

# Analysis of Property Value at Bank Sumut Binjai Branch, North Sumatra, Indonesia

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## Abstract:

The property value such as land and buildings as collateral have different values due to the location, land and buildings and other things. The high Non-Performing Loan (NPL) at Bank Sumut, sub-branch of Pasar Tavip Binjai is due to the inaccuracies of credit analysts in assessing collateral. Method of analysis in this research is using Multiple Linear Regression method. The result of this research shows that land area, building area, the width of road and land law have positively and significantly influenced the value of collateral located at PT Bank Sumut, Binjai Branch. in determining the value of land and buildings that are used as collateral by prospective debtors or which will be re-valued so as to protect the bank from giving collateral harms the bank itself. For assessors can use a linear regression model generated in this study to be used as a reference in assessing the value of land and buildings as collateral. For further research, either those who will conduct research on the same type of research population or others, it is recommended that other variables be used that can affect the value of collateral as collateral or the same variable but at different research sites.

**Keywords:** Value, Character, Capital, Capacity, Collateral, Condition of Economic, Bank.



IJSB

Accepted 22 April 2019  
Published xx April 2019  
DOI: 10.5281/zenodo.2649248

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## INTRODUCTION

Business activity is a phenomenon that is very complex since it covers various fields, law, economics, and politics. In the life of society can be seen that human activity in the business world cannot be separated from the role of banks as providers of financial services to the community. The bank is known as a financial institution whose primary activity is to receive savings deposits, savings and deposits. The bank is also known as a place to borrow money (credit) for the people who need it. Then, the Bank is also known as a place to change money, transfer money or receive any form of payment and deposit as payment of electricity, telephone, water, taxes, tuition, and other payments. Activities borrowing money has been around a long time in the life of the people who know money as means of payment. Almost all people have to make money lending and borrowing activities as something that is necessary to support the development of economic activities and to improve the standard of living. It is argued that lending and borrowing are part of public life at present. Implementation of lending by banks also depends on the type of loan. As for the types of loans that are not on the mortgage loan (unsecured loan) and using the mortgage loan (Firdaus & Ariyanti, 2009). The extension of credit by the bank to the collateral submitted by the debtor is one way to reduce the level of risk. When providing credit, the bank will make an assessment of the credit application. Assessment of the subject and the object is to generate trust collateral for the bank to avoid problems in the future on the assets. The banking world uses the principles of credit ratings "5 C" are: Character, Capital, Capacity, Collateral and Condition of Economic (Gandaprawira, 1985). Valuation of a property is an economic benefit estimate on goods valued at a certain time scale with a specific definition of value. In this case, the normal value of tangible common currency and exchange rate are also tangible. The purpose of the valuation of property is for the purpose of sale, purchase and for rental purposes. (Sujono, 2011). The property value such as land and buildings as collateral have different values due to the location, land and buildings and other things. In addition, there is also a guarantee in the environment, land and building shape and the same building value but the different land area has different values. According to Levy (1985), The main variables that determine the value of land is related to the location of the land that has accessibility or proximity to the town centre and the centre of the business district (CBD).

CBD concept, in this case, is defined more broadly as an area of economic activity in the Land Value Zone (LVZ) that includes or is associated with a central location for shopping activities, education, offices, terminals, hotels, recreation centres and other economic activities. With the increase in transportation, infrastructure, facilities and infrastructure built to support the government in areas of the city will have an impact on the value of land that surrounds the development of specific regions. According to Irwan (2010), land area, building area, road width and time of the transaction affects the value of the land. The factors that affect the value of the land significantly is the width of the road in front of the building and land that became the object of evaluation. Hidayati (1998) conducted a study on the influence of the centre of economic activity on the land value in Yogyakarta, not comparing the influence of economic activity groups to the land value. In addition, the research also examines the value of land affected by the distance from the centre of economic activity, population density and building density ratio covering the building for all types of use, not only limited to residential buildings and assess the contour of land value in Malioboro's economic activity centre and Solo Street. According to Mukhsinati (2013), there are some causes of bad credit which is one of the credit analysts in the analysis of collateral value. Bank Sumut is a Bank owned by the Government of North Sumatra. The bank located at Tavis Market sub-branch is one of Bank

Sumut branches. In January 2018 Non-Performing Loan (NPL) at Bank Sumut sub-branch, Tavip Market reached 7.82. It is possible because of the high Non-Performing Loan (NPL) at Bank Sumut sub-branch, Tavip Market, Binjai is the inaccuracy of credit analysts in assessing collateral. The importance of valuation in banking makes it important for creditors or credit analysts to take into account any aspect that affects the property value from the collateral in this case land and building to prevent the occurrence of miscalculation of collateral.

