Environmentally friendly private cities in Indonesia and Malaysia

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Abstract. This paper is a review of the model to investigate the effect of safety and security, financial benefit, social status, and lifestyle facilities on residential purchase and residential satisfaction. The future research will survey residents in private cities in Indonesia and Malaysia. For Indonesia, samples will be taken in South Tangerang, specifically in Bintaro Jaya, BSD City, and Summerecon. For Malaysia, samples will be taken among residents of private cities in Malaysia. The analysis will employ the use of structural equation model using SPSS and Amos software. The accepted hypotheses are expected be result of this study. Safety and security, financial benefit, social status, and lifestyle facilities determine the residential purchase and residential satisfaction. The originality of the research is the study investigate comparative study of the model testing in two countries, Indonesia and Malaysia.

1. Introduction

Private housing developers have captured the high flow of urbanization and migration of people to big cities as an opportunity to create large scale urban settlements. This model has become the typology of newly built urban settlements characterized by dividing walls and gates that separate the new urban settlers from the old rural settlers. Gated housing clusters can be found in various urban developments in Asia, such as in China as studied by Breitung [1], Liao et al. [2], in Malaysia as studied by Tedong et al. [3], in Philippines as studied by Clement and Grant [4], and Kleibert and Kippers [5], and in Indonesia by Roitman and Recio [6]. In fact, for the case in Indonesia, the newly developed urban areas can be a major part of independent cities such as South Tangerang.

According to Tan [7], there are three types of housing development in Malaysia. The first type is open neighborhoods, which is the residential type without barricade or physical border which separates it from older neighborhoods. The second type is guarded neighborhoods. This residential type places latches and guards at the entrance to the housing. Outsiders who will enter the housing must pass through the guard gate, which may enforce some security measures. Thirdly type is the gated community.
Malaysian chose to live in this gated community for exclusivity reasons. Walls surround these gated communities to protect the amenities created exclusively for the residents.

Roitman & Recio [6] gave three types of gated communities in Indonesia. They are 'Single GC', 'Clustered GC', and 'Private City'. 'Single GC' is a housing type with only one control point of the gate entrance into the housing. 'Clustered GC' is a housing clusters group with two control point gates. There is the main entrance gate guarded by security guards, and each cluster has their dedicated entrance gate, also guarded by security guards. The residents of clusters share common amenities in the GC. The last type, the 'Private city', is similar to 'Clustered GC', but it is built on a much bigger scale. Private Cities also typically have more amenities and infrastructure, commercial facilities and shopping center, office space and educational facilities. The private city term emphasizes the privatization of urban space and amenities used only by their residents.

The phenomena of private cities in Asia are developing. 'New town' or 'private cities' in Indonesia continue to flourish. There are at least 23 private cities in Greater Jakarta alone [6]. Development in Malaysia is not much different. According to Shepar [8], reclaimed land in Johor Bahru is one of Malaysia's 'Private City'. Private city development continues to increase in Indonesia, especially in Greater Jakarta. Due to the Jakarta area's density, many private cities are currently being built in Tangerang City, Tangerang District, and South Tangerang [9]. Figure 1 is maps of Private Cities in Greater Tangerang. BSD City, Summarecon City, and Bintaro City are three of South Tangerang's largest and most prolific private cities (see figure 2, figure 3, and figure 4).

Private cities in Malaysia, where the study will be conducted are Sunway City in Kuala Lumpur (Figure 5) and Malaysia Setia Alam in Selangor, Malaysia (Figure 6). Sunway City is developed in 1997 with 800 acres coverage area. Sunway City consist of multiple features such as; housing schemes,
shopping center (Sunway Pyramid), amusement park Sunway Lagoon, Sunway Resort Hotel & Spa, and education centers such as Monash University Malaysia, Sunway University, Sunway College, Le Cordon Bleu Malaysia and The One Academy, private hospital namely the Sunway Medical Centre and Sime Darby Medical Centre, Places of worship include Masjid Al-Husna, several Buddhist Centres (Subang Jaya Buddhist Association, Passaddhi Buddhist Centre and Dharma Drum Mountain Buddhist Centre) and churches, and connected with Kuala Lumpur City Center, Shah Alam and Petaling Jaya via network of highways.

