

Opportunities & Threats Faced by Urban Housing Developers

By

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Deceleration of the Candidate & the Supervisor

I, the undersigned, hereby declare that the Dissertation titled "**Opportunities and Threats Faced by Urban Housing Developers,**" which I wrote and submitted to the University of Moratuwa in partial satisfaction of the requirement for the award of a Master of Science degree under the supervision of Dr Chandana Siriwardana, is my original work, and the conclusions drawn therein are based on the material collected by myself.

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Dedication

This dissertation is dedicated to my wonderful Parents, Family and Friends

And especially to

All those who have invested their time and effort in the development of

Housing construction in Sri Lanka.

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Abstract

The Sri Lankan construction industry went through a major boost within the last few decades, especially in high rise residential buildings which are coming up in Colombo and other urban areas. The growing number of local and foreign investors contributing to the housing market has exponentially benefitted the local construction industry as well. Long term sustainability of these projects is not certain due to many issues such as socio-economic and political issues. Hence it is very important to identify the opportunities and threats that are associated with the housing market industry in Sri Lanka.

This study identifies the opportunities and threats that are faced by urban housing developers and identifies how the internal strengths should be developed for the organization to grasp the benefits of opportunities and minimize the risks posed by the threats. Thus, the main research question formulated to investigate the above is “What are the important Opportunities and Threats which are faced by Urban Housing Developers?” The primary objective of this research is the identification of opportunities and threats for urban housing developers in Sri Lanka as well as globally and how we can face these challenges and mitigate them. The information required for this study was composed through a detailed literature review from reputed journals, published books and websites.

The study adopted both quantitative and qualitative approaches in data collection, thereby identifying the most critical and important opportunities and threats faced by urban housing developers. A detailed literature review was done first from reputed journals, published books and websites. Thirty-Four (34) most important & critical factors were identified through the literature survey. A Factor Ranking survey was designed based upon literature to obtain the Opportunities & Threats faced by Urban housing developers. Since this topic is very wide & use of all factors for questionnaire survey is not practical. Hence only the most important 34 factors were selected as input variables for our survey assuming that these factors would best represent the construction field. When selecting the factors, the availability of local construction industries, case studies and the global construction industry were considered. The Ranking survey was done for validating the finding from the previous literatures of the construction industry. Survey is distributed through email with excel spreadsheet form and emailed to twenty (20) Industry Practitioners selected from the Sri Lankan construction industry. These twenty (20) Industry practitioners are from the Private sector, Government sector & research and development sector.

From that the Fifteen (15) most critical and important factors were identified and then proceeded to further analyze and interpret the data gathered by adopting the Analytical Hierarchical Process (AHP) with the involvement of Ten (10) experts selected among the twenty Industry practitioners. A summary table was prepared with an average weighting percentage identified to each of the 15 factors. Hence, those 15 factors have been ranked from 1-15 according to their relative importance.

According to the analysis, five (5) most critical factors were obtained:

1. Demographic trends will shape the housing market. (A5)
2. A major challenge facing the real estate market is the frequency of natural disasters. (G1)
3. Weak and rigid legal framework to solve litigation procedure on properties by banks (B2)
4. Government provided incentives (D3)
5. Complicated Documentation. (B1)

For any type of housing developers, the above critical factors are both challenges and opportunities for them. The housing developers must study these factors which are beyond their control and analyze each factor. This thesis intends to be a guide for housing developers before they venture into new housing projects.

Hence, they can develop a framework and identify their challenges, which factors are threats, and which are opportunities. Identify the most crucial factors then find whether these factors are beyond their control then it's a risk to start the project.

This thesis is a methodology to prioritize the opportunities and threats for a particular housing project. Housing developers despite their scale (Low, Medium or High) they can use the same methodology to prioritize the threats and opportunities for their projects. After prioritizing, if the most crucial factors are beyond their control, then they will have to rethink about the project.

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Chapter 01

1. Introduction

1.1 Background and Problem Identification

The Sri Lankan construction industry went through a major boost within the last few decades, especially in high rise residential buildings which are coming up in Colombo and other urban areas. The growing number of local and foreign investors contributing to the housing market has exponentially benefitted the local construction industry as well. Long term sustainability of these projects is not certain due to many issues such as socio-economic and political issues. Hence it is very important to identify the opportunities and threats that are associated with the housing market industry in Sri Lanka.

There may be many types of Urban Housing Developers in this market:

- ❖ Firms who are engaged in purchasing a large land plot (ex: 1 acre) plotting it to smaller plots (ex: 10 perches each) and building houses (2-3 bedroom) designed by the firm and sold to the end consumer.
- ❖ Firms who are engaged in purchasing a large land plot (ex: 1 acre) plotting it to smaller plots (ex: 10 perches each) and building houses (2-3 bedroom) designed with the end consumer by the advance money of the end consumer.
- ❖ End customer already has small plot of land (ex: 10 perch) and then developer build house for them in that plot of land.
- ❖ Apartment builders, who build their apartments 4-5 floors and selling to the end consumer.
- ❖ Real estate developers who purchase small houses (10 perches), renovate, and sell it to the end consumer.

The bulk of Colombo's urban population lives in decaying shacks, slums, and housing estates, which make about 9% of the city's total area. According to a survey conducted by the Urban Development Authority, a total of 68,812 households living in 1,499 community groups (disadvantaged settlements) lack a healthy environment for human life and lack access to basic infrastructure such as drinking water, electricity, sanitation, and other necessities. These families are relocating to new residential complexes that meet approved criteria, marking a significant step in transforming Colombo into a world-renowned city with a clean and pleasant atmosphere, as outlined in the urban development plan's goals.

To meet these objectives, the UDA has launched a program to construct 60,000 residential units in underprivileged areas of Colombo and its environs. The major purpose of this initiative is to relocate inhabitants from barracks, slums, and other crumbling dwellings out of the city and into modern housing. If we look at the land use model for the CMC region, we can see that the undeserving communities are dispersed around the city and have spread to the north and east of the city. To ensure livelihoods, the UDA recommended and determined to carry out further residential projects in these locations while also modernizing the physical, social, and economic infrastructure in line with the residential complex. The Colombo Urban

Regeneration Program's goal is to create 30,000 low-cost housing units in the next three years, followed by another 40,000 units in the next three years, to move families now living in disadvantaged areas of Colombo. To create and implement a relocation program with a higher quality of life, all families in disadvantaged institutions must be identified. A community development and marketing effort is also anticipated to shift 70,000 families to newly constructed dwellings. Each housing unit in the planned residential complexes has a paved area of 400 m² (450 m² of floor space) and includes a living room, pantry, two bedrooms, laundry room, and balcony. These housing units must be housed in G + 11 condos, which are 12-story buildings. The project must include infrastructure for the city, such as power, water, sewage, and drainage, as well as landscaping and inland roadways. As part of Phase I and Phase II of this initiative, the UDA has started 18 residential projects. (Authority, 2018)

According to Lanka Property Web, national real estate prices grew 17% in 2018 to an average of LKR 34.03 million. In 2018, the average property price in Colombo climbed by 50% year on year to LKR 165.74 million. Central (27.5%), Northwest (27.1%), West excluding Colombo (17%), and Southern Province (17%) were the next most populous provinces in 2018. (0.3 %). The cost of land is also increasing. In Sri Lanka, the average price of residential land increased by 15.3% year on year to LKR 1.36 million per perch in 2018. Similarly, over the same period, land prices in Colombo climbed by 5.5 percent YoY to LKR 11.56 million. According to the Department of Census and Statistics, Sri Lanka's GDP expanded 3.2 percent in 2018, slightly less than the previous year (3.3 percent) and at its worst pace since 2001. Foreign nationals may purchase real estate without restriction if they are ready to pay property taxes. They have the option of purchasing the entire worth of the property. Another option is to rent the land out for 99 years and raise the tax to 7%. Almost all real estate deals are completed in rupees. Checks and bank transfers are rarely accepted.

Rental returns are poor since property prices have climbed so much. Rents continue to climb. According to Lanka Property Web, the average monthly rent in Colombo grew by 6% year on year to 354,000 LKR in 2018. Apartment rents grew by 14.6 percent year over year, to a monthly average of LKR 274,000. The prognosis is still quite promising. According to local land experts, Sri Lanka's land market, which is still in its early stages of growth, is set to remain robust for years to come.

Expatriates and returnees from Sri Lanka are boosting demand and purchasing flats in high-rise developments even before they are built, at the highest end of the condominium market. Most are purchased as an investment, such as for rent, rather than for personal use. Migrant laborers have shown an unwavering interest in the lowest end of the market. There is a significant scarcity of affordable housing because of internal migration from the rural to the metropolis. According to a survey by KPMG Sri Lanka, home building now amounts to roughly 12,500 units per year, which is only a small part of the yearly housing need of 100,000 units. There appears to be overcapacity in mid-sized flats in regions like Colombo 6, since people who initially purchased apartments are returning to their original homes in the north and east. Another obstacle is that the slower growth of

private income. A house within the suburbs of Colombo costs a minimum of LKR 25 million, which is barely accessible to most medium-sized businesses thanks to high construction costs and insufficient incomes.

Over the last five years, Sri Lanka's urbanization rate has been approximately 0.3 percent. Due to fast growth and economic prospects in urban regions, the Sri Lankan government anticipates that urbanization will continue to grow at a rate of 3% to 4% in the coming years. Condominiums account for almost 76 percent of Sri Lanka's key real estate assets. In addition to infrastructural delays, Colombo's broken transportation network is one of the reasons for increasing land values in the city's core neighborhoods. As companies and inhabitants swarm to the town center, inadequate transportation and rising traffic congestion make commuting from rural places difficult. The construction of a new metropolis within the capital, the 665-acre Colombo Port City, which might quadruple the size of the city, is expected to be finished in 2041 and would cost over USD 15 billion, according to China Harbor Engineering, the project's developer. The project is on target to finish the refurbishment and first phase of the infrastructure by 2020.

One of the programs, initiated by the government is "My Dream Home Visa", targeting wealthy foreign investors / citizens over 55 years aged who are ready to transfer USD 15,000 or equivalent in an approved foreign currency and deposit the funds into a current Sri Lankan checking account, which can increase the demand for permanent residential property and still increase property in Sri Lanka. This in turn acts as an intermediary to encourage foreign direct investment in real estate as well. In 2015, President Sirisena made changes that encouraged positive economic growth in terms of foreign investment, mainly in the real estate sector. He also outlined plans to relax laws restricting overseas investors' ownership of land and property as early foreigners looked to invest in property on the island and had to pay a large and uninviting amount of taxes. Foreigners who want to purchase land can now become shareholders of 49% of a rental property and are also allowed to own 25% of this property. Foreign investors can now apply for a free property contract, but only after 20 years as part of a lease. Sri Lanka has been smart as many foreign investors from emerging markets can now purchase a 99-year-old rental home with a minimal tax rate.

Dehiwala-Mount Lavinia, Battaramulla, Ratmalana, Kaduwela, Rajagiriya, and Kolonnawa are among Colombo's most popular suburbs, offering a wide choice of luxury and mid-range residences. High-end flats cost between Rs 30 and Rs 550 million, while high-end luxury apartments cost between Rs 40 and Rs 1.2 billion. In these locations, middle-class two- and three-bedroom residences cost between 10 and 30 million rupees. Medium-sized houses in Colombo are much more expensive than apartments due to the great demand for land. Because of the increased demand for better locations, which is driven by huge corporations, land prices are rising even faster. Houses in Colombo are hard to come by, so individuals seeking for a home near the city will have an easier time finding one in Kolonnawa, Ratmalana, or Kaduwela. Because of Colombo's inflated land costs, people who already own homes on the periphery are searching for a "crash pad" in the city center and are likely to choose for medium-sized "micro-apartments." This is advantageous to the workers since it

permits them to stay in Colombo late at night while maintaining a property in a quieter section of the city. For professionals whose families desire to live in the friendliest area, this is a popular choice. A property in the suburb's costs on average 26% less than a comparable residence in the city, according to Lamudi. Every year, the demand for suburban real estate grows. Because many skilled professionals have taken over long-distance transportation, many prefer to move from the suburbs to the city core. Many people commute from Gampaha and Kandy to Colombo since it is a very cost-effective choice. A modest family house in Gampaha costs between 4 and 6 million rupees, while a small family house in Kandy costs between 6 and 8 million rupees.

Nowadays, young professionals in Colombo are more likely to buy an apartment in Sri Lanka, but to buy a high-end apartment in Colombo one must have a good salary. Highly skilled buyers like a Chief Architect earn up to Rs 4 million per year while most middle and senior workers earn between Rs 250,000 per year and Rs 800,000 per year. The concept of living in apartments is relatively new in Sri Lanka with many young people between the ages of 30 and 45 preferring to move into apartments. Recently married couples with just 1 or 2 children are usually the most likely to buy an apartment, especially those looking to live near Colombo. These groups need relatively smaller apartments/houses than older people with more children and grandchildren. Lamudi points out that 45-50% of property searches in Sri Lanka were by people between the ages of 25 and 34. Note that this percentage includes rental searches and real estate. Foreign investors are more likely to invest in apartments in areas such as downtown Colombo and Kandy which are the two most important locations of the country. When looking for a bigger home, many buy a larger property near the coast like Galle or in the scenic hill country such as Nuwara-Eliya since can keep that vacation as a rental. Luxury has become very popular in Colombo since the capital became one of the most important cities in South Asia. The visa application process was changed by the government in 2012 to regulate those wanting to move to Sri Lanka and to control the number of those entering and leaving the country. Visas were given to foreigners wanting to move to Sri Lanka but owning land and property was until recently reserved for Sri Lankan citizens only.

Now this has grown in other major cities in the country as well, such as emerging cities like Nuwara-Eliya, Kandy and Galle. The old tax of 15% on the purchase of leases has been removed so that foreigners can buy without tax for up to 99 years. Foreign nationals who only want to purchase land are granted tax exemptions on a case-by-case basis. The government removed property rights restrictions from the ground floor and allowed foreigners to buy the apartments to collect 40% of the cost from a national bank. The removal of land lease tax encourages foreigners to invest more and more since they expect growth development of country's small cities located out of Colombo.

Construction activity increased from 2.8% in 2015 to 8.5% in 2016, mainly due to the significant increase in cement availability of 22.9% and the private sector loans to the sector from commercial banks, which occurred in the first half of the year Rose to 40.2% in 2016. According to the Oxford Business Group, the property market in Sri Lanka grew rapidly in 2015 and early 2016. The medium-term growth is mainly due to the increased demand for

residential property in the upper class and in the media. Hence, this trend is expected to continue. The decision of the former finance minister to lower taxes on housing in the travel sector was one of the most important and positive events for the real estate sector in 2016. An increase in residential demand is likely to lead to an increase in commercial real estate, which in turn helps businesses to meet new and future demand. One of the main obstacles to real estate market growth in 2017 was the drought in Sri Lanka early 2017. Even the new villa tax law that came into force last year was thought by many to suppress interest from international investors. However, factors such as tourism growth, buyer demand, and construction and GDP growth very much had a positive impact on the market in 2018. (Lamudi, 2017)

1.2 Research Questions

The identifying of opportunities and threats for urban housing developers are critical and important for the future development and sustainability of the housing industry. Hence, this study is designed to be a guide for housing developers before they venture into new housing projects. Hence, they can develop a framework and identify their challenges, which factors are threats, and which are opportunities. Identify the most crucial factors then find whether these factors are beyond their control then it's a risk to start the project. The following is the research question that the study intends to explore.

“What are the important Opportunities and Threats which are faced by Urban Housing Developers?”

1.3 Objectives

The research objective is to analyze the opportunities and threats faced by the Urban housing developers and recommend sound strategies to profit on opportunities and mitigation of threats.

- Identify Opportunities for Housing developers
- Identify threats for Housing developers
- Recommendation after analyzing challenges, opportunities & threats and identify strategies for sustainable business growth

Opportunities are the positive effects occurring in the external environment that enables the organization to profit by developing the organization strengths and absorbing the opportunity. Since inception of 2018 it can be identified the Sri Lankan construction industry is facing a severe decline due to escalating costs caused through currency depreciation and lack of foreign investments. This has caused many small-scale developers to move out of the industry as they do not have enough capital to be with the industry recession. Recent Government changes and the never-ending political instability has also caused the Sri Lankan construction industry to be volatile due to lack of labor, increasing difficulty to hire machines and other hardships. Also, instable political environment is another crucial factor for not being able to motivate investors to invest in real estate developments. When compared to previous year to this year there's a drop of 400 million rupees.

Lack of government funded research and development in the industry is another crucial reason for small scale developers for not having a market to stay. Inefficient and unskilled labor is another reason for creating wastage for firms through incorrect material usage leading to material wastage thereby escalating costs and inability to identify suitable skills due to lack of certification as well as the immature legal environment. Lack of legal knowledge for solving construction problems has led to small firms moving out of business due to legal problems.

