Comparison Property Players

by Perpustakaan Referensi

Submission date: 19-Nov-2023 08:59AM (UTC+0700)

Submission ID: 2232489601

File name: Paper_Comparison_3_Players.docx (73.49K)

Word count: 4475

Character count: 25575

KOMPARASI PREFERENSI PELAKU PROPERTI TERHADAP HARGA RUMAH DI SURABAYA

COMPARISON OF THE PROPERTY PLAYERS' PREFERENCES ON HOUSING PRICES IN SURABAYA

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ARSTRAK

Rumah merupakan produk real estate yang digunakan untuk memenuhi motif konsumsi atau investasi. Penelitian ini dilakukan untuk membandingkan preferensi pengembang, konsumen, dan investor terhadap harga rumah di Surabaya pada kedua motif. Responden dipilih secara secara purposive sampling, kemudian dilakukan penyebaran kuesioner secara offline dan online untuk pengumpulan data. Pengujian data menggunakan konkordansi Kendall dan uji Kruskal Wallis untuk menganalisis komparasi preferensi pengembang, konsumen dan investor. Hasil penelitian menunjukkan bahwa ketiga pelaku memiliki preferensi variable yang berbeda terhadap harga rumah di Surabaya terkait kualitas fisik, merek, konsep perumahan, lingkungan lokasi, kondisi keuangan, dan kelayakan huni. Pengembang fokus pada produk (kualitas fisik dan konsep perumahan) dan merek. Konsumen memprioritaskan kualitas fisik, lingkungan lokasi, dan kondisi keuangan. Selanjutnya, investor memprioritaskan kualitas fisik dan lingkungan lokasi.

Kata Kunci: Pengembang, Konsumen, Investor

ABSTRACT

Landed house is a real estate product that is used to fulfill consumption or investment motives. This study was conducted to compare the preferences of developers, consumers, and investors for housing prices in Surabaya on both motive. Respondents were selected by purposive sampling, then offline and online questionnaires were distributed for data collection. Test data used Kendall concordance and Kruskal Wall test to analyze the comparison of developer, consumer and investor preferences. The results showed that the three players had different preference variables on house prices in Surabaya related to physical quality, brand, location concept, location environment, financial condition, and livability. Developers focus on products (physical quality and housing concept) and brands. Consumers prioritize physical quality, location environment, and financial condition. Furthermore, investors prioritize the physical and environmental quality of the location.

Key Words: Developer, Consumer, Investor.

1. INTRODUCTION

Surabaya's population is constantly increasing and it was estimated in 2020 to be around 2,971,300 people (Badan Pusat Statistik Kota Surabaya, 2021). This creates a high demand for housing and opens up market opportunities for developers to offer landed house products and reap benefits (Rahadi, Wiryono, Koesrindartoto, & Syamwil, Factors influencing the price of housing in Indonesia, 2015a). However, a landed house is a complex product and has both consumption and investment functions (Harshman & Quigley, 1991; Henderson & Ioannides, 1983). The difference between these two functions makes it hard for practitioners to determine the right price for a landed house based on their preferences. According to theories of economics, preferences for housing are affected by macro-level factors such as property market, property system, and economic conditions (Coolen & Hoekstra, 2001) and micro-level factors such as age, household composition, income, and housing situation (Clark & Dieleman, 1996). The study of Daly, Gronow, Jenkins, & Plimmer (2003) and Aluko (2007), shows that there are differences in preferences between consumers and developers. These studies were later developed by Rahadi, Wiryono, Koesrindartoto, & Syamwil (2015b) by comparing the preferences between consumers and developers in Jakarta, Indonesia. The result shows that there are differences where the developer's preferences are more specific than that of the consumers'.

Changes in the housing market have also created shifts in market behavior that expects to benefit from investing in landed houses (Gabrielli, 2018; Lee C. L., 2008; Lowies, Whait, & Viljoen, 2018). Investors note the amount of returns generated from properties, as well as the location, accessibility, design of the building, and the environment (De Bruin & Flint-Hartle, 2003; Roberts, Rowley, & Hennebery, 2012). The comparison of housing preferences between market players is still very limited in Indonesia. Previous studies have focused on the consumer's side. Therefore, this study aims to compare the preference differences of consumers, investors, and developers towards the housing prices in Surabaya. Preference differences will give benefits to each market players to determine their next strategy or decision-making.