## LITERATURE REVIEW

### Collateral

In lending, collateral or guarantee is top of priority to get the confidence of the bank for funds distributed in the form of credit in order when congestion occurs then the guarantee can be made for smooth rescue banks. Satrio, J (1996) states that the guarantee provided by the borrower to the bank since the bank has an interest that borrowers must fulfil their obligations in an alliance. In general, as delivery guarantee wealth or a statement of readiness to bear the repayment of a debt. According to the Banking Law No. 10 of 1998 on banking subjects, states that collateral is additional collateral that the debtor's customers handed over to the bank for the provision of credit facilities or financing based on shariah principles. Meanwhile according to Djumhana, M (2000) that any debtor who borrowed credit must be accompanied by a guarantee. The guarantee can be one of the supporting tools in the smooth delivery of credit. In Indonesia, the fulfilment of the requirement for the existence of guarantee in Law No. 7 of 1992 on banking article 8 which states in the case of giving credit of the general bank must have confidence in the ability and willingness of the debtor to settle the debt according to the contracted. The guarantee is an alliance between the creditor and the debtor, whereby the debtor promises all their assets to settle debts in accordance with the stipulated conditions if within the stipulated time of the payment of the debtor. The use of guarantees according to Suyatno, T (1992) is intended as follows; Ensuring that clients play a role in the transaction to finance their business so that it is possible to leave their business or project harming themselves or their company, be prevented or at least likely to be able to do so minimized. Giving the bank the right and the power to get the settlement and the proceeds of the sale of the security goods, if the customer commits a mortgage, which does not pay back the debt at the time stipulated in the agreement. Encourages debtors (collectively) to meet credit agreements in particular on repayments in accordance with agreed terms so that they do not lose assets that have been pledged to banks. The types of collateral are the following guarantees of tangible objects: goods that can be used as collateral, such as land, building, motor vehicle, merchandise, plant or farm or rice field. Intangible guarantees such as stock certificates, bonds certificates, land certificates, certificates of deposits and money orders. The guarantor of a person or company is a guarantee granted by a person or company to the credit facility provided. If the credit is stuck then the person or company who provided the guarantee is at risk. Without guarantees is a guarantee provided not by certain warranties. Usually given to professional companies so that the credit may be very small.

### Land and buildings as collateral

Land rights are the most favoured credit guarantees by banks since land is considered more economically valuable. Guaranteed institutions charged to land and buildings by banks are liens. It should be noted, that creditors must always be vigilant, in the future to have no difficulty in executing or selling the land and building. The certificate is a strong proof because in the certificate it is written about the type of rights holders and important legal

events in relation to a particular land and all of which are filled by the competent authorities, then what is read in the certificate should be considered true. A strong proof tool means that the certificate is not the only proof of the validity of a transfer. Proof of valid certificate has not been perfect for a third party this is because third parties can still freely about land ownership in public registers at the local Land Office. This allows the light of the principle of openness in the Agrarian Law. "The land with whatever is on it or which is attached to it either the plant, the building or the other is called the real estate. Meanwhile, all rights or legal relationships and benefits associated with real estate ownership are called Real Property. "(Indonesian Appraisers Standard, 2015). As for land tenure rights based on the PA Law No. 5 of 1960 are: (Eddy, 2010) Property rights, building use rights, right to use business, right to use, management rights

### **Land and Building Assessment as Credit Collateral**

The implementation of lending to debtors in the banking world is certainly carried out with the principle of prudence and carrying out the principle of 5 C in analyzing the prospective debtor. The stages of collateral assessment are the stages carried out by credit analysts or assessors after analyzing Character, Capital, Capacity, Collateral and Condition of Economic. Assessment of the collateral is sometimes done by the credit analyst from the bank itself in line with the assessment of the debtor's business. There are also banks that have their own part to take care of the problem of collateral valuation of borrowing candidates or use external assessors. It depends on the amount and type of credit. Assessment of credit collateral is an assessment done in terms of determining the value of the collateral submitted by the debtor as a guarantee on the proposed loan. In practice, collateral assessment is conducted by assessing the legal status of ownership over real estate and then assessing real estate. Real property is defined as the ownership of legal interests inherent in real estate or juridical jurisdiction over owners of real estate while real estate represents physical assets (SPI and KEPI, 2015). In the valuation of collateral, the assessor usually uses the methods in the assessment. There are three types of approaches in the assessment (Supardi, et al 2010: 31-32) among others; Market Data Approach; Cost Approach; Income Approach.

