

## Conference Paper

# Variables Affecting ZNT Implementation in Communities Semarang City

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## Abstract

The Land and Building Tax Imposition Base (NJOP) is used to determine the basis for Land and Building Taxes. But in reality, NJOP sometimes does not match fair market values. By land valuation experts, a method was formed which approached real land prices, namely the Land Value Zone (ZNT). ZNT in its application and development raises diverse responses. For that, we need to study variables affecting the implementation of ZNT in the community. Therefore, the city of Semarang is considered suitable for case studies on the implementation of ZNT because it is the center of economic activity in Central Java Province. This research is expected to provide benefits regarding the implementation of ZNT as a method to determine the amount of NJOP. The level of acceptance of ZNT implementation in society is measured by 10 variables. The data in this study were obtained using a questionnaire sampling to community. Questionnaire results are then analyzed so as to help further explain statistical results that have been obtained. Facts on the ground show that the people of Semarang City feel the ease and accuracy as well as the fair transparency of market prices for land in ZNT. The analysis results that have been found, there are 3 variables that most influence, namely politics, communication with the parties concerned, and socialization of ZNT. Those improvements are needed on the internal and external factors of the ZNT method and coordination, communication and cooperation between the government and the community.

**Keywords:** implementation, NJOP, ZNT

## 1. Introduction

The concept of space is one of the interesting issues being discussed by various parties. This happens because the availability of space (supply) is limited, but the need for space (demand) continues to increase from time to time. The level of urban migration is one of the effects of changes in the demographic structure of the population and economic activities in urban areas which results in the growth process of land built in non-urban areas [1]. Because of this, a spatial arrangement is needed to ensure legal certainty as a guideline for issuing space ownership permits, as a control instrument from spatial

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use. Spatial law refers to Law Number 26 of 2007 concerning spatial planning which states that space is a place which includes land space, sea space, and air space, including space within the earth as a unitary area, where humans and other creatures live, carry out activities, and maintain their survival. Land space in spatial planning can be interpreted as the surface of the earth or land where humans can carry out various activities in daily life. The basic tenure of land in Indonesia has been regulated in the 1945 Constitution of the Republic of Indonesia Article 33 paragraph 3 which reads "The earth, water and natural resources contained therein are controlled by the state and used as much as the prosperity of the people" and are explained in more detail in the Republic Law Indonesia Number 5 of 1960 concerning Basic Agrarian Basic Regulations (UUPA). In the UUPA regulated the security of land rights arising from land unrest due to land transfers through market transactions, the formalization and recording of land transactions is seen as the best low-cost and pragmatic way [2].

An effective land price assessment system is believed to be able to contribute greatly to land use efficiency [3]. Land use plans are part of regional planning. In addition, other sections also discuss the issue of transportation, public utilities, various types of community infrastructure and special problems that require attention such as economic development and environmental preservation [4]. Land prices have a large influence on the ecological return process to reach their original state with time [5]. Changes in the total value of urban systems can be estimated from the results of overlaying land use data with land prices [6]. This shows a correlation between diversity of land use and land prices [7]. An understanding of land use must pay attention to several descriptions of perspectives on land [8]. In the land distribution process, transactions on land markets have the potential to cause different effects [9].

Determination of the basis for imposition of Land and Building Tax (PBB) in Indonesia uses NJOP (Tax Object Selling Value). NJOP sometimes does not match fair market values Land quality factors, location, distance to the nearest market and city affect the value of land [10]. Approach to calculating NPW by looking at the level of the geographical zone consisting of groups of several plots of land and having the same price or land value referred to as the Land Value Zone (ZNT) [11]. According to world history, the division of ZNT could be adapted to the distribution of the Chicago Zoning Ordinance in 1923, which included residential, commercial and manufacturing zones [12]. In the distribution of ZNT there are several results of the analysis, for example the market price in the settlement zone is higher than the paddy zone [13]. Determination and grouping of zones in ZNT are basically by looking at the location so that the

emergence of a variety of groupings in ZNT, such as commercial allotment zones, housing allocation zones, agricultural allotment zones and other zones.

