

*A comprehensive analysis of Thailand's
Residential, Retail, Hotel and Office markets*



Thailand Real Estate Highlights

2H 2021

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THAILAND REAL ESTATE HIGHLIGHT 2H 2021

Residential (Condominium and Luxury Housing), hotel, retail, office markets

Market Indications

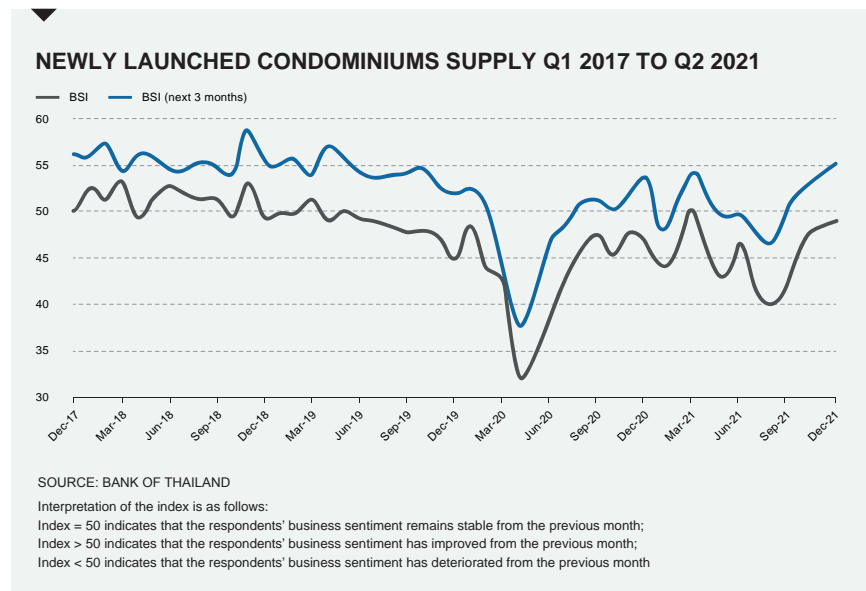
The Thai economy in 2021 was expected to expand at a rate of 1.1 percent. In the third quarter, GDP contracted by -0.3percent Y-o-Y and -0.1percent Q-o-Q. Despite the COVID-19 situation in the country, the number of people getting vaccinated is increasing and simple disease control measures have enabled many types of economic activities to resume. The number of foreign tourists is likely to increase after the country's opening, further supporting the economy to gradually recover. The Thai export sector expanded at a high level due to the low base factor in the previous year and the expansion of the world economy and trade. In addition, the government has continuously injected money into the economy to drive domestic consumption.

Dampening the many types of economic support measures, the Omicron strain outbreak is considered a risk factor in the future. For 2022, the economy will expand gradually. A positive factor is that the export sector is likely to develop in line with the recovering world economy. Also, the situation improves with advances in vaccinations, the efficacy of drugs to treat COVID-19, and the relaxation of travel measures to enter the country. Negative factors remain moderate due to the impact of lingering economic challenges over the past two years, such as high household debt burdens, weak household income, and a subdued labour market. There is also the risk of disease outbreaks from virus mutations that could reduce the efficacy of vaccines in the future, as well as the return of measures to control the Omicron outbreak, the temporary cancellation of Test & Go, rising inflation, etc. The policy interest rate at the end of 2021 is at 0.5 percent, which is expected to remain stable throughout 2022.

The Business Sentiment Index (BSI) in December increased to near pre-COVID levels but remained below the 50-threshold because of concerns about the spread of the Omicron strain.

The additional relaxation of control measures nationwide had a significant positive impact on the revival of economic activities and consumer confidence, most notably for the hotel and restaurant sector. The 3-month expected BSI improved to

55.2, driven by improved confidence in all sectors except for the real estate and construction sectors where the index remained below the 50-threshold.



Timeline of the Covid situation in Thailand

Wave 1 occurred from January to March 2020, officially beginning when the Ministry of Public Health announced a case of a 61-year-old Chinese woman infected with COVID-19 travelling from Wuhan, China, and arriving at Suvarnabhumi Airport in Bangkok. Disease control measures took place during March to June 2020.

Wave 2 happened in December 2020, when there was an outbreak in the seafood market cluster in Samut Sakhon province, near Bangkok. Control measures took place from December 2020 to January 2021.

Wave 3 started in April 2021 from Pathum Thani Province and it developed into a cluster in Bangkok's Thonglor area from the

Crystal Club nightlife venue. As a result, control measures resumed in May 2021.

Wave 4 arrived in July 2021, when an outbreak occurred in a construction worker camp in Lak Si district of the Don Mueang area. As a result, control measures took place in August 2021. Lockdown measures started to relax in September 2021.

From September to December 2021, the government began to loosen the lockdown measures periodically before another wave of COVID-19 outbreaks, thanks to the Omicron variant. This began in December 2021 and continues to the present, January 2022.

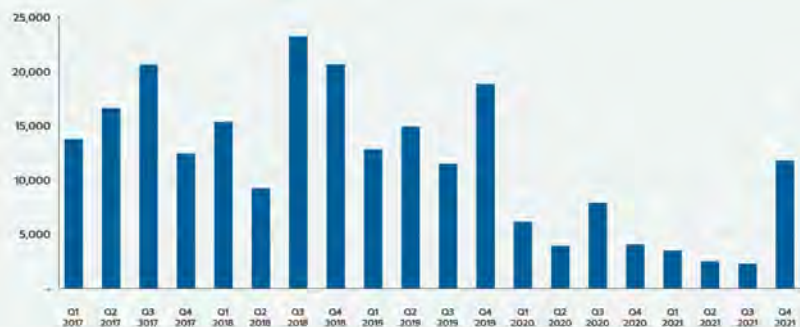
BANGKOK CONDOMINIUM OVERVIEW

Highlights

The condominium market situation in the 4th quarter of 2021 showed more movement on the supply side. Previously, there was a slowdown in launching new projects throughout the year. However, developers began to start selling more projects in this quarter. This was due to the government's easing and lifting of the lockdown measures and the opening the country to tourists, particularly the action to reduce the quarantine period with Test & Go. In addition, the Bank of Thailand offered a temporary relief measure for LTV until the end of 2022, which positively affects investors and people who want to buy housing with bank loans. Therefore, developers considered it a suitable time for launching new projects. Although the overall condominium market in the 4th quarter showed better signs, the Omicron strain of COVID-19 required operators to plan strategies according to the situation to capture real demand, which constitutes the main purchasing power at this time.

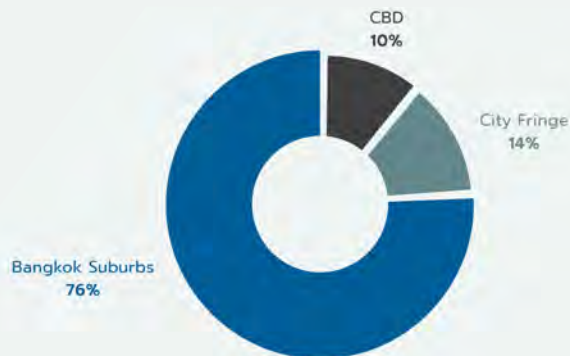
100,000 baht/sq m because such products and price points received attention from the group of buyers with the main purchasing power in this period.

SUPPLY OF NEW CONDOMINIUM PROJECTS IN BANGKOK, Q1 2017 TO Q4 2021



Source: Knight Frank Thailand Research

NEW SUPPLY PROJECTS CLASSIFY BY LOCATION



Source: Knight Frank Thailand Research

SUPPLY OF NEWLY LAUNCHED CONDOMINIUMS CLASSIFIED BY GRADE Q4 2021



Source: Knight Frank Thailand Research

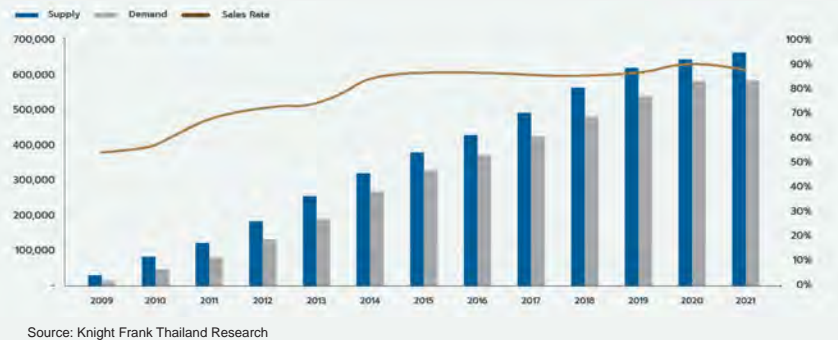
Supply

As of the 4th quarter of 2021, the supply of condominiums in Bangkok totalled 11,821 units. The number of new units sold increased by 64.5 percent compared to the same period last year and by 80.4 percent compared to the previous quarter. The newly launched 4th quarter supply represented nearly 60 percent of the total supply for 2021, totalling 20,584 units, with 76 percent or 8,962 units located in the suburbs of Bangkok. The City Fringe and Central Business District (CBD) accounted for 14 percent and 10 percent, respectively. The new supply is still largely (up to 70 percent) from a group of large-scale operators. The rest are projects of middle and small developers. The new condominiums launched this quarter were priced from 0.9 to 3.5 million baht. By grade, it is found that grade C condominiums make up 58 percent of the new supply while grade B condominiums stood at 42 percent, indicating that operators chose to launch condominiums for sale at an average price of approximately 80,000 to

