

# The Development of Apartment Which Influenced by Market Demand in Banjarmasin

Nurika Irliza

Departement of Architecture – Real Estate Planning  
Sepuluh November Institute of Technology (ITS)  
Surabaya, Indonesia

Vincentius Totok Noerwasito

Departement of Architecture  
Sepuluh November Institute of Technology (ITS)  
Surabaya, Indonesia

Purwanita Setijanti

Departement of Architecture  
Sepuluh November Institute of Technology (ITS)  
Surabaya, Indonesia

**Abstract**— Urbanization give an impact on the demographic aspects, namely increasing the number of residents in a city. The economy of a town will increase as the population increase, followed by the increasing demand for housing. This phenomenon occurs in big cities in Indonesia, one of which is Banjarmasin. But the phenomenon of urbanization is not supported by the condition of the land around urban areas of Banjarmasin. A negative effect, namely the rise of the price of land in urban areas, which also resulted in horizontal residential construction was not possible to do. Then the concept of vertical residential or apartment becomes a necessity and an alternative. The purpose of this study was to identify factors that influence the demand for apartments in the city Banjarmasin market. The concept of this research using quantitative approach with factor analysis techniques. Factor analysis was used to find the factors that affect the market demand for apartments. Data collection methods used by spreading questionnaires directly and the snowball technique. In addition to holding a live interview and sorting methods against the respondent. Respondents are middle and upper classes of society, and is taken by using purposive sampling. The results of this study found the factors that influence the market demand for apartments in the city of Banjarmasin.

**Keywords**— *Apartments, Feasibility-Study, Market-Demand, Banjarmasin*

## I. INTRODUCTION

The population of the city of Banjarmasin each year is increasing. Recorded until 2015, the city of Banjarmasin has a population of 675 440 inhabitants with a population growth rate of 1.36% in 2005-2015 [1]. Naturally, the increase in population will affect the demand for housing and the need for residential land will increase. But it is not supported by the existing land in the city of Banjarmasin. The land area owned by the city of Banjarmasin is approximately 98 km<sup>2</sup> [2]. Land conditions in Banjarmasin that increasingly limited allegedly would have a negative impact that increase the price of the existing land area of the city.

Increased demand will be supported by a large occupancy capacity or affordability of the public in having the house (housing affordability). This capability is determined by how much the purchasing power of the community or a household with income in buying a home at a certain price level. On average in Indonesia have a housing affordability index value of 3.30. And to the value of housing affordability index in South Kalimantan alone rose from 2006 to 2007. In 2006,

housing affordability index value of 2.97 while in 2007 was 3.08 [3].

Besides the increase in demand for housing supported by the South Kalimantan's economy continued to grow during the last few years. During the year 2013 South Kalimantan's economy grew by 5.18% compared to the year 2012. In the second quarter of 2015 grew at around 3.9% -4.1% (yoy). This increase is supported by strong demand and the improvement of public investment and government spending [4].

Dynamically increasing condition of the city will trigger the growth of apartments. As happened in the big growing cities. Residential development in the vertical direction is judged to be an alternative to address the need for an increasingly narrow residential land and rising prices. Then, with their limited land and increasing demand for residential, the concept of vertical housing can be implemented in the city of Banjarmasin. Therefore, the future city of Banjarmasin has potential and a tremendous opportunity for development of apartments.

## II. LITERATURE REVIEW

### A. Demand Theory

According to Case and Fair (2007) in his book entitled Principles of Economics demand is the amount or number of units of a product to be bought by households in a given period if the household used to buy everything he wanted at the current market price. There are several factors that influence household decisions in determining the quantity or the demand for the particular product, among other things:

- The price of the product concerned; Between price and quantity demand is negatively related. When the price rises, the quantity demand decreases. When the price falls, the quantity demand will increase. The negative relationship between price and quantity demand is often called the law of demand (law of demand).
- Revenue within a household; Income of a household is the sum of all wages, salaries, profits, interest payments, rent and other forms of income received by a household in a specific period of time. Households with higher incomes have the ability to buy more goods. In general there is a positive correlation between high income with the quantity of goods demanded.