### **Characterization Factors that Affect Collateral Value**

In this case, the value of land and buildings are the collateral at the bank has a different value even in the same area. This is caused by various factors that can cause differences in collateral value in the form of land and buildings. The factors that can affect the value of collateral in the form of land and buildings are land size is multiplied by length and width of a land plot with square meters (m<sup>2</sup>) (Anastasia and Tanugara, 2014). The building area is the physical area of the building which is used both as residences, businesses, warehouses and other and calculated in units of square meters (m<sup>2</sup>) (Anastasia and Tanugara, 2014). The roadway width is the width of the road in front of the ground and the building which becomes the main access to the location of the land and building and is calculated in meters (m) (Anastasia and Muliadihardjo, 2004). Road construction is the construction of roads that are in the vicinity of concrete whether concrete, asphalt, soil, paving blocks or others. (Sutawijaya, 2004). Land Distance to the CBD or Local Shopping Center is the distance between the business activity centre or the local market closest to the plot of land and building. (Hidayati, 1998). Land Legality is a proof of ownership of the land pledged by the debtor to the bank. (Anastasia and Tanugara, 2014). The form of land is a physical form of land or a plot of land whether or not the length and width are proportional to the land value. (Rijasa et al, 2014).

## Hypotheses Development

Based on the theory and the problems, the hypothesis proposed in this research is assumed the factor of land area, building area, width of the road, road construction, distance of land to CBD, land legality status and land shape have significant influence to value of property

## RESEARCH METHODS

The type of research is descriptive. Descriptive research aims to look for the characteristics, elements or properties of a phenomenon or to determine the value of a variable. The type of research data is secondary data consisting of collateral data, collateral value and credit at Bank Sumut sub-branch of Pasar Tavip, Binjai. The population of this research is collateral of PT. Bank Sumut sub-branch of Tavip Binjai Market from 2015 to 2017. The collateral is located at Bank Sumut Sub-Branch of Tavip Market as much as 273 collaterals consisting of 200 representing land certificates and 73 PNS SKs. Population totalling 200 collateral. To determine the amount of collateral that was taken as a sample, the method of determining the sample was using Slovin formula (Supranto, 2000) where the number of populations had been identified with certainty, then the sample was 66,6777 which was rounded into 70 samples. Descriptive research data analysis is a form of data analysis to test the generalization of research results based on a sample. Descriptive analysis by examining the descriptive hypothesis that is suitable with data types or variables based on the measurement scale. The analysis of this research data is using Multiple Linear Regression and Dummies Model as a parameter estimator which is useful to see the relationship between the collateral value and the characteristics that influence.

## RESULTS & DISCUSSION

### Regression Model

The classic assumptions of regression models have been met with no constraints. This indicates that the prediction model of the model sub-structure I already meet BLUE (best, linear, unbiased estimate) criteria. Model predictions are approaching the real situation. Regression results from the first model sub-structure by reviewing the prediction of independent variable prediction in explaining dependent variables through the adjusted coefficient of adjusted R-square values, predictive significance simultaneously via F-test on ANOVA, and the effect of each independent variables on dependent variables through regression coefficient.

**Table 1 F-Test Results**

| Model        | Sum of Squares | Df | Mean Square | F      | Sig.              |
|--------------|----------------|----|-------------|--------|-------------------|
| 1 Regression | 838,930        | 5  | 167,786     | 93,796 | ,000 <sup>b</sup> |
| Residual     | 166,363        | 93 | 1,789       |        |                   |
| Total        | 1005,293       | 98 |             |        |                   |

a. Dependent Variable: employee performance

b. Predictors: (Constant), communication system, formal authority, workflow, formal control, task complexity

The above table presents information that simultaneously the variable of the workflow (X1), the complexity of tasks (X2), formal authority (X3), formal control (X4) and communication system (X5) significantly affect employee performance. This decision is obtained based on F-value value greater than F-table, or through F-test significance value



smaller than 0.05 (Sig F = 0,000). Thus, the working flow (X1), the complexity of tasks (X2), formal authority (X3), formal control (X4) and communication system (X5) are true as predictors of employee performance in the Housing and Residential Area of North Sumatera.

