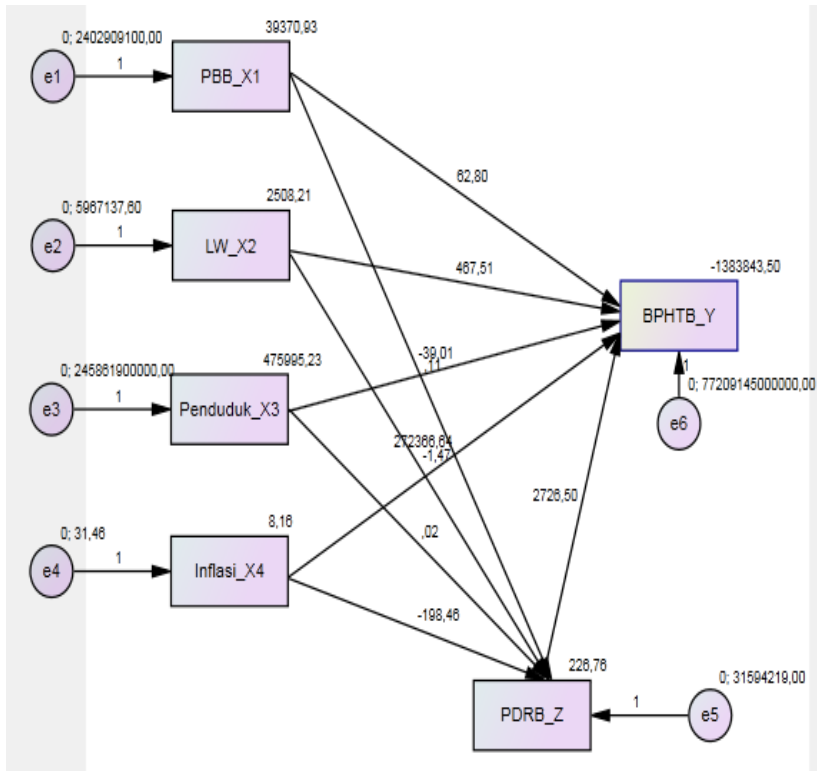


Figure 2. Full Standards Coefficient of Research Model

#### 4.2.1.5. Evaluation on Regression Weight for Causality Testing

The data processing with analysis of Structural Equation Model (SEM), using aid of AMOS generates analysis result of the relationship between variables, as listed in the following table:

Table 7. Regression Weights: (Group number 1 - Default Model)

			Estimate	S.E.	C.R.	P	Label
PDRB_Z	<----	PBB_X1	,113	,008	13,938	***	par_5
PDRB_Z	<----	LW_X2	-1,470	,163	-9,011	***	par_6
PDRB_Z	<----	Penduduk_X3	,019	,001	23,514	***	par_7
PDRB_Z	<----	Inflasi_X4	-198,464	71,042	-2,794	,005	par_8
BPHTB_Y	<----	PBB_X1	62,803	17,863	3,516	***	par_1
BPHTB_Y	<----	LW_X2	467,511	302,574	1,545	,122	par_2
BPHTB_Y	<----	Penduduk_X3	-39,007	2,442	-15,975	***	par_3
BPHTB_Y	<----	Inflasi_X4	272366,642	113213,584	2,406	,016	par_4
BPHTB_Y	<----	PDRB_Z	2726,499	110,816	24,604	***	par_9

Source: AMOS 21 Output (2015).

The evaluation of Regression Weight for the causality using CR value. The testing results as presented in Table shows that all the coefficient regressions are unequal to null significantly, therefore the null hypothesis that the regression weight is unequal to null is rejected, and alternative hypothesis is accepted; that each indicator has a causal relationship, meaning that the model is acceptable.

1. PBB (X<sub>1</sub>) significantly affects Economic Growth (Z) with critical value ratio of 13.938.
2. Total Area (X<sub>2</sub>) significantly affects Economic Growth (Z) of -9.011.
3. Total Population (X<sub>3</sub>) significantly affects Economic Growth (Z) of 23.514.
4. Inflation (X<sub>4</sub>) significantly affects Economic Growth (Z) of 23.514.
5. PBB (X<sub>1</sub>) significantly affects BPHTB (Y) with critical value ratio of 3.516.
6. Total area (X<sub>2</sub>) does not significantly affect BPHTB (Y) of -9.011.
7. Total Population (X<sub>3</sub>) significantly affects BPHTB (Y) of -15.975.
8. Inflation (X<sub>4</sub>) significantly affects BPHTB (Y) with critical value ratio of 2.406.
9. Economic Growth (Z) significantly affects BPHTB (Y) with critical value ratio of 24.604.