- The amount of accumulated wealth; Wealth is the size of the deposit. Net worth is the total value of which is owned by a household less the value of its debt. Just as the income, the greater the accumulation of wealth is also positively related to the ability of a household to determine the quantity of goods demanded.
- Price of other products that are available; When the increase in the prices of goods led to increased demand for other goods (positive relationship), it can be said that the goods are substitution. The fall in the prices of goods led to a decrease in demand for goods substitution. Substitution goods are goods that can act as a substitute for one another. When the goods are complementary (complimenting each other), a decrease in the price of one led to an increase in demand for the other, and vice versa.
- The tastes and preferences; Changing tastes and preferences in the household can specify the level of demand for a product.
- Expectations about future household, wealth, and prices in the future; Someone's expectations about future price changes can affect a person's level of demand [5].

#### B. Theory of Demand for Residential

According to McKenzie, et al (2006) demand on the housing must be studied from two points of view. The first viewpoint is the total demand or the number of housing units needed in the market. The second is from the standpoint of the composition of housing, such as unit size, age, location, condition, and whether the units are planned to be sold to consumers or only for rent. Housing demand is influenced by three main factors, among others: (1) Population and demography; (2) Effective revenue and housing loans; (3) The tastes and lifestyles [6].

Meanwhile Eckert (1990) mentioned factors that are very important and affect the demand for the housing market, namely:

- Economic Factors; changes in economic factors that affect the demand for housing is income, interest rate, loan policy, the level of rents and house prices.
- Social factors; is the density of population, family size, education, crime rate and age distribution.
- Factors Government; including Zonic, town government services and tax levels of society.
- Environmental Factors; changes in environmental factors that affect the demand for housing is topography, landform, soil conditions and amenity as follows: parking, shopping centers, schools, prayers houses, employment, transportation and business establishment services [7].

#### C. Residential Needs Theory

Place to stay substantially in view as the physical form of a house (house, dwelling or shelter) are easily recognizable and identifiable. This condition reflects that the residence functioned as a place to shelter or protect themselves from natural conditions are not always favorable. The residence also often placed at the level after meeting the needs of food and shelter. Individual human beings have different needs.

Differences in need affected individual characteristics and dynamic continues to change in line with changes to the individual characteristics of a person. In the theory of human motivation, Maslow believes that human needs variation is seen arrayed in the form of a hierarchical or tiered. Each level of needs can be met when the previous levels have been met [8].



Figure 1. Theory of Hierarchy of Needs

At this stage of physiological need, people need shelter as a basic need for shelter and rest. And on the safety need stage, shelter serves as a place to protect that humans get a sense of security and free from human disturbance and unwanted circumstances such as rain, sunshine, cold. Moreover, at the stage of esteem needs, occupancy serves as a tool to give a sense of confidence and to earn the respect of others. On the stage of self actualization, humans will conduct investment activities to fulfill his wish on occupancy. As for the notion of investment itself according Tandelilin (2001) is a commitment of a number of investment funds or other resources that are done at this time, with the goal of obtaining a number of advantages in the future. Goals for investing is to increase the value of the total utility of a product [9].

#### D. Consumer Preferences In Choosing Occupancy

Referring to Kauko (2006), based on the aspects of the market, consumer preferences for products real estate influenced by several variables, namely:

- a. House Prices; House prices is a major determinant of consumer preferences towards a real estate product. House prices according to quality and economic conditions around the consumer real estate products would make preference value become high.
- b. Revenue; The income level of consumers will affect the purchasing power of consumers and consumer preferences in accordance with the level of income.
- c. Location; Factors related to the location of the ease of accessibility, strategic location, the house with the surrounding environment, the social structure of the community around.
- d. The area of House and House Design; The area of the house affects the types of customers with different preferences for each type. The classification of consumers by income level, age, and education were able to answer the preferences area home and Desai homes tend to have on the classification of each consumer [10].