**Table 2. Coefficient of determination**

| Model | R                 | R Square | Adjusted R Square | Std. An error of the Estimate | Durbin-Watson |
|-------|-------------------|----------|-------------------|-------------------------------|---------------|
| 1     | ,914 <sup>a</sup> | ,835     | ,826              | 1,33748                       | 1,866         |

a. Predictors: (Constant), communication system, formal authority, workflow, formal control, task complexity

b. Dependent Variable: employee performance

Table 2 shows the adjusted value of R-square in the research model which indicates that the workflow variables (X1), the complexity of tasks (X2), formal authority (X3), formal control (X4) and communication system (X5) 82.6 % variance of data on employee performance variable (Y). A total of 17.4% variance of data on employee performance is explained by other unexplored variables in this model.

**Table 3. Regression coefficient**

| Model                | Unstandardized Coefficients |            | Standardized Coefficients | T     | Sig. |
|----------------------|-----------------------------|------------|---------------------------|-------|------|
|                      | B                           | Std. Error | Beta                      |       |      |
| (Constant)           | 3,182                       | ,752       |                           | 4,230 | ,000 |
| workflow             | ,190                        | ,061       | ,218                      | 3,092 | ,003 |
| task complexity      | ,055                        | ,071       | ,068                      | ,786  | ,434 |
| formal authority     | ,193                        | ,070       | ,238                      | 2,763 | ,007 |
| formal control       | ,235                        | ,074       | ,262                      | 3,191 | ,002 |
| communication system | ,213                        | ,079       | ,243                      | 2,698 | ,008 |

a. Dependent Variable: employee performance

Based on Table 3 above the model regression equation is written as follows:

$$Y = 3,182 + 0,190 X1 + 0,055 X2 + 0,193 X3 + 0,235 X4 + 0,213 X5 + e$$

The regression equation above indicates that employee performance variables are influenced by workflow (X1), the complexity of tasks (X2), formal authority (X3), formal control (X4), the communication system (X5), and other variables beyond research.

if the flow of work gets better then it will encourage the achievement of better employee performance too. if the complexity of the task gets better then it will encourage the achievement of employee performance better. if a formal authority is better then it will encourage the achievement of better employee performance too. if formal control is better then it will encourage the achievement of better employee performance too. if the communication system is better then it will encourage the achievement of better employee performance too.

**Table 4 Results of hypothesis testing**

| Variable             | T-count | T-table | Sig   | Conclusion |
|----------------------|---------|---------|-------|------------|
| workflow             | 3,092   | 1.98    | 0,003 | Accepted   |
| complexity of tasks  | 0,786   | 1.98    | 0,434 | Rejected   |
| formal authority     | 2,763   | 1.98    | 0,007 | Accepted   |
| formal control       | 3,191   | 1.98    | 0,002 | Accepted   |
| communication system | 2,698   | 1.98    | 0,008 | Accepted   |

## Discussion

### *The effect of land area on collateral price*

Land area variable has regression coefficient 312.090,313, standardized coefficients are 0,197, with Sig. of 0.036 and t\_count is 2,140. The regression analysis result shows that the land area variable has a significant effect on collateral value at PT. Bank Sumut sub-Branch of Tavip Market in Binjai, where the larger the land area of 1 unit will increase the value of the collateral by 312,090,213 units. Land area is one factor that can influence the market value of home living in Surabaya (Anastasia and Ongkowijaya, 2013: 59). In research conducted by Rahayu (2009: 68), it is revealed that Land Area factor has a positive and significant effect on land value. If the land area increases by 1%, then the land value will increase by 0.921696% with the other factor assumption (*ceteris paribus*). Therefore, the land area has a positive and significant effect on the collateral value of PT. Bank Sumut sub-Branch Tavip Market in Binjai.

### *The effect of building area on collateral price*

Building area variables have regression coefficients of 863.576,954 standardized coefficients of 0.371 with Sig. for 0,000 and t-calculate 3,760. Regression results of building area variable have a significant effect on the price of collateral at PT Bank Sumut sub-Branch of Tavip Market, Binjai. The larger the building per 1 unit will increase the value of the reserve amounted to 863,576,954 units. In the study conducted by Fahirah et al. (2010) the area of the building is a factor that affects the value of the building. The extensive building will have many benefits to its owners. Anastasia and Muliadihardjo (2004) also say that the construction area is a factor that affects the market value of land and buildings in Citraraya real estate. Therefore, the building area has a positive and significant effect on the collateral value at PT. Bank Sumut sub-Branch, Tavip Market in Binjai.