Setia Alam is developed in 2004 with 4000 acres coverage area. Setia Alam divided into several Precint development. The example, there are corporate towers, condominiums, apartments, a green commercial city centre which houses a regional mall, a convention centre, a city park, SOFOs, hotels, a medical centre, a police station, a transportation hub and others in Precinct 1, Setia City. Then, Setia Tropika comprises of luxury residential enclaves in Setia Eco Park. Setia Impian is other precint in this private city which comprises of multiple commercial developments such as Tesco, Setia Eramas 8, Setia Alam Club and Setia Avenue. There are other percints in this private city, Setia Alam.

Based on the literature, Roitman & Recio [6] listed structural and individual factors which compel people to choose to live in gated communities or private cities. The structural factors are growing inequalities and social polarization, 'imitation' of foreign models, limited housing options for middle and high-class people, and urban crime rates. The individual factors are the search for better lifestyle, social homogeneity, and a pursuit of higher social status. For the residential satisfaction of the gated
community in Malaysia, Tan [7] found that the safety and security, financial benefits, social status, and lifestyle facilities are people's motivations to own housing in gated communities. Unfortunately, no research specifically examines the factors influencing the residential purchase and residential satisfaction in a private city that compare between Indonesia and Malaysia in one study. Therefore, this review paper will be a conceptual framework to investigate residential satisfaction and the mediating role of residential purchase in Indonesia and Malaysia's private cities.

2. Literature review

2.1. Residential satisfaction
Residential satisfaction is the difference between the residents’ actual and expected housing and neighborhood conditions [10]. There are two main concepts about residential satisfaction: the purposive approach and the aspiration-gap approach. These concepts are made popular by Galster [11]. The purposive approach measures the level of settlers’ satisfaction with the facilities and the housing environment, which is why they buy a house in that housing [7]. Residential satisfaction will be achieved when residents feel like their environment support their day to day activity or help them meet their goals in life [12].

On the other hand, the aspiration-gap approach measures the gap between what residents have and what they desire [13]. The aspiration-gap approach measures whether households perceive that their houses and neighborhoods’ features fulfill their expectation [7]. Residential satisfaction in this approach is based on a cognitive comparison between residents’ expectations and housing conditions [12]. Therefore, if residents feel that the housing environments meet their needs, expectations, and aspirations, their satisfaction will be high [12].

2.2. Residence purchase
A homogenous social group and private social group are some of the reasons people choose to live in exclusive, privatized urban settlements. They will be satisfied if they feel that the house they bought meets their expectations [6]. People who purchase housing in a gated community or private city are middle-income and high class who spend a lot of money in the hope that the house is located in a safe and secure neighborhood and gives high investment return, social status, and prestigious facilities. These factors are essential for their satisfaction [6].

2.3. Safety and security
Numerous previous studies have proven that safety and security are important for people who decide to live in gated communities or private cities. The main reason is that they consider gated communities a safe and comfortable place to live. Assumed criminality and violence encourage them to move to safer housing. They believe that the population living outside the housing complex is a threat, criminals, rioters, and it will not be safe to coexist with them [7].

Previous studies found that safety and security are one of the significant predictors of residential satisfaction. Roitman and Recio [6] show that safety and security are reasons to choose and live in a gated community or private city. Clement and Grant [4] found that the guarantee of safety and security with walls and guarding the entrance to housing protects them from crime and violence. It has become the basis of residential purchase and residential satisfaction. Tan [7] found that safety and security positively and significantly affect residential satisfaction. Mridha [14] found that environmental security increases residential satisfaction, and it is the main deciding factors of housing purchase. Wang and Wang [15] found that safety is a significant determinant of residential satisfaction.

Base on the previous studies, then the two first hypotheses are:

H1: Safety and security have a positive and significant impact on the residence purchase.
H2: Safety and security have a positive and significant impact on residential satisfaction.

2.4. Financial benefits
Many people think that property values in private cities are high and tend to increase more rapidly. Given the high investment returns from buying a home in private cities, wealthy citizens may buy houses as investments rather than as a place to live [7]. Financial resources are the basis for selecting residential conditions which fit their needs and financial power because they invest in residential purchasing in private cities [14].

Previous studies found the effect of financial benefits on residential satisfaction. Mridha [14] found that financial security influenced residential satisfaction. Tan [7] found that their housing investment's financial benefits influenced residential satisfaction among Malaysians in gated communities. Akgun and Baycan [16] found that people evaluated that housing safety and security conditions guaranteed their safety investment and property value, hence, it can be concluded that the base of their purchase decision and satisfaction is financial benefits.

Base on the previous studies, then the two second hypotheses are:

H3: The financial benefit has a positive and significant impact on the residence purchase.