1.4 Research Methodology

The research methodology defines the research methods and techniques used in the research. It is essentially the design of the research, the theoretical arrangement of which the research is conducted. The data for the study needs to be accurate and clear cut to fulfill the objectives of the research. This chapter will elaborate on the process of data collection for the research and will justify the reasons behind the selection of the data collection method. This survey attempts to explore the opinions of construction professionals engaged in construction projects in Sri Lanka. The survey was focused on the important & challenging factors that need to be considered for urban housing developers. The main objective of this research is the identification of opportunities and threats for urban housing developers in Sri Lanka as well as globally and how we can face these challenges and mitigate them. The information required for this study was composed through a detailed literature review from reputed journals, published books and websites.

I have identified the threats and challenges faced by National & International Urban Housing Developers through the Literature review and extracted the important factors. For the next part, feedbacks from 20 Industry Practitioners have been taken (Practitioners in the Industry). These Practitioners are from the Private sector and the Government sector and the Research Development sector.

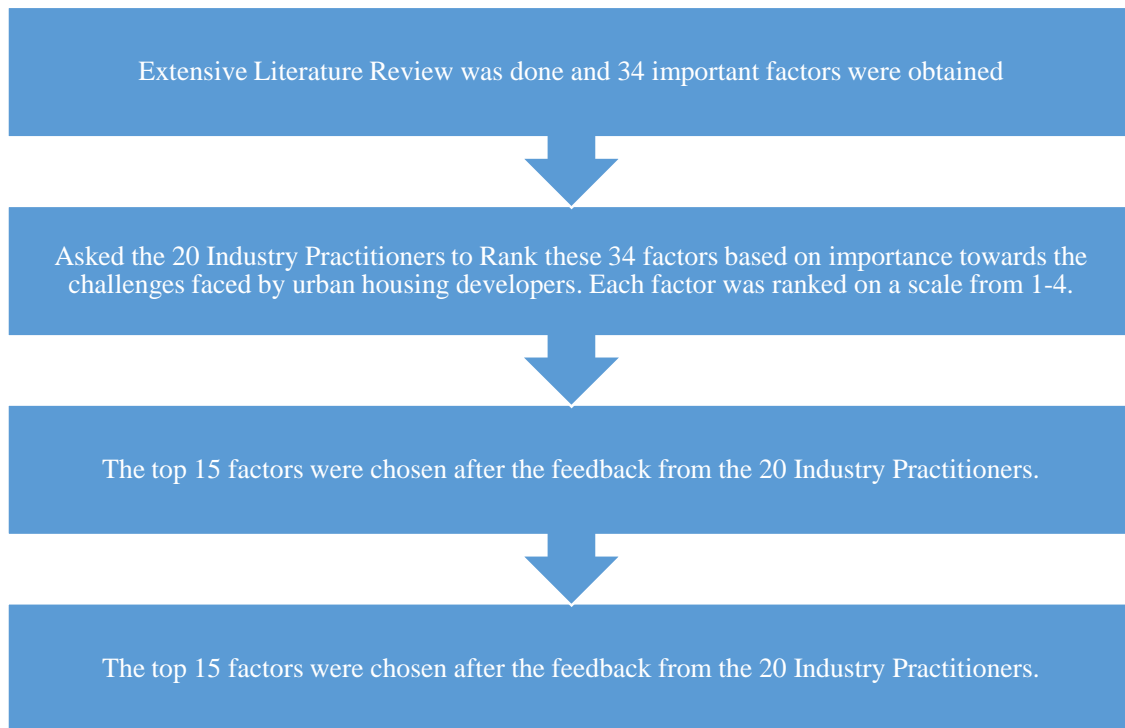


Figure 1: Steps of selecting the variables of the Factor Ranking survey

These Industry Practitioners were given the 34 factors which were extracted from the Literature Review and asked them to Rank each factor on a scale from 1-4. Out of the ranking table, factors with rank 1 & 2 have been extracted; hence 15 most challenging factors were identified by the 20 Industry Practitioners. From these selected 15 factors an AHP (Analytical Hierarchy Process) analysis was done with the feedback of 10 selected experts & a summary table was prepared with an average weighting percentage identified to each of the 15 factors. Hence, those 15 factors have been ranked from 1-15 according to their relative importance.

1.5 Limitation of the Study

This study is limited to the condominium projects in Urban cities such as Colombo Municipality city limits and its suburbs since most of the condominium projects are in these areas.

The opportunities and threats in the Housing industry are discussed with respect to urban housing developers.

1.6 Research Deliverables

- Identification of Opportunities and Threats for urban housing developers.
- Literature Survey was done to identify most critical factors facing urban housing developers.
- Application of Analytical Hierarchical Process (AHP) analysis to evaluate these critical factors in local housing projects with respect to Developer.

1.7 Guide to Thesis

Chapters:

Chapter 01 – Introduction

The introduction offers an outline of the research background, research question and identifying the problems, importance of the study and guide to succeeding chapters.

Chapter 02 – Literature Survey

Discusses the facts collected from available literature related to housing industry. The information required for this study was composed through a detailed literature review from reputed journals, published books and websites. Important factors were identified in the following categories: Demand for Housing, Housing Finance, Supply of Housing, Legislation, Threats, Pollution and Unforeseen events.

Chapter 03- Research Methodology

Describes the research methodology adopted for this thesis and provides an in-depth detail on research techniques used for gathering data and the techniques for data analysis.

Chapter 04 – Results and Analysis

Describes the data collected through the factor ranking survey as well as the Analytical Hierarchical Process (AHP). These data are further analyzed and interprets the findings of the study.

Chapter 05 – Conclusions and Recommendations

It presents a summary of the main findings of the previous chapters and the conclusions that can be identified. It also provides suggestions and recommendations. It further discusses the importance of future studies to identify and mitigate factors which are challenging to urban housing developers.

Chapter 02

2.0 Literature Review

2.1 General

Dwelling is described as a concept by the United Nations Housing Policy Guidelines for Developing Countries (1976), because it is much more than physical housing. Housing was redefined by the United Nations Social Housing Program for Urban Areas in 1992, as it serves as a center for the family's "total residential environment, a force of economic activities, as a symbol of achievement, social acceptance, and an element of urban growth and income distribution." (Sarathchandra,2008). The third UN conference on "Housing and Sustainable Urban Development," Habitat III, was held in 2016. The goal was to provide "sufficient protection for all," and all political leaders pledged to give people with healthy housing that is safe, accessible, and cheap, as well as essential services, facilities, and amenities, as well as discrimination-free housing and owner safety standards of rights. Government officials pledged in the Millennium Declaration to improve the lives of at least 100 million slum dwellers by 2020. (NHDA, 2016) Housing plays a critical role in any country's economic development. It accounts for 10-20% of the country's overall economic activity and is the source of the highest wealth for families. (Habitat III, 2016).

The demand for living space is not only one of the most basic human needs, but it also serves as a barometer of the population's standard of life. Today it is current that the living space must be comfortable, economical, and easy to maintain, as well as architecturally expressive and respectful of the environment. (Helinae, 2016)

According to the report by department of Census on survey of construction report in 2013, 51.1% (Rs 57,960 million) of the total value of work done by type of construction for the year 2012 is Building construction out of which 2.5% (Rs 1462 million) is the value of work done for housing units out of all types of buildings. Total value of contracts for building construction stands at Rs 147,210 million out of which contracts for housing units stands at Rs 1825 million (1.2%) out of all types of buildings. (SCI report, 2013) According to the Census department survey of construction report in 2016, 32.7% (Rs 87,357 million) of the total value of work done by type of construction for the year 2015 is Building construction out of which 17% (Rs 14,989 million) is the value of work done for residential buildings out of all types of buildings. Total value of contracts for building construction stands at Rs 143,664 million out of which contracts for residential buildings stands at Rs 32,787 million (22.8%) out of all types of buildings. (Sri Lanka, 2016) Which brings out the fact that 50% or more of the construction value is for residential housing which is a very high demand and brings out the fact that contracts for residential buildings have increased from Rs 1825 million in 2012 to Rs 32,787 million in 2015 which is an unprecedented increase. (Sarathchandra, 2008)

2.2 Demand for Housing

The demand for housing is increasing, so from an investor's point of view this is a great motivation for the property, mainly due to the appreciation of the property and the appreciation of the rent. For example, if you own a \$ 30 million apartment near Colombo, you can easily rent it for around Rs 100,000 per month, which is a healthy return. Although the increase in value of real estate in Colombo has been the highest in the whole country for some time, the increase in value in the periphery is now quite high at 15 to 20% per year, so people also owned real estate in these areas. Nigel Oram said the apartments should meet four main requirements, provide adequate protection against burglary, be protected from the dangers of fire and structural collapse, and be provided in conditions that promote health, including the provision of clean and adequate water and types of Waste (hygiene). Finally, it should be ensured that the residents enjoy sufficient space and privacy. (Sarathchandra, 2008) In Sri Lanka, interest rates are lower than they've ever been, fixed-income securities alternatives have shrunk dramatically, and the ever-reliable and safe fixed-term deposits have lost their allure due to declining prices. So, if you want your money to grow, or at the very least keep its value, real estate can be the greatest option. However, real estate investing is not without risk; potential investors should carefully analyze their options in a crowded market. It can aid in the comprehension of urban development dynamics. Colombo is a city with a population of about 560,000 people (within the urban area of Colombo). Every day, almost 500,000 new people enter the city. Traffic has slowed to a halt. Why, therefore, do individuals waste years of their life stuck in traffic? Colombo is the country's epicenter, with most well-paying jobs, schools, hospitals, big retail malls, and other social infrastructure concerted in Colombo.

Obtaining full appreciation, on the other hand, remains an option throughout the duration. When it comes to investing, timing and location are crucial. Although the epidemic and the expatriate brain drain have temporarily reduced rent demand, there will surely be a comeback. It's critical to keep track of the odds. Interest rates are low, and today's FDs and other fixed income instruments are unlikely to keep you above inflation, but mortgage rates are also low, and banks are under pressure to lend. Then you'll be able to receive good real estate mortgage rates. When shopping for a house in Colombo, proximity to the city's central core (Colombo 1 and 2), as well as the local surroundings, are significant factors to consider. (Mawilmada, 2020). The rising demand for private residential colonies that sell their commodities (condos) combined with multiple services has resulted in a dramatic increase in land costs, rendering private dwellings for low-income families and those on the periphery inaccessible to state-owned housing programs. The major goal of this study was to determine the interaction between the state, market, and social classes in Colombo in relation to Sri Lankan urban housing policy. Sahaspura, a low-income apartment/condominium complex that was relocated as a new government project in the 1990s, Mattegoda, a lower-middle-class housing development that was a government project in the 1980s, and Millennium City, an upper-middle-class housing complex that was a new private sector project in the 2000s, were the projects. The key elements that influenced people's movement to housing complexes were the numerous possibilities to use the facilities linked with Colombo, which is Sri Lanka's main commercial and administrative center. Better living circumstances in the Colombo area, with a variety of modern amenities. It is beneficial for those who live nearby

because it assists children in finding work. Having a home in Colombo makes it easier for parents to send their children to secondary school. Various types of business opportunities are available. Transportation is an excellent mode of transportation for both public and private jobs. It is easier to purchase a home in a residential complex than it is to construct one on your own. A residence in a residential complex comes with all the latest conveniences. When you buy a house in a complex, you have the option of paying in installments. Most housing complexes provide 24-hour security, which is especially important for single and divorced women, widows, and minorities, good security and facilities for the elderly, land disputes, various types of conflict, abuse and common abuses in rural society are lacking in a complex residential area.

The current strong demand for residential buildings in and around Colombo is mainly due to the rapid change in urbanization, the liberalization of the economy and the new trend in the labor market. Then an entrepreneurial class of urban developers emerged along with a subculture that created competition among urban developers for construction work and marketing of finished homes to their customers. The rise in land prices in metropolitan areas and the associated rise in the prices of building materials are inevitable. Low-income groups of people in these urban areas have been motivated to seek help from the government to solve their housing problem by finding housing in government complexes or apartments. The current situation is that upper-middle classes are more likely to settle in Colombo itself and its economically significant suburbs, while low-income groups tend to focus on areas of lesser economic importance. An environmental problem has arisen due to the overcrowding, but with the introduction of these residential complexes, infrastructure has been made available to address the problem. Due to these residential complexes, the areas have been developed in such a way that the population density has increased as the middle class and upper middle class settle in these residential complexes. For this reason, modern suburbs were created and formed a new type of social stratification. (Niriella, 2010).

Dehiwala-Mount Lavinia, Battaramulla, Ratmalana, Kaduwela, Rajagiriya, and Kolonnawa are among Colombo's most popular suburbs, offering a broad choice of luxury and mid-range residences. High-end flats cost between Rs 30 and Rs 550 million, while high-end luxury apartments cost between Rs 40 and Rs 1.2 billion. Middle class two- and three-bedroom houses in these areas range from 10 to 30 million rupees. Due to the high demand for land in Colombo, medium-sized houses cost far more than apartments. Because a high demand for better places ordered by large companies drives land prices even higher. Houses in Colombo itself are very rare to find, so those looking for a house near Colombo city will be easier to find in Kolonnawa, Ratmalana and Kaduwela. Colombo apartments tend to attract higher prices than Colombo houses as most of these houses are on the outskirts of Colombo. Because of Colombo's high land costs, people who already own homes on the periphery are searching for a "crash pad" in the city center and are likely to choose for medium-sized "micro-apartments." This is advantageous to the employees since it permits them to stay in Colombo late at night while maintaining a home in a calmer section of the city. For professionals whose families desire to live in the nicest area, this is a popular choice. A

property in the suburb's costs on average 26% less than a comparable residence in the city, according to Lamudi. Every year, the demand for suburban real estate grows. Because many skilled professionals have taken over long-distance transportation, many choose to move from the suburbs to the city core. Many people commute from Gampaha and Kandy to Colombo since it is a highly cost-effective choice. A modest family house in Gampaha costs between 4 and 6 million rupees, whereas a small family house in Kandy costs between 6 and 8 million rupees.

Nowadays, young professionals in Colombo are more likely to buy an apartment in Sri Lanka, but to buy a high-end apartment in Colombo one must have a good salary. Highly skilled buyers like a Chief Architect earn up to Rs 4 million per year while most middle and senior workers earn between Rs 250,000 per year and Rs 800,000 per year. The concept of living in apartments is relatively new in Sri Lanka with many young people between the ages of 30 and 45 preferring to move into apartments. Recently married couples with just 1 or 2 children are usually the most likely to buy an apartment, especially those looking to live near Colombo. These groups need relatively smaller apartments/houses than older people with more children and grandchildren. Lamudi points out that 45-50% of property searches in Sri Lanka were by people between the ages of 25 and 34. Note that this percentage includes rental searches and real estate. Foreign investors are more likely to invest in apartments in areas such as downtown Colombo and Kandy which are the two most important locations of the country. When looking for a bigger home, many buy a larger property near the coast like Galle or in the scenic hill country such as Nuwara Eliya since can keep that vacation as a rental. Luxury has become very popular in Colombo since the capital became one of the most important cities in South Asia. The visa application process was changed by the government in 2012 to regulate those wanting to move to Sri Lanka and to control the number of those entering and leaving the country. Visas were given to foreigners wanting to move to Sri Lanka but owning land and property was until recently reserved for Sri Lankan citizens only. (Lamudi, 2017).

According to research by Fortin and Leclerc (2000), changes in the 15- to 54-year-old age group had a bigger influence on property values than those aged 54 and over. Furthermore, Atkin and Myers (1994) discovered that home demand lasted until people were 70 years old. Fortin and Leclerc (2000) developed a home demand model to investigate demographic shocks by looking at the percentage change in the 15-64 age group. A logarithm of the housing stock was used to estimate housing demand, which was constituted of numerous market parameters. They used a calculated statistic like the Average Multiple List Service (MLS) divided by the Consumer Price Index to determine real estate values. They utilized Statistics Canada to calculate the number of residences on the market. The income was derived by dividing real GDP by the number of those above the age of 15. We also look at changes in people's typical salary to better understand their capacity to buy a property based on their research. Income and education are major variables in real estate markets, according to Green and Hendershott (1996).

Property values are influenced by a country's economic conditions. GDP has a minor influence on property values since rising GDP indicates that the economy is growing. People's spending and saving habits are influenced by the economy. People are more inclined to buy homes when the economy improves, and banks are more prepared to lend. Property prices rise by 0.93 percent for every one percent growth in GDP. Property values are influenced by macroeconomic variables, according to Fortin and Leclerc (2000). Property prices would be affected by both economic crisis and prosperity. The more homes there are, the lower the prices, as the fundamental economy dictates. A 1% increase in housing supply would result in a 0.046 percent drop in home prices. There is a modest variance in pricing when unemployment grows; a 1% increase in unemployment results in a 0.684 percent fall in property prices. Property values are also affected by outstanding mortgage debt. House prices climb by 1.30 percent for every 1% increase in outstanding debt. With increased mortgage debt, there will be more demand for houses, which will lead to higher prices. More crucially, as the model implies, working-age population demographics play a statistically significant effect in fluctuations in housing values. A 1% rise in the number of persons aged "15-64" results in a 2.707 percent increase in property values. After all, a 1% rise in household income results in a 0.195 percent increase in home prices. This age group, according to Fortin and Leclerc (2000), is the most in demand for housing and has the biggest effect on pricing.

