

A draft on The introduction, literature review and methodology

Introduction

Has the question ever been raised regarding the prices of different condominiums in the area of the capital of Thailand, Bangkok. The level of monocentric urbanization in Thailand especially in the Bangkok area has been the issue since several decades ago. It is undeniable that the development of Bangkok has gone way ahead of the rest of the country, giving birth to a concrete jungle of department stores, business districts, Habitats, and many more. Condominium is one of the most significant development signals of Bangkok. Since these apartments can be seen as a long-term or short term habitats for the residents or the workers of Bangkok, especially the ones around the BTS sky train line that facilitate the convenience for the residents.

The sense of individualism that has risen in the culture of Thailand's population also gives more significance to this research paper as more Thai population choose to live separately from their family or settling down as a small family instead of a compound one with many generations. These factors have influenced more Thai population to choose to stay in condominiums along the BTS lines for the sake of convenience and cultural preference. It also suits the lifestyle of most of the Thai population in the present days even more as well(2019). However, the prices of these condominiums along the BTS line can range from extremely expensive to surprisingly cheap even if they are only a couple of hundred meters apart from one another. So what factors actually determines the differences in the prices among these condominiums?

This paper will be a useful tool for these upcoming Thai population searching for condominiums as it will estimate the impacts of different factors that determines the prices of condominiums located along the BTS sky train line in Bangkok. The most significant pattern of

rooms that should be growing in demand the most in the future would be the one bedroom plus one bathroom type as more of the individual workers would try to find this pattern of rooms to live alone so the type is the most sufficient for a person to live comfortably and more condominiums are offering more rooms of this type than the others as well.

The condominiums are growing at a significant rate in the real estate industry, as the trend of the consumers spending on the housing projects are shifting away towards the condominiums in the city as it suits the preference of the newer generation of the Thai population better than traditional houses. But what really determines the prices of these condominiums still remain the big question. Little research has been done in the past as the trend of condominiums have just been exploding in the last decade.

This paper will be divided into ... parts, after the introduction, there will be a literature review followed by methodology explanations, findings and interpretation and conclusion. In the end, the condominiums attributes will be observed individually to determine the impact on the final price offered to the consumers in the time of present year(2019).

Before any analysis begins, some terms need to be defined first in order to clear up any misunderstanding or any misconception and be on the same page. The term “condominiums” would refer basically to a building similar to an apartment but each unit is owned separately by each individual owner while containing some shared areas such as amenities and reception areas. The main difference between apartment is basically ownership of the residents where the owner of an apartment is usually the owner of the building renting out the rooms for the residents while the owner of a condominium is basically each individual owners co-owning each units and the

building managed by HomeOwners Association(HOA) (Cambridge dictionary, 2018; Lesly Gregory, 2018).

Literature review

There has been a very similar paper that studied very similar objectives in the past. The paper studies the influence of rail mass transit on the condominium prices in Bangkok (Thamrongrisook, 2011) by using the hedonic price model approach. The Hedonic price model is an approach that treats differentiated products as a bundle of attributes which was used as a model for many prior similar studies(Disphanurat, 2017). The paper tried to focus and identify the magnitude of the influence of Rail Mass Transit(RMT) on the pricing of the condominiums in Bangkok which included the Bangkok Mass transit system(BTS) and the Metropolitan Rapid Transit(MRT) along with the structural attributes of the condominiums itself which is a very similar approach to this research. The location variables in the multiple linear regression of the paper consists of the distance from the condominiums to the nearest RMT station. This is the main variable that indicates the influence of the RMT on the dependent variable which is the condominium price. The structural attributes that come from within the condominium were also included in the multiple regression model as other kinds of attributes in hedonic pricing. These attributes included the size of the smallest rooms offered, the developers reputation(Top 10 as dummy variables) and the views. Another kind of attribute was the neighborhood attributes which indicates the amount of public facilities to be higher than 3.