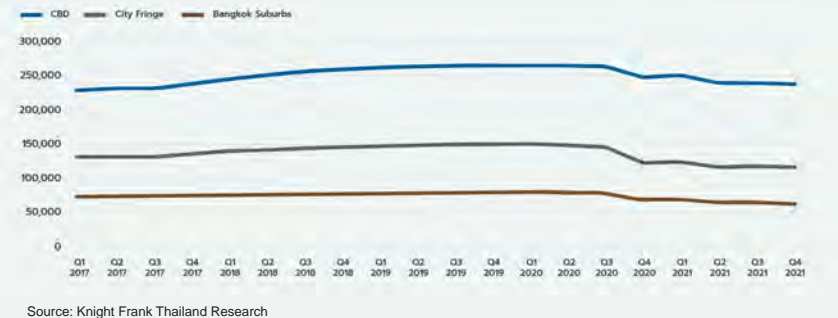
Demand

In the 4th quarter of 2021, the epidemic situation of COVID 19 subsided in terms of severity. In recent years, progress in accelerating vaccinations for people has decreased deaths and severe cases. Economic activity, including in the condominium market, has returned to a hopeful state. Developers have more confidence and gradually launched new projects for sale. The number of new units sold this quarter was 2,835 units from the new supply that launched in the 4th quarter of this year, totalling 11,821 units, representing a sales rate of 24.0 percent or 9.2 percent Y-o-Y and 14 percent lower than the previous quarter. The sales rate decreased due to the relatively high number of new units launched for sale. The number of units sold decreased due to weaker purchasing power from domestic customers, especially self-employed groups affected by the government-ordered shutdown. Also, prolonged control of COVID-19 by private companies caused many employees to agree to reduce their working hours without compensation or to be dismissed from their jobs. High-end customers and vast groups of foreigners were significantly reduced due to restrictions on entry into the country. We noted that the overall customer segment was affected, causing revenue instability. Moreover, banks needed to tighten credit approvals to prevent continuously rising NPLs.

BANGKOK CONDOMINIUMS MARKET SUPPLY DEMAND AND SALES RATE IN 2009 - 2021



CONDOMINIUMS ASKING PRICES CLASSIFIED BY LOCATION, Q1 2017 TO Q4 2021



Price & Trend

The asking prices of Bangkok condominiums as of the 4th quarter of 2021 decreased in all areas from the third quarter of 2021, with the offering price in the CBD at 239,689 baht per sq m, a decrease of 4.6 percent compared to the same period in the previous year or 0.4 percent compared to the previous quarter. The selling price of condominiums around the City Fringe was at 115,659 baht per sq m, a drop of 6.3 percent compared to the same period last year, or a 1.1 percent decrease compared

to the same period last year. With the last quarter, the asking price of condominiums in the suburbs of Bangkok was at 63,258 baht per sq m, a decrease of 8.2 percent compared to the same period last year or 2.1 percent compared to the previous quarter. The asking prices in the 4th quarter of 2021 decreased as some projects that have been on sale for a long time have not been able to close deals, resulting in a lower selling price with various promotions. Also, some projects reduced their prices to

comply with the reduction of transfer and mortgage fees for units priced at no more than 3 million baht, which is a price group that still has an active market. As a result, a portion of the unsold units in the market have been drained from the stock.

Review & Outlook

The year 2021 was quite challenging for condominium developers compared to 2020, due to the COVID-19 epidemic with a large number of infected people and the ensuing lockdown measures. This affected all sectors of the economy. For 2022, it is believed that the condominium market is likely to recover and become more active gradually. Large operators are more confident and have gradually announced plans to launch more new projects. About 10,000 new units will be launched in the first quarter of 2022. However, the COVID-19 Omicron strain is a risk factor and cause for concern as the number of deaths and critically ill patients increased significantly. This may result in the government issuing another lockdown order. Another risk factor is inflation, which causes the prices of consumer goods, including the cost of construction materials, to rise during the economic slowdown. In terms of the real estate market, the government has measures to help stimulate purchasing power, such as reducing transfer and mortgage fees for a period of time, which has been extended to encourage the group of buyers with real demand and the most purchasing power to take action during this period.

There is a tendency for asking prices to increase, especially in the condominium

segment due to rising development costs, whether the price of land, current wage rates, or worker shortages. Many former workers chose independent delivery jobs or to return to agriculture. In addition, construction materials prices began to rise from government projects that started construction in the new fiscal year and steel production cuts in China. As of December 2021, the construction material price index of the country increased by 8.9 percent from the same period last year. The cost will increase for new construction projects for sale, and the selling price per sq m will rise accordingly. The approach to residential development in 2022 is expected to be towards design that offers more privacy, focuses on health and utilises technology to make life easier, which will be the key selling points.

SUPER-PRIME&PRIME CONDOMINIUM OVERVIEW

Highlights

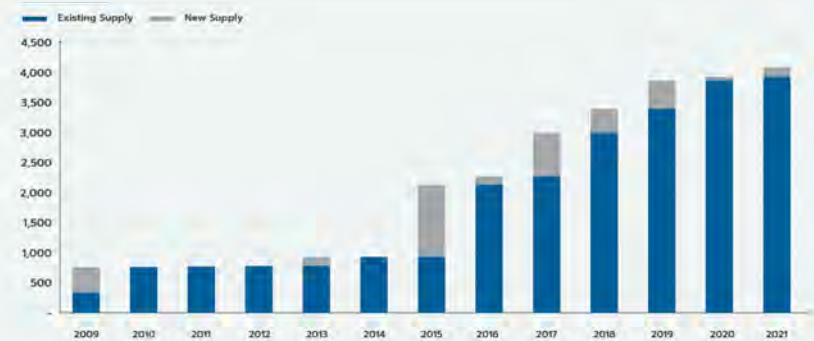
The super-prime and prime condominium market also saw a decline in demand compared to the previous year and reflected the lack of launches of new developer projects. In 2021, only one new project was launched. Therefore, trading in the super-prime and prime condominium market was subdued given the limited supply. As a result, sales rates are better in some areas. In the future, if the price of land is increased, condominiums in the super-prime and prime levels may be in smaller unit sizes so that the selling price per unit is not too high.

Supply

At the end of 2021, there was a total supply of 4,080 units of super-prime condominiums from 31 projects. Only one super-prime condominium project was launched during the year, namely, Scope Promsri, with 146 units. Most of these condos are in the Sukhumvit area, which accounted for 48 percent of the supply, followed by Lumpini and the Chao Phraya riverside at 26 percent and 16 percent, respectively. The Sathorn/Silom area only housed 10 percent of the super-prime condominiums. However, the future supply is expected to expand in the Lumpini from residential projects in the One Bangkok (3 buildings) project. Preliminary figures show that Tower 1 will house approximately 110 additional units, while the units in the remaining two buildings remain unconfirmed. In addition, there will be an increase in supply in the same area from Dusit Residences (159 units) and Dusit Parkside (230 units), offering more options for top tiered city residences.

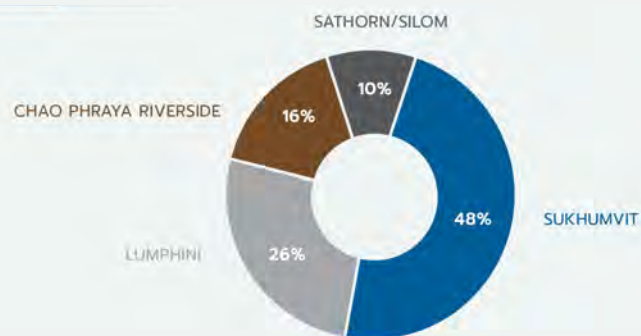
At the end of 2021, there was a total supply of 4,934 prime condominium units from 21 projects. It was found that there was no increase in the prime condominium supply in 2021. Most of the existing units are in the Sukhumvit area, which accounted for 37 percent, followed by Sathorn / Silom and Lumpini, accounting for 29 percent and 26 percent, respectively. The Chao Phraya riverside area only made up 8 percent of the prime condominiums.