The increasingly critical condition of taxpayers in addressing land NJOP as a product of the assessment produced by the PBB Directorate increasingly demands an increase in the quality of land NJOP. The benchmark for the quality of the assessment product is based on the accuracy of the supporting data, the accuracy in the data analysis and the reasonableness that adheres to the principles of valuation. The effort to implement and enforce ZNT aims to improve the standard and correct method of making in determining the NJOP value by the government in this case as a form of anticipating the capitalization of land prices by land brokers and generating diverse responses by the community. This is what underlies the need for a study of the variables that affect the implementation and understanding of ZNT in the community.

## 2. Experimental Method

This research uses quantitative methods. Quantitative research is an approach to test objective theory by testing the relationship between variables that can be measured and analyzed using statistical procedures [14]. Quantitative methods are represented by survey research methods conducted by describing quantitatively the trends, opinions, attitudes of a population towards the object of research. Quantitative data is obtained by using a self-compiled questionnaire instrument. The use of research strategies by using quantitative data is collected to further integrate the results of the analysis to draw conclusions on the results of the overall research. In this case the results of quantitative statistics from a sample are then followed up by a calculation process that helps explain the results of the statistics obtained.

The analysis used the scoring method. The process of scoring data by giving the highest score on good answers and the lowest score on answers that are not good from the results of questionnaires given or submitted to the community. Data on community perceptions obtained from the results of filling out questionnaires directly on each question can be recorded and processed using the scoring formula. Each variable consists of 3 (three) questions, then the final sum is added. Then, for the calculation and processing of the analysis results of each variable using the final number formula

The variables in this study emphasize the criteria of community perception about the level of understanding and knowledge of ZNT implementation in the community. The number of samples taken 100 respondents from the community. The selection of respondents was carried out by purposive sampling method, based on consideration

and the aim to find out public perceptions in the level of understanding and knowledge of perceptions of implementation or implementation of ZNT. Semarang City has 16 sub-districts, so 100 respondents will be divided into 16 sub-districts with clustering techniques based on the percentage of population in each sub-district in Semarang.

The process of scoring data by giving a score on each of the questionnaire answers. The data is then processed using the formula (1) so that it can be known perceptions from the community. Each variable consists of 3 (three) questions, then the final sum is obtained.

$$\text{Formula} = \text{nominal score} \times \text{number of respondents per nominal score}$$

### 3. Result and Discussion

In urban planning and development, information on land prices is currently very much needed in the context of allocating space allotments [15]. Market transactions in land prices are adjusted to the location and the latest land conditions. The process of land valuation must be carried out as quickly and easily as possible [16]. This is what underlies the making of ZNT maps. ZNT itself has a large area of coverage, mass and a lot of land (agriculture or non-agriculture) then presented in the form of zoning maps [17]. ZNT is an area or field that describes the value of land relative to the imaginary boundary or real according to land use. ZNT has a difference in value between one and the other based on comparative analysis of market prices and costs [18]. In addition, ZNT has a goal to obtain land market value in the year the valuation is carried out.

Field surveys are carried out by observing and distributing questionnaires. The subjects in this study are homogeneous, so the process of distributing questionnaires is done randomly. The selection of respondents was carried out using the purposive sampling method. The city of Semarang has 16 districts so that 100 respondents will be divided as many as 16 districts by clustering technique based on the large percentage of the population of each district in the city of Semarang.. Map of the distribution points of this research sample can be seen in Figure 1.

Analysis of land market value aims to obtain market value results from all existing buying and selling transaction data [19]. All transaction data is set at the specified valuation date. The next step is to correct the type and time of buying and selling data transactions to get the estimated NPW price. ZNT maps are made on a scale of 1: 10,000 or larger scale. The ZNT map describes information about the value of land in the form of classification or classification of land values. In principle, using market value-based



Figure 1: Sample Distribution Map.

valuation and the assessment team must collect land market price data as a comparison in determining the value of land.