### *The effect of road width on collateral price*

The variable of the road width has a regression coefficient of 67.315.642.08, standardized coefficients of 0.340 with Sig. of 0,000 and t-calculate 4,214. Regression results indicate that the width of the road has a significant effect on the price of collateral at PT. Bank Sumut sub-branch of Tavip Market, Binjai. Each additional road width of one unit will increase the collateral price of 67,315,642 units. Easy access can increase the value of the surrounding land or buildings. The location of residences or businesses on a wide street will provide benefits to the environment such as easy access to the targeted plots, more efficient times and the choice of modes of transportation. Irawan and Pranata (2010) in their study stated that the width of the road width in front of the land has a positive and significant effect on the value of land and buildings with a regression coefficient of 11601.28. The width of the road in front of the land has a positive and significant effect on the collateral value at PT. Bank Sumut sub-branch of Tavip Market in Binjai.

***The effect of land distance to CBD on collateral price***

Variable distance to CBD has a regression coefficient of -17.049.554,20, standardized coefficients of -0,166 with Sig. at 0.038 and t-count -2.115. Regression analysis result of the variable of the distance of land to CBD has a significant effect to collateral value, where the increase of collateral price from CBD by 1 unit will decrease the value of collateral equal to 17.049.554 unit. CBP is a place where buying and selling activities are carried out in an area. Many people are eager to have land located not far from the CBD due to time efficiency and reduce transportation costs (Sjafrizal, 2012). In research conducted by Raeka et al (2012) the distance of land to CBD has a positive and significant effect on the land area in Surabaya. While Rahayu (2004) states that the distance of land to CBD has a negative and significant effect on the value of the building. So the distance to CBD has a negative and significant effect on the collateral value at PT. Bank Sumut sub-branch of Tavip Market in Binjai

***The effect of road construction on collateral price***

Road construction variables have regression coefficients of -96.316.653.99, standardized coefficients of -0,194 with Sig. 0,012 and t-count -2,578. Regression analysis results of road construction variables have a significant effect on the price of collateral, where road construction that is not made of asphalt by 1 unit will reduce the price of collateral by 96,316,653 units. In research conducted by Sutawijaya (2004) it was revealed that road construction has a positive effect on the land value of 0,391%. This condition is caused by the improvement of road construction will facilitate transportation in order to raise the land price. Construction of the front of the collateral has a negative and significant effect on the value of the collateral at PT. Bank Sumut sub-branch of Tavip Market in Binjai

***The effect of land legality status on collateral price***

Land status variables have regression coefficients of 110.027.782,35 standardized coefficients of 0.255 with Sig. 0.004 and t-count 2,968. Regression analysis result of the land status variable has a significant effect on land value in this research area. This means land with the land status of SHM and SHGB will increase land value by 110.027.782,35 unit.

Land with legal status (SHM or SHGB) will raise the price of land or building. This is because landowners will avoid legal problems such as land disputes that often occur in Indonesia. Anastasia and Tanugara (2014) stated that the land legality factor had a significant effect on the shophouses in Surabaya. Rijasa et al (2014) also state that the status of land legality has a positive effect on the value of land and buildings in the city of Denpasar. The status of land legality has a positive and significant effect on the collateral value at PT. Bank Sumut sub-branch of Tavip Market in Binjai

***The effect of land shape on collateral price***

Land shape variable has regression coefficients of -99.100.507,10, standardized coefficients of -0,214 with Sig. at 0.014 and t-count -2.253. Result of regression analysis of land shape variables has a significant effect on the price of collateral at PT. Bank Sumut sub-branch, Tavip Market, Binjai. This means that land that has a disproportionate form will reduce the collateral price of 99,100.507.10 units. Rahayu (2009) states that the shape of square land will be easier to construct a building compared to irregular landforms. Rijasa et al (2014) reveal that landform has a positive and significant effect on land value in Denpasar city. Therefore, the land shape has a negative and significant effect on the value at PT. Bank Sumut sub-branch of Tavip Market in Binjai