The strength of the dimensions forming up latent factors can be tested using Critical Ratio (CR) on regression weight generated by the model. CR is identical to  $t_{count}$  in the regression analysis. CR is greater than 2.0 (Ferdinand, 2000) showed that the variables significantly are the dimension of factors. Besides, it is also indicated by the AMOS output with mark \*\*\*, showing the probability is below 5% alpha (0.000). The direct effect testing is as follows:

Table 8. Standardized Direct Effects (Group number 1 - Default model)

	Inflasi_X4	Penduduk_X3	LW_X2	PBB_X1	PDRB_Z
PDRB_Z	-,087	,731	-,280	,433	,000
BPHTB_Y	,055	-,702	,041	,112	1,268

Source: AMOS 21 Output (2015)

Based on the above, the largest direct effect is total population, whilst indirect effects testing results is as follows:

Table 9. Standardized Indirect Effects (Group number 1 - Default model)

	Inflasi_X4	Penduduk_X3	LW_X2	PBB_X1	PDRB_Z
PDRB_Z	,000	,000	,000	,000	,000
BPHTB_Y	-,110	,927	-,355	,549	,000

Source: AMOS 21 Output (2015)

Results show that indirect effect through the largest economic growth (PDRB) is total population variable. Meanwhile, the total effect is presented as follows:

Table 10. Standardized Total Effects (Group number 1 - Default model)

	Inflasi_X4	Penduduk_X3	LW_X2	PBB_X1	PDRB_Z
PDRB_Z	-,087	,731	-,280	,433	,000
BPHTB_Y	-,055	,225	-,314	,661	1,268

Source: AMOS 21 Output (2015)

The results suggest that the total effect of PBB is 66.1%, a total area of 31.4% total population of 22.5% and inflation of 5.5%.

#### 4.3. Discussions

Changes in economic growth positively affect changes in BPHTB income. The higher the economic growth, the higher the BPHTB. BPHTB is not a simple process, thus if internal factors, such as data, human resources quality, and others being improved, it will directly increase BPHTB. BPHTB income is related to how well the regional government designs and implements its economic program. Changes in population density positively affect in changes of BPHTB income. The higher the density, the higher the BPHTB income. That is, the population density is an important factor in BPHTB income. Densely populated regions describe the high competition level to get land and buildings, leading to rising prices. The increasing price is a major source of potential for increased BPHTB income. The proof is that City's BPHTB (typically denser) is much higher than BPHTB income in regencies,

considering the presence of the land and/or buildings is extremely limited. Thereby, the state shall regulate the use of land and buildings upon them. The state shall tax on individuals or legal entities receiving economic value and the benefits of the land and/or buildings, or due to acquisition of rights to land and/or building. The tax in question is Duty on Acquisition of Rights to Land and Buildings or commonly known as the BPHTB.

## **5. Conclusions and suggestions**

### **5.1. Conclusions**

1. Factors such as Land and Building Tax, Total Population and Inflation affect on Duty on Acquisition of Rights to Land and Building (BPHTB) in North Sumatra, Indonesia.
2. Total Area insignificantly affects on Duty on Acquisition of Rights to Land and Building (BPHTB) in North Sumatra, Indonesia.
3. Economic Growth serves as a mediating variable on the relationship among Land and Building Tax, Total Population and Inflation on Duty on Acquisition of Rights to Land and Building (BPHTB) in North Sumatra, Indonesia.

### **5.2. Limitations**

1. The research scope is only conducted in the scale of North Sumatra, thus thorough conclusions are not provided if being undertaken on a scale of Indonesia.
2. There are several other determinant factors on BPHTB income that are not studied, for instance managerial abilities of collector agencies, expertise in appraisal for producing NJOP, the strength of SOP implementation and work mechanism that are not examined in this research.
3. The research period is extended and research samples are expanded.

### **5.3. Suggestions**

1. The government should assist the regions with extremely low BPHTB. The type of assistance provided should lead to the improvement of the condition of internal factors, such as training for capacity building includes of human resources, including expertise strengthening in appraisal sector to produce NJOP approaching the transactional value, guidance for the formulation of regulations, SOPs, and training programs for the improvement of data quality, and guidance to formulate work mechanism.
2. Local governments should be able to make their regions attractive, whether for living place, doing business and investment, through publication on the potential of the region, the efficiency of the bureaucracy, infrastructure provision, creation of security, and the provision of regulations guaranteeing legal certainty.

3. Local Governments, particularly those experiencing low BPHTB shall evaluate the spending allocation in their budget, hence the proportion of capital expenditure (infrastructure) keeps increasing; with the expectation that the development of infrastructure shall increase the value of land and buildings in such regions.

### Acknowledgement

The research is the study results of the researcher in order to strengthen decision-making system related to BPHTB in North Sumatra.

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