Preferences on Property Market Players

Property-related preferences are the tendency for a person to decide which product they want to buy. Weimer (1966) stated that property products have characteristics that distinguish them from other economic products. Kwanda, Rahardjo, and Wardani (2001) explained that building quality, design, prices, facilities, infrastructure, and location are indicators that influence the price of a house. Boarnet and Chalermpong (2001) added that road accessibility also influences housing preferences. Blakely and Snyder (1998) found that better security improves status and lifestyle. Glaeser, Gyourko, and Saks (2005) stated that a good neighborhood also influences prices. The proximity to activity centers, education centers, health centers, places of worship, workplaces, and tolls also influence prices (Farasa & Kusuma, 2018; Tajani, Di-Liddo, Ranier, & Anelli, 2022; Vadali, 2008; Wen, Zhang, & Zhang, 2014; Shimizu, 2014). In addition, according to Hofman, Halman, and Ion (2006), façade and building specifications are a preference that consumers consider. House size, number of stories, layout, garage, and interior also influence preferences (Aliyev, Amiraslanova, Bakirova, & Eynizada, 2019; Daly, Gronow, Jenkins, & Plimmer, 2003). Green concept also influences house prices (Farasa & Kusuma, 2018; Njo, Valentina, & Basana, 2021; Sander & Polasky, 2009). Rahadi et al. (2015b), through the syntingsis of various journals, acquired six variables that influence house prices in Surabaya. Those six variables are physical quality, brand, concept, location environment, financial condition, and livability. These variables are compared between consumers and developers, and the results show that there are differences, the developers' preferences are more specific than the consumers'. Previous studies are limited to the consumption side. However, Henderson and Ioannides (1983) and Njo, Made, and Irwanto (2019) stated that houses have dual functions, for consumption and investment. In light of this, there is a need for additional property players for comparison that is investors. Sean and Hong (2014) stated that location, finances, and layout are factors that influence property investors. Roberts, Rowley, and Henneberry (2012) also added that the amount of returns gained from a property is one of the priorities for investors.

H1: Developer, consumers and investor have a different preferences of physical quality, brand, concept, location environment, financial condition, and livability in house prices in Surabaya.

2. DATA AND METHODS

This study is a comparative quantitative study, which compares variables on three sample groups in the form of numbers and analyzes those using statistics (Sugiyono, 2019). Sample selection using purposive sampling is done on housing developers in Surabaya. For consumers and investors, incidental sampling is used with the criteria of desiring or has conducted a residential transaction in Surabaya and is 21 years of age and older. Data is collected through questionnaires given both offline and online. The questionnaires are divided into 3 sections. The first section is the respondents' personal data. The second section is statements developed from Rehadi et al. (2015b) related to respondents' consideration of variables that influence housing prices which are physical quality, brand, concept, location environment, financial condition, and livability. The statements are coded using a Likert scale from 1 (strongly disagree) to 6 (strongly agree) to limit respondents' tendency to choose a middle value (Dhar & Simonson, 2003). The third section is questions to

determine the priority order for the six variables that influence housing prices. Details of the variables and indicators used can be seen in Table 1.

Table 1. Variable group and indicator

| Variable | Indicator | Code |
|-------------|---|-----------------|
| | Facade / front view of the building | PQ1 |
| | Infrastructure (telephone line, power line, water) | PQ2 |
| | Width of access road | PQ3 |
| Physical | Rooftop design | PQ4 |
| Quality | Specification of materials used | PQ5 |
| Quality | Building plan | PQ6 |
| | Land area | PQ7 |
| | Living area | PQ8 |
| | Building age | PQ9 |
| | Developer's commitment | B1 |
| Duand | Quality of houses built | B ₂ |
| Brand | Aftersales service | В3 |
| | Developer's reputation | B4 |
| | Environment-friendly product and environment (green concept) | C1 |
| | Area of land developed for housing (development scale) | C2 |
| | Clusters developed with specific themes (American, Japanese, etc.) | C3 |
| | Development concept in-line with today's trends | C4 |
| Concept | Residential area is divided into smaller clusters that support each | C5 |
| · | other | |
| | Premium facilities (clubhouse, golf court, and others) | C6 |
| | Development of smaller clusters in sync with the whole theme | C7 |
| | Variety of houses offered | C8 |
| | Proximity to toll access | Loc1 |
| | Proximity to family | Loc2 |
| | Proximity to place of work | Loc3 |
| | Good security system | Loc4 |
| | Good neighbors | Loc5 |
| | Ease of access | Loc6 |
| Location | Proximity to activity centers | Loc7 |
| Environment | Proximity to shopping centers | Loc8 |
| | Proximity to education centers | Loc9 |
| | Proximity to places of worship | Loc10 |
| | Proximity to terminal | Lo c11 |
| | Prone to traffic jam | Lo c12 |
| | Prone to flood | Loc13 |
| | Unique location | Loc14 |
| | Alternative payment scheme (Cash, installment, or KPR) | FC1 |
| Financial | Investment value of house | FC2 |
| Condition | Personal financial capabilities | FC ₃ |
| | Pricing scheme (price difference based on payment method) | FC4 |
| | Prestige | Liv1 |
| | Increasing social status | Liv2 |
| Livability | Following lifestyle | Liv3 |
| | Prioritizes privacy | Liv4 |