Aside from economic reasons, the working-age population is the primary demand for real estate and the primary influencer of property price increases. While demographics exert some influence on the trajectory of housing values, economic considerations are far more flexible. Because changes in the working-age population cannot be directly influenced, each country's financial system must become more transparent. The US government is working hard to improve financial industry openness. They should tighten regulation and increase capital requirements for all lenders, particularly in the shadow banking sector. This would make it illegal for lenders to offer mortgages merely to create derivatives for investors. (Henry, 2014) Lowry (1974) published a descriptive analysis that explained housing demand in terms of income, household size, employment, and transportation expenses. Income, the age of the householder, sex, the number of families, and education are all characteristics that influence the demand for a dwelling unit, according to Rosen (1974). According to Mohd Zain (1989), population size, structure, and growth may all have a role in future housing demand. Affordability, according to Stone (2006), is a link between income and relative costs, not an inherent property of housing. Because of people's affordability, income and other demographic characteristics might influence market demand. It was cited among other variables impacting house demand in the market by Idrus and Ho (2008). They are the role of residents' demographics, satisfaction levels and personal preferences. They then found that these personal preferences vary according to housing category, area, project size and project period. Mar Iman (2002) stated that real estate demand can be classified according to its physical location, location, population, socio-economic status, and market. Myers (1990) classified socioeconomic, market-related and demographic determinants as macro factors. Population size, age, income and disposable income, interest rate, and the availability of savings are all elements to consider. According to Myers (1990) and Sirat et al. (1999), demographic considerations may impact housing demand, with higher demand linked with a

bigger population. Simultaneously, the age distribution, which favors the period in which to have a family, will result in a higher demand for housing. Demand and affordability are strongly correlated with wealth and net return on home ownership factors such as employment, education level, and household income.

In addition, Velilla and Olympia (2002) discovered that in locations where unemployment is persistently higher than the national average, average earnings are lower and buyer confidence is harmed. The larger the family size, the more educated the person is and how long the job will have an added incentive for the person to own a home. Several forms of demographic changes are influencing the real estate market, according to Mar Iman (2006). Population, migration, the influx of millions of echo boomers into the housing market, resource transfers from elderly parents to baby boomers, and societal developments are all factors to consider. Such demographic trends have historically been important drivers of real estate demand and will continue to be so in the future. According to the Canadian Housing Observer (2003), the characteristics of everyone in a population, notably age, ethnicity, and marital status, impact housing demands and preferences. The education rate of households, which is a crucial driver of housing demand, is influenced by both populations increase and its features. Changes in the number of households seeking homes, according to Mickle (2001), will affect housing demand due to natural population growth, increased family formation and regional migration, among other things. Linneman and Megbolugbe (1992) have interpreted that the affordability problem, particularly for lower-middle-class families, is due to their poor professional qualifications and education. Then these groups of people started having accessibility problems, not because house prices had risen dramatically, but rather their incomes stagnated and they could no longer cope with the price offered on the market. It is clearly stated that education levels determine people's incomes and, in turn, differentiate the affordability of housing. (A.A Bujang, 2010).

2.3 Supply for Housing

Residential development is an important part of urban planning and discusses numerous determinants of residential land development, urban land use and residence, the spatial model and segregation in residential areas, the perception in the residential area and mobility of housing, housing agencies, housing finance markets. This in turn means that coordinating the various agencies to solve the housing problem is a must to ensure the planned housing development. According to the 2001 census, the nationwide housing shortage was estimated at 218,295, and 30% of existing homes are classified as semi-permanent, temporary, or unclassified when significant improvements are required. The homes damaged by the tsunami were approximately 77,561, of which only approximately 60,000 were replaced in 2007. The discussion of the preliminary assessment North and East shows that approximately 150,000 housing units (2007) are required to solve the housing problem for both rehabilitation and the relocation of affected families. Overall, the total housing deficit in 2007 was 1,000,000, and that number has increased every year. Given the total population and the rate of population growth and household size, it can be estimated that the new annual demand for housing would be on the order of 70,000 on top of the existing deficit. Although the cost of building a home is out of the reach of the average person's income and must be invested from a person's

savings or finding financial support from a financial institution. Therefore, the need to find solutions to high construction costs using innovative means is a necessity and can be realized through financial derivatives that enable long-term funds at reasonable costs to finance housing. The demand for housing is mainly reflected in the income of a buyer, the main factors being the development of employment and income of the potential client group, as well as the conditions and availability of finance.

In the national context, housing construction should be examined together with infrastructure. The infrastructure related to housing consists of three levels: infrastructure within the housing unit, infrastructure in the area or housing project and nationwide infrastructure such as electricity from the national grid, access to main roads, etc. To improve the quality of life in general; Improvement of urban infrastructure, urban housing problem solving must be holistic (for example: district development should be integrated into national goals), basic housing, clean water, electricity, telecommunications, and global communication networks for all citizens to be accessible, the state is expected to provide tax incentives. Promotion of the long-term debt capital market offers to direct funds from long-term financing sources to the real estate finance market. Bank financing and condominium management, complementary features of property development, also need refinement. The urban population in Sri Lanka has always increased, so statistics from 1990 to 2000 show that urbanization in Sri Lanka has increased slightly, although it is not as high as in India, Pakistan, and other neighboring countries. This is due to the impact of the national policy of decentralizing economic activities and management in the suburbs of the city center. (Sarathchandra, 2008).

The economy and population of major cities grew significantly in the 2000s, but it is argued that the supply of new housing did not match this increase, leading to an accessibility and availability crisis. This form of market failure would arise from a very limited and outdated planning approach that is unable to meet the current market demands of private investors, developers, and house builders. As a result, the reductionist solution to the problem is to deregulate real estate markets and planning systems in order to restore supply and demand equilibrium (Storper and Rodriguez-Pose, 2020). The private sector is expected to adapt its business practices to take advantage of new market opportunities and alleviate the supply-side shortage. The only constraint, according to proponents, is the politics of planning systems and the ability of organized interests to stifle fresh expansion. Such narratives underpin the policies of supranational institutions like the World Bank and the International Monetary Fund (Amirtahmasebi et al., 2016), influential industry publications and journalistic reports (Williams, 2020), and a school of academic writers who see planning constraints as a source of inspiration (such as green belt area designation) limit much needed supply. (Cheshire, 2019).

Secondly, when there is a lack of demand for new homes, market activity falls, reducing investor incentives and increasing financial risks. According to some academics, residential real estate has a low appeal as an asset class when compared to other more liquid assets (see Baum and Hartzell, 2012; Crosby and Holgersen, 2014). House prices can plunge during

economic downturns, as they did in most of Western Europe in the early 1990s and following the global financial crisis of 2008. Lower investment and new growth prospects imply falling demand. When crises are seen in this perspective, policy responses may focus on mechanisms that maintain demand, such as grants or direct financing for home purchases or direct support for new (counter-cyclical) housing. Many Western governments in the 2000s, notably in the United Kingdom, were ready to punish the former by providing social benefits or "help by purchase" subsidies to people, while they rejected the latter for ideological grounds, permitting only residences and government-funded limited-construction.

Third, certain components of the housing crisis in cities are more intimately tied to governance and regulatory failures. Long-term narratives of a "housing crisis" put governments and state actors in a more difficult position of legitimacy. Politicians are under increasing political pressure to act. Even if their operations contribute to fueling a supply or demand crises for residents and consumers, they are unable to generate enough visible outputs (such as new apartments) to legitimize their activities with voters, according to Schapf's (1992) standard formulation.

Finally, housing crises are exacerbated by a governance crisis, defined as "the question of whether a socially or discursively constituted object of government can ever be controlled in light of the complexity and turbulence of the material, social, and space-time conditions in which it is embedded," as Jessop (2002: 180) puts it. In other words, oversimplified descriptions of the operation of real estate markets and the transformational potential of regulatory reforms may likewise cause crises. If governance challenges such as affordability are reductionist and/or establish objectives and recommended solutions that individuals and institutions cannot meet, they might become "uncontrollable" under this paradigm. A governance crisis, on the other hand, prompts a series of emergency political measures that, ironically, are believed necessary to preserve a certain degree of "normalcy," or what some have dubbed a "state of emergency" after Poulantzas. (Jessop, 2002, Žižek, 2017). When crises linger, exceptionalism can become the norm, leaving the issue of whether a housing crisis can be addressed unanswered as the crisis' core focus grows to embrace various, sometimes contradictory interpretations.

In nations like the United Kingdom, much study on urban housing issues has centered on policy remedies (Heslop and Ormerod, 2020). Even though there are several policy solutions, research has shown that supply-side initiatives to reducing housing market pressure are given priority (Gallent et al., 2018). Accelerated politics and new governance mechanisms have obliterated public spaces while giving private actors and enterprises more privileges and freedoms in the areas of urban development and housing. The act of naming the situation is a strong weapon for increasing political mobility and bringing about change (Madden & Marcuse, 2016). Following this logic, the housing crisis (in its various forms) has created new regulatory scenarios favorable to the real estate sector and has favored selective investments in homes with high yields and puffed-up costs for all citizens. (Brill Frances, 2021).

2.4 Housing Finance

Real estate financing is usually long-term and relatively high in relation to the borrower's income. Therefore, some institutions are not suitable for this type of loan, e.g., B. those who specialize in short-term high-risk loans or loans for industrial and commercial developments. Some institutions, while providing few residential loans, are mobilizing household savings, and looking for ways to invest those savings, while others may be building financial institutions such as pension funds, employee trust funds and insurance companies, etc. They hold the longest lasting savings. Most of the excess funds from these institutions have been invested in short-term government bonds, as a mandatory provision or as an administrative measure aimed at eliminating national budget deficits. This is regrettable in view of the underdeveloped capital market in the country, under which the need for housing finance could otherwise be financed with corresponding long-term funds. Therefore, it is important for the government to put in place tax and other measures to facilitate the secondary real estate finance market that could attract long-term market funds to the real estate finance market.

The demand for real estate financing is increasing. The increased supply of new apartments and the availability of facilities in the new residential complexes have resulted in an increase among young executives, which has resulted in strong demand. In 2007-2008, approximately 25% of the population will be in cities and it is expected to increase to around 50% in 2025, despite efforts by the government to decentralize development and management from urban centers to suburbs. Since the post-war northeastern particularly in 2009, people have moved exponentially to Colombo and other urban suburban areas that have recently been urbanized. Housing policy should therefore focus more on urban housing. This has resulted in a growing demand for condominiums in the western province. Negative interest rates in recent years have led to real estate investments rather than low-income bank deposits. Rapid increases in incomes in the private sector make housing construction more affordable, thereby increasing consumption in areas such as housing construction. The per capita income has also increased significantly. Tax breaks were extended to borrowers, further reducing the actual cost of borrowing while helping to increase housing demand. Corporate tax benefits available to developers on, for example, BOI-approved housing projects include tax exemptions and tariffs on imports of building materials. Interest on home loans is also considered an eligible expense for income tax purposes up to a certain limit.

Many Sri Lankans living overseas prefer to invest in Sri Lankan housing. Migrant workers want to have a home of their own when they return to the country. Therefore, they invest their hard-earned money in real estate for these three reasons: the return on investment is relatively high due to the price increase, they cannot expect a positive return on their bank deposits due to fluctuations and interest rates, negatives prevailing in the country and ultimately for a peaceful family and social status. The demand from unskilled Sri Lankans employed in the Middle East is the highest of any migrant worker. The main goal of this type of worker is to earn the necessary funds to finance their housing needs. High concentration of domestic workers with a combined 80% share of the Sri Lankan work force is employed in Middle Eastern countries. This sector is the most vulnerable and the lowest income group.

First and foremost, they want to return to the island to lead a quiet family life in their own home. The introduction of escalating home loans has become popular with borrowers because of the convenience that these loans provide for a larger loan amount than would otherwise be possible with traditional monthly home loans. The emerging competition in the real estate finance industry between lenders has resulted in lenders charging lower interest rates and offering better and more facilities. More and more newcomers to the real estate finance market such as foreign and local commercial banks such as HSBC, Seylan, HNB, Sampath and Commercial Bank. The introduction of numerous new products by lenders to meet the needs of a wide variety of customers such as Adjustable-rate mortgages, branded home loan products and tiered monthly payments are some of these new products.

There are many weaknesses in the property finance market of Sri Lanka. Such as, complicated documentations, Hidden charges, Lower proportion loaned compared to the value of the asset, weak and rigid legal framework to solve litigation procedure on properties by banks. The increasing collaboration between lenders and real estate developers minimizes legal problems related to mortgages, making it easier to buy a property. Home loans are mostly given for the construction of individual houses. The development of land by developers is new and the legal requirements that the developers must set for the projects are not yet satisfactory. In the case of developers developing land for sale, the banks are now working with them to ensure ownership clearance for the entire property, so the bank doesn't need a unique title for each block. This minimizes the legal problems for individual builders. One of the trends in home finance is long-term loans with repayment terms of 20-25 years to make potential borrowers available for the required credit facility due to rising house prices. (Sarathchandra, 2008)

House prices rose 17% across the country in 2018 (16.3% adjusted for inflation) to an average of LKR 34.03 million (\$ 194,670), according to LankaPropertyWeb. On a quarterly basis, house prices increased 4.9% in the fourth quarter of 2018 (4% adjusted for inflation). Average house prices in Colombo, the Sri Lankan capital, increased by 50% year-on-year (45.6% adjusted for inflation) to LKR 165.74 million (USD 948,124). Property prices in Colombo increased by 15.1% in the last quarter (14.9% adjusted for inflation). Property prices have risen in almost all provinces, with Sabaragamuwa having the largest annual increase in 2018 at around 40%, followed by Central (27.5%), Northwest (27.1%), West excluding Colombo (17%) and Southern Province (0.3%). Land costs are also on the rise. The average residential lot price in Sri Lanka grew 15.3% year over year in 2018, hitting LKR 1.36 million (\$ 7,780) per perch (1 perch is 16.5 feet long). Similarly, land prices in Colombo grew 5.5 percent year on year to LKR 11.56 million (\$ 66,130). Sri Lanka's burgeoning tourism industry is fueling real estate demand. Sri Lanka received a record 2.3 million tourists in 2018, increasing 10.3 percent from the previous year, according to CBSL. India, China, the United Kingdom, and Germany were the main markets last year, with Australia showing considerable growth. The number of visitors that arrived in the first two months of 2019 increased by 4.6 percent over the same period last year, reaching 496,272. Despite the enormous demand for housing, construction is still behind. According to the Central Bank of Sri Lanka (CBSL), the overall number of residential licenses in the Colombo

metropolitan region fell by 11.1 percent year on year to 5,130 in the first half of 2018. Permits for housing declined by 4.7 percent in 2016 and 6.9 percent in 2017.

The 15 percent depreciation of the Sri Lankan rupee against the US dollar from 153.2 LKR = 1 USD in December 2017 to 180.215 LKR = 1 USD Dollar breakeven in December 2018 contributed to gains in the Sri Lankan real estate market from the perspective of US dollar investors. According to the Department of Census and Statistics, Sri Lanka's GDP expanded by 3.2 percent in 2018, slightly less than the previous year (3.3 percent) and at its worst pace since 2001. The economy is predicted to increase 3.6 percent this year and another 3.8 percent in 2020, according to the Asian Development Bank (ADB). Foreigners are permitted to purchase real estate if they pay the property tax. Foreigners are allowed to buy 100% of the property's worth. Renting the land for 99 years and raising the tax to 7% is another option. Almost all real estate transactions are conducted in rupees and are carried out in cash. Checks and bank transfers are rarely accepted. Rental returns are poor since property prices have climbed so much. The cost of living continues to grow. According to Lanka Property Web, the average monthly rent for properties in Colombo grew 6% year on year to LKR 354,000 (\$ 2,025) in 2018. Apartment rentals grew 14.6% from the previous year to LKR 274,000 (\$ 1,567) per month on average. The prognosis is still quite promising. According to local real estate experts, Sri Lanka's real estate sector, which is still in its early stages of growth, is projected to stay robust for years to come.