### III. METHODOLOGY

This research uses a quantitative approach and is an exploratory research that aims to find the factors that affect the market demand for residential apartments in Banjarmasin. The variables included in this study is derived from the literature review and preliminary survey carried out to six practitioners and academics who are experts in the field of property in the city of Banjarmasin. Techniques of data retrieval is done by distributing questionnaires, both directly and with the snowball technique. Then with a short interview and accompanied by a sorting method. Data that have been obtained subsequently analyzed by using descriptive analysis and factor analysis. The population in this study is the middle and upper class society in Banjarmasin interested in buying or renting an apartment unit.

### IV. ANALYSIS AND RESULT

#### A. Location Overview

Banjarmasin city is the capital of South Kalimantan province, known as a city of thousand rivers. Banjarmasin city has an area of 98 km<sup>2</sup> and as one of the National Activity Center (PKN) on the island of Borneo, Banjarmasin city made into a service center for other towns around it, including other provinces in Kalimantan.

Potential construction of apartments in the city of Banjarmasin are at the point of the housing that has a high density levels ie downtown area. Because the area is very close to all the activities of the center and there are a lot of trade and services, infrastructure facilities and public utilities. As with the areas that have high levels of low density. This area does not have a huge potential for the establishment of vertical housing such as apartments. This is due to the area does not have a plus because apart from any existing city facilities.

#### B. Discussion

The analysis technique used is the analysis of factors. The first phase of a factor analysis test validity. Validity test results showed that the 37 questions that measure the factors that affect the market demand for apartments in the city of Banjarmasin have been valid. This is shown by all the Sig. Pearson Correlation <0.05. Thus all of the item in question can be used for further analysis of the reliability test. After that, the reliability test performed. Reliability test results showed that the alpha value of 0.908 cronbach that 37 items declared realibel questions and has the reliability in measuring factors influencing the market demand for apartments in the city of Banjarmasin.

The next stage is the stage of factor analysis. Factor analysis was done 3 rounds. In the final round, lah obtained 31 item indicators that were later declared as factors influencing the market demand for apartments in the city of Banjarmasin. After extraction of the factors that has been done, found 8 (eight) groups of factors that affect the market demand for apartments in the city of Banjarmasin. The next step is interpreasi factors or the naming of the new factors that have been formed:

#### *Factor 1: Product Attributes Factor*

Factor 1 is a factor of product attributes that have the greatest influence levels when compared with other factors. Product is everything that can be used to satisfy and meet the needs and desires of consumers that can be created by the manufacturer. Consumer preferences towards product attributes number of rooms and area units will vary in each individual. Because each individual has their own activities and different needs. The differences in the preferences of product attributes is because every individual has different tastes.

#### *Factor 2: Convenience for Habitation Factor*

The second factor is the comfort factor for habitation. Security and comfort is a basic need that is required for every individual. As expressed by Maslow in the theory of human motivation, that the variation needs of human beings are arranged in the form of a hierarchical or tiered. Each level of needs can be met when the previous levels have been met. There are 5 levels that exist within the theory of human motivation, namely Physiological Needs, Safety Needs, Belonging Needs, Esteem Needs and Self-actualization. In each level there are variety of human needs. And when their respective needs are met, then the individual will feel the satisfaction and comfort.

#### *Factor 3 and Factor 4: Availability of Facilities and Infrastructure Works Factor*

The availability factor of the facilities and public facilities around the dwelling is also one factor affecting the demand for housing. Facilities and Public Facilities here include public facilities and social amenities, including infrastructure, education facilities, health, religious, transportation, and others. The existence of such facilities to attract investors to build and which will further increase the demand for housing in the region.

#### *Factor 5: Economic Growth Factors*

5th Factor is a factor of economic growth. Economic growth is the key for property sector to flourish. The better the economic growth within a country, the more developed also the field properties. This is because economic policies are related to property development policy. In addition to that the economic growth is also associated with a person's income. A consumer would consider to make a sale and purchase transaction based on revenue it collects. The demand for goods, especially in the property market will happen if consumers have a craving (willing) and capacity (ability) to buy. If consumers only have one of them, the demand of an item will not happen.