SUPPLY OF SUPER PRIME CONDOMINIUM SUPPLY FROM 2009 TO 2021



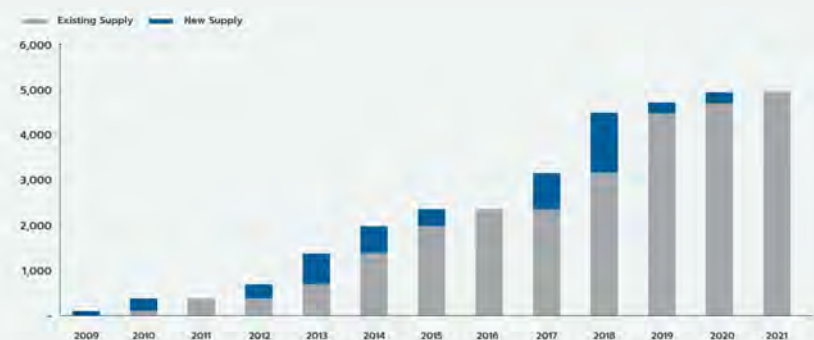
Source: Knight Frank Thailand Research

SUPPLY OF SUPER PRIME CONDOMINIUM BY LOCATION, AS OF 2021



Source: Knight Frank Thailand Research

SUPPLY OF PRIME CONDOMINIUM SUPPLY FROM 2009 TO 2021



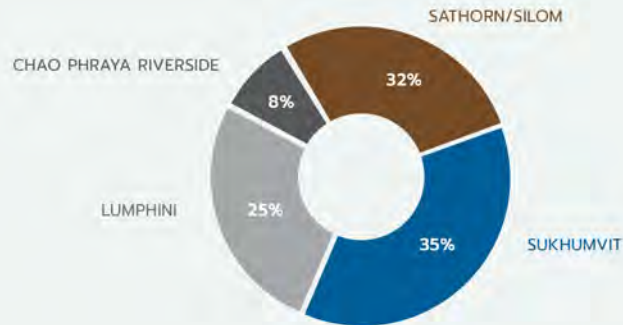
Source: Knight Frank Thailand Research

Demand

Throughout 2021, demand for super-prime and prime condominiums remained low. From a survey, we found that most customers in 2021 were affluent Thai people with financial stability who viewed 2021 as an opportunity to buy super-prime and prime condominiums with more flexibility in the price range, compared to normal times. However, the impact of the COVID-19 epidemic still resulted in a significant reduction in the number of foreign customers. Due to travel restrictions, foreign customers who made purchases in 2021 were those who are mainly operating or residing in Thailand.

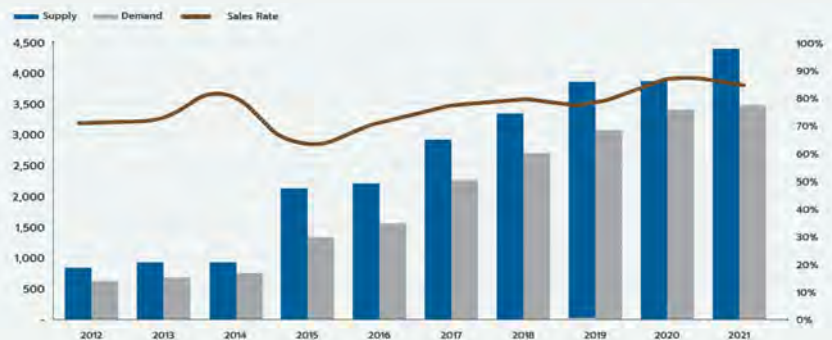
Demand for super-prime condominiums until the end of 2021 showed that 3,450 units were sold out of a total supply of 4,080 units, representing a sales rate of 85 percent, a decrease of 2 percent from 2020. In 2021, only 28 units were sold compared to about 410 units sold in the previous year. As for the demand for prime condominiums until the end of 2021, there were 4,265 units sold out of a total supply of 4,934 units, representing a sales rate of 86 percent, an increase of 7 percent from 2020. There were 343 new units sold in 2021, which decreased compared to 510 units sold in the previous year. New unit sales throughout 2021, for both the super-prime and prime levels, reflected a significant decrease compared to 2020 as some people who reserved units during the project launch phase had to cancel their bookings. This was due to the impact of the COVID-19 epidemic; some foreigners were unable to travel across borders into the country and some Thais were not confident in the economy. However, other reasons were the reduced new supply in the market and the fact that remaining units for sale are usually large or high-rise units with relatively high package prices compared to the units sold previously. Buyers continued to delay their decisions.

SUPPLY OF PRIME CONDOMINIUM BY LOCATION, AS OF 2021



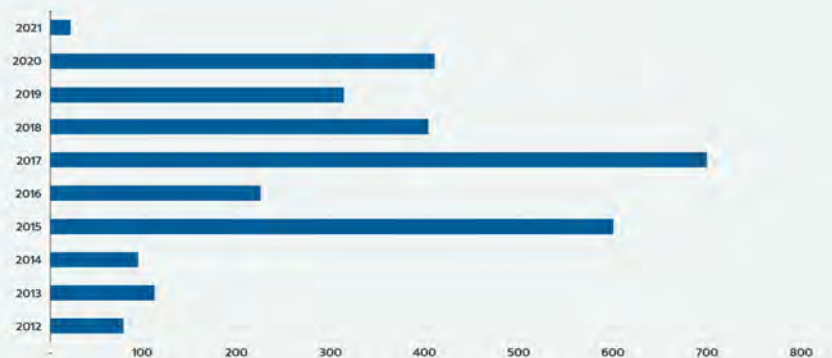
Source: Knight Frank Thailand Research

SUPPLY DEMAND AND SALES RATE OF SUPER PRIME CONDOMINIUMS FROM 2012 TO 2021



Source: Knight Frank Thailand Research

ANNUAL SALE OF SUPER PRIME CONDOMINIUM (IN UNITS) FROM 2012 TO 2021

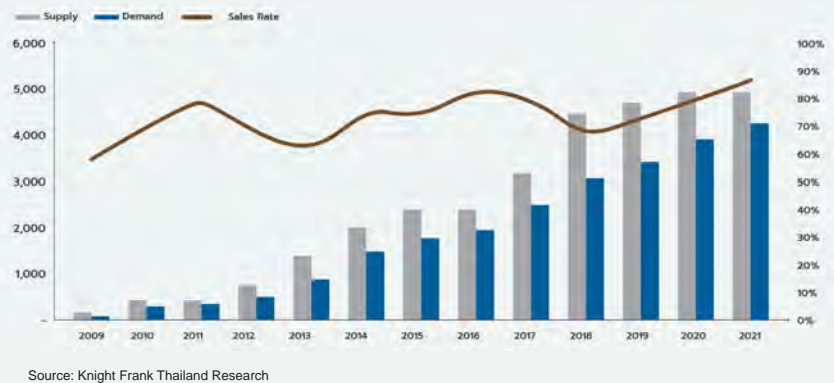


Source: Knight Frank Thailand Research

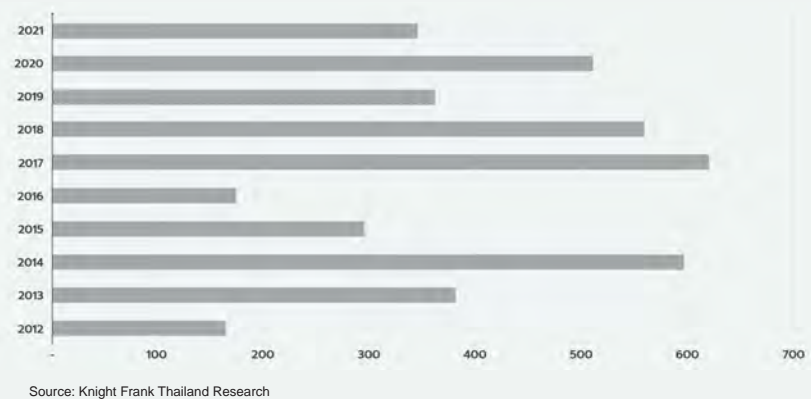
Asking Prices

Due to the epidemic situation, the number of project reservations declined, affecting completed projects and resulting in a decrease in ownership transfers. Although the super-prime and prime condominium market did not offer many discounts in 2021, we found that the average asking price of super-prime condominiums was 368,717 baht per sq m, a decrease of 3.55 percent from 2020. The average asking price of prime condominiums was 264,274 baht per sq m, down 5.05 percent from 2020. From these figures, we can see that developers in Thailand have begun to reduce their asking prices to stimulate sales and cope with the decline in demand. However, some developers choose to hold their prices steady in order to maintain a good relationship with customers who bought units in their projects before the COVID-19 crisis. We also found that completed projects receive more interest than newly launched projects in terms of off-plan sales.

SUPPLY DEMAND AND SALES RATE OF PRIME CONDOMINIUMS FROM 2012 TO 2021



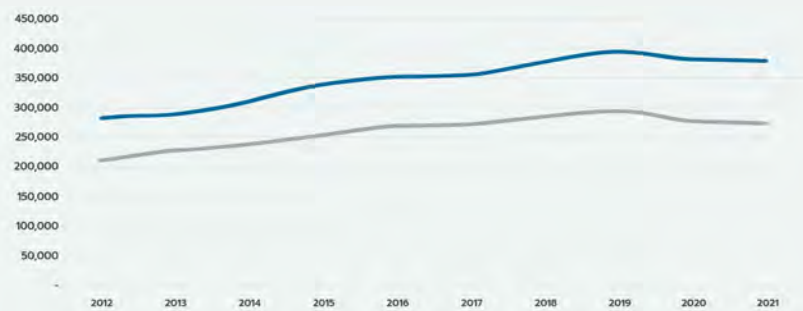
ANNUAL SALE OF PRIME CONDOMINIUM (IN UNITS) FROM 2012 TO 2021



Review & Outlook

COVID-19 impacted the entire year for project developers. No new projects have been launched in the super-prime and prime condominium market; therefore, the remaining supply is limited. However, we found that most of the remaining supply included larger and higher priced units due to their location on high floors or unique attributes like being a duplex penthouse or a condo with a distinctive style. With very high package prices, sales of the remaining units are gradual. However, land in the CBD that can be developed into a condominium project is limited and it remains a challenge to create new development projects. Super-prime and prime condominium market demand is often fuelled by the desire to acquire assets to increase wealth. The government's Test & Go and visa incentive schemes to attract foreign buyers could help boost demand in the super-prime and prime condominium market. We expect improvement in the next period as the condominium market in this segment is still in demand among Thais and foreigners with stable financial bases.