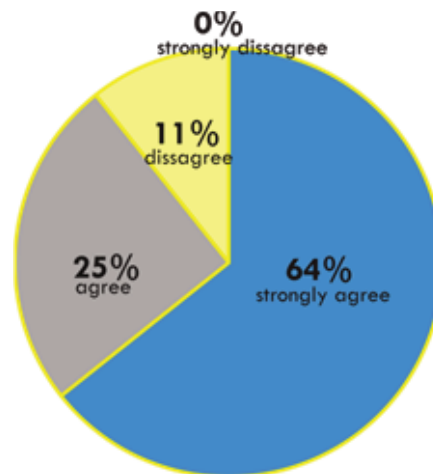
When conducting a research survey in the field there were still many people in the city of Semarang who were unfamiliar with ZNT and needed a deeper explanation of ZNT. A list of theme questions regarding ZNT knowledge in general can be seen in Table 1.

TABLE 1: Theme of ZNT Concept Questions.

No.	Variable	Question Themes
1.	ZNT concept in general	a. Replacement NJOP with ZNT b. ZNT Concept Readiness c. Legalization of ZNT

**Figure 2:** is a diagram of the analysis of the ZNT concept that was asked directly to the public. The result can be seen that the highest value is equal to 64% of respondents who strongly agree, 25% of respondents who agree, 11% of respondents who disagree and 0% of respondents who strongly disagree about the ZNT concept which is considered better than the existing NJOP concept.

According to the results of the study based on respondents, the concept of implementing ZNT is mature and the ZNT method must be ratified as soon as possible in



**Figure 2:** Diagram of the Analysis of The ZNT Concept.

order to ensure transparency in the market value of the land. In Semarang City Regional Regulation No. 13 of 2011 concerning Land and Building Tax, Land and Building Tax is one of the most important regional revenues for improving services to the community. Therefore, information on the value of land, property, economy, region, and total land assets is needed to be realized as a national reference to realize the function of land, one of which is the ZNT Map [20]. Making ZNT Maps requires a base map to provide a spatial approach for valuer appraisals in analyzing land and buildings effectively and efficiently [21]. ZNT maps can be used to determine tariffs in land services, reference communities in transactions, determine compensation, inventory value of public assets and community assets, monitor land values and land markets, and reference NJOP stipulations for PB [22]. ZNT can also increase Semarang City's Asset Income, which in the future has a very good impact on the development and progress of Semarang City.

The main purpose of implementing policy is to understand what must happen after a program is declared valid This understanding includes efforts to administer it and have a real impact on society. Implementation of basic policy decisions, usually in the form of a law (UU), but can also be in the form of orders or important executive decisions or decisions of the judiciary. In general, the decision identifies the problems that want to be addressed, explicitly states the goals and objectives to be achieved, and various ways to structure or regulate the implementation process. The results of the analysis of the influence of the quality of the implementation of basic public services in the social field partially indicate a positive influence on the level of community satisfaction [23].

Determination of selected variables is done by weighting or scoring. So that the final results are assessed for the 3 (three) highest variables that affect the implementation of ZNT in Semarang City community. This analysis was obtained after the researcher

conducted a field survey which was then followed by processing data and displayed on Table 2. below.

TABLE 2: The Results of the Analysis of Variables are Selected for the Implementation of ZNT.

No.	Variables	Explanation	Value	Rating
1.	Standard Operational Procedure (SOP)	ZNT's Standard Operational Procedure (SOP) is ready to replace the NJOP method	1.041	Strongly Agree
2.	Goal	The main goal of ZNT is to be on target with the community and needs to be targeted towards relevant stakeholders and all groups	1.115	Strongly Agree
3.	ZNT Method	ZNT method is ready to change NJOP	1.095	Strongly Agree
4.	Readiness and ability of Human Resources	Readiness and capability of Human Resources need to be improved	1.038	Strongly Agree
5.	ZNT socialization	ZNT socialization needs to be held regularly	1.152	Strongly Agree
6.	Legality	The legal aspect is sufficient to underlie the implementation of ZNT	950	Agree
7.	Environment	ZNT can be accepted in the community	1.135	Strongly Agree
8.	Social and Economy	ZNT can be accepted in the social and economic aspects of society	1.119	Strongly Agree
9.	Politic	ZNT can be used for political purposes by the community and the City Government	1.155	Strongly Agree
10.	Communication with Related Parties	Communication with related parties is needed in the implementation of ZNT	1.154	Strongly Agree