| Variable | Indicator | Code |
|----------|---|------|
| | Availability of complete fixtures (stairs railings, toilet, pantry, etc.) | Liv5 |
| | Neighborhood of similar age and background | Liv6 |

3. RESULT AND DISCUSSION

Based on questionnaire selection, 417 respondents were acquired, comprised of 43 investors, 349 consumers, and 25 developers. Demography of respondents is shown in Table 2 and Table

Table 2. Demography of developers

| Information | | | Location | Total | % | | |
|-------------|-------------------|-----------------------|----------|-------|----|----|-----|
| information | | East West North South | | Total | /0 | | |
| | Director | 0 | 2 | 0 | 0 | 2 | 8% |
| | Marketing Manager | 0 | 5 | 0 | 0 | 5 | 20% |
| Position | Other Manager | 1 | 1 | 2 | 0 | 4 | 16% |
| POSICION | Marketing | 6 | 3 | 0 | 1 | 10 | 40% |
| | Estimator | 1 | 1 | 0 | 0 | 2 | 8% |
| | Surveyor | 0 | 2 | 0 | 0 | 2 | 8% |
| Gender | Male | 5 | 12 | 2 | 1 | 20 | 80% |
| | Female | 3 | 2 | 0 | 0 | 5 | 20% |
| A -1- | ≤ 25 | 1 | 4 | 0 | 0 | 5 | 20% |
| Age | 25 - 35 | 5 | 6 | 0 | 1 | 12 | 48% |
| (years old) | > 35 | 2 | 4 | 2 | 0 | 8 | 32% |
| Education | Undergraduate | 6 | 12 | 2 | 1 | 21 | 84% |
| Education | Graduate | 2 | 2 | 0 | 0 | 4 | 16% |
| Deisa | ≤ 1 M | 1 | 3 | 0 | 0 | 4 | 16% |
| Price | 1 – 6 M | 6 | 11 | 2 | 1 | 20 | 80% |
| (rupiah) | > 6 M | 1 | 0 | 0 | 0 | 1 | 4% |
| | ≤ 25 Ha | 1 | 3 | 0 | 0 | 4 | 16% |
| Area | 25 – 100 Ha | 6 | 11 | 2 | 1 | 20 | 80% |
| | > 100 Ha | 1 | 0 | 0 | 0 | 1 | 4% |

 Table 3. Demography of investors and consumers

| Information | | Type of Pro | perty Player | Total | % | |
|--------------------|-------------------------|-------------------|--------------|-------|-----|--|
| information | | Investor Consumer | | TOTAL | /0 | |
| Gender | Male | 35 | 217 | 252 | 64% | |
| Gender | Female | 8 | 132 | 140 | 36% | |
| Λαο | ≤ 25 | 25 | 204 | 229 | 58% | |
| Age (years old) | 25 - 35 | 12 | 102 | 114 | 29% | |
| (years old) | > 35 | 6 | 43 | 49 | 13% | |
| Education | Mid / High school | 0 | 12 | 12 | 3% | |
| Education | Diploma / Undergraduate | 39 | 309 | 348 | 89% | |
| | Graduate / Doctoral | 4 | 28 | 32 | 8% | |
| | Center Surabaya | 0 | 6 | 6 | 2% | |
| Location | East Surabaya | 15 | 113 | 128 | 33% | |
| Location | West Surabaya | 19 | 193 | 212 | 54% | |
| | North Surabaya | 2 | 12 | 14 | 4% | |