H4: The financial benefit has a positive and significant impact on residential satisfaction.

2.5. Social status
Owning a house in a private city often means guaranteed security and comfort. Nevertheless, because of the high price of houses and complementary housing facilities, living in a private city will also increase the residents' social status. Those who live in private cities will be seen as high class, elite, and exclusive. For certain people, improving social status is an vital factor in deciding to purchase a house in a gated clusters or private cities [7].

Previous studies found that social status influenced residential purchase and residential satisfaction. Roitman and Recio [6] show that social status is another reason to choose and live in gated communities or private cities. Mridha [14] found the sense of social status to be a base of purchasing a house and residential satisfaction. Tan [7] found that social status influences residential satisfaction positively and significantly. People choose to live in the gated community or private city for the self-image, such as luxury symbol and prestige. Wang and Wang [15] also found that the social environment is an essential factor for residence purchase and residential satisfaction.

Base on the previous studies, then the two third hypotheses are:

H5: Social status has a positive and significant impact on the residence purchase.

H6: Social status has a positive and significant impact on residential satisfaction.

2.6. Lifestyle facilities
More than a gated community, private cities generally provide elite facilities, recreational facilities, commercial venues for the high class, and educational institutions for the high class [7].

Previous studies found that lifestyle facilities are factors of residence purchase and residential satisfaction. Roitman and Recio [6] show that lifestyle facilities are another reason to choose and live in gated communities or private cities. Mridha [14] found that lifestyle facilities and amenities increase residential satisfaction. The lifestyle facilities and amenities are why people purchase their houses in the gated community or private city. Wang and Wang [15] found that contributing to quality amenities or facilities is essential for residential satisfaction.

Base on the previous studies, then the two fourth hypotheses are:

H7: The lifestyle facilities positively and significantly impact the residence purchase.
H8: The lifestyle facilities have a positive and significant impact on residential satisfaction.

The above hypotheses, then form the conceptual frameworks as at the figure 7.

![Figure 7. Conceptual framework.](image)

3. Methods and the future research

3.1. Population and sample
This conceptual framework will be tested in Indonesia and Malaysia. This study's Indonesian population are residents of private cities in Tangerang, such as Bintaro City, Summerecon City, and BSD City, and for Malaysian population is residents of private cities in Malaysia. The sample will be taken from the population.

3.2. Sampling technique
This study will employ convenience sampling. The Indonesian sample will be taken 30% from Bintaro City, 30% from Summerecon City, and 40% from BSD City. For the Malaysian population, the sample will be taken from private cities in Malaysia.

3.3. Measurement scale
The measurement scale of this study will adapt the instruments that developed by previous researcher. The safety and security adapt four items by Tan [7]. Likewise, the financial benefit adapt four items by Tan [7]. As well as, the social status adapt five items by Tan [7]. And, the lifestyle facilities adapt four items by Tan [7]. Then, three items of residence purchase and four items of the residential satisfaction are developed from Tan [7].

4. Conclusion
Base on above conceptual framework, then the following is the the objectives of the future research:

RO1: To identify the determinant factors of residential satisfaction.
RO2: To examine the impact of the determinant factors on the residential satisfaction.

RO3: To examine the mediating role of residence purchase on the relationship of the determinant factors and residential satisfaction.

The model will be tested both in Indonesia and Malaysia. Then, the result will be compared to proof that the safety and security, financial benefit, social status, and lifestyle facilities are factors that determine the residential purchase and satisfaction among private cities residences in Indonesia and Malaysia. But different results are also possible. Therefore, this is the purpose of this research.

The significance of the study is: first, the finding about the level of residential satisfaction and the factors that influence it will important for real estate developers planning for housing developments that can boost residence purchase and residential satisfaction. Residential satisfaction will be able to increase sales of housing because satisfied residents can become actors in spreading word of mouth.

Second, the results of this study will increase public awareness that private city development will provide safer, more comfortable and healthier housing. The people must understand that planned settlements will give higher quality than unplanned settlements. Real estate developers who have residential satisfaction orientation will increase the factors that influence it.

Third, provision of housing oriented to residential satisfaction is important as an answer to many safety and environmental problems in society. Planned settlement will provide higher quality housing than unplanned settlement. Therefore, the government as a regulator can launch regulations that benefit all parties in various levels of society. A well-planned private city development will improve the quality of the environment and the productivity of the people, which in turn will have an impact on the national economy.

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