The Central Bank of Sri Lanka (CBSL) increased the interest rate on permanent deposits (repo rate) by 75 basis points to 8% in November 2018 and increased the interest rate on permanent loans (repo rate) by 25 basis points to 9%. In the third quarter of 2018, total outstanding house loans (including acquisitions, construction, and repairs) climbed 14.8 percent year on year to LKR 523.29 billion (\$ 2.99 billion), according to CBSL. The mortgage loan will last between 15 and 25 years. A commercial bank's average loan is LKR 1 million (\$ 5,720). Loans to public corporations have a lower average interest rate. Variable rate mortgages are offered by private commercial banks, which account for around 75% of the market. Only fixed-rate mortgages are available from state institutions. Construction is being held back by fragmented industry and excessive expenses, according to the Central Bank of Sri Lanka (CBSL). The number of residential property approvals in the Colombo metropolitan region fell by 4.7 percent in 2014 to 12,725 units, and then fell again by 6.9% to 11,843 units in 2015. Home ownership authorizations fell 11.1 percent to 5,130 units in the first half of 2018, continuing the downward trend. Construction is being slowed by the fragmentation of the industry as well as excessive expenses. Overseas Realty is the sole real estate company listed on the Colombo Stock Exchange. Access, Ceylon Cold Stores, Hayleys, Richard Pieris & Company, and John Keels Holdings are among the corporations having development offices.

Expatriates and returnees from Sri Lanka are driving demand and purchasing flats in high-rise developments before they are even constructed, at the top end of the condominium market. According to TKS Securities, most are purchased for financial objectives such as renting rather than for a livelihood. Migrant laborers continue to show interest at the lowest

end of the market. There is a significant lack of affordable housing due to internal migration from the rural to the metropolis. According to a survey by KPMG Sri Lanka, housing building is now at roughly 12,500 units per year, only a small fraction of the housing requirement of 100,000 units annually. There appears to be overcapacity in mid-sized flats in regions like Colombo 6, since people who initially purchased apartments are returning to their original homes in the north and east. Another stumbling block is the stagnation of personal income growth. Due to high construction expenses and low revenues, a quality house in the suburbs of Colombo costs at least LKR 25 million (\$ 143,000), which is hardly accessible to most medium-sized enterprises.

Over the last five years, Sri Lanka's urbanization rate has been approximately 0.3 percent. According to the Sri Lankan government, urbanization would continue to grow at a rate of 3% to 4% in the coming years due to fast growth and economic possibilities in metropolitan regions. Condominiums make up over 76 percent of Sri Lankan real estate. The traffic situation is worse. According to the Oxford Business Group, Colombo's poor transportation network is one factor for increasing land values, in addition to infrastructural delays in central areas of the city. As companies and inhabitants swarm to the city center, inadequate public transportation and rising traffic congestion make commuting from rural places difficult. The government has announced the creation of a new city in the capital. The 665-acre port city, which may treble the size of the state capital, is set to open in 2041 and will cost almost \$15 billion to build. According to the site's developer, China Harbor Engineering Company, the project is on pace to finish the renovation and first phase of infrastructure by 2020.

"My Dream Home Visa," one of the schemes, is aimed at rich overseas investors and nationals over the age of 55. You must also be able to deposit USD 15,000 or the equivalent in an acceptable foreign currency into a Sri Lankan checking account, which will raise the need for permanent residents and further increase ownership in Sri Lanka. This in turn acts as an intermediary to encourage FDI in real estate. President Sirisena implemented measures after taking office in 2015 that will stimulate favorable economic growth in terms of foreign investment, particularly in the real estate industry. He also mentioned plans to loosen regulations prohibiting foreign investors from owning land or property on the island, citing the fact that the first foreigners who wanted to invest in real estate on the island had to pay a large and unappealing amount of taxes. Foreigners who want to purchase land can now become shareholders of 49% of a rental property and are also allowed to own 25% of this property. Foreign investors can now apply for a free property contract, but only after 20 years as part of a lease. Sri Lanka has been smart as many foreign investors from emerging markets can now purchase a 99-year-old rental home with a minimal tax rate. Hence, it has proven to be an attractive option for many who had previously been discouraged by high commissions. Real estate investors in all emerging markets agree to REIT (Real Estate Investment Fund) programs. Last year's budget for Sri Lanka brought REITs into the country's true escape landscape. REITs allow investors to reduce risk and can monetize real estate assets. In India, for example, the REIT trend has caught fire as homebuyers use structures that reduce risk and help structure debt more effectively. REITs often make real estate transactions more transparent, as many of these trusts take place on public exchanges.

The current real estate market in Sri Lanka is dominated by luxury real estate. There is great concern that a heavy focus on luxury real estate in the larger cities of Sri Lanka will affect the decline in more affordable projects. According to research by Lamudi, international buyers and expats returning to the island are more likely to buy luxury homes than people who have stayed behind. They have greater purchasing power than most local buyers. This is mainly due to the wartime and its impact on the financial stability of the premises before 2009. However, cheaper accommodation options are now available. For example, through innovation, companies are developing weatherproof materials for low-cost construction such as Lafarge Building Materials, which have already started making a difference on projects in Sri Lanka. Lafarge has developed cost-effective alternative solutions for brick construction, including mixing earth with concrete to create stabilized, non-burning blocks. This makes large-scale construction more efficient, more durable, and less expensive, ideal for a country that shows up as Sri Lanka. For the real estate industry in Sri Lanka to thrive to the full, we need large, affordable apartments, medium-sized apartments, and luxury apartments. Living in apartments or portraits has become a trend in Sri Lanka in recent years, especially in cities like Colombo where apartment complexes can be identified on every street.

Now this has grown in other major cities in the country as well, such as emerging cities like Nuwara-Eliya, Kandy and Galle. Although many experts say the real estate and housing market is saturated, a real estate agent tells the newspaper that it is different. There is a lot of land, and many foreigners are looking for real estate, especially Sri Lankans who want to return to the country. Hence the demand is still high. Governments like Singapore are taking steps to control the real estate market. Many foreigners turn to Sri Lanka to invest mainly because of the location and to be an island paradise. In summary, he says that as the supply of housing and the housing market increase, so does the demand for real estate. When discussing the threats to the real estate market, the economic one first comes to mind. Sri Lanka's economy has been declining in recent years. Although sector-related activities increased by 5.7% in the first nine months of 2016, compared to a growth of 3.3% in the same period of 2015 due to a significant growth in construction activities (+ 8.5% compared to the previous year) and real estate activities (+ 8.7% yoy). The government introduced tax adjustments that increased the VAT rate from 11% to 15% in September 2016, doubled the cost of economic service and doubled the NBT rate from 0.25% to 0.5% 2% to 4 %. A single tax rate of 17.5% was introduced for all sectors except banking and financial services, insurance and some other sectors that continued to be taxed. The real estate market in Sri Lanka has grown relatively rapidly and continues an average growth trend driven by the increased demand for residential property in the middle and upper classes, the growing demand for class A office and commercial space for local overseas business, and the growth in interest in the country as a tourist destination. The old tax of 15% on the purchase of leases has been removed so that foreigners can buy without tax for up to 99 years. Foreign nationals who only want to purchase land are granted tax exemptions on a case-by-case basis. The government removed property rights restrictions from the ground floor and allowed foreigners to buy the apartments to collect 40% of the cost from a national bank. The removal

of land lease tax encourages foreigners to invest more and more since they expect growth development of country's small cities located out of Colombo.

The government is also looking into the possibility of reducing the tax structure in the construction sector by removing import duties on machinery such as cranes and cement mixers. Coupled with the building materials tax revision, this is expected to lower construction costs, resulting in a lower final sale price for property developments and allowing more people, including the middle class, to buy property in Colombo. Construction activity increased from 2.8% in 2015 to 8.5% in 2016, mainly due to the significant increase in cement availability of 22.9% and the private sector loans to the sector from commercial banks, which occurred in the first half of the year Rose to 40.2% in 2016. According to the Oxford Business Group, the property market in Sri Lanka grew rapidly in 2015 and early 2016. The medium-term growth is mainly due to the increased demand for residential property in the upper class and in the media. Hence, this trend is expected to continue. The decision of the former finance minister to lower taxes on housing in the travel sector was one of the most important and positive events for the real estate sector in 2016. According to the SLTDA (Sri Lankan Tourism Development Authority), the tourism results for January 2017 (219,360 arrivals) are better than January 2016 (194,280), which in turn benefits the housing sector immensely as more tourists visit a country and more international buyers in it are interested in investing in real estate there. New developments since 2016 like The Elements in Rajagiriya, the new Sheraton Hotel in Colombo, the Dynasty Residence in Kandy etc. Although some projects like Dynasty are overdue, they should all be completed by 2017. Developments expected to be completed in 2017 include Punto Chiara Residenze in Kotte, Grand Hyatt in Colombo, Altair in Colombo, and Green Valley in Athurugiriya etc. An increase in residential demand is likely to lead to an increase in commercial real estate, which in turn helps businesses to meet new and future demand. One of the main obstacles to real estate market growth in 2017 was the drought in Sri Lanka early 2017. Even the new villa tax law that came into force last year was thought by many to suppress interest from international investors. However, factors such as tourism growth, buyer demand, and construction and GDP growth very much had a positive impact on the market in 2018. (Lamudi, 2017)

Despite notable interventions in support of financial markets in 2008, the role of the state in solving financial-related housing crashes has only recently been at the center of research. There have been two productive methods of government-sponsored asset management businesses (AMCs) "replenishing" private bank debt (Byrne, 2016a; Ashton, 2011) and "replenishing" public resources for private financial players (Byrne, 2016a; Ashton, 2011). (Aalbers, 2016). In the first, asset value uncertainty, which impedes lending and market liquidity, is a key issue coming from the breakdown of financial cycles after a housing crisis. Through government-sponsored asset auctions, public AMCs are frequently formed to segregate problem assets from the rest of the financial system, remove value uncertainty, and crystallize losses associated with such assets (Byrne, 2016a). These deals are typically undertaken on advantageous terms for investors, at significant discounts from the debt's initial face value, and at enormous public expenditure (Janoschka and Alexandri, 2017). AMCs' ability to set an artificial minimum price and regulate the supply of properties

returned to the market allows them to function as "market makers," generating liquidity and transactions in a market that has collapsed. The foundation of AMC, which saw €264 billion in private real estate debt brought to the public exchange, was the most significant reaction to Europe's crisis (Cushman & Wakefield, 2014). The related privatization and financialization procedures are referred to as the "roll-out" part of government activity. To facilitate financialization, the government may actively intervene on the market through privatization tactics (eg: The sale of social housing units to tenants which leads to greater levels of mortgage borrowing). In certain situations, the privatization process can be funded entirely by selling whole portfolios of government held land, housing, and infrastructure to private equity investors, a process called as "financial privatization" (Aalbers, 2016, 3). What matters is that the government intervenes to influence market values, especially in times of economic hardship or budgetary austerity, and often enacts legislation to do so.

The concern for "transmission mechanisms" that restart the flow of capital between financial markets and the built environment binds these study lines together (Halbert and Attuyer, 2016). Similarly, Sokol (2017) has recently created the notion of "financial chains" to focus on the value transfer channels and social linkages that allow the extraction of value from people and places, as well as the creation of new areas for financial exploitation. The term encompasses both the means that transfer values across geography (such as financial instruments, econometric models, and legal structures) and the networks of financial players that define economic regions. Sokol (2017) applies the concept to the credit-debt relationships that exist between banks, states, and households; however, it could also be applied to the financial instruments, practices, and social relationships that exist between capital flows flowing through financial markets and capital flows in the built environment. A Real Estate Investment Trust (REIT) may be seen of as a socio-technical innovation that turns global financial capital into real estate, transforms real estate into a marketable asset, and brings together a range of financial real estate stakeholders. and what has been crucial to the global real estate market's resurgence. REIT investments have expanded globally since 2011 (EY, 2016), and they are credited in the United States for realigning the real estate industry and producing great returns for investors (The Economist, 2016). Few academics, on the other hand, have examined how REITs, as a source of wealth and as a social connection, turn the fixed and distinctive nature of ownership into a standardized, worldwide, and readily transferable financial asset. (Waldron, 2017)

2.5 Government Initiatives on Housing Sector

According to the projects from 2011 to 2017, government housing projects were involved to fill the affordable housing gap with 600,000 units built across the island in the six years. Then there are 25 programs for government employees that have been established in the capitals of each district. In addition, 5,000 units were built for university communities close to the university. In Kurunegala and Anuradhapura, too, 15,000 three-story residential units were built for migrant workers. In the Colombo region, 20 high-rise housing projects for low-income residents with 40,000 residential units have been built. In the north and east, 150,000 houses were built to relocate those affected by the conflict. Then 30,000 units were built for

the fishing community in coastal areas and cities and 50,000 units for real estate workers in hilly areas. (Industries, 2010)

Housing for the country's middle class is a problem that has yet to be solved. This has been recognized for at least two decades, particularly in the capital's close area. The UDA discovered that demand for housing in the middle- and high-income groups in metropolitan regions is higher than it has ever been. As a result, the government has agreed to create 500,000 dwelling units for middle-income groups throughout the five-year period 2015-2020. The UDA had launched many housing schemes based on the aforesaid structure to meet the goal as rapidly as feasible. To acquire reasonable loans from Sri Lankan commercial banks, UDA's URPC developed a public housing program of 608 housing units valued Rs 8.5 million per unit, according to the title's aim. Given the success of the initial endeavor, the URPC decided to provide the UDA with additional moderately priced home returns.

The purpose of these types of UDA initiatives is to remove obstacles to middle-income people's access to housing while simultaneously encouraging them to dwell in cities by offering easy access to work opportunities. Housing towers will be built at prominent locations around the city of Colombo and its environs. Depending on the Project we can identify who's qualified to apply for these kinds of projects. Main procedure for applying is done through advertising on the newspapers and online platforms. Roughly when it comes to Financials a unit price of a house in Borella is Rs.8.5 Mn- 11Mn. The project at Borella commenced in May 2016 and completed in December 2019.

However, there are many problems for the construction industry in Sri Lanka. High costs of building materials, lack of funds, poor quality steel supply, and shortage of skilled workers, environmental pollution, land acquisition delays and frequent legislative changes are the main problems facing the Sri Lankan construction sector. The literature points to numerous factors that influence sustainable construction. Traditional construction methods focus solely on cost, performance, and quality goals, but sustainable construction methods additionally include resource use, environmental damage, and the creation of a healthy built environment. It is obvious that economic development and environmental protection are contradictory concepts. Great attention would be paid to economic development and environmental protection. (Authority, 2018)

2.6 Legislation

Policies and regulations are the primary drivers of any country's physical growth. Policies and regulations are implemented by ministries, agencies, departments, businesses, and notified entities. A successful combination of these two systems yields a positive end outcome that meets the objectives. Policies and institutions of Sri Lanka, on the other hand, have changed regularly, with many events and legislation impacted largely by political interests. Looking back over 100 years of Sri Lankan housing policy, housing policy was inextricably related to political parties and, like political parties, has evolved through time. (Authority, 2018). Singapore has a Housing Developer's (Control and Licensing) Act (Chapter 130) which is An Act for the licensing and control of housing developers in

Singapore, but Sri Lanka doesn't have this kind of legal backing when it comes to the housing sector. (Singapore, 2021)

2.7 Threats

In January 2020, the first COVID-19 patient in Sri Lanka was reported. The second patient was identified a few weeks later, on March 10, and by the first week of May 2020, there were over 700 cases. According to WHO classifications, Sri Lanka is now in Phase 3 of the epidemic case group. The global economy is on the verge of collapsing. The global economy will fall by 1.9 percent, according to Fitch, with the US and Europe returning to pre-virus levels by the end of 2021. Depending on the intensity of the demand shock, the ADB predicts a drop in global GDP of 4.8 percent to 2.3 percent. The Sri Lankan economy is also having a negative impact. A recovery is expected in 2021. The magnitude of the impact and recovery will depend on the duration and spread of the still uncertain virus and the subsequent recovery in economic activity. Due to the uncertain economic environment, there will be possible investment delays in the next couple of months. In construction and mechanical engineering, a slowdown is expected due to funding freezes and restrictions. The industry is considering options for returning to work while protecting the health and safety of the workforce. The construction industry also relies on countries like China and India for the import of building materials. Delays in procurement and the devaluation of the exchange rate increase input costs. The effects of the COVID-19 outbreak are being felt across all property classes, with the hospitality and retail sectors having the greatest impact.

The most severe effects of the COVID-19 outbreak will be felt in the hospitality industry. The blockade and closure of its international airports in Sri Lanka has brought national and international tourism demand to zero. The recovery is contingent on the recovery of Sri Lanka's primary tourism markets and the opening of international borders. This is another another setback for the business, which was already reeling from last year's Easter Sunday assaults, which saw visitor numbers plummet by 18.0% to 1.9 million in 2019. In 2019, the major source of visitors was China, which accounted for 18.6% of total arrivals. With advances of 10.4 percent and 8.8 percent, respectively, the United Kingdom and China come in second and third. Arrivals to Sri Lanka were impacted by the Chinese embargo in February, which coincided with the biggest travel period around the Chinese New Year. In February, China's arrivals dropped by 92.6 percent. Tourist arrivals fell by 6.5 percent and 17.7 percent in January and February 2020, respectively, compared to the previous year. Tourist arrivals dropped 70.8 percent in March, owing to visa restrictions and the closure of all passenger ports of entry since mid-March due to worldwide travel restrictions. Although Sri Lanka has managed to restrict the spread of COVID-19, the sector's future depends heavily on the speed with which the major source markets recover. China's economy is beginning to recover, India has declared a 21-day shutdown that would take effect in early May, and nations such as the United Kingdom and the rest of Europe continue to see fresh instances, making the situation unpredictable. Dates of recuperation are forecasted. Approximately 2.9 billion people are now trapped in some way across the planet. In the short term, the implications of travel restrictions, event cancellations, and decreased personal and

corporate travel will have an impact on employment. Low demand will result in lower average accommodation prices, having a substantial impact on profitability.