AVERAGE ASKING PRICES OF SUPER PRIME AND PRIME CONDOMINIUMS, 2012 TO 2021



Source: Knight Frank Thailand Research

LUXURY HOUSING OVERVIEW

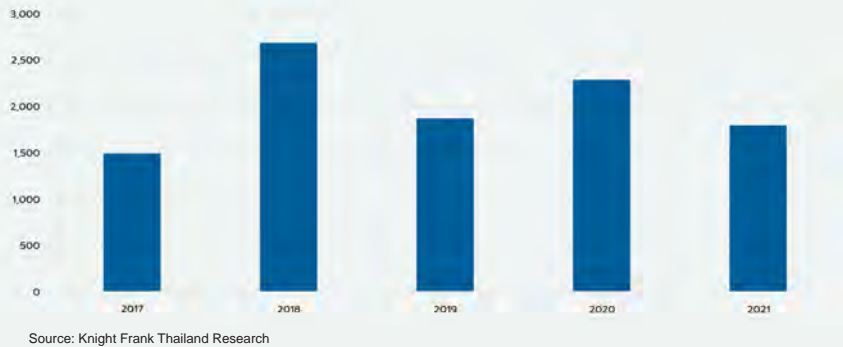
Highlights

The low-rise market for houses with prices of 10 million baht or more still showed positive signs. Throughout 2021, developers have turned to more low-rise projects, but the overall supply in this group is still relatively low. There was still steady growth in demand from customers with high purchasing power, which are considered an important group that can generate income for developers of house projects. The needs of this group have been quite limited but lifestyles and behaviours in the New Normal due to the COVID-19 outbreak resulted in the need to change housing styles to have more space that is suited for daily use. This includes the requirement of technology applied to the house and a location in an easy-travel zone. These factors may cause the demand of this market segment to expand more in the future.

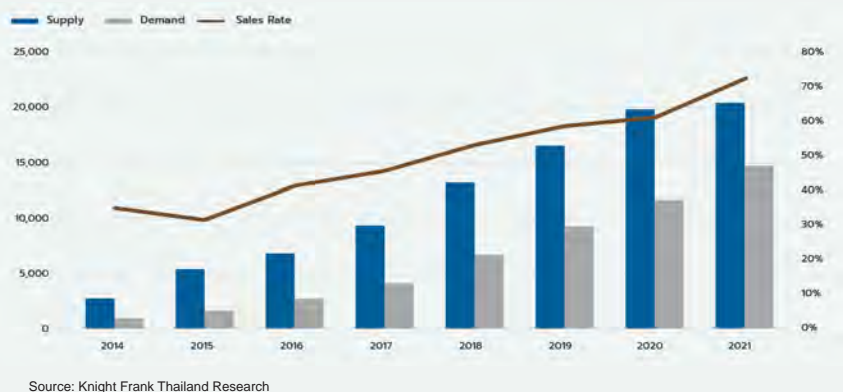
The number of Land Allocation Permits

The number of land allocation permits that have been granted (for the whole project) for houses with a selling price of 10 million baht or more from 2017 to 2021 included a total of 10,087 units. In 2021, it was found that there were land allocation permits granted in this group for 1,785 units.

LAND ALLOCATION PERMIT FOR HOUSING LUXURY PRICE FROM 10 MILLION BAHT AND UP, FORM 2017 TO 2021



SUPPLY DEMAND AND SALES RATE OF HOUSES PRICED FROM 10 MILLION BAHT AND UP, FROM 2014 TO 2021



Demand

Demand is measured from housing projects that still have units left for sale at present. At the end of 2021, we found that houses priced at 10 million baht and over still have approximately 197 units left for sale. Of the total cumulative supply of 20,434 units, a total of 14,766 units were sold, representing a sales rate of 72 percent. The end of 2021 showed a sales rate of 11 percent compared to 61 percent of the previous year.

During the whole of 2021, there were 3,100 new units sold, which is a relatively high number compared to last year. This reflects that homes priced at 10 million or more are likely to continue growing well. This is a great opportunity for entrepreneurs who develop projects in this real estate segment. Homes priced between 10 and 20 million baht had the highest demand, which rose to 8,043 units, followed by houses with prices between 21 - 30 million baht and 31 - 40 million baht, with

a market of 2,816 units and 2,102 units, respectively. The highest selling rate, at 90 percent, were for homes priced above 100 million baht due to limited supply. This was followed by houses priced between 51 - 60 million baht and 31 - 40 million baht, with sales rates of 83 percent and 82 percent, respectively.

Review & Outlook

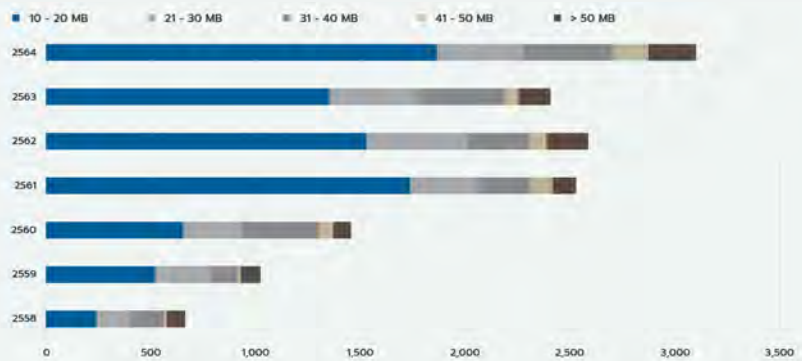
The house market of units priced at 10 million or more in 2022 will continue to grow from high-income customers because they still have a good ability to buy houses. On the supply side, it is expected to increase due to the government's announcement that the land and building tax rate will not be reduced. As a result, developers have to plan to gradually develop the lands they keep on hand. In addition, there will be more competition in the market, and the challenge for developers include higher costs, whether from the price of construction materials, employee wages, cost of epidemic measures for employees, or land tax that must be paid in full.

The purchasing power of this segment's group of buyers will increase due to their changing ages. This age group (22 to 38 years old) is known as Generation Y which generally exhibits thoughtful and self-motivating behaviours. For them, emphasis is placed on operating their own businesses rather than being a salaried employee or even taking over their family business. They want to build up their status and enjoy financial freedom. In the future, if the overall economy grows well, it is expected that this group of people will find success and better financial stability.

From surveys in the past, we found that house projects in townhomes and semi-detached houses are starting to get some acceptance from people in this age group because they are in the process of change, such as wanting to expand the family or create a family, including making an office in the house. This type of house model has functions that match the lifestyle and responds well to the buyers of this age group. In addition, it is essential to design a home that is compatible with the future. It should be designed to be in line with technology to make it easier to live, including technology that will help save energy in the home, which some projects have already been using, or designed in conjunction with nature,

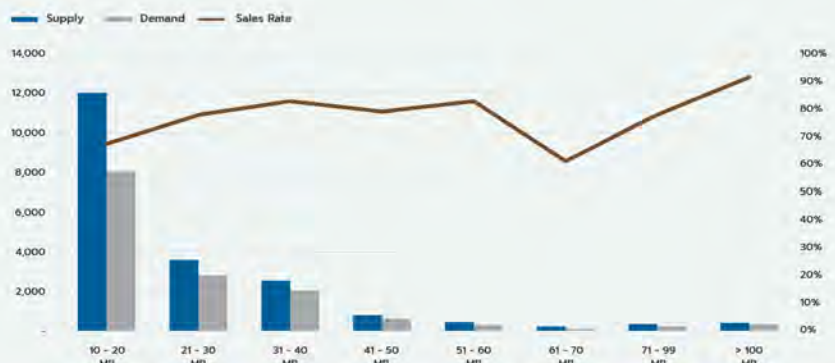
being environmentally friendly and having a positive effect on the quality of life. Futuristic, sustainable design is becoming increasingly important to buyers as it adds value to their investment in housing. Developers should study consumer behaviours to focus on the target group of each age group so that they can respond appropriately and comprehensively to their lifestyle needs.