| | South Suraba | ya | 7 | 25 | 32 | 8% |
|-------------|--------------|-----------------|----|-----|-----|-----|
| | ≤ 1 M | | 13 | 130 | 143 | 36% |
| Price | 1 – 2 M | | 16 | 119 | 135 | 34% |
| (rupiah) | 2 – 3 M | | 7 | 57 | 64 | 16% |
| | > 3 M | | 7 | 43 | 50 | 13% |
| Area | Sell | | 17 | 0 | 17 | 4% |
| Area | Buy | | 26 | 349 | 375 | 96% |
| Transaction | Completed | ≤ 3 years prior | 15 | 46 | 61 | 16% |
| Status | on completed | > 3 years prior | 4 | 59 | 63 | 16% |
| | Undergoing | | 24 | 244 | 268 | 68% |

Table 4 shows that three indicators are obtained through validity test on developer's preferences (proximity to family, proximity to terminals, similarities in age and background with neighbors) with a significant score of > 0.05, and thus discarded because they are invalid. Afterward, the reliability test shows each variable is reliable with Cronbach's Alpha > 0.7.

Table 4. Validity and reliability test

| lu diantau | Developer | | Consumer | | Investor | |
|----------------|------------------------------|--------------------------|------------------------------|--------------------------|------------------------------|--------------------------|
| Indicator | Validity ^a | Realibility ^b | Validity ^a | Realibility ^b | Validity ^a | Realibility ^b |
| PQ1 | 0,940** | 0,913 | 0,716** | 0,876 | 0,828** | 0,899 |
| PQ2 | 0,787** | | 0,623** | | 0,697** | |
| PQ3 | 0,864** | | 0,745** | | 0,797** | |
| PQ4 | 0,483** | | 0,675** | | 0,649** | |
| PQ5 | 0,711** | | 0,767** | | 0,860** | |
| PQ6 | 0,781** | | 0,804** | | 0,811** | |
| PQ7 | 0,907** | | 0,718** | | 0,712** | |
| PQ8 | 0,924** | | 0,728** | | 0,616** | |
| PQ9 | 0,488** | | 0,598** | | 0,778** | |
| B1 | 0,931** | 0,933 | 0,880** | 0,882 | 0,848** | 0,885 |
| B ₂ | 0,932** | | 0,856** | | 0,868** | |
| B3 | 0,863** | | 0,876** | | 0,852** | |
| B4 | 0,939** | | 0,826** | | 0,886** | |
| C1 | 0,835** | 0,862 | 0,738** | 0,906 | 0,848** | 0,922 |
| C2 | 0,812** | | 0,719** | | 0,805** | |
| C3 | 0,407** | | 0,807** | | 0,739** | |
| C4 | 0,804** | | 0,806** | | 0,881** | |
| C5 | 0,654** | | 0,801** | | 0,839** | |
| C6 | 0,822** | | 0,794** | | 0,792** | |
| C7 | 0,765** | | 0,816** | | 0,880** | |
| C8 | 0,743** | | 0,742** | | 0,664** | |
| Loc1 | 0,631** | 0,869 | 0,596** | 0,896 | 0,652** | 0,930 |
| Loc2 | 0,235 | | 0,657** | | 0,729** | |
| Loc3 | 0,741** | | 0,737** | | 0,832** | |
| Loc4 | 0,852** | | 0,702** | | 0,633** | |
| Loc5 | 0,768** | | 0,688** | | 0,735** | |
| Loc6 | 0,934** | | 0,760** | | 0,799** | |
| Loc7 | 0,853** | | 0,758** | | 0,841** | |