## CONCLUSIONS & SUGGESTIONS

### Conclusion

Based on the results of the analysis described, it can be concluded that simultaneously, land area, building area, road width in front of collateral, collateral distance to the CBD, road construction in front of collateral, land legality status, and land shape can explain changes in the dependent variable collateral value or the regression model is declared feasible. The influence of each independent variable on the dependent variable is described as follows: The area of land has a positive and significant effect on the collateral value at PT. Sumut Bank sub-Branch of Tavip Market in Binjai. The building area has a positive and significant effect on the collateral value at PT. Sumut Bank sub-Branch of Tavip Market in Binjai. The road width in front of the land has a positive and significant effect on the collateral value at PT. Sumut Bank sub-Branch of Tavip Market in Binjai. Land distance to CBD has a negative and significant effect on collateral value at PT. Sumut Bank sub-Branch of Tavip Market in Binjai. Road construction in front of collateral has a negative and significant effect on the value of collateral value at PT. Sumut Bank sub-Branch of Tavip Market in Binjai. Land legality status has a positive and significant effect on the collateral value at PT. Sumut Bank sub-Branch of Tavip Market in Binjai. The form of land has a negative and significant effect on the collateral value at PT. Sumut Bank sub-branch of Tavip Market in Binjai.

### Suggestion

Based on the conclusions above, some suggestions that need to be added are as follows: For banks, especially PT. Bank Sumut sub-Branch of Tavip Market in Binjai, in order to make this research become one of the references in determining the value of land and buildings that are used as collateral by prospective debtors or which will be re-valued so as to protect the bank from giving collateral harms the bank itself. For assessors can use a linear regression model generated in this study to be used as a reference in assessing the value of land and buildings as collateral. For further research, either those who will conduct research on the same type of research population or others, it is recommended that other variables be used that can affect the value of collateral as collateral or the same variable but at different research sites

## REFERENCES

- Anastasia, N., Muliadihardjo, M., & Fransisca, F. (2005). PENILAIAN PROPERTI DI SURABAYA PADA PERUMAHAN PAKUWON INDAH GRAHA FAMILI DAN CITRARAYA (Studi Kasus pada ERA Tjandra II). *DIMENSI (Journal of Architecture and Built Environment)*, 32(1).
- Abdillah, W., & Hartono, J. (2015). Partial Least Square (PLS): Alternative Structural Equation Modeling (SEM) in Business Research. *Yogyakarta: Andi*.
- Djumhana, M., & Indonesia, A. A. H. P. (2000). Citra Aditya Bakti.
- Eddy, R. (2010). *Aspek Legal Properti-Teori, Contoh, dan Aplikasi*. Penerbit Andi.
- Faizal. (2015). Mekanisme Objek Agunan Kredit Pada Bank Rakyat Indonesia Dengan Jaminan Surat Keputusan Pegawai Negeri Sipil Di Lingkungan Pemerintahan Daerah Ibukota Jakarta.
- Fitriana, E. A. (2015). Penilaian Jaminan Properti di BTN Syariah (Studi Pada Bank Tabungan Negara Kantor Cabang Pembantu Syariah Ciputat Tangerang Selatan).
- Fahirah, F. (2011). Identifikasi variabel penilaian properti perumahan berdasarkan persepsi penghuni perumahan. *SMARTek*, 9(4).
- Firdaus, R., & Ariyanti, M. (2009). Manajemen Perkreditan Bank Umum. *Bandung: Alfabetta*, 79.