Information:

- Range: 976-1200 : Strongly Agree
- 751-975 : Agree
- 526-750 : Disagree
- 300-525 : Strongly Disagree

Based on the calculation scoring that can be seen from Table 2, the variable that obtains the rating "agree" is the legality variable. For 9 components of the other variables, namely the Standard Operational Procedure (SOP), Goal, ZNT Method, Readiness and ability of Human Resources, ZNT socialization, environmental aspects, social and economic aspects, political aspects, and communication with related parties very much needed in the implementation of ZNT in the city of Semarang to get the final result with an assessment of "strongly agree".

The results of the analysis of the variables selected for the implementation of ZNT in the Semarang City community above also can be seen that the political variable



occupies the highest valuation with a value of 1155. This shows that ZNT can be used for political purposes by the City Government and other parties with interests. Political and state factors are important factors in determining the value of land so that the price actually represents the value of existing land [24]. The implementation of constitutional power includes the division of political power which consists of the problem of the source of political power, the process of legitimacy, the highest authority, the exercise of power, functions of power or light duty and easily achievable political goals [25]. Ideal politics also greatly influences this ZNT implementation [26]. The community feels the ease and transparency of the fair market price of land with the ZNT method and feels that this is not in the NJOP determination currently in force. Cross-sector cooperation between the Semarang City Land Office and the Semarang City Government is also needed, for example by holding a memorandum of understanding (MoU) with the Regional Financial and Asset Management Agency (BPKAD) and Semarang City Spatial Planning Office in implementing ZNT, so as to increase PAD and PNBK.

It can also be seen from the results of the assessment of communication variables with parties related to very thin results with political variables, which are equal to 1,154, which ranks second on the selected variable. Communication variables with related parties also have a very important role in the implementation of ZNT in the city of Semarang in order to establish good relations, support each other and work together. Communication according to Van Horn and Van Mater is a matter between related organizations and implementation activities so that public policy can be implemented effectively [27]. This indicates that the need and importance of the role of good communication with stakeholders regarding the determination of land prices in the application of ZNT. so, it is necessary to hold a Focus Group Discussion (FGD) as a process of gathering information on a specific problem that is very specific through group discussions between ZNT policy makers and stakeholders regarding the implementation of ZNT in Semarang City. The implementation of ZNT is important in the future if communication with relevant parties supports and cooperates with each other. The implementation of the program will run as expected if the establishment of effective communication and good coordination with relevant parties [28].

The third highest variable is occupied by the ZNT socialization variable with a value of 1.152 which states that the Semarang City community needs to carry out ZNT socialization regularly so that the community can keep up with the latest developments in information and transparency on land market prices with critical and developing community conditions in the current millennial generation. According to Goslin, socialization is a learning process that is experienced by someone to gain knowledge of skills, values



and norms so that he can participate as a member in his community group [29]. The socialization process will not work well without the help of people who are aware or not, in this case people are working to represent the community in carrying out socialization activities [30]. With the ZNT outreach activities it can also have an impact on the people who already know the importance of land market price information and the transparency of land market prices.

## 4. Conclusion

Determination of the imposition of PBB in Indonesia still uses NJOP. But in reality, NJOP is incompatible with NPW. According to community assessments, land prices with the NJOP method are still below the market price of the land. According to the study conducted in this study, it can be concluded that the implementation of ZNT can be accepted by the community as a measurement in determining PBB. The implementation of ZNT received a positive response from the people of Semarang City as the object of study. Political factors, communication with related parties and ZNT socialization are the most important factors in implementing ZNT. These three factors support each other by involving parties from the community, Semarang City Government, Semarang City Land Office, other relevant government agencies and those who have an interest in ZNT going forward. So that ZNT can be applied in the method of valuing land prices that are intended to determine the amount of land tax with a record of the activity of updating land market prices annually or periodically.

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