UNITS SOLD PER ANNUM OF HOUSES PRICED FROM 10 MILLION BAHT AND UP, FROM 2015 TO 2021



Source: Knight Frank Thailand Research

SUPPLY DEMAND AND SALES RATE OF HOUSES BY PRICES OF 2021



Source: Knight Frank Thailand Research

BANGKOK HOTEL OVERVIEW

Highlights

In 2021, the Covid-19 pandemic continued to disrupt the hospitality industry that has caused a massive drop in the number of visitors to Bangkok since March 2020. The total number of inbound foreign visitors plummeted by 91% YoY to circa 560,000. Yet, this figure increased by 174% YoY in the second half of the year, mostly as a result of the ease of travel restrictions under the 'Test & Go' scheme during the last two months of the year. At the beginning of the second half of 2021, the Thai government launched a pilot program called 'Phuket Sandbox' as a first attempt to ease travel restrictions and resume the battered tourism industry in Thailand. However, Thailand peaked a number of infections a couple of months later, in August 2021, with over 20,000 cases

per day, postponing the country's reopening and impacting the traveller's confidence. In November 2021, Thailand introduced a more ambitious quarantine-free scheme named 'Test & Go'. There were 346,763 international arrivals under this program, just before the government temporarily suspended it on 21 December amid concerns over the spread of the Omicron variant. In 2021, 51% of international visitors were from Europe, followed by East Asia (21%) and the Americas (13%).

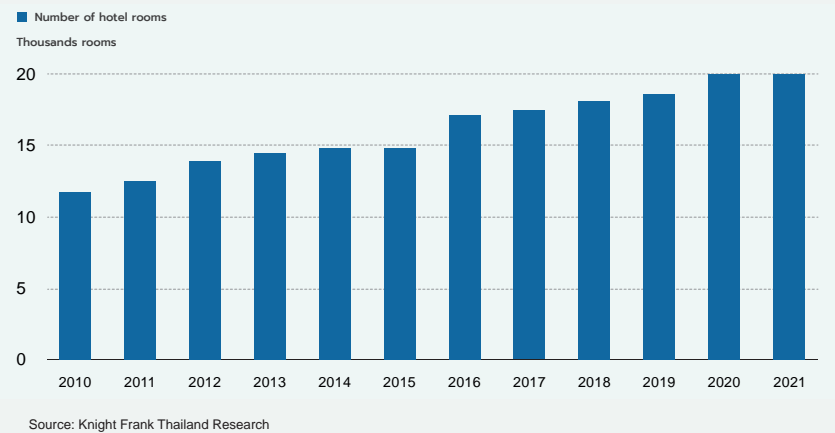
Supply&Demand

As travelling restrictions remained in place during most of 2021, demand for hotel accommodation continued at its lowest levels. The average occupancy rate of five-star hotels in Bangkok was 21%, 6 p.p. lower than that in 2020. The number of domestic and foreign tourists remained low because of several pandemic outbreaks, multiple clusters of Covid-19, and the late vaccine rollout. The inoculation of Thai residents started in late February 2021, and as of the end of 2021 circa 64% of the total population was fully vaccinated with two doses. The hotel occupancy rate improved in the second half of 2021 to 22%, driven by the increase in domestic demand supported by the subsidised tourist campaign named 'We Travel Together' and the relaxation of entry

BANGKOK'S INTERNATIONAL VISITORS ARRIVAL



BANGKOK'S LUXURY HOTEL STOCK



requirements to foreign visitors under the 'test & go' scheme in November 2021. Yet with weak demand and a large number of hotel rooms in the city, the Average Daily Rate (ADR) of luxury hotels dropped by 34% YoY to THB 2,949.

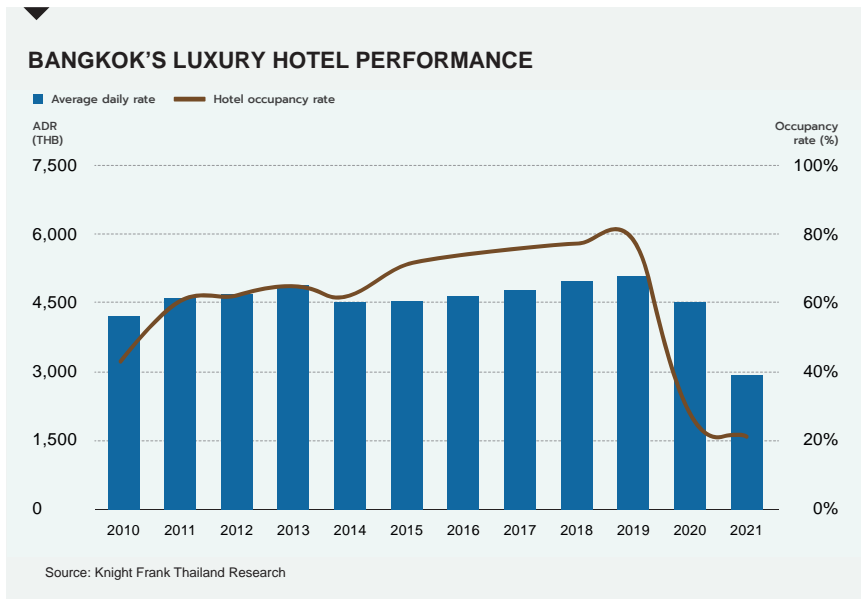
The year 2021 ended without any new hotel openings in the luxury segment. Given the poor market outlook, hotels with plans to open in 2021 were delayed. New luxury hotel openings are expected to add circa 3,000 keys in 2022 if new hotels in the pipeline go ahead. Yet, several hotels in the

upscale and midscale segments opened in 2021, including Glow Sukhumvit 71 (108 rooms), Oakwood Hotel & Residence Bangkok (142 rooms), and Maitria Hotel Rama 9 (209 rooms), Shama Yenakart Bangkok (136 rooms), The Quarter Silom (160 rooms), The Quarter Ploenchit (160 rooms), Holiday Inn Express Bangkok Ratchada (220 rooms), JAL City Bangkok (324 rooms), and the Courtyard by Marriott Suvarnabhumi Airport (617 rooms).

Review & Outlook

The country's reopening under the 'Test & Go' scheme in November 2021 had a positive response. The number of monthly international visitors increased to six digits just before the suspension of the scheme by the risk of the Omicron variant in late December 2021. The recovery of the hospitality industry relies on the ease of travel restrictions in Thailand and its main market sources, which remain unpredictable. The high level of vaccination rate globally seems not to be enough to stop the spreading of the virus. We expected to see a bounce-back of tourism activities by late 2021, but things turned for the worse, first with the Delta wave, and later with the high transmissible variant Omicron. At the beginning of 2022, several countries reintroduced travel restrictions and postponed border reopening plans. Nevertheless, Omicron has been associated with mild to moderate symptoms, that might lead to less restrictive measures to help cut down the spreading. Subject to the resume of the 'Test & Go' scheme in Thailand, the number of international tourism in 2022 is likely to pick up surpassing that in 2021, initiating the recovery of the tourism sector, with a gradual increase in the number of international tourists mainly from traditional feeder markets such as Europe, North America, and the Middle East. However, it is unlikely to reach significant levels in the number of tourists without China, the main tourism market feeder, that keeps its zero-Covid policy discouraging Chinese tourists from travelling abroad. The Bank of Thailand forecasts 5.6 million foreign arrivals in Thailand in 2022, mostly during the second half of the year.

Even though the pandemic is not controlled yet, and new variants may arise after Omicron, we can be more optimistic in 2022 due to the high inoculation rates and government experience in handling the situation when compared to the beginning of the pandemic in early 2020. Ease of travel restrictions and simple travel rules are key factors to restore travellers' confidence and drive the recovery in the tourist industry in 2022.



BANGKOK RETAIL OVERVIEW

Highlights

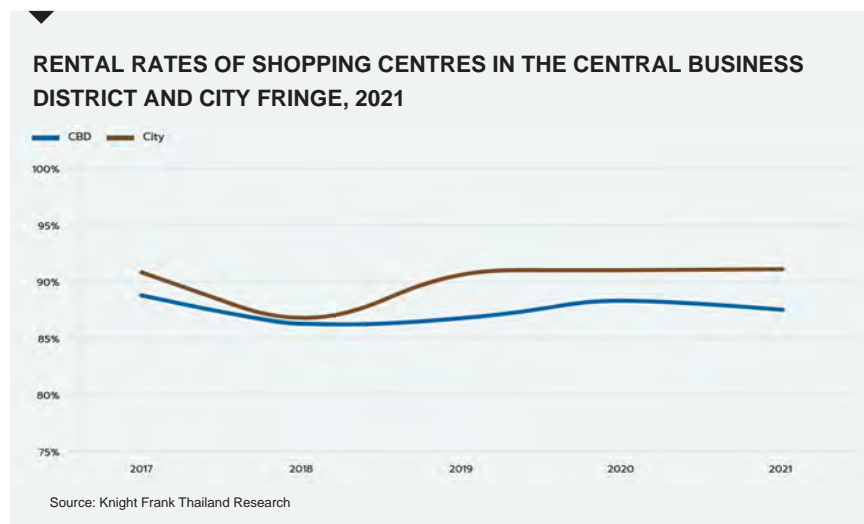
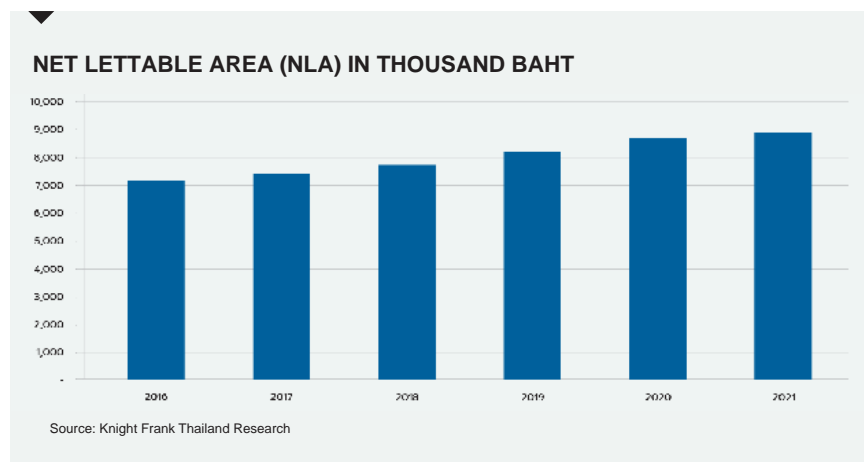
In 2021, shopping centre businesses still had to face the problem of the epidemic of COVID-19 and its variants. As ordered by the government, there was limited openings of shopping centres for disease control, resulting in lost revenue for shops. The shopping centres needed to help their tenants, resulting in a 20-30 percent drop in overall shopping centre revenue from the previous year. Shopping centres adapted to cope with the disruption, however, and used phygital (physical + digital) retail as a strategy to drive their businesses further.