- Ghozali, I. (2006). *Aplikasi analisis multivariate dengan program SPSS*. Badan Penerbit Universitas Diponegoro.
- Grudnitski, G. (2003). Golf course communities: the effect of course type on housing prices. *The Appraisal Journal*, 71(2), 145.
- Hadiwijaya dan Wirasasmita. (2000). Analisis Kredit, CV. Pionir Jaya, Bandung.
- Hidayati, W. (1999). *Pengaruh pusat kegiatan ekonomi terhadap nilai tanah di Yogyakarta* (Doctoral dissertation, Universitas Gadjah Mada).
- Hidayati, Wahyu dan Harjanto, Budi. (2003). Konsep Dasar Penelitian Properti. BPFE. Yogyakarta
- Harnoto dan Adiatma, Lambang. (2010). Mengenal Penilaian Dan Profesi Konsep Prinsip Umum dan Praktek Penilaian di Indonesia. Penerbit Mitra Wacana Media. Jakarta
- Irawan dan Paranata. (2010). Analisis Penetapan Nilai Ganti Kerugian Properti Korban Luapan Lumpur Lapindo. JEJAK, Vol. 3, No. 2, Hal. 98-108.
- Kamus Perbankan Bank Indonesia (1999), Jakarta.
- Kasmir, (2014), Bank Dan Lembaga Keuangan Lainnya, PT RajaGrafindo Persada, Jakarta
- Maulana, Muhammad. (2014). Jaminan Dalam Pembiayaan Pada Perbankan Syariah di Indonesia.
- Misbahuddin dan Hasan, Iqbal. (2014). Analisis Data Penelitian Dengan Statistik. PT Bumi Aksara. Jakarta
- Mukhsinati, Sari. (2011). Analisis Faktor – Faktor Penyebab Terjadinya Kredit Macet Pada Bank “X” Di Kabupaten Jember. Universitas Jember. Jember
- Nils Kok, Paavo Monkkonen, John M. Quigley, (2011), Economic Geography, Jobs, and Regulations: The Value of Land and Housing, the Berkeley Program for Housing and Urban Policy and the European Property, Maastricht University.
- KROPP, Sebastian, (2012), The Influence of Flooding on the Value of Real Estate, Knowing to manage the territory, protect the environment, evaluate the cultural heritage, Rom, Italy.
- Limbong, Bernhard, Dr, S.Sos., S.H., M.H., (2011), Pengadaan Tanah Untuk Pembangunan, Regulasi Kompensasi Penegakan Hukum, Pustaka Margaretha, Jakarta.
- Rahayu, Heffi Christya. (2009). Analisa Nilai Tanah Terhadap Lingkungan Kampus Politeknik Pasir Pengairan. Jurnal APTEK Vol 1, No. 1
- Raeka, Fatmawati dan Sulistyarso, Haryo. (2012). Model Perkembangan Nilai Lahan Perkotaan di Surabaya. Jurnal Teknik Perencanaan Wilayah dan Kota. Vol. 1, No. 1, Hal. 1-3.
- Rijasa, Sukrawa dan Nadiasa. (2014). Analisis Penilaian Bangunan Rumah Tinggal di Kota Denpasar. Jurnal Spektran, Vol. 2, No. 2
- Satrio, J. (1996). Hukum Perjanjian, Citra Aditya Bhakti, Bandung.
- S., H., Salim, (2004), Perkembangan Hukum Jaminan Di Indonesia, PT. Raja Grafindo Persada, Jakarta.
- Sinulingga Sukaria. (2015). Metode Penelitian. USUpress, Medan.
- Setiawan, Ikhsan, M., (2006), Faktor-faktor yang Mempengaruhi Perubahan Nilai Tanah dan Bangunan pada Suatu Properti (Kasus: Perumahan Galaxi Bumi Permai, Surabaya). NEUTRON, Vol.6, No.2.
- Soemitro, Hanitijo, Ronny, (1988), Metode Penelitian Hukum dan Jurimetri, Ghalia Indonesia, Jakarta.
- Standar Penilaian Indonesia (SPI), Jenis Properti, (2015).
- Sujono, Bambang. (2011). Penilaian Aset dalam Sektor Properti. Modul Vol. 11, No 1.
- Supardi, Untung dkk. (2010). Tinjauan Konsep Prosedur Teknik Penilaian & Properti. Penerbit Mitra Wacana Median, Jakarta.

- Sutawijaya, Adrian. (2004). Analisis faktor-faktor yang mempengaruhi Nilai tanah sebagai dasar penilaian nilai jual Obyek pajak (njop) pbb di kota semarang. Jurnal ekonomi pembangunan, kajian ekonomi negara berkembang. Suyatno, Thomas, 1995, Dasar-dasar Perkreditan, Gramedia Pustaka Utama, Jakarta.
- Undang-Undang Republik Indonesia No. 10 Tahun 1998 tentang Perubahan atas Undang-Undang No. 7 Tahun 1992 tentang Perbankan.
- Wijaya, Faried dkk. (1991). Perkreditan, BNK Dan Lembaga – Lembaga Keuangan. Universitas Gajah Mada. Yogyakarta

**Cite this article:**

**Imanurrahman, M., Sinulingga, S. & Aulia, D. N. (2019).** Analysis of Property Value at Bank Sumut Binjai Branch, North Sumatra, Indonesia. *International Journal of Science and Business*, 3(3), 124-134. doi: <https://doi.org/10.5281/zenodo.2649248>

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