The recovery of the sector is expected to take place in 2021, provided the pandemic does not recover. Over the past two years, the supply of leisure properties in Sri Lanka has increased significantly. Supply has outpaced tourism demand and even the informal leisure sector, such as private accommodation and serviced apartments, has put pressure on room prices in the formal sector. The impact on residential property is lower than in the hospitality and retail segments. The conclusion of the negotiations on the sale and rental of apartments and villas has been suspended for some time due to difficulties in organizing sales visits and tours of the properties. Furthermore, despite the actual domestic demand for housing units (with population growth, household size reduction and housing gap) in the market, the macroeconomic situation could destabilize home buyers and postpone purchasing decisions. Any short-term transaction leads to pricing problems. Residential property sales have regained interest since January 2020 after a market hiatus in 2019. In the residential property market, demand has remained low due to both economic and political concerns and inconsistent industrial policies in recent years. At the national level, more fundamental political reforms need to be developed to attract foreign investment and demand for expatriates. There is a high risk of transmission of the virus in public areas of high-density vertical buildings and closed residential complexes. Therefore, more attention needs to be paid to developing plans and protocols for current and future scenarios to mitigate this risk.

The immediate effects of the pandemic on the real estate sector are direct, but the medium- and long-term effects can only be assessed over time. The impact on the key sectors of the economy, the new business strategies of the key sectors to overcome the crisis and the related impact on employment will have an impact on the medium-term prospects of the real estate sector. The consequences of COVID-19 could also lead to changes in practiced operating models, such as the increased use of remote work and the use of collaborative technologies to connect people at a distance, as well as the wider use and adoption of e-commerce Sri Lankan companies and the public. This will also have an impact on the real estate sector. (KPMG, 2020)

Production, employment, and sales are all prone to substantial cyclical swings in some industries. Construction, steelmaking, and the aerospace industry are among these businesses. Due to the larger cyclical variations in the US economy, the aerospace sector in the United States loses up to 40% of its profits (Seidl and Kleiner, 1999). Product sales swings of up to 20% are normal in various parts of the construction sector (Yisa et al., 1996). The typical boom and bust cycles connected with the growth of the construction industry have been seen to occur every 10 years or so (Yisa et al., 1996). Companies that accept such cycles as a given and accept them as a fact of life will be better prepared for future recessions during boom times. Such businesses frequently adopt long-term management practices that make it easier to get out of a slump (Lovelock, 1997; Sheridan, 1997). The widespread consensus was that the two-cycle phenomena could not be explained without reference to the other. Because of this intimate association, an external shock will have a significant influence on both the

overall economy and the building (or construction) business. In times of economic austerity, both the public and private sectors will substantially curtail building investment. Because such capital investments are typically large and costly, they are prone to be overlooked or postponed. Intervention analysis is obviously appropriate as a modeling tool for time series under development in the context of examining the consequences of an external shock because of its resilience. Such consequences must be thoroughly investigated so that policymakers may learn from and consider future comparable situations, as well as display more intelligent future planning.(Sheridan, 1997)(Goh, 2005)

Urbanization is a crucial driver of modernization and economic advancement, and it is frequently viewed as an inexorable trend in the evolution of human society (Bai et al., 2014; Wei et al., 2017). However, urbanization brings a plethora of problems, including environmental degradation, resource shortages, and higher crime rates (Saboor et al., 2017; Liu and Li, 2017). Let us focus on the benefits while not dismissing these problems. Because urbanization demands large investments in infrastructure such as city roads, water, electricity, gas, communication networks, and other infrastructure, raising the required funds has proven to be difficult in certain cases (Chen et al., 2019b). Long-term taxes have traditionally provided this funding, but the industrialized world's experience shows that inefficient tax and banking systems are unable to meet these investment demands. (2020, Zhaoyang Cai). The consequences of major floods on property values were explored by Kousky (2010), Bin and Landry (2012), and Atreya et al. (2013). Before and after two major storms in Pitt County, North Carolina, Bin and Landry (2012) compare property prices in FEMA-designated floodplains to those outside the floodplains. The authors estimate a 5- to 6-year hurricane-induced flood risk discount of between 5.7 and 8.8 percent. Atreya et al. (2013) does similar research after a devastating flood in Dougherty County, Georgia, and discover a 32 percent post-hurricane flood risk discount that lasts 7 to 9 years. Kousky (2010) finds no significant changes in 100-year floodplain land values following the 1993 floods on the Missouri and Mississippi rivers but does discover a 2 percent to 5% drop in 500-year floodplain land prices. When it comes to the salinity of the threat, the ability to draw conclusions from current scientific work on floods and fires is limited. Before we prove that variations in risk perception drive observable price swings, we want to be sure that other, more direct processes aren't at work. Three specific areas of potential concern are: 1) the accident-damaged infrastructure in the immediate vicinity; 2) the presence of compositional effects, which are determined by differences in the structural characteristics of houses sold before and after a fire, as described by Campbell et al. (2011); and 3) the presence of compositional effects, which are determined by differences in the structural characteristics of houses sold before and after a fire.(S.J McCoy, 2018)

2.8 Lessons on Housing in Regional Context

2.8.1 Housing Lessons from Singapore

When Singapore broke apart from Malaysia in 1965, it had its own "Brexit." The Singapore Housing and Development Board (HDB) was created in 1960 to provide citizens of this small city-state with cheap, high-quality housing. The state issues them on 99-year leases, and the home's worth is determined by the property's intrinsic value (size, kind, and location) and easily accessible finances, including those given by the Central Provident Fund (CPF). The CPF is a social security system that allows Singaporeans to build up pension plans. It is a mandated savings scheme that involves payments from employers, health funds, and long-term housing expenditures.

A development council home can be purchased using a bank loan, HDB loan, cash, or CPF financing in Singapore. An HDB apartment's resale value depreciates after the conclusion of the lease, in this example if the lease is less than 30 years, difficulties arise in financing short-term rental apartments. However, the "owners" under HDB's renting scheme have simply obtained the right to occupy the unit; ownership and ownership remain with HDB. Singaporeans are also prohibited from owning more than two dwelling units at the same time, according to the Development Committee. Ownership of an inherited flat is only possible if the heir has access to existing private or public assets within six months of receiving the bequest. HDB is still the country's main housing provider, having built and owned most of the units and playing a very active role. Private flats are also available; however, they are far more costly.

In the United Kingdom, public housing is viewed as an expense to the government and a financial burden on the taxpayer. For many folks, this is their last option for lodging. It is not labeled in Singapore and is regarded both a public financial good and a social good and is not branded as something or seen as something that should be avoided whenever possible. The mixed real estate sector of the United Kingdom causes significant social and economic distortions, whereas Singapore invests in residential property to minimize or mitigate such distortions. Housing building in the United Kingdom, except for New Towns, includes the production of individual resources rather than a strategy centered on the establishment of locations, neighborhoods, and communities. In Singapore, HDB residential units are being built in HDB cities. Clinics, community facilities such as parks and sports facilities, and retail businesses are also available in the housing complexes. With the growth of Singapore's economy, HDB has begun to provide more luxurious flats.

Lessons from a long-term approach to Singapore's housing needs:

- One of them is a more holistic approach to housing: in the United Kingdom, the debate is around the quantity of units supplied and the price at which they are sold. Who this apartment is for, where it has to be, and how it should generate a sense of place would be a more complicated topic. It's also crucial that housing is completely connected with existing urban infrastructure, such as roads, public transportation, schools, and health facilities.

- Existing residential districts in the UK are exceedingly expensive to restore or considerably modify due to the fragmentation of property ownership. Every property owner should be convinced to modify or sell their property via a land installation procedure. HDB ownership implies the possibility to reconstruct ancient estates and maintain and enhance levels of social service integration in Singapore, which has a history of intensive land use and population density. More electric and self-driving vehicles, schoolwork, e-commerce, and ever-increasing population density in cities are all key advances that need to be represented in our houses. Because of HDB's integrated strategy, Singapore can address these changes strategically in the long run, making it simpler for residential districts to have all the utility, retail, and transportation facilities they require to prosper. (Bryson, 2019)

2.8.2 Affordable Housing in India

Affordable Housing (AH) is quickly becoming a major international issue, as well as a national priority in India. There are an estimated 18 million dwellings in India that are in short supply, with 99 percent of them in the poorest parts of the population. Because housing is now acknowledged as a necessity, governments at all levels are debating how to provide housing to their populations. Living space affordability is defined differently throughout the world. One of the most used definitions of accessibility is housing affordability, which is defined as a ratio of housing costs to family income. The Indian government agrees, stating that "affordable housing" is defined as "any home that fulfills some type of accessibility criterion, such as: The first is continuous urbanization, which has been accompanied by an increase in the urban population, which has increased from 109 million in 1971 to 377 million in 2011 and is projected to reach 600 million by 2030. According to the 2011 census, there are 65 million people living in slums and informal social housing. Rising salaries have resulted in a rise in the middle class and an increase in the urban population, resulting in a growth in demand for "affordable" housing, as well as basic services, an essential aspect of the Indian economy. In 2013/14, the real estate sector generated around 6.3 percent of GDP, or around 3.7 million euros, and employed approximately 7.6 million people.

Jawaharlal Nehru's National Urban Renewal Mission (JNNURM-2005), Basic Services for the Urban Poor (BSUP), Integrated Housing and Slum-Development Program (IHSDP), and Rajiv Awas Yojana collaborated on the National Urban Housing and Habitat Policy (NUHHP-2007). The NUHHP 2007 covers urban planning, land availability, special provisions for women, public-private partnerships, management information systems, and other topics. MoHUPA (MoHUPA, 2007). In relation to the HA, the following objectives should be pursued: accelerate the development of housing and related infrastructure; create enough rental and ownership housing units while improving affordability through capital or interest subsidies; and use technology to modernize the housing sector for energy and cost efficiency, productivity and quality, green and smart construction, and disaster reduction. Since 2009, real estate developers have begun constructing projects outside of the central business district/secondary business districts in Indian towns with low real estate prices. Over 15 projects, including Karjat, Palghar, and Boisar in Mumbai, have experienced such planned expansion. In Ahmadabad, Narol and Vatwa; and in Bangalore, Anekal. Tata Housing

(ShubhGriha), VBHC, Foliage, DBS Affordable Home, the Nirman Group, HDIL, TVS Housing, S. Raheja, Mahindra Lifespaces, and Usha Breco Realty are some of the leading developers. Projects typically range in size from 1,500 to 3,500 units and are located 20 to 25 kilometers from the city center. Limited possibilities, closeness to industrial or commercial hubs, small acreage, cheap building costs, quicker construction timeframes, and the supply of essential social services define the projects.

Land limitations, lack of marketable land, title concerns, growing costs, and regulatory limits are all major issues in the affordable housing sector. Private property developers and charities get many funds to assist the supply of AH as governments focus on developing sustainable public housing for vulnerable populations such as children, the elderly, fragile, and disabled. AH awards are either part of a land use and planning strategy or come in the form of monetary incentives. AH developers may gain additional development rights, development standards concessions, lower fees, or fewer compliance with legal regulations (and hence regulatory expenses due to less red tape, etc.). AH's projects may be classified into two primary strategic approaches on a global scale. Countries like Singapore, the Netherlands, Sweden, and Denmark have a universal approach to housing, ensuring that everyone has a decent place to live. More typical is the targeted strategy taken by nations like Canada, Malaysia, the United States, and much of the European Union, which concentrates on the weakest areas to keep them from being shut out of the housing market. From concessional rentals to subsidized real estate in the Netherlands, both supply-side subsidies (social housing or sponsorship) and demand-side subsidies (regular cash payments or capital grants to cover housing expenses) are typical practices. Spain. Many countries have schemes that mix rental with house ownership. Density awards are given in the United States, mixed-use housing is given in the United Kingdom, tax exemptions are given in Malaysia, and timely follow-up is given in Canada. Malaysia has also formed PPPs, with roles defined for public (country and process) and private (money and enforcement) players. With a comprehensive set of low-income housing rules and inclusive zoning, California has developed to be a leading state in the United States. Low-cost commercial cross-subsidies have been successfully pioneered by Singapore and Hong Kong. The broad adoption of AH is today's most pressing concern in urban India, and it has the possibility of addressing slum expansion, chaotic housing development, unplanned growth, and traffic congestion. There are a few issues that must be addressed immediately for AH to be viable. On the demand side, issues include finding the proper clientele, expanding access through micro-credit financing methods and self-help organizations, and developing flexible payment mechanisms that may adapt to various revenue sources. On the supply side, incentives through measures (additional surface index, vacancies, etc.), slum rehabilitation and redevelopment programs, guarantee of sufficient space, cadastre rationalization, inclusion of the mass living area in land use plans global development (CDP), promotion of private participation and partnership, and approval of individual projects for smaller projects in the sense of large city projects are all being considered. For developers, the marketability of small formats with low down payments should be a top focus. To be effective, project budgets and timeframes must be managed to minimize overflow in the AH sector. It's an issue when the infrastructure isn't up to standard.

The construction of accompanying connectivity and accessibility becomes increasingly vital as more projects migrate to suburban and semi-urban locations. (Gopalan, 2015)

2.8.3 The Housing Market & Housing Policies in Japan and Singapore

In 2013, Japan's house ownership rate was 61.7 percent. For over half a century, the rate has hovered around 60%, with minor changes that are roughly identical to those in the United States (USA) (64.0 percent in 2014), the United Kingdom (UK) (64.6 percent in 2013), and France (64.3 percent in 2014), but higher than Germany (52.6 percent in 2013). In October 2013, Japan has 60.63 million housing units, with 8.20 million of them unoccupied. The percentage of vacancies was 13.5 percent. The vacancy rate in the United States in 2013 was 12.8 percent, according to the American Housing Survey, however the United States has more second houses than Japan. The question of whether Japan is building too many houses is being contested. In the 40 years between 1968 and 2008, the number of new dwellings in Japan topped one million. Due to the global financial crisis, the number of new dwellings in Japan fell to 0.79 million in 2009 and has not yet reached a million. Before the change in the excise tax rate, which was set to increase from 5% to 8% in April 2014, it was 0.98 million units (125 square meters) for Japan and 247 square meters for the US in 2013. In Japan, like in the United States, the proportion of multi-family dwellings, which are typically smaller than single-family homes, is also high. Condominiums make up roughly 60% of overall real estate stock, but they account for 80% of residential space. Single-family residences are nearly identical in size to those in continental Europe, although rented flats are significantly smaller.

The most significant difficulty facing Japan's real estate industry is the country's unfavorable demographic trend. Not only is Japan's population shrinking, but so is the proportion of working-age people to dependent-age people. Even if eight million units are unoccupied, it is debatable whether Japan should begin building many new residences now. Existing property sales in Japan are modest when compared to comparatively huge new development projects in the United States. The Fudosan-Ryutu-Keieikyokai (FRK (Association of Japan Real Estate Agents) estimate is one of the most often used figures on the number of existing house sales. In 2012, according to the FRK, 473,000 existing apartment units were sold. This represents roughly half of all new dwellings in Japan. One of the causes for the biggest drop in property value by age in countries is the limited turnover of existing residences. Existing residences will undoubtedly lose value, but Japan's rate of depreciation is greater than that of other affluent countries. The total amount of nominal real estate investments from 1995 to 2014 was 382 trillion yen. In 1994, the total market value of existing housing complexes was 312 trillion yen. The market value of existing residential structures is estimated to reach 694 trillion yen in 2013, up from 357 trillion yen before the automated inclusion. The Japanese real estate industry has a big problem in boosting the value of existing properties and increasing sales of current properties. To address this issue, the Ministry of Land, Infrastructure, Transport, and Tourism (MLIT) is implementing several policy initiatives. Natural catastrophes are another important issue for the Japanese real estate industry. Some argue that Japan's outstanding mortgage debt (MDO) as a percentage of GDP is lower than

that of other affluent countries. Since the turn of the century, Japan's MDO/GDP ratio has hovered around 40%. It's worth noting that the figure for the United States was also below 50% at the turn of the century. During the early 2000s housing boom, the MDO/GDP ratio in the United States increased by 70%. In the United States, MDO / GDP inflation is mostly attributable to property value appreciation, whereas in Japan, this phenomenon has not happened. Because the interest rate in Japan was exceptionally low and the decrease (partial upfront) was a large component of the upfront payment in Japan, many Japanese considered it more advantageous to pay off their existing mortgage debt upfront. Despite dropping property prices and increasing vacancies in Japan, house development has remained high, partially owing to the short-term need to replace old residences with new investments, and partly due to robust demand for housing purchasers of high-end new houses (which to some extent driven by incentive measures that can be strengthened).