Supply

The market situation of shopping centres in Bangkok and its vicinity in 2021 has a supply of approximately 8.86 million square meters. Excluding supermarkets and convenience stores. The amount of reserve has increased quite a bit, only 2 per cent, which in the past 5 years has averaged an average rate of 4 per cent per year. This year, the number of rental spaces has increased relatively little. Most of the new projects are community malls and retail spaces supporting office buildings. Due to the epidemic situation of COVID-19 that came back to intensify in Wave 4, especially the Covid-19 virus Delta species that has spread quickly and has a higher mortality rate; as a result, entrepreneurs who have plans to develop new projects or launch new projects have postponed their operations.

Rental Rate

For leading shopping centres, the occupancy rate remained high. For example, shopping centres under Central Group's overall occupancy rate in the first quarter of 2021 was 91 percent. For places catering to foreigners, there were some reduced rental rates and some place had the average occupancy rate decreasing to about 20-30 percent. However, the occupancy rate may not reflect actual performance. This is because the rental rate in some deals have been reduced or the tenant may have changed the rental format to a percentage of gross profit. Sometimes the occupancy rate decreased



in some periods due to temporary or partial renovations, etc. Therefore, revenue from rent and service charges more clearly reflects the performance of the shopping centre.

As for income from renting spaces inside the shopping centres, in 2021, it is still another year that the impact is relatively high.

When operators needed to cooperate with the government and limit services in shopping centres to control the epidemic, the number of customers who regularly

use the shopping centre services has decreased, especially during the 3rd quarter, when the announcement of the opening time limit for more than 51 days directly affected the tenants. Shopping centres needed to reduce rental income and offer tenant assistance during the crisis. According to the analyst meeting report, we found that leading shopping centres had a continual decrease in revenue of approximately 20-30 percent from the previous year (in 2020, shopping centre operators already had decreased income of an average of 30-40 percent from the previous year).

Consumer Confidence Index

As of December 2021, the Consumer Confidence Index rose for the fifth consecutive month to 47.0. An increase in the Consumer Confidence Index is a good sign for the shopping centre business because it is directly related to the consumer sector. The improvement in consumer confidence results from the domestic economy that has begun to recover in line with continuously expanding exports. And the situation of the epidemic of the COVID-19 virus has improved. Although the symptoms of the infected were not as severe as the Delta variant, operators still need to be vigilant in the future.



Tenant

Shopping malls in Thailand receive rental income in two types of formats, namely, fixed rental rates under contracts or a Gross Profit or GP sharing model, which is divided into different proportions for each shopping centre. For example, the rental fee is kept at a fixed rent throughout the contract with GP at the ratio of 60:40, etc. The Research Department and Project Development Consultancy of Knight Frank Chartered (Thailand) found that widely known name brands are the main tenants of leading shopping centres in Bangkok. They can be divided into 8 product categories led by the fashion category consisting of brands like Uniqlo, H&M, ZARA, MUJI, etc.; and the home decoration category consisting of HomePro, SB Design Square, Index Living mall, Koncept The Living, H&M Home, Zara Home, etc. For the financial institution category, the current trend is for tenants to reduce the rental space's size due to the change in consumer behaviour where use of mobile banking application services is gaining in popularity. Also, small fashion products are focusing more on selling in online channels, and having physical space to build customer confidence doesn't have to be very large. Meanwhile, home decoration product and office equipment retailers tend to expand. Given the effects of the

EXAMPLES OF MAIN TENANTS OF SHOPPING CENTRES IN BANGKOK, BY CATEGORY



New supply in the first half of 2022

COVID-19 epidemic, many companies have changed their policies for Work from Home employees, causing a demand for more furniture and equipment for working from home, for example.

As for new supply in the first half of 2022, it is expected that two new shopping centres will be opened, namely, Terminal 21 Rama 3, which has been completed in January 2021 and Don Donki: Seacon Bangkae. In addition, the news will be launched at the end of the year for the status of projects such as ICONSIAM Phase 2, Marketplace Wongsawang, Saimai Avenue, Silom Edge, etc.

Phygital Retail is becoming a strategic tool to drive the retail industry

Phygital retail is physical + digital. It combines both online and offline marketing to meet consumers' emotional and practical needs. It involves impressive customer experience and customers can click online to shop easily. They can make an appointment to pick up the product in front of the shop or immediately use the home delivery service. Sometimes, entrepreneurs may have store sales that look unsatisfactory. But a growing percentage of online sales comes from customers who first visit the store and then decide to buy online. And by creating an omnichannel shopping experience for customers, retailers will be able to connect with old customers to lead to repeat purchases continuously.

The COVID-19 crisis has accelerated the entry of the e-commerce disruption business. Entrepreneurs have adapted to changing consumer behaviour, and 2021 proved that consumers continue to consume offline and online products. However, there is a more innovative way to buy and spend more time checking the prices of goods and services online before deciding. Therefore, the phygital retail marketing strategy is the direction entrepreneurs adapt to use in the shopping centre business. The Research and Project Development Consultancy of Knight Frank Chartered (Thailand) has compiled 8 phygital retail characteristics that are popularly used by entrepreneurs, as follows:

1. Customers can choose a method of purchase. They can make an appointment to pick up the product in front of the shop or can use the store's service for immediate home delivery. This format is called buy online, pickup in-store (BOPIS).
2. Customers can choose a payment method, whether it is a standard payment or with RFID technology.
3. Stores use AR, VR, MR technologies to create customer experiences, such as

using AR to let customers try on clothes digitally while in the store and using VR to bring customers into a digital experience to browse brands and products. The use MR is in showing the sample unit of condominiums, etc.

4. Endless Aisle is popular with stores with their e-commerce channels. It enables customers to order products that are not in stock or that are not available at the store through the point of sale at the store and with home delivery service.

5. SMS Sniper sends automatic promotional messages when customers enter the store area. This builds relationships with customers both before and after the sale and can receive feedback from customer reviews to improve products and services further.

6. Retailers create a storefront on and use social media to build a brand identity to reach consumers. This is now prevalent and uses a state-of-the-art platform and algorithm, enabling brands to use the ChatBot system to help sell products. For example, they can shoot advertisements or precisely submit promotional offers to the target audience.

7. Influencer marketing integrates marketing through influencers in the online world, whether real people or a virtual character or virtual influencer, for example, Lu do Magalu, Lil Miquela, Barbie, Guggimon, Knox Frost or Thai icons that have begun to be created such as ai_ailynn, Katie, etc.

8. Content marketing is the creation of articles by people who specialise in that subject to reach the target group directly, answering questions with a degree of personalization. This kind of marketing in Thailand includes OneSiam Super app, for example.