| | Developer | | Consumer | | Investor | |
|-----------|-----------------------|--------------------------|-----------------------|--------------------------|------------------------------|--------------------------|
| Indicator | Validity ^a | Realibility ^b | Validity ^a | Realibility ^b | Validity ^a | Realibility ^b |
| Loc8 | 0,920** | | 0,730** | | 0,832** | |
| Loc9 | 0,920** | | 0,677** | | 0,803** | |
| Loc10 | 0,872** | | 0,664** | | 0,761** | |
| Loc11 | -0,162 | | 0,555** | | 0,698** | |
| Loc12 | 0,630** | | 0,613** | | 0,606** | |
| Loc13 | 0,463** | | 0,615** | | 0,680** | |
| Loc14 | 0,717** | | 0,574** | | 0,644** | |
| FC1 | 0,865** | 0,838 | 0,888** | 0,908 | 0,833** | 0,874 |
| FC2 | 0,806** | | 0,869** | | 0,802** | |
| FC3 | 0,832** | | 0,888** | | 0,906** | |
| FC4 | 0,881** | | 0,896** | | 0,902** | |
| Liv1 | 0,835** | 0,781 | 0,866** | 0,868 | 0,846** | 0,924 |
| Liv2 | 0,805** | | 0,857** | | 0,843** | |
| Liv3 | 0,829** | | 0,785** | | 0,868** | |
| Liv4 | 0,866** | | 0,696** | | 0,858** | |
| Liv5 | 0,781** | | 0,694** | | 0,888** | |
| Liv6 | 0,387 | | 0,770** | | 0,822** | |

Details: ^aPearson Correlation; ^bCronbach's Alpha; **significant at α: 5%

The next test is the Kendall's concordance test for the comparison among property players. Based on the mean order, the three property players have different preferences towards variables that influence house prices in Surabaya. The order of preference difference between property players can be seen in Table 5.

Table 5. Priority of price-determining variables according to developers, consumers, and investors

| Variable | Developer | | Consum | Consumer | | Investor | |
|-------------------------|-----------|-------|--------|----------|------|----------|--|
| variable | Mean | Order | Mean | Order | Mean | Order | |
| Physical Quality | 2,84 | 1 | 2,83 | 1 | 2,74 | 1 | |
| Brand | 2,92 | 2 | 3,95 | 5 | 3,79 | 4 | |
| Concept | 2,84 | 1 | 3,70 | 4 | 3,28 | 3 | |
| Environment of location | 3,24 | 3 | 3,21 | 2 | 3,07 | 2 | |
| Financial Condition | 4,68 | 5 | 3,31 | 3 | 4,00 | 5 | |
| Livability | 4,48 | 4 | 4,00 | 6 | 4,12 | 6 | |

4. Discussion

Based on the priority scale of variables physical quality, brand, concept, location environment, financial condition, and livability, players in the property market have their own preferences on those variables and prioritize according to their own roles.

Consumers' Preference

Consumer's first priority is the physical quality, followed by location environment, financial condition, concept, brand, and livability. Rahadi et al. (2015b) and Daly et al. (2003) also stated that consumers really pay attention to physical quality and location, as consumers expect comfort and accessibility for their activity. Financial condition is an additional variable or complementary for consumers. The most considered indicator of physical quality is infrastructure, materials specification, building plan, and road width in front of the house. Consumers prioritize those indicators more than the facade (2015a). The build

quality of the house, developer's reputation, developer's commitment, and aftersales service, respectively, are the order of the brand indicator according to consumers. The most considered points regarding concept are the area of development, green concept, variety of houses, and premium facilities. House variety is a solution to both consumers and developers to the ever-growing prices of landed houses (Raymond & Love, 2000). As for the location environment, a good security system, ease of access, good neighborhood, and proximity to activity centers are points which the consumers consider the most. This is in line with Blakely and Snyder's (1998) study that a person will choose a community in which security is ensured. Neighborhood has also been an important indicator in previous studies (Glaeser, Gyourko, & Saks, 2005; Lee K. Y., 2021; Wang & Li, 2006). The least considered location indicators are uniqueness of location and proximity to terminals. Reliance on private vehicles and the lack of a culture of using public transport are the main reasons why proximity to terminals are not taken into consideration (Mulliner & Algrmas, 2018). Financially, consumers' considerations include payment scheme and investment value of the house, financial capability, and price scheme. High house prices cause consumers to really pay attention to their financial capabilities and expect investment value from what they have already expended as in the study of Daly et al. (2003) and Ratchatakulpat, Miller, & Marchant (2009). On the variable of livability, indicators such as privacy, complete fixture, and prestige are more preferred. Consumers prefer houses that are not interrupted by the outside environment. The indicator the consumers consider the least is age and background similarity with neighbors. Every individual who lives in a heterogeneous community will improve their social life in the neighborhood (Schnell & Harpaz, 2005)