2.8.3.1 Housing Policies in Japan

In the 1950s, the so-called "three pillars of housing policy" were formed to expand the number of housing units in the following order:

- 1) On June 5, 1950, the Government House Loan Corporation (GHLC) was established to give financial assistance to housing building by providing liquidity to the previously almost non-existent mortgage markets.
- 2) In 1951, the Public Homes Act (Law No. 193 of 1951) was passed, allowing local governments to construct public rental housing for low-income residents.
- 3) The Japan Housing Corporation (JHC) was established in 1955 with the goal of promoting the building of collective housing and the wide-scale allocation of residential land to middle-income individuals, mostly in metropolitan cities.

The Japan Housing Finance Agency's (JHF) replacement of GHLC reflects Japan's shifting political landscape. The first postwar housing strategy of supplying many flats was realized in the twentieth century, and housing policy currently focuses on housing quality. The Basic Law for Housing was passed on June 8, 2006. The five-year program was eliminated, and the major pillar of the policy reform was a move from quantity to quality. The following housing policy concepts were established under the law:

- 1) Create a safe and high-quality living environment.
- 2) Create an attractive real estate market environment.
- 3) Establish home safety nets for persons who find it difficult to secure their homes.
(Kobayashi, 2016)

2.8.3.2 Housing Policies in Singapore

Singapore had a population of 5.54 million people in 2015, including 3.38 million Singaporeans, 0.53 million permanent residents, and 1.63 million foreigners. Reclaimed land covers one-fifth of the city's 719 square kilometers (km²). The state's dominance in terms of land ownership and home building, as well as its extensive meddling in the housing industry,

is due to a lack of land and a high population density (around 7,600 persons per km²). Since the early 1990s, the resident population has owned a house at a rate of above 90%. In 2014, the typical household income for resident working households was \$ 8,292 per month, or \$ 99,504 per year. A four-room apartment (about 90 m²) sold by the state housing organization Housing & Development Board (HDB) with a 99-year leasing tenure is the most common form of apartment. For the year 2015, the average property price (market values) was compared to the yearly family income ratio was estimated to be 5.0.

2.8.4 Lessons learned from other Asian countries

The HDB and the Central Provident Fund (CPF), which is lavishly sponsored by the Treasury, have created a symbiotic relationship in Singapore's real estate market throughout time. The HDB-CPF system has aided in the development of high savings and house ownership rates, as well as the mobilization of savings and home loan growth. Affordable housing has aided social stability, economic development, and community development. With its property and resale limitations, the massive HDB sector is helping to curb the need for speculative housing. CPF rate modifications have been beneficial as a macroeconomic tool for a relatively open economy, given their implications on inflation and labor costs. The Singapore housing paradigm may teach us the following lessons:

- ❖ The impact of housing construction on economic growth: The housing and real estate finance industries can have a significant and positive impact on a country's economic and financial development. Strong savings and income growth, low unemployment, low inflation, low government interest rates, budget surpluses, and currency appreciation have all characterized Singapore's macroeconomic climate. Housing policy has also been used to promote racial integration, resulting in increased social stability and progress. Accessibility to home ownership: Creating a unified structure for funding land, dwellings, and mortgages might significantly increase housing supply while simultaneously increasing real estate accessibility.
- ❖ Governments in metropolitan areas may greatly speed up the rate of urban growth and rehabilitation by enacting suitable laws, regulations, and institutions that allow for more housing supply to meet the needs of a rising population.
- ❖ Financial institutions and private property developers play an equal role in the real estate market, notwithstanding the government's key involvement in urban development and mobilizing national funds. Governments must evaluate rules on a regular basis as markets mature to ensure that they remain relevant.
- ❖ Favorable Markets: Markets are critical, and building or enabling more efficient markets, as well as facilitating private efforts, are critical parts of housing policy. Singapore has avoided the worst effects of severe central planning and uncontrolled urbanization because to a symbiotic collaboration between the government and the private sector.
- ❖ Market transparency: By providing timely information on the real estate market, governments may play a significant role in promoting market openness.
- ❖ Housing subsidies: To maintain long-term sustainability and successful involvement in the real estate market, the short and long-term impacts of explicit or implicit housing subsidies

on the demand or supply side within the overall system must be thoroughly understood and frequently confirmed.

- ❖ Macro prudential regulation: The government has implemented several mitigating measures in tandem to decrease the possibility of housing being a source of financial sector volatility. Real estate markets are separated and controlled with great care. Domestic savings are the primary source of money for house financing. The fact that these funds are required lowers the likelihood of bankruptcy.
- ❖ Housing monetization: the CPF system was utilized to mobilize pension resources for young families' mortgage payments. As the population ages, measures to help elderly homeowners monetize their retirement real estate investments will be needed.
- ❖ Governance: The need of strong regulation and effective governance in real estate and financial organizations should not be overlooked.

The system, however, is not without flaws and threats. The required structure of the CPF, along with the HDB's dominance, may have resulted in an overabundance of cash allocated to housing. The CPF collects more money from members than is required for housing. This may have shifted consumption, and the illiquidity of CPF money has been blamed for the sluggish home starting market. The large dispersion of savings in home development, as well as the possibility of declining property values, poses challenges for retirement planning. An intentional and long-standing house ownership strategy has also had a detrimental influence on the affordable rental component of the Singapore real estate market. The vast majority of HDB rental flats are one- and two-bedroom apartments occupied by low-income families. There is a general shortage of affordable rental units in the HDB sector, which is reflected in HDB apartment rentals being higher than private home rents. As Singapore's foreign population grows, the rental market for low-cost housing must expand. While other Asian nations have expressed interest in the Singapore model, the transferability of the Singapore experience to other countries must be weighed against the local political and social environment. A housing pension fund may be set up rather quickly in the field of housing policy if it is intended as a savings and payout tool. The HDB, with its relocation, urban planning, and property management powers, as well as its concentration on creating inexpensive, high-quality housing on a wide scale, is the most difficult organization to emulate. Furthermore, Singapore's strategies - mandatory savings, government land ownership, and government housing - may easily lead to widespread inefficiency and corruption in other socio-political environments. (Deng, 2019)

2.8.4.1 The development of Hong Kong housing market

Housing demand is created by economic development and population increase. Most of the building booms reviewed in this section – the start of Hong Kong's housing market in the 1950s, the late 1970s housing boom, and the recovery from the 1997 crisis into the early 2000s – were fueled by strong and rapid economic demographic development. One of the most fundamental human requirements is housing. It's no surprise, therefore, that as the population grows, so does the need for housing space. Households can build wealth to fund property purchases as the economy grows, leading to an increase in housing demand.

Hong Kong's real estate market is exposed to fluctuating foreign money flows since it is a tiny open economy with no capital controls. International money flows have two distinct effects on the real estate market. First, like the speculative process described above, foreign money can be drawn to real estate while the market is bullish and then depart when the market shows signs of becoming bearish. Property values are more volatile due to the cyclical nature of foreign financial movements. This channel chronicles the late 1970s and early 1980s real estate bubble and crisis in Hong Kong. Hong Kong's economy enjoyed tremendous growth in the late 1970s, attracting enormous inflows of cash and, as a result, skyrocketing housing values. Despite strong economic success, investors were apprehensive about Hong Kong's future after Margaret Thatcher's 1982 visit to China, which resulted in capital flight. Second, Hong Kong banks' interest rates and liquidity are heavily influenced by capital movements in the linked exchange rate system. The present home price has significantly eclipsed its 1997 high after years of fast rise. Although there are various factors contributing to the quick and continuous rise in housing prices, the primary ones are the widening demographic divide and rising land availability.

After the 1997 Asian financial crisis, the Hong Kong SAR government stopped issuing new land from July 1998 to March 1999 to keep the total leased area low and maintain the real estate market. Aside from the supply and demand imbalance in the local market, many external factors also contributed to the overheating of the real estate market. The United States started the first wave of quantitative easing in 2009 in response to the global financial crisis of 2008, which was rapidly followed by many other economies, including Japan and Europe. The development of property prices in Hong Kong is also explained by Hong Kong's integration with mainland China. With the convergence of the economies of Mainland China and Hong Kong, mainland investors' demand for real estate in Hong Kong is expected to rise. Hong Kong property frequently has a better investment value than mainland property. In instance, the rental price ratio of residential properties in Hong Kong is significantly greater than in other major Chinese cities. Although the rate has fallen since 2009 because of US quantitative easing, which has driven Hong Kong housing prices higher, the rental yield in Hong Kong is still attractive. Furthermore, because residential land is relatively scarce, Hong Kong property valuations may have further space to rise. However, due to a slew of new levies enacted in late 2012, continental investors' investment demand has dwindled in recent years percent of the transaction value tax on property transactions. Foreign investors' returns on investment were effectively cut, and demand from continental investors was repressed. The increase in the property price index decreased in 2013, which might be explained in part by the new policy.

More crucially, the connection between Hong Kong and mainland China has changed structurally, making the Hong Kong real estate market more favorable. There are three factors to consider: Shenzhen's development, the fluctuation in Chinese currency reserves, and the growing number of tourists from mainland China. The first structural shift is owing to Hong Kong's Shenzhen sister city's quick expansion, which has since boosted Hong Kong property prices more than it did in 1997. Hong Kong's average property price per square meter increased to \$138,412 HKD in 2018. The increase in property prices in Shenzhen was

the most striking, hitting RMB 54,120 per square meter, narrowing the gap substantially. With the RMB's strengthening versus the Hong Kong dollar during the last decade, the margin has decreased even further. Second, the purchasing power of mainland China has greatly risen. China's foreign exchange reserves increased from \$ 139.89 billion in 1997 to \$ 3,167.99 billion in 2018. After reaching a high of \$ 3,993.21 billion in June 2014, the figure dropped to \$ 3,089.56 billion in January 2017, suggesting net spending of nearly \$ 900 billion over the previous two and a half years. When compared to the size of Hong Kong's real estate market, the figure is enormous. This market can be sustained with only a tiny fraction of the market. Third, more visitors from the mainland are visiting Hong Kong. From 2.36 million in 1997 to 65.15 million in 2018, the number of tourists visiting the mainland has surged dramatically. Visitors are unlikely to own real estate on their own, but they must nonetheless construct homes.

Because it is intertwined with the stock market and the financial system, the Hong Kong real estate market should not be considered in isolation. An optimistic stock market and credit expansion can lead to housing market speculation, resulting in excessive price levels. Changes in Hong Kong property prices are also explained by foreign financial movements. Despite the huge price rises, the contemporary real estate market remains stable and sustainable. The present high price is supported by robust residential property demand, substantial purchasing power in the financial system, and significant backing from mainland China. We don't rule out the possibility of Hong Kong seeing a housing price downturn in the future, but it's unlikely to happen in 1997. Hong Kong will need to find a means to temper the overheated housing market in the future, not just for macroeconomic reasons, but also for the sake of its citizens. Increased land availability, the Lantau Tomorrow Vision program, increased public housing building, and GBA (Guandong-Hong Kong-Macau Greater Bay Area) integration are among the government's current initiatives. While this promises to cut housing prices in the long run, the effectiveness of these policies in the near term is questionable due to their time lag. (Chong, 2019)

2.8 Summary

Findings of the literature review shows that there was a growing demand for housing in Sri Lanka with the recent economic trends. But with the outbreak of the COVID-19 virus several economic sectors were badly impacted including housing sector. Government is also playing key role in providing low income and medium income housing of the country. Government decision to relax the financial regulations has made enabling environment to prospective buyers of the housing market.

3. Research Methodology

3.1 Introduction

The research methodology defines the research methods and techniques used in the research. It is essentially the design of the research, the theoretical arrangement of which the research is conducted. The data for the study needs to be accurate and clear cut to fulfill the objectives of the research. This chapter will elaborate on the process of data collection for the research and will justify the reasons behind the selection of the data collection method. This survey attempts to explore the opinions of construction professionals engaged in construction projects in Sri Lanka. The survey was focused on the important & challenging factors that need to be considered for urban housing developers. The main objective of this research is the identification of opportunities and threats for urban housing developers in Sri Lanka as well as globally and how we can face these challenges and mitigate them. The information required for this study was composed through a detailed literature review from reputed journals, published books and websites.

I have identified the threats and challenges faced by National & International Urban Housing Developers through the Literature review and extracted the important factors. For the next part, feedbacks from 20 Industry Practitioners have been taken (Practitioners in the Industry). These Practitioners are from the Private sector, Government sector & the Research Development sector.

Sector	Industry Practitioners
Private	Housing development Investors, Project Managers, Chartered Engineers, Chartered Architects, Quantity Surveyors & Accountants
Government	Professionals from Urban Development Authority, National Housing Development Authority, National Building Research Organization, Condominium Management Authority & Construction Industry Development Authority.
Research Development	Professionals who engage in Research & Developmental activities in Housing Development.

Table 1: Industry Practitioners Sector-wise

Industry Practitioners were given the 34 factors which were extracted from the Literature Review and asked them to Rank each factor on a scale from 1-4. Out of the ranking table, factors with rank 1 & 2 have been extracted; hence 15 most challenging factors were identified by the 20 Industry Practitioners. From these selected 15 factors an AHP (Analytical Hierarchy Process) analysis was done with the feedback of 10 selected experts & a summary table was prepared with an average weighting percentage identified to each of the 15 factors. Hence, those 15 factors have been ranked from 1-15 according to their relative importance.

3.2 Method of Data collection

The data for the research is based on the literature review related to the construction industry. Several thesis, books, reports, and websites have been selected as reference for this study. From the Literature survey, 34 important factors were filtered out. These factors were further studied and concluded to 15 factors with the feedback of the 20 Industry Practitioners and ranked them considering the frequency of occurrence of the challenges faced by Urban Housing Developers in each literature.

In this study the 34 factors were identified through the literature surveying related to opportunities and threats faced by urban housing developers. The data required for the study is based on the experience of the professionals in the construction industry and has been collected through the Factor Ranking survey.

3.2.1 Design of Survey

A Factor Ranking survey was designed based upon literature to obtain the Opportunities & Threats faced by Urban housing developers. Since this topic is very wide & use of all factors for questionnaire survey is not practical. Hence only the most important 34 factors were selected as input variables for our survey assuming that these factors would best represent the construction field. When selecting the factors, the availability of local construction industries, case studies and the global construction industry were considered.

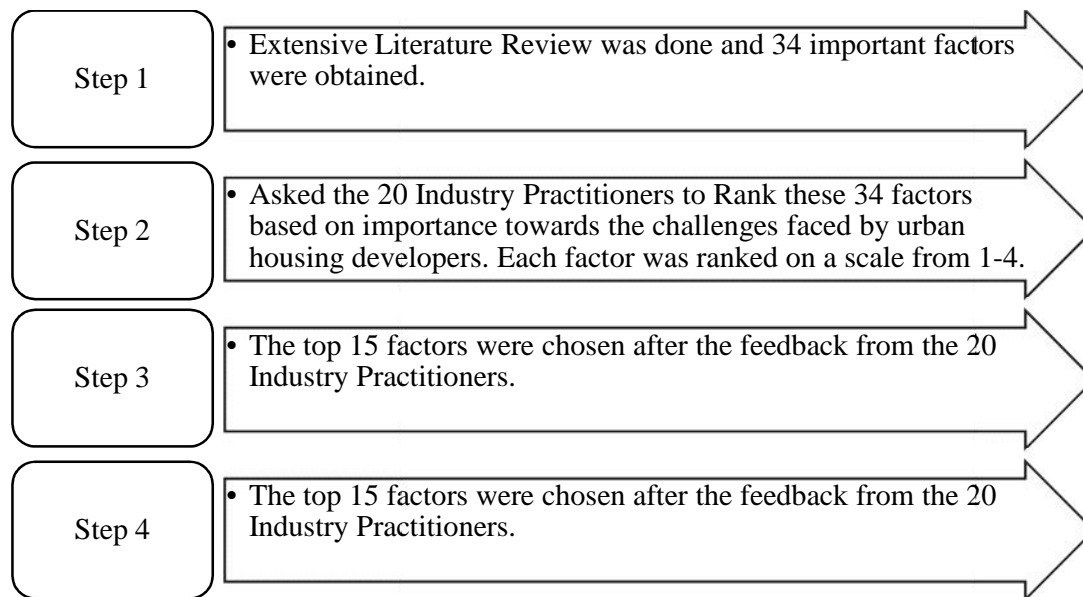


Figure 1: Steps of selecting the variables of the Factor Ranking survey

The Ranking survey was done for validating the finding from the previous literatures of the construction industry. Survey is distributed through email with excel spreadsheet form and emailed to 20 Industry Practitioners selected from the Sri Lankan construction industry. Factors were divided into 7 categories:

- 1) Demand for Housing
- 2) Housing Finance
- 3) Supply of Housing
- 4) Legislation
- 5) Threats
- 6) Pollution
- 7) Unforeseen Events.