BANGKOK OFFICE OVERVIEW

OFFICE PROPERTY MARKET INDICATORS

	5.66M SUPPLY (sq m)	4.62M OCCUPIED SPACE (sq m)	81.7% OCCUPANCY RATE	793 ASKING RENT (THB / sq m / month)
% Change				
Q-o-Q	▲ 2.7%	▲ 1.0%	▼ 1.4% pts.	▲ 0.9%
Y-o-Y	▲ 5.2%	▲ 0.5%	▼ 3.8% pts.	▼ 0.5%

Highlights

Supply

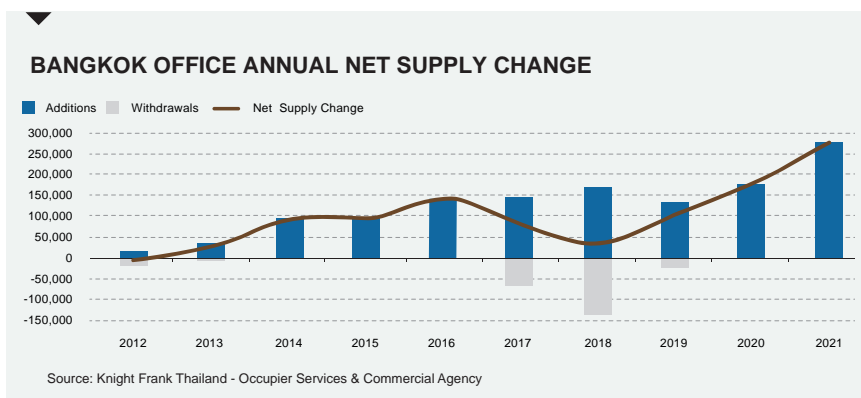
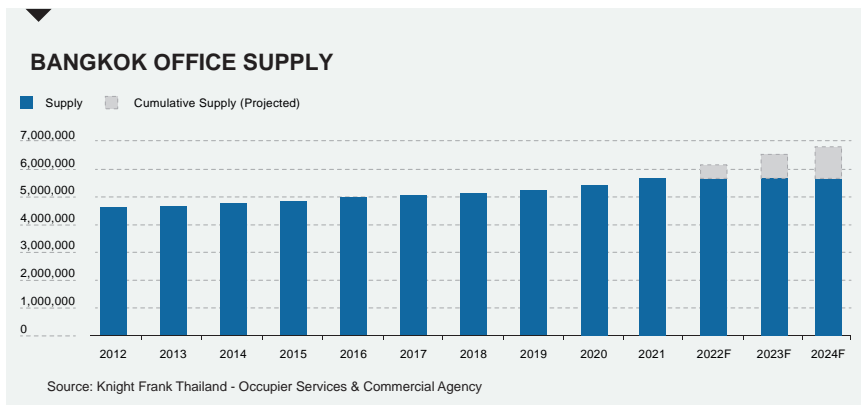
Total supply of office space in Bangkok increased by around 148,000 sq m or 2.7% Q-o-Q this quarter following the completion of 6 new buildings. For the full year, supply increased by 280,000 sq m or 5.2% to reach 5.66 million sq m, representing a 10-year record growth rate.

Future Supply

Around 1.70 million sq m is in the projected supply pipeline from 2022 to 2026, adding an average of 340,000 sq m to the market each year. 66% of the new supply will be in the CBD. Currently, we do not anticipate any significant completion delays except for Mochit Complex, which is now estimated to be completed in 2028 instead of 2026. The next 2 years may change the market landscape significantly as 25 new projects with a combined lettable area of 850,000 sq m are scheduled for completion.

Demand

On a positive note, leasing activity improved significantly as take up increased from 45,000 sq m in Q3 to 116,000 sq m this quarter, thanks to the strong leasing performance of newly completed properties. Meanwhile, the total amount of space vacated was 70,400 sq m. As take up exceeded the amount of space vacated, Q4 net absorption was at 45,500 sq m, the highest level recorded ever since the COVID-19 pandemic started.



For the full year, demand showed strong signs of recovery as annual net absorption rebounded from a -121,000 sq m contraction to a 24,800 sq m expansion this year. As a result, total occupied space increased by 0.5% to reach 4.62 million sq m. Nevertheless, the market is still relatively subdued in comparison to the

pre-COVID period during which average net absorption was approximately 96,000 sq m per year, and total occupied space reached an all-time high of 4.71 million sq m.

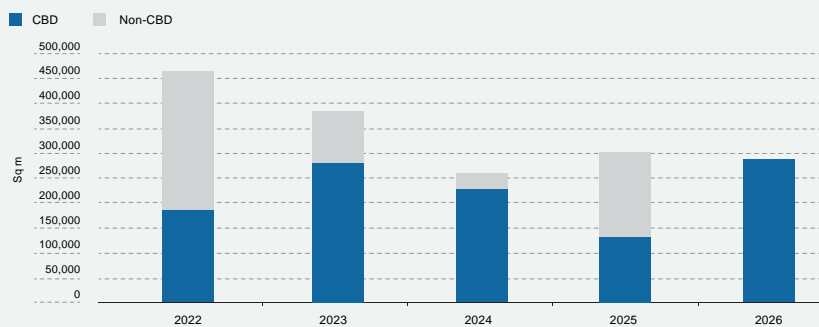
Demand for space at new and refurbished office buildings was a strong driver of

leasing activity over the past year. 44% of total take up in 2021 was for new and refurbished supply, the highest share of take up over the past decade. It indicates that while cost savings are a business priority, many companies still value “high quality” spaces that can meet the modern-day requirements of their employees. By reducing space via workplace strategy initiatives and leveraging the tenant’s market to achieve favorable lease terms, companies can relocate to a better office space today for a lot less than before the pandemic.

Although the total amount of space leased increased, the market occupancy rate dropped further to 81.7%, falling by 1.4% Q-o-Q and 3.8% Y-o-Y as supply continued to outpace demand. Occupancy rates dropped across all grades, but it is evident that grade B properties were the most affected from the shifting property market dynamics from an occupancy rate perspective. From 2012 to 2019, the grade B occupancy rate was consistently above 90%. In the following 2 years, it plunged by 14.7% points to 76.8%. The poor performance of new grade B properties have only served to highlight the intensifying competition for tenants and the diminishing value proposition grade B properties have for relocating tenants. Although the occupancy rate dropped, grade A remains the best performer with an average occupancy rate at 88.1%. Meanwhile, grade A- (properties that can justify an asking rent in the grade A range but do not meet all the required criteria to be classified as A) also presents an attractive alternative for tenants that would like to upgrade their space, but do not have the budget for grade A or require a CBD location.

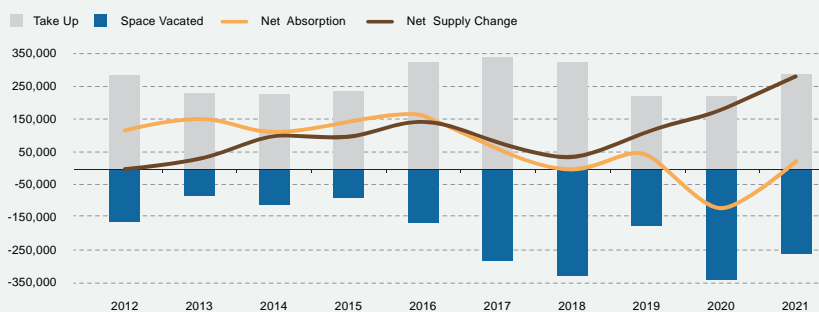
The average occupancy rate for CBD properties dropped by 2.8% points Y-o-Y to 84.6%, falling for all sub-markets we track. Ploenchit – Chidlom – Wireless remains the strongest CBD sub-market, with an average occupancy rate of 86.9%. Meanwhile, the average occupancy rate for non-CBD properties dropped by 5.0% points to 77.8%. Currently, it is unclear if the pandemic has influenced tenants’ location

BANGKOK OFFICE FUTURE SUPPLY



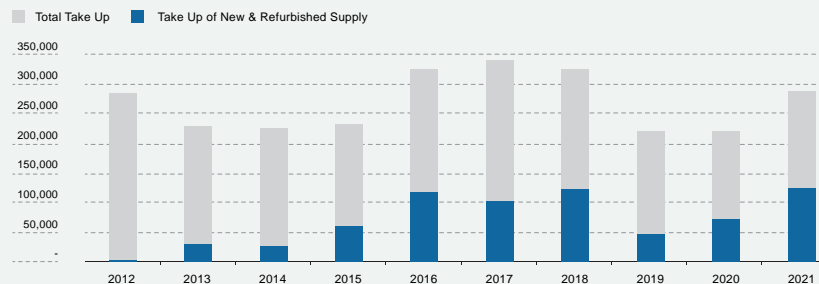
Source: Knight Frank Thailand - Occupier Services & Commercial Agency

BANGKOK OFFICE SUPPLY – DEMAND DYNAMICS



Source: Knight Frank Thailand - Occupier Services & Commercial Agency

BANGKOK OFFICE ANNUAL TAKE UP BY SUPPLY TYPE



Source: Knight Frank Thailand - Occupier Services & Commercial Agency

preference, but we have some anecdotal evidence that existing companies still prioritize remaining in the same area as their existing office to minimize disruptions to their workforce.

Rental Rates

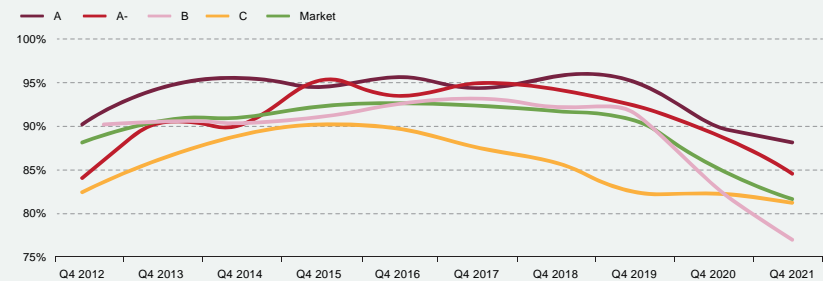
With the new supply added this quarter priced above market, the average asking rent increased by 0.9% Q-o-Q to 793 baht per sq m per month. Nevertheless, it fell by 0.5% Y-o-Y as most existing properties either kept their asking rate constant or reduced it to a modest extent. Annual rental growth has slowed considerably in comparison to the 10-year average rate of 3.7%. While the asking rent has been stable, landlords are a lot more flexible in the negotiation process. With more than 6 months of rent free offered in some deals, the effective rate can be up to 30% lower than the asking rent at some properties.