The result of the research shows significant signs of inverse correlation between the distance from the RMT station and the price of the condominiums according to the regression. This indicates that the larger the distance between the RMT station and the locations of the

condominiums, the lower the prices of the condominiums will be. This is directly correlated with the expected results of the author in this research paper. However, there are some improvements on the paper that can be made. The paper was dated back in 2011 so the number of observations collected by the author was statistically insufficient(63) as in that year, the growth of both the condominiums and the mass transit was not as high as today where the range of extension almost doubled and covered a much wider area compared to that research. The number of extensions should be more than sufficient this year(2020). Some of the attributes such as view were not as significant as others in order to represent amenities which can be more relevant than qualitative attributes such as views, or the possible collinearity between the BTS and MRT in terms of distance towards the central business districts. Some of the aspects can be further explored and improved in the future.

On another similar research paper, *Peson Sirikolkarn* (2008) tried to illustrate the effects of mass transit systems on price of condominiums in Bangkok which the author aimed to identify the impact of BTS and MRT on the residential properties in the areas of Sukhumvit and Ratchada areas. The author also took the hedonic price model approach to conduct a multiple linear regression as well by using the price of the condominium as the dependent variables measured by price per square meters while classifying independent variables into three similar categories as the paper by *Thamrongsrisook*, (2011). The first category is location variable which is the distance between the condominiums and the closest mass transit station. The second category is the structural variables which consist of the age, room size(minimum), views, garden, and the developers reputation. The final category also the neighborhood variables. Which offers more reasonable attributes than the prior study mentioned since it also includes the condition of

the condominiums such as age and the number of observations is higher even though the samples are collected from only two central business districts.

The result of the regression also shows similar signs as the research paper in 2011 and the expectation of the author as, from the hedonic price model through multiple linear regression, the result suggests that the distance between the condominiums and the closest mass transit has inverse relationship and the influence of the location variables is statistically significant. However, there are some gaps in such research since different business districts and different stations from different areas can also have the same or different impact on the condominium prices as well as the distance on the prices as well as the distance in terms of meters or number of stations. There can also be omission of variables which can cause the result to be biased.

Methodology

The objective of this research is to observe and determine the “Factors affecting and driving the condominiums prices along the BTS line in the area of Bangkok”. The paper will try to understand the impacts of the factors that determine the way the condominium developers and the sellers determine the price according to certain characteristics or attributes from the condominiums itself and the factors around the condominiums. This research paper will also utilize the hedonic pricing model in order to analyze the pricing of the condominiums as a bundle of different attributes in terms of the product differentiation. It will be used to explain the primary data collected from different sources to be analyzed through multiple linear regression models

The data collection will take place through a handful of main sources from the online websites with significant presence in the real estate intelligents markets such as

thinkofliving.com, Prakard, DDproperty, Renthub and similar sites. According to the types of rooms offered in the condominiums market in the present days, most of the producers would try to sell the standard rooms with one bedroom and one bathroom per one unit, in order to fit the preference of the Thai condominium residents in the present days where they seek to live comfortably as an individual with or without a partner. The sample of rooms collected will be constrained to the standard mentioned above. The locational variables of the condominiums will also have to be within the radius of 500 meters from the BTS stations in order to keep the scope of the sample collection within the scope of research question that only includes the condominiums “along the BTS line” and all of the samples will be collected within the same period of time which is the first and the second quarter of the year 2020 where the number of samples should be sufficient to be statistically unbiased.

The variables that will be observed to determine the price of condominiums would consist of the price of condominiums from the room with one bedroom and one bathroom pattern while on the side of independent variables, it will be separated into two categories only. The first category is the structural variables which are the variables that are internal to the condominiums which consist of the room size in square meters, the age of the condominiums in terms of years built, the amount of the yearly maintenance fees in order to determine the quality of the shared facilities and amenities, the designs and the grade of the materials used to built around the condominium, the brand of the developers whether if it is a top ten brands in Thailand or not, and the parking space percentage which could also determine the size of the condominiums.

The other category of variables is the locational variables which concerns the characteristics external to the condominiums. These variables include the distance from the

condominiums to the closest BTS station, the distance from the condominiums to the closest MRT station within 500 meters, the number of stations needed to reach the central business districts from the closest BTS station along the BTS line where the stations of the CBD will be determined such as Asoke, Silom, Sathorn, Prompong, or Nana. After all of the regression analysis is finished, the impacts from different factors will be observed to see which factors really have significant impacts on the pricing characteristics of the producers and which does not.

<https://www.investasian.com/2018/10/18/thailand-property-developers/>