The table below shows a sample of the initial ranking of the 34 Factors (extracted from the Literature Review) which was sent to the 20 Industry Practitioners. Each factor was ranked from 1-4, were

- 1- Critical (Key success factor)
- 2- Very Important/Challenging
- 3- Important
- 4- Low Priority

Category		Factor	Rank (1-4)
Demand for housing (A)	A1	For building jobs, there is competition amongst housing developers (A1)	4
	A2	Housing developers compete for clients by promoting completed houses (A2)	2
	A3	Building material prices are high (A3)	1
	A4	Because of the great demand for land, medium-sized homes are significantly more expensive than flats (A4)	2
	A5	Demographic trends will shape the housing market.(A5)	3
	A6	Creating house safety nets for people who have trouble safeguarding their homes. (A6)	4
Housing Finance (B)	B1	Complicated Documentation. (B1)	3
	B2	Weak and rigid legal framework to solve litigation procedure on properties by banks (B2)	3
	B3	Lack of financial resources (B3)	1
	B4	Mortgage finance systems and support groups are being used to expand access. (B4)	1
	B5	Flexible payment procedures to suit many sources of revenue. (B5)	2
	B6	Marketability of compact formats with modest down payments should be a priority for developers. (B6)	2
	B7	Housing sector contribution to a country's economic and financial development. (B7)	3

	B8	The relationship of the stock market & banking system with the real estate market. (B8)	2
Supply of Housing (C)	C1	Poor supply of Materials/Logistics (C1)	1
	C2	Housing should fully integrate with existing urban infrastructure. (C2)	1
	C3	Providing a safe and high-quality living and living environment. (C3)	2
Legislation (D)	D1	Many developments and laws being heavily influenced by political interest(D1)	2
	D2	Housing policy was closely linked to party politics (D2)	3
	D3	Government provided incentives (D3)	2
	D4	Creating a desirable environment for the real estate market. (D4)	2
	D5	Government interference with the Housing sector in terms of land ownership. (D5)	2
	D6	Housing policy has also been used to promote racial integration, social stability & economic growth. (D6)	4
	D7	Governments can significantly improve the pace of urban development through appropriate laws, regulations & increase housing supply for a growing population. (D7)	2
	D8	Government measures to improve people's financial capacities to invest in homes. (D8)	1
	D9	The government's plans for boosting real estate investment. (D9)	1
Threats (E)	E1	Potential delays in investments. (E1)	2
	E2	Difficulty of organizing sales visits and property inspections. (E2)	4
	E3	The key economic sector's new business strategies to overcome the crisis will have medium-term impact on the real estate sector. (E3)	2
	E4	Inconsistent policies of the real estate sector in recent years. (E4)	3
	E5	Real estate markets in small open economies with no capital regulations are prone to fluctuating foreign financial movements. (E5)	3
	E6	Increasing value & sales of existing homes are challenges for the real estate market. (E6)	2
Pollution(F)	F1	Environmental pollution (F1)	2
Unforeseen Events(G)	G1	The incidence of natural disasters is one of the main challenges in the housing market(G1)	3

Table 2: Initial Factor Ranking

3.3 Weighting of the Top-15 factors with AHP (Analytical Hierarchy Process) Ranking

From above factor table, top 15 factors were chosen and then the 15 factors were ranked using the AHP (Analytical Hierarchy Process) Pair-wise ranking method. See Table4for a sample of the AHP Ranking table which was done by one of the 10 Industry Practitioners. Each Factor had to be compared with the other and given a ranking from 1-9, where 1 being equally important and 9 is most important than the other factor.

3.3.1 AHP (Analytical Hierarchy Process) Ranking

The Saaty technique is an analytic hierarchy process decision-making approach invented by Saaty. Its goal is to quantify the relative priority for a given set of alternatives on a scale of relationships based on the decision maker's opinion, highlighting the relevance of a decision maker's intuitive judgments as well as the consistency of comparative alternatives in decision making. Constructing an array that conveys the relative values of a collection of properties is critical. When comparing the expense of equipment with convenience of use, what is the relative relevance of operating a business, for example? You'll be asked if cost is considerably more important, a bit more important, just as important, and so on, or if usability is much less essential. On a scale of one to ten, each of these ratings is assigned a number:

Intensity of Importance	Definition	Explanation
1	Equal Importance	Both elements work in favor of the goal.
3	Somewhat more important	One factor favors one over the other somewhat.
5	Much more important	One element favors one side over the other.
7	Very much more important	One element substantially favors one of the candidates over the other.
9	Absolutely more important	One element favors one side over the other to the greatest extent feasible.
2,4,6,8	Intermediate values	When you need to work together.

Table 3: Intensity of Importance Scale

		Establishing home protection nets for people who have difficulties in protecting a home. (A6)	Difficulty of organizing sales visits and property inspections. (E2)	Housing policy has also been used to promote racial integration, social stability & economic growth. (D6)	Government provided incentives (D3)	The relationship of the stock market & banking system with the real estate market. (B8)	Creating a desirable environment for the real estate market. (D4)	Housing policy was closely linked to party politics (D2)	Competition between housing developers for marketing completed houses to their customers(A2)	Flexible payment mechanisms to accommodate different income streams. (B5)	A major challenge facing the real estate market is the frequency of natural disasters. (G1)	Housing sector contribution to a country's economic and financial development. (B7)	Trends in Demographic development will have an impact on the real estate market. (A5)	Complicated Documentation. (B1)	Weak and rigid legal framework to solve litigation procedure on properties by banks (B2)	Increasing reach through micro-mortgage financing mechanisms and support groups. (B4)
1	Creating house safety nets for people who have trouble safeguarding their homes. (A6)	1.00	0.25	0.11	0.13	0.13	0.17	0.25	0.14	0.11	0.20	0.11	0.14	0.14	0.17	0.14
2	Difficulty of organizing sales visits and property inspections. (E2)	4.00	1.00	0.13	0.17	0.11	0.50	0.50	0.20	0.25	0.13	0.11	0.20	0.17	0.20	0.25
3	Housing policy has also been used to promote racial integration, social stability & economic growth. (D6)	9.00	8.00	1.00	0.25	2.00	0.50	3.00	0.50	0.33	0.14	0.13	0.20	0.33	0.33	2.00
4	Government provided incentives (D3)	8.00	6.00	4.00	1.00	1.00	0.50	3.00	5.00	5.00	2.00	4.00	0.33	0.25	0.14	3.00
5	The relationship of the stock market & banking system with the real estate market. (B8)	8.00	9.00	0.50	1.00	1.00	3.00	1.00	2.00	2.00	0.33	1.00	0.33	2.00	0.33	3.00
6	Creating a desirable environment for the real estate market. (D4)	6.00	2.00	2.00	2.00	0.33	1.00	2.00	4.00	4.00	0.50	0.25	0.17	2.00	1.00	3.00
7	Housing policy was closely linked to party politics (D2)	4.00	2.00	0.33	0.33	1.00	0.50	1.00	0.33	2.00	0.33	2.00	0.25	0.50	0.33	4.00
8	Housing developers compete for clients by promoting completed houses (A2)	7.00	5.00	2.00	0.20	0.50	0.25	3.00	1.00	1.00	0.33	4.00	0.33	0.50	0.17	0.20
9	Flexible payment procedures to suit many sources of revenue(B5)	9.00	4.00	3.00	0.20	0.50	0.25	0.50	1.00	1.00	0.25	3.00	0.33	0.33	0.25	2.00
10	A major challenge facing the real estate market is the frequency of natural disasters. (G1)	5.00	8.00	7.00	0.50	3.00	2.00	3.00	3.00	4.00	1.00	3.00	1.00	1.00	5.00	1.00
11	Housing sector contribution to a country's economic and financial development. (B7)	9.00	9.00	8.00	0.25	1.00	4.00	0.50	0.25	0.33	0.33	1.00	0.33	0.33	0.50	2.00
12	Demographic trends will shape the housing market (A5)	7.00	5.00	5.00	3.00	3.00	6.00	4.00	3.00	3.00	1.00	3.00	1.00	3.00	3.00	5.00
13	Complicated Documentation. (B1)	7.00	6.00	3.00	4.00	0.50	0.50	2.00	2.00	3.00	1.00	3.00	0.33	1.00	1.00	0.20
14	Weak and rigid legal framework to solve litigation procedure on properties by banks (B2)	6.00	5.00	3.00	7.00	3.00	1.00	3.00	6.00	4.00	0.20	2.00	0.33	1.00	1.00	4.00
15	Mortgage finance systems and support groups are being used to expand access. (B4)	7.00	4.00	0.50	0.33	0.33	0.33	0.25	5.00	0.50	1.00	0.50	0.20	5.00	0.25	1.00

Table 4- Sample AHP Ranking table

Next is the calculation of a list of the relative importance of the factors. Technically this list is called an Eigenvector. (The AHP Lesson-1 by International Hellenic University)

Finally, we received the following Normalized Eigenvectors by dividing each factor's eigenvector with the smallest eigenvector of 0.008 (of Factor A6) after taking into consideration the feedback we got from the 10 experts who completed the AHP Pair wise Ranking table. See below table for the summary of results.

Factor	Eigenvector	Normalized Eigenvector	Factor Ranking
Creating house safety nets for people who have trouble safeguarding their homes. (A6)	0.007	1	15
Difficulty of organizing sales visits and property inspections. (E2)	0.012	1.57	14
Housing policy has also been used to promote racial integration, social stability & economic growth. (D6)	0.039	4.99	13
Government provided incentives (D3)	0.090	11.32	4
The relationship of the stock market & banking system with the real estate market. (B8)	0.065	8.13	7
Creating a desirable environment for the real estate market. (D4)	0.070	8.8	6
Housing policy was closely linked to party politics (D2)	0.043	5.33	12
Housing developers compete for clients by promoting completed houses (A2)	0.045	5.62	10
Flexible payment procedures to suit many sources of revenue(B5)	0.043	5.37	11
A major challenge facing the real estate market is the frequency of natural disasters. (G1)	0.121	15.11	2
Housing sector contribution to a country's economic and financial development. (B7)	0.064	7.96	8
Demographic trends will shape the housing market(A5)	0.148	18.58	1
Complicated Documentation. (B1)	0.077	9.73	5
Weak and rigid legal framework to solve litigation procedure on properties by banks (B2)	0.116	14.53	3
Mortgage finance systems and support groups are being used to expand access.(B4)	0.056	6.99	9

Table 5: Summary Result of Weightings of Factors

4. Results & Analysis

4.1 Introduction

The purpose of this research was to identify the Opportunities and Threats for Urban Housing developers in Sri Lanka. The data were collected from past thesis, books, journals, articles, websites, essentially from the Literature review which was done in relation to this thesis. Then a Factor Ranking Survey was done to get the feedback from the selected experts (professionals in the industry).

4.2 Literature Review

The purpose of the Literature review was to identify the opportunities and threats for urban housing developers in Sri Lanka. Mainly the review was covered with the following sections:

- 1) The thesis, reports and books related to identify the challenges faced by urban housing developers in Sri Lanka as well all around the Globe.
- 2) The thesis published related to challenged faced by housing developers.
- 3) Journals, Articles, websites & other publications found on the internet related to challenges faced by housing developers around the world.

4.2.1 Literature Review related to challenges faced by urban housing developers

Extensive range of literature was studied and identified 34 individual important factors related to opportunities and threats faced by urban housing developers as identified in Table 1 of the Methodology section. These factors were then given to the 20 Industry Practitioners for their feedback and 15 most important factors were finalized for extensive analysis. These factors were ranked considering the importance given by the practitioners, hence it was found that the most important factor was: “Trends in Demographic development will have an impact on the real estate market (A5)” and that the most common category type of factors was “Housing Finance” since there were 4 factors from this category in the top 15 ranked overall factors. The top 15 ranked factors are identified in Table 4 of the methodology section.

Cross section of the experts in terms of their practicing discipline is shown below.

Discipline of the expert	Number of Respondents
Engineering	9
Project Management	4
Architecture	2
Quantity Surveying	2
Research Developers	2
Finance	1

Table 6: Industry Practitioners by their Practicing Discipline

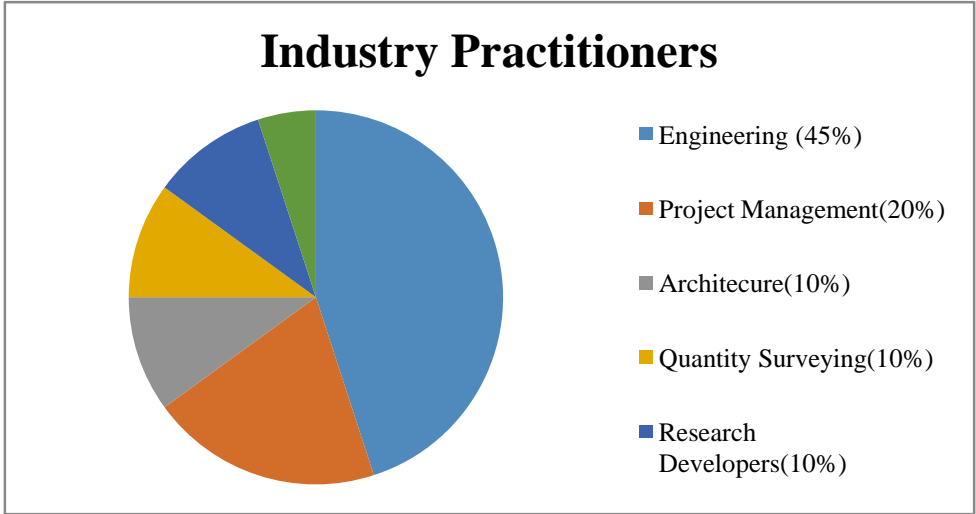


Figure 2: Cross section of Industry Practitioners (Profession-wise)

Cross section of the selected Industry Practitioners in terms of their involvement in the Housing Development industry is shown below.

Type of Involvement in the Industry	Number of Respondents
Developer/Client	6
Contractor	6
Designer/Consultant	6
Research Developers	2

Table 7: Cross section of Industry Practitioners (Sector-wise)

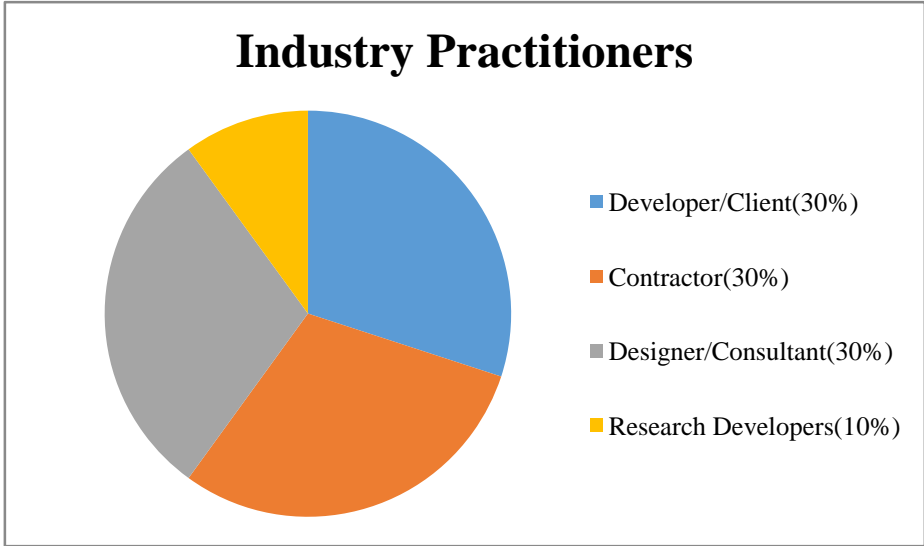


Figure 3: Cross section of Industry Practitioners (Sector-wise)

Factor Rank	Factor	Factor Category
1	Demographic trends will shape the housing market. (A5)	Demand for Housing
2	A major challenge facing the real estate market is the frequency of natural disasters. (G1)	Unforeseen Events
3	Weak and rigid legal framework to solve litigation procedure on properties by banks (B2)	Housing Finance
4	Government provided incentives (D3)	Legislation
5	Complicated Documentation. (B1)	Housing Finance
6	Creating a desirable environment for the real estate market. (D4)	Legislation
7	The relationship of the stock market & banking system with the real estate market. (B8)	Housing Finance
8	Housing sector contribution to a country's economic and financial development. (B7)	Housing Finance
9	Mortgage finance systems and support groups are being used to expand access(B4)	Housing Finance
10	Housing developers compete for clients by promoting completed houses (A2)	Demand for Housing
11	Flexible payment procedures to suit many sources of revenue. (B5)	Housing Finance
12	Housing policy was closely linked to party politics (D2)	Legislation
13	Housing policy has also been used to promote racial integration, social stability & economic growth. (D6)	Legislation
14	Difficulty of organizing sales visits and property inspections. (E2)	Threats
15	Creating house safety nets for people who have trouble safeguarding their homes. (A6)	Demand for Housing

Table 8: 15 most Important Factors from top to bottom

Based on the findings of the Literature Review, 34 Factors were identified as most challenging for Urban Housing Developers. Then the most important 15 factors were filtered out from the 34 factors which were initially identified from the literature review with the help of the 20 Industry Practitioners (practitioners in the industry). As mentioned in the methodology section, the experts ranked the 34 factors and from that we were able to identify the 15 most important factors. See table No:8 for these 15 factors which were identified by the 20 Industry Practitioners and then these 15 factors were sent to 10 selected Industry Practitioners from the original 20

Industry Practitioners and were asked to complete the Analytical Hierarchical Table (See sample AHP Ranking at Table No:4).