Investors' Preference

Investors' preferences are physical quality, location environment, brand, financial condition, and livability. In line with the study of Roberts, Rowley, and Henneberry (2012) along with Sean and Hong (2014), investors are very concerned with physical quality and location. Adversely, financial condition and livability are not a top priority as 40% of investors earn more than Rp 10.000.000,000 per month. Investors tend to have no financial difficulty to invest in property. Indicators of the physical variable that investors prefer are infrastructure, road width in front of the house, building plan, and materials used. Investors do not always buy a new house as their investment product, but rather consider the developer's commitment, build quality of the house, developer's reputation, and aftersales service. Variable of concept such as green concept, area of development, small cluster development, and house type variation are investor's priorities. Green concept or environment-friendly housing has been around for a long time and is growingly popular in Jakarta (Rahadi, Wiryono, Koesrindartoto, & Syamwil, Comparison of the property practitioners and consumers preferences on housing prices in the Jakarta metropolitan region, 2015b) and Surabaya, and investors consider this green concept indicator to be important because it adds value. Financially, investors prioritize the investment value of a house, price scheme, personal financial capability, and payment scheme alternative, in line with the study of Roberts, Rowley, and Hennebery (2012). Prestige, privacy, having a complete fixture, good security system, ease of access, good neighborhood, proximity to activity centers are the most important things investors consider (Blakely & Snyder, 1998; Glaeser, Gyourko, & Saks, 2005; Wang & Li, 2006).

Developers' Preference

Developers have their priorities on the physical quality and concept of housing. Then, in their respective order, comes brand, location environment, livability, and financial condition. This indicates that developers

are more concerned with the products they offer than with the consumers' financial condition. Rahadi et al. (2015b) also stated that developers are very concerned with physical quality. The developers' preferred physical indicators include road width in front of the house, age of the building, material specification, and building plan. Developers will sell newly built houses as soon as possible as older houses generally have lower quality (Tan, Neighborhood preferences of house buyers: The case of Klang Valley, Malaysia, 2011). Developers with large land areas pay even more attention to the road width. A wider road will create a more comfortable open space (Shimizu, 2014). In addition, developers prioritize the quality of the house built as it plays an important role in boosting the company's brand. House purchasing is influenced by the quality of the existing building (Chia, Harun, Kassim, Martin, & Kepal, 2016). The area of development, development concept that follows the trend, varying types of houses, and green concept are very much ensidered by the developer. Large-scale development will attract consumers to choose said developer (Rahadi, Wiryono, Koesrindartoto, & Syamwil, Factors influencing the price of housing in Indonesia, 2015a). Moreover, the large-scale development will encourage developers to prioritize premium facilities, small clusters development, and house type variance. However, for developers in general, the indicators of development with specific themes and development of small clusters that are in line with the housing concept are not a top priority. The development of small clusters is often overlooked because the number of developers with a land area of ≤ 100 Ha in Surabaya is much greater than the number of developers with land area of >100 Ha. Developers also prioritize a good security system, ease of access, and proximity to shopping and education centers. Financially, developers prioritize payment scheme alternative, price scheme, investment value of the house, and lastly, personal financial capability. The condition of house sales on several different groups of developers often offers a variety of payment scheme alternatives to attract consumers. Livability, prestige, privacy, and the availability of a complete fixture are key to developers while improving social status and lifestyle are not a major indicator. Residential reflects a sense of pride over others, thus developers use it as a promotional tool (2015b). Tan (2012) also stated that having privacy at home will meet a person's needs in terms of psychology and security.

5. CONCLUSION

Developers, consumers, and investors have different preferences on variables of physical quality, brand, concept, location environment, financial condition, and livability which influences landed house prices. Developers will focus on their products, simultaneously prioritizing physical quality and housing concept. Developers also prioritize brand as their second priority. On the other hand, consumers prioritize physical quality, followed by location environment. In the third priority, consumers place financial condition which shows that the physical quality and location environment selected are also adjusted to their existing financial condition. Investors also prioritize physical quality as their top and location environment as their second, but financial condition is not of great consideration. For the purpose of future studies, this model can be applied in other areas in Indonesia or even overseas, as characteristics of real estate (landed house) are unique, affected by location and demographical condition of the public

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