#### *Factor 6: City Developments Factor*

6th factor is the factor of development of the city. In the development of this city there are three (3) variables: the level of land prices, the attractiveness of a city and land price expectations in the future. These three indicators are related to one another. This is supported by a statement by Ghana and Navastara (2012), the appeal of a city will lead the growth of the urban population. The rapid population growth caused by the phenomenon resulted in an increased need for residential land. And it will affect the availability of land in urban areas. Then the price of land and property in the future becomes unstable, or tend to increase the price.

#### *Factor 7: Influence Relatives Factor*

7th factor is based on relative influence. Friends influence the purchasing decision becomes a factor that must be considered. Because every individual in daily life will always socialize or interact with friends, family and others. Either directly or indirectly. Interactions that occur continuously can influence behavior in making decisions whether to buy or not. The role of a friend in making a purchase decision is important because it teaches the experience, as a source of information, to help fill a new social role and help individuals to determine their own freedom.

#### *Factor 8: Property Investment Trends Influence Factor*

The last factor is the influence of property investment trends factor. Most people in Banjarmasin who wants to buy or rent an apartment unit have the purpose of investing. Investment is something that is loved by the people of Indonesia at this time. Indonesia became one of the very strategic location to develop property investment because the level of economic and political stability in Indonesia are likely to be stable is considered to provide a great opportunity for investors. Besides government policy also contributes to support property investors. As well as housing needs in Indonesia is still very high. For Banjarmasin itself, it is only a handful of people who are affected to invest in property. Most come from the upper classes in Banjarmasin. Banjarmasin affected communities on the trend rated just wanted to show identity and their classes.

Indonesia at this time. Indonesia became one of the very strategic location to develop property investment because the level of economic and political stability in Indonesia are likely to be stable is considered to provide a great opportunity for investors. Besides government policy also contributes to support property investors. As well as housing needs in Indonesia is still very high. For Banjarmasin itself, it is only a handful of people who are affected to invest in property. Most come from the upper classes in Banjarmasin. Banjarmasin affected communities on the trend rated just wanted to show identity and their classes.

## V. CONCLUSION

Limitations of residential land in Banjarmasin arise when the population increased and resulted in rising land prices. So the presence of vertical housing (apartments) could be one solution to overcome these problems. Therefore it takes a research related to market analysis in order to know the factors that influence the market demand of apartment in the city of Banjarmasin.

Based on factor analysis, obtained 31 indicators grouped in 8 new factors influencing the market demand for apartments in Banjarmasin City that is: product attributes, the convenience for habitation, the availability of trading facilities - commercial and public transportation, the availability of educational facilities - shopping centers & health facilities, economic growth, and influence of relatives and property investment trends influence.

## REFERENCES

- [1] SPPIP Kota Banjarmasin (2010)
- [2] RTRW Kota Banjarmasin (2010-2030)
- [3] Rostiana, Endang. (2011). Keterjangkauan Perumahan di Indonesia. *Trikonomika*, 10, 162-175.
- [4] Bappeda Kota Banjarmasin (2014)
- [5] Fair, Case &. (2007). *Prinsip-prinsip Ekonomi*: Erlangga.
- [6] McKenzie, Dennis J., Betts, Richard M., & Jensen, Carol A. (2006). *Essentials of Real Estate Economics*. USA: Cengage Learning
- [7] Eckert, Joseph K. (1990) *Property Appraisal and Assesment Administration*. IAAO. Chicago.
- [8] Goble, F.G. (2004). *The Third Force: The Psychology of Abraham Maslow*: Maurice Bassett.
- [9] Eduardus Tandelilin. (2001). *Analisis Investasi dan Manajemen Portofolio Edisi. Pertama*. Yogyakarta: BPFE Yogyakarta.
- [10] Kauko, Tom. (2006). Expressions of Housing Consumer Preferences: Proposition for a Research Agenda. *Housing, Theory and Society*, 23(2), 92-108. doi: 10.1080/14036090600773097