4.3 Analytical Hierarchical Process

One of the main objectives of this study was to identify the opportunities and threats faced by urban housing developers, essentially the challenges faced by them in the present housing development market and comparing those challenges with the international market as well. Saaty (2008) had introduced the decision-making process convenient by means of a pair-wise comparison of each of the selected 15 most important factors. Likewise, a scale of digits was used to compare the criticality of a factor with respect to another.

A sample response received from one of the Industry Practitioners out of the selected ten (10) is shown on Table No:4.

Table No:5 shows the Normalized Eigenvectors by dividing each factor's eigenvector with the smallest eigenvector of 0.007998988 (of Factor A6) after taking into consideration the feedback we got from the 10 Industry Practitioners who completed the AHP Pair wise Ranking table.

As per the results obtained through the AHP analysis, the ranking of the Five most critical factors as follows:

- 1) Trends in Demographic development will have an impact on the real estate market. (A5)
- 2) A major challenge facing the real estate market is the frequency of natural disasters. (G1)
- 3) Weak and rigid legal framework to solve litigation procedure on properties by banks (B2)
- 4) Government provided incentives (D3)
- 5) Complicated Documentation. (B1)

4.4 Discussion on Results

Even though the local housing industry is still in the early ages of its development and at the same time, also having reached one of its peaks in the recent past, the selection criteria were assumed as satisfactory. Therefore, it was important to collect data which are relevant to the recent projects that can be useful to explore the current market behavior.

As the Results indicated in the above section 4.3, criticality of important factors was ranked from the feedback of the selected Industry Practitioners (Practitioners in the Industry). Accordingly, it was recognized that "Trends in Demographic development will have an impact on the real estate market (A5)", which falls under the "Demand for Housing" category is the most important factor, in terms of the challenges faced by urban housing developers. It indicates that demographic development is an important factor for housing developers since people tend to move into areas where predominantly similar demographically aligned people are living, thereby

making it easier for new homeowners to move in and blend in with the neighborhood. In certain areas, if the population growth has a descending trend, then there is a surplus in the housing market. Then new housing development projects would not be needed, this can happen regionally as well as nationally. This usually happens when the natural birth rate of that area or country is low. Even high crime rate, low socio-economic status, low security is some of the other factors which can affect the housing market. People tend to research on an area before they move into a new neighborhood. Hence if above three factors are not suitable enough then people tend to ignore these areas and so the housing demand is very low in such areas. People start learning about Natural disaster-prone areas and they avoid such areas. These factors make the housing demand low hence already existing houses are vacant and new housing demand is also low, which is not favorable for property development.

The second most important factor identified from the feedback of the Industry Practitioners is “A major challenge facing the real estate market is the frequency of natural disasters (G1)”, which falls under the “Unforeseen Events” category. Usually, people start researching about the area where they would like to move in with a new house; hence one of the most factors they will consider is if the area is prone for natural disasters such as landslides, storms, floods, etc. The housing demand in such areas is low since people do not want to use their resources to mitigate the threats posed by natural disasters and be unnecessarily burdened. Hence, they try to avoid such areas as much as possible.

The third most important factor is “Weak and rigid legal framework for the resolution of legal disputes on real estate by banks (B2)”, which falls under the category “Home financing”. Land and real estate law in Sri Lanka is extremely strict and very boring. Especially if there is a legal dispute over a property in a prime location, the property can only be used when the long and extremely rigid legal framework is over. In most cases, it takes generations to resolve land and property disputes. Unresolved land disputes, legal disputes and unclear tenure issues leading to land invasion, land misuse and disuse, etc. They have become the negative effects on the current land ownership model in Sri Lanka. The cases remain unsolved for a long time due to the complicated basic land law. For example, most legal proceedings last at least 5 years and some proceedings last more than 30 years. During this time, the precious land remains unused. On the other hand, as the "long-time (sometimes generations) society of remedies for land disputes" is well known, many are reluctant to bring their land disputes to justice and would rather try their own ways and means to solve such problems. For example, through violent trespassing and evictions, informal compromises between parties through discussions, verbal agreements, etc. These can have various long-term negative social and economic effects as solutions to problems are not legally valid.(Perera, 2010)

The Fourth most important factor is “Government provided incentives (D3)” which falls under the “Legislation” category. Governments give incentives regarding land, infrastructure process

and procedure according to their requirements. Middle income housing projects are mostly done by leasing CS2 housing contractors in Sri Lanka. Land is provided by the government; Approval process is also facilitated by the respective government institution to complete the legal procedures until the initiation of the project. Government also helps with the marketing aspect of these houses as well. These incentives are very important for housing contractors, and a very big opportunity for them to complete these projects successfully with the help of the Government. A few examples of these projects are Mount Clifford - Homagama, a middle-income housing development project. The Orugodwatte ICC housing project is focused on land resettlement and slum rehabilitation.

The Fifth most important factor is “Complicated Documentation (B1) “, which falls under the “Housing Finance” category. Housing and Real estate documentation is an extremely complicated process especially in Sri Lanka. For registration of Land, House, or Condominium property there are several documents required as per the Sri Lankan regulations.

- Title Deed of the Apartment/Land/House,
- Condominium Declaration,
- Building Plan,
- Certificate of Conformity (COC),
- Approved Lot Plan of the Land,
- Certificate of Ownership,
- Non-Vesting Certificate,
- Street Line Certification,
- Extracts of the land/House,
- Valuation

The issue is with not the number of certificates but the time to obtain these. Each document should have to obtain from specific institute in National or District level. This will consume more time and money of the investors. This complicated system demoralizes the real estate investors due to significant delays in the process.

5. Conclusion and Recommendation

This thesis is a methodology to prioritize the opportunities and threats for a particular housing project. Housing developers despite their scale (Low, Medium, or High) they can use the same methodology to prioritize the threats and opportunities for their projects. After prioritizing, if the most crucial factors are beyond their control, then they must rethink about the project.

Accordingly, 15 important opportunities and threats were identified by extensive literature review.

Factor Rank	Factor	Factor Category
1	Demographic trends will shape the housing market. (A5)	Demand for Housing
2	A major challenge facing the real estate market is the frequency of natural disasters. (G1)	Unforeseen Events
3	Weak and rigid legal framework to solve litigation procedure on properties by banks (B2)	Housing Finance
4	Government provided incentives (D3)	Legislation
5	Complicated Documentation. (B1)	Housing Finance
6	Creating a desirable environment for the real estate market. (D4)	Legislation
7	The relationship of the stock market & banking system with the real estate market. (B8)	Housing Finance
8	Housing sector contribution to a country's economic and financial development. (B7)	Housing Finance
9	Mortgage finance systems and support groups are being used to expand access (B4)	Housing Finance
10	Housing developers compete for clients by promoting completed houses (A2)	Demand for Housing
11	Flexible payment procedures to suit many sources of revenue. (B5)	Housing Finance
12	Housing policy was closely linked to party politics (D2)	Legislation
13	Housing policy has also been used to promote racial integration, social stability & economic growth. (D6)	Legislation
14	Difficulty of organizing sales visits and property inspections. (E2)	Threats
15	Creating house safety nets for people who have trouble safeguarding their homes. (A6)	Demand for Housing

Table 8: 15 most Important Factors from top to bottom

It was recognized that “Demographic trends will shape the housing market (A5)”, which falls under the “Demand for Housing” category is the most important factor, in terms of the challenges faced by urban housing developers. It indicates that demographic development is an important factor for housing developers since people tend to move into areas where predominantly similar demographically aligned people are living, thereby making it easier for new homeowners to move in and blend in with the neighborhood. In certain areas, if the population growth has a descending trend, then there is a surplus in the housing market. The second most important factor identified from the feedback of the Industry Practitioners is “A major challenge facing the real estate market is the frequency of natural disasters (G1)”, which falls under the “Unforeseen Events” category. Usually, people start researching about the area where they would like to move in with a new house; hence one of the most factors they will consider is if the area is prone for natural disasters such as landslides, storms, floods, etc. The housing demand in such areas is low since people do not want to use their resources to mitigate the threats posed by natural disasters and be unnecessarily burdened. Hence, they try to avoid such areas as much as possible.

The Third most important factor is “Weak and rigid legal framework to solve litigation procedure on properties by banks (B2)”, which falls under the “Housing Finance” category. Land and real estate laws in Sri Lanka are extremely rigid and very lengthy. Specially if there is a legal case regarding a land located in a prime location then one cannot utilize the land until the lengthy and extremely rigid legal framework is over. In most cases, it takes generations to resolve land and property disputes. Unresolved land disputes, legal disputes and unclear tenure issues leading to land invasion, land misuse and disuse, etc. They have become the negative effects on the current land ownership model in Sri Lanka. The cases remain unsolved for a long time due to the complicated basic land law. The fourth most important factor is "Government Incentives (D3)" which falls under the "Legislation" category. Governments give incentives in terms of land, infrastructure processes and procedures according to their needs. Middle income housing projects in Sri Lanka are mainly leased by housing company CS2. Land is provided by the government; The approval process is also facilitated by the respective state institution to complete the legal process until the start of the project. The government is also helping with the marketing aspect of these homes. The fifth most important factor is the "Complicated Documentation (B1)", which falls under the "Home Financing" category. Documenting housing and real estate is an extremely complicated process, especially in Sri Lanka. Multiple documents are required for land, house, or condominium registration under Sri Lankan regulations.

The sixth most important factor in Table 8 is "Creating a desirable environment for the housing market (D4)", which falls under the "Legislation" category. In the twentieth century, the focus of housing policy shifted significantly to the quality of life. The basic laws for housing have been changed. The most important pillar of political change has been the shift from quantity to quality; The law established the fundamental principle of housing policy. The seventh factor is "The relationship of the stock exchange and the banking system with the real estate market

(B8)", which falls under the category "Home financing". A optimistic stock market and credit expansion can lead to housing market speculation, resulting in excessive prices. Changes in property values are also explained by international money movements. Despite the huge price rises, the contemporary real estate market remains stable and sustainable. The present high price is supported by robust demand for residential property, considerable purchasing power from the financial system, and strong backing from the international community. The ninth most important factor is "Mortgage finance systems and support groups are being used to expand access(B4)", which falls under the category "Home finance". Large-scale development of affordable housing is a major challenge in urban cities in developing countries today and promises a solution to slum proliferation, disorganized housing development, unplanned growth, and traffic congestion. On the demand side, issues include finding the proper clientele, expanding access through micro-credit financing methods and self-help organizations, and developing flexible payment mechanisms that may adapt to various revenue sources.

The tenth ranked factor is "Housing developers compete for clients by promoting completed houses (A2)" which falls under the "Demand for Housing" category. There is a remarkable amount of media advertisements and marketing that goes along with the construction of these housing units, in fact some housing developers spend millions just on advertising these houses to their clientele hence creating a vast and entertaining competition between housing developers, especially among the high-end developers. The eleventh ranked factor is "Flexible payment procedures to suit many sources of revenue(B5)" which falls under the "Housing Finance" category. As discussed above, large-scale development of Affordable Housing is one of the biggest challenges in urban cities of developing countries today and promises a solution to slum proliferation, disorganized real estate development, unplanned growth, and traffic congestion. On the demand side, challenges include Flexible payment mechanisms such as housing loans, grants, etc. to accommodate different income (low, mid, high) streams. The twelfth factor is "Housing policy was closely linked to party policy (D2)" and falls under the "Legislation" category. Policies and regulations are the primary drivers of any country's physical growth. Policies and regulations are implemented by ministries, agencies, departments, businesses, and notified entities. A successful combination of these two systems produces a favorable outcome and meets the intended objectives. Policies and institutions of Sri Lanka, on the other hand, have changed regularly, with many events and legislation impacted largely by political interests. Looking back over more than a century of Sri Lankan housing policy, it is obvious that housing policy was inextricably tied to political parties and, like political parties, has evolved through time.

The thirteenth ranked factor is "Housing policy has also been used to promote racial integration, social stability & economic growth (D6)" which falls under the "Legislation" category. Housing policy has also been utilized to encourage racial integration, which has aided social stability and progress. Even though people tend to move towards neighborhoods which are predominantly occupied by similar raced people, it is imperative that people move on from this way of thinking for the betterment of the society and the economy. The fourteenth ranked factor is "Difficulty of

organizing sales visits and property inspections (E2)” which falls under the “Threats” category. In some situations, Real estate agents or salesmen go through a difficult time to organize sales visits and property inspections with the interested buyer due to unavoidable circumstances. It is in the best interest of both parties to come to an amicable agreement, reschedule the appointment and go ahead with these visits and inspections as soon possible. The fifteenth ranked factor is “Creating house safety nets for housing owners who have trouble safeguarding their homes (A6)” which falls under the “Demand for housing” category. As discussed above in modern days, the focus of housing policy substantially shifted towards housing quality. The Basic Laws for Housing Construction were modified. The main pillar of policy change was the shift from quantity to quality; The law established one of the core principles of housing policy; “Establishing home protection nets for people who have difficulties in protecting a home”.

For any type of housing developers, the above discussed factors are both challenges and opportunities for them. The housing developers must study these factors which are beyond their control and analyze each factor. This thesis intends to be a guide for housing developers before they venture into new housing projects.

Hence, they can develop a framework and identify their challenges, which factors are threats, and which are opportunities. Identify the most crucial factors then find whether these factors are beyond their control then it’s a risk to start the project.

This thesis intends to recommend the housing related government institutions, our findings such as “Weak and rigid legal framework to solve litigation procedure on properties by banks (B2)” and “Complicated Documentation (B1)”, where individual developers cannot handle or need additional help with above two factors. These Government institutions need to get involved in the handling of these factors and resolve them to enhance the ease of business and to increase the sustainability of the real estate market.

Professionals need to do more research and studies on the Real estate and Housing market in Sri Lanka. They need to study about the challenges and problems faced by all sides specially the housing developers and give sound solutions to these challenges and problems. Need to study more on this sector, need to compile more thesis and study reports and even get sound ideas and help from the international housing market as well. The more study reports professionals from Sri Lanka can compile it will give a positive boost to better develop and enhance the Sri Lankan Real estate sector.

The identifying of opportunities and threats for urban housing developers are critical and important for the future development and sustainability of the housing industry. Hence, this study is designed to be a guide for housing developers before they venture into new housing projects. Hence, they can develop a framework and identify their challenges, which factors are threats, and which are opportunities. Identify the most crucial factors then find whether these factors are beyond their control then it’s a risk to start the project. The following is the research question that the study has explored:

“What are the important Opportunities and Threats which are faced by Urban Housing Developers?”

The research objective is to analyze the opportunities and threats faced by the Urban housing developers and recommend sound strategies to profit on opportunities and mitigation of threats.

- Identify Opportunities for Housing developers
- Identify threats for Housing developers
- Recommendation after analyzing challenges, opportunities & threats and identify strategies for sustainable business growth

Opportunities are the positive effects occurring in the external environment that enables the organization to profit by developing the organization strengths and absorbing the opportunity. Since inception of 2018 it can be identified the Sri Lankan construction industry is facing a severe decline due to escalating costs caused through currency depreciation and lack of foreign investments. This has caused many small-scale developers to move out of the industry as they do not have enough capital to be with the industry recession. Recent Government changes and the never-ending political instability has also caused the Sri Lankan construction industry to be volatile due to lack of labor, increasing difficulty to hire machines and other hardships. Also, instable political environment is another crucial factor for not being able to motivate investors to invest in real estate developments. Lack of government funded research and development in the industry is another crucial reason for small scale developers for not having a market to stay. Inefficient and unskilled labor is another reason for creating wastage for firms through incorrect material usage leading to material wastage thereby escalating costs and inability to identify suitable skills due to lack of certification as well as immature legal environment. Lack of legal knowledge for solving construction problems has led to small firms moving out of business due to legal problems. Hence through this thesis the most important factors (includes both opportunities and threats faced by urban housing developers) have been identified and given a rank from most important to least important as well, thereby addressing the above objectives.

The present Economic and Political crisis which has befallen Sri Lanka from March 2022 is an unexpected recent major event, which this thesis did not take in to consideration since the analysis was done in 2021. This kind of crisis can occur in any country, in the past it has happen to Venezuela, Lebanon, Zimbabwe, Argentina, etc. Future studies should give an importance to this sought of threats that can be faced by the construction industry and further study the threats this kind of Economic and Political crisis will bring to a country and hence identify these threats which can befall a country and society and how these threats can be mitigated for the betterment of the urban housing developer.

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