The average asking rent for CBD properties rose by 0.9% Q-o-Q to 898 baht per sq m per month but is still down 1.3% Y-o-Y. Nana – Asoke – Phrompong is the only area that experienced rental growth both on a quarterly and annual basis, rising to 905 baht per sq m per month. For non-CBD properties, the asking rent increased by 0.6% Q-o-Q and 1.4% Y-o-Y. The Bangna – Srinakarin area was a strong driver of rental growth outside the CBD, with the average asking rent rising by 3.4% Q-o-Q and 6.2% Y-o-Y. However, this was mainly due to new supply priced above the sub-market average rather than an increase in the rate at existing buildings.

Review & Outlook

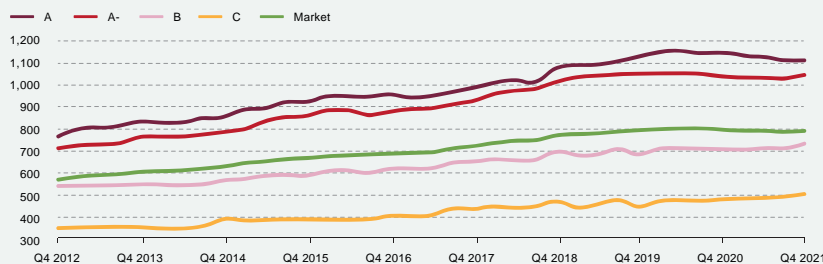
Over the past 2 years, companies have gradually adapted to the COVID-induced changes and have had an opportunity to reassess their business needs and requirements. In terms of the workplace, many have successfully challenged the status quo that employees need to be physically be in the office every day to be productive by implementing remote work on an unprecedented scale. We estimate that at its peak, around 70% to 80% of employees in companies that require office space in Bangkok worked from home to some extent. At the same time, companies also learned that sustained working from home is not a direct substitute for the office; Some business functions can't operate efficiently outside of the office and

BANGKOK OFFICE OCCUPANCY RATE BY GRADE



Source: Knight Frank Thailand - Occupier Services & Commercial Agency

BANGKOK OFFICE AVERAGE ASKING RENT BY GRADE



Source: Knight Frank Thailand - Occupier Services & Commercial Agency

BANGKOK OFFICE AVERAGE ASKING RENT BY GRADE

	Q4 2021	Rent % Change		10 Yr. Annual Growth Rate
		(Q-o-Q)	(Y-o-Y)	
Market	793	▲ 0.9%	▼ 0.5%	▲ 3.7%
Grade A	1,112	▲ 0.1%	▼ 3.0%	▲ 4.2%
Grade A-	1,046	▲ 1.9%	▲ 0.7%	▲ 4.3%
Grade B	731	▲ 2.8%	▲ 3.8%	▲ 3.8%
Grade C	503	▲ 2.5%	▲ 5.4%	▲ 4.4%

Source: Knight Frank Thailand - Occupier Services & Commercial Agency

BANGKOK OFFICE SUB-MARKET INDICATORS

Area	Average Asking Rent	Rent % Change		Occupancy Rate (%)	Occupancy % Change	
		(Q-o-Q)	(Y-o-Y)		(Q-o-Q)	(Y-o-Y)
CBD	898	▲ 0.9%	▼ 1.3%	85%	▼ 1.0%	▼ 2.8%
Ploenchit - Chidlom - Wireless	1,031	▲ 0.4%	▼ 5.1%	87%	▼ 3.3%	▼ 2.7%
Nana - Asoke - Phrompong	905	▲ 3.3%	▲ 1.4%	87%	▼ 0.2%	▼ 2.3%
Silom - Sathorn - Rama IV	848	▼ 0.2%	▼ 0.8%	83%	▲ 0.3%	▼ 2.5%
Thonglor - Ekkamai - Phra Khanong	780	▼ 0.5%	▼ 0.5%	86%	▲ 2.2%	▼ 3.3%
Non - CBD	653	▲ 0.6%	▲ 1.4%	78%	▼ 1.9%	▼ 5.0%
Petchburi - Rama IX - Ratchada	703	▲ 0.3%	▲ 1.7%	81%	▼ 1.1%	▼ 6.0%
Paholyothin - Viphavadi	665	▲ 1.1%	▼ 1.2%	79%	▲ 0.2%	▲ 0.4%
Bangna - Srinakarin	598	▲ 3.4%	▲ 6.2%	68%	▼ 5.7%	▼ 8.5%

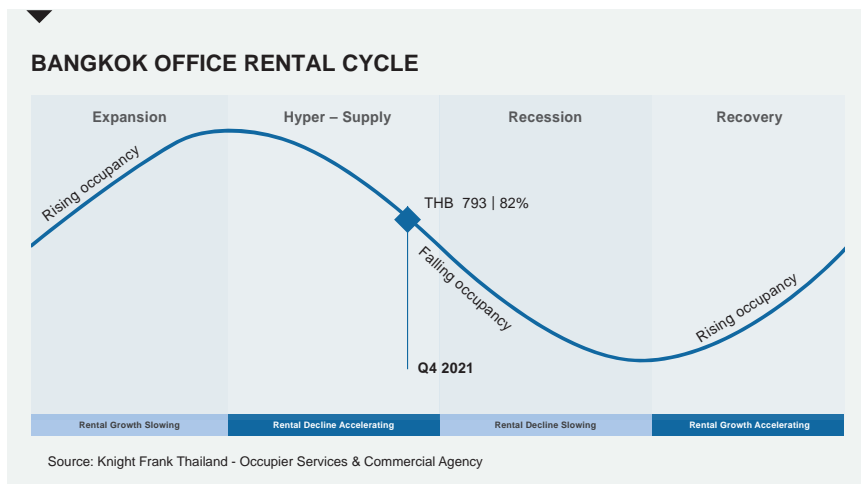
Source: Knight Frank Thailand - Occupier Services & Commercial Agency

many employees have reported obstacles associated with long term remote work, most notably feeling disconnected and overworked because of unclear work-life boundaries.

There is a growing consensus that work from home is here to stay, but within the confines of a hybrid model - permitted on an as-needed basis - meaning that the office is still an important element for businesses. The question is: How much space do we need? Tenant approaches in Bangkok vary greatly, adding another layer of complexity. While some expect to retain the same amount of space, others are finding that hybrid work and novel approaches like activity-based working enable them to reduce space by 30%-40%. In contrast, there are companies in thriving sectors such as E-Commerce that now require more space, although the overall market contraction suggests that they are in the minority.

Regardless of approach, it is clear that "flight to quality" still holds, as indicated by the performance of the various property grades. Although average occupancies did drop, grade A and A- properties are still the best performers in the market, signaling that tenants haven't reverted to viewing their corporate real estate entirely as an expense despite the sustained economic slowdown. Arguably, COVID-19 only served to strengthen the preference for high quality workplaces as factors such as health, safety, wellbeing, and convenience become increasingly important to the attraction and retention of talent. On a related note, grade A and A- properties that opened in Q4 drove a significant amount of leasing activity in this quarter, leading to positive net absorption for the full year. While we are still far from the 96,000 sq m average annual net absorption level pre-COVID, we expect demand to continue its gradual recovery as tenants continue to roll out their adapted corporate real estate strategies with increasing certainty.

Although we anticipated varying outcomes in the market, we didn't expect that the occupancy of grade B to plunge so sharply and rapidly. Traditionally, these



BANGKOK OFFICE MARKET BALANCE PROJECTION

2022	Landlord	Balanced	Tenant
2023	Landlord	Balanced	Tenant
2024	Landlord	Balanced	Tenant

Source: Knight Frank Thailand - Occupier Services & Commercial Agency

properties were the most stable and represented the best value for money, which in theory should have shielded them from market volatility as they are more affordable than grade A and A-, and offer higher quality workspaces than grade C. However, the recent supply influx, greater incentives offered and the sustained tenant preference for higher quality workplaces meant that grade B properties struggled to compete for new tenants and were faced with space reduction from their existing tenants.

We maintain our projection that the tenant's market will persist over the next 3 years. By our most optimistic projections in which the new supply is completed as projected and net absorption incrementally increases to twice the historical average by 2026, the market occupancy rate will be around 77%. Our forecasting model suggests that we are headed into a period during which office building occupancies in the 70% to 80% range becomes the new baseline.

Asking rent levels will most likely be held constant or increased at a low single-digit % in the short term. Landlords will hesitate to drop headline rents as this could possibly have a negative impact on their building's public image and dissatisfy existing tenants locked in at higher rates. However, the effective rent will decline significantly due to considerable discount and incentives offered in negotiations for sizeable tenants.

**We like questions, if you've got one about our research,
or would like some property advice, we would love to hear from you.**



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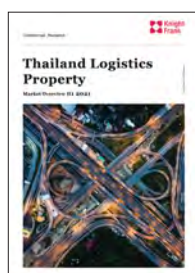
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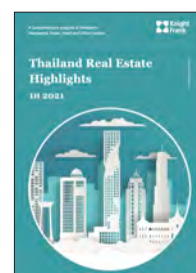
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