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### Economics/Financial

# The Emergence of Asian Supertalls





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#### Jonathan Hsu

Hsu joined CBRE in June 2013 as director of the Asia-Pacific research team, leading the fundamental analysis for the office, retail, and industrial subsectors from a regional perspective. He is responsible for forming and delivering the regional occupiers' strategy to internal business lines and to CBRE's key clients in the region. Prior to CBRE, Hsu covered listed real-estate securities in Asia as an equity research analyst. As vice president at Barclays, Hsu covered listed developers and landlords in Hong Kong and China. Prior to this, he served as associate director of the UBS Global Real Estate Strategy team.

#### Cynthia Chan

Chan joined CBRE in mid-2010 as senior analyst of the Asia-Pacific research team. She has been working closely with local research members to conduct fundamental analysis for the retail and industrial sectors from a regional perspective before a recent focus on the office sector. She is also assisting in the delivery of regional occupiers' strategy to CBRE's key clients in the region. Before joining CBRE, Chan worked as an equity research analyst to cover listed conglomerates in Hong Kong. Prior to this, she started her career as an analyst in real estate direct investment.

Within Asia, a high density of tall buildings is viewed as being synonymous with being a successful financial hub. It is widely believed that constructing supertall office buildings can enhance the competiveness of a city's business environment. Authorities in a number of markets have pursued this strategy as a means to establish their city as a financial center or to reposition their economies. This "build and they will come" approach has been adopted in several emerging financial markets across the region, with limited degrees of success.

#### Introduction

The creation of financial centers has traditionally underpinned the development of tall buildings in major cities worldwide. Prior to the advent of computers and the adoption of the Internet, there was a strong need for accounting, auditing, consultancy, and law firms to be in close proximity to each other in order to service key clients, such as large financial institutions and major corporations in other industries. As the financial sector expanded, the size of supporting industries increased in proportion.

This led to rapid growth in demand for office space and stimulated the expansion of Central Business Districts (CBDs), vertically and/or horizontally. The adoption of the safety elevator and advent of steel-frame construction facilitated the vertical development of office space to accommodate growing demand. Examples of vertical expansion include New York, which is home to the largest number of tall office buildings in the world.

Increasing demand for CBD space, combined with the gradual rise in construction costs,

resulted in higher rents, which predominantly financial sector tenants were able to afford. This meant that supporting industries had to move out and locate themselves some distance from the clients they served. Financial sector occupiers therefore came to dominate CBDs, and financial hubs began to emerge.

The pattern of vertical development is best illustrated by the Manhattan borough of New York City, which has been the leading global financial center since the 1920s. Over the past century, the skyline has evolved with the completion of numerous tall office buildings housing large financial institutions and major corporations. New York City continues to have the highest number of tall office buildings in the world, followed by Shanghai, Tokyo, Hong Kong, and Chicago (see Figure 1). With the exception of Shanghai, all of these cities are traditional financial centers.

New York, London, Hong Kong, Singapore, and Tokyo all rank highly on the Global Financial Centres Index (GFCI),¹ a ranking of the competitiveness of global financial centers. Three out of the top six cities are in Asia, and all these cities have a large number of tall office buildings. The high profile of these cities has created the perception that mature global financial centers are comprised of tall building clusters. In Asia, a high density of tall buildings is viewed as being synonymous with being a successful financial hub. Numerous city leaders are seeking to mimic the success of the likes of New York, Hong Kong, and Singapore. They do

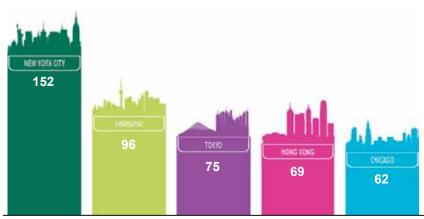


Figure 1. Cities with the largest number of tall office buildings (150+ m). Source: CBRE Research/CTBUH, June 2014.

<sup>&</sup>lt;sup>1</sup> The Global Financial Centres Index is a ranking of the competiveness of 83 financial centers based on over 25,000 financial center assessments from an online questionnaire, together with a total of 103 instrumental factors from organizations such as the World Bank, Economist Intelligence Unit, and the United Nations. Ratings in the GFCI 15 range from 423 (Athens) to 786 (New York).

so by adopting a "build and they will come" strategy of constructing tall office buildings with high specifications to attract financial sector companies as a means to establish their city as a regional financial center (see Figure 2).

# The Emergence of Asia as Hub For Tall Office Buildings

The development of tall office buildings in Asia began relatively recently, at the end of the 20th century. Construction accelerated dramatically in the early 2000s, with completions growing at an average of 40 new tall office buildings per year. In comparison, the United States currently sees the completion of an average of six new tall office buildings per year. As of June 2014, Asia was home to 55% of the total number of tall office buildings globally (see Figure 3). On a country level, China accounts for around one-third of existing tall office buildings worldwide.

In recent years, governments in a number of countries in Asia have supported the construction of supertall office buildings, defined as a building with a height of 300 meters or greater (see Figure 4). Supertall office buildings are viewed by authorities as a means to enhance the competiveness of their business environment so their city can establish itself as a financial center. Shanghai World Finance Center (SWFC) and Guangzhou IFC were constructed in accordance with this strategy.

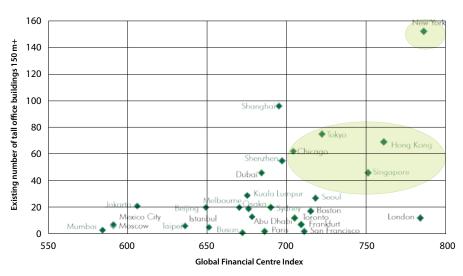


Figure 2. Global financial centers and their tall office-building numbers. Source: CBRE Research / CTBUH / Z/Yen Group, June 2014

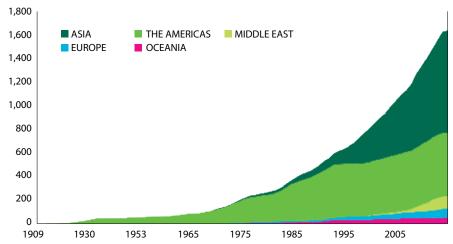


Figure 3. History of the construction of tall buildings. Source: CBRE Research / CTBUH, June 2014

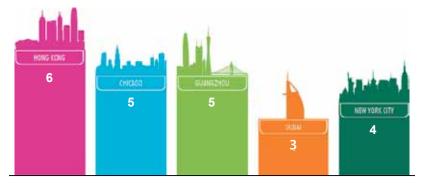


Figure 4. Cities with the largest number of supertall office buildings (300+ meters). Source: CBRE Research / CTBUH, June 2014

# Steps to success: Leverage strong relationships

Supertall office buildings in Asia tend to be developed with a high degree of government involvement. Guangzhou IFC was primarily developed by Yue Xiu Properties, a company established by the Guangzhou government to pursue economic and trade development opportunities in Hong Kong. Shenzhen KK 100 was constructed by Kingkey Real Estate Development Company Limited, whose founder is a high-profile member of various civil service organizations, such as the Chinese People's Political Consultative Conference and the Guangdong Political Consultative Conference.

That said, the challenges and complexity involved in constructing a supertall office building often necessitate the participation of a more experienced partner from overseas. For example, Shanghai World Financial Center was developed by Japan-based Mori Building Company and constructed by the Shanghai State Construction Group, which is currently developing the Shanghai Tower, a new supertall office building in the same city.

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In other countries, the impact of globalization and the relocation of manufacturing operations to cheaper markets have prompted authorities to reposition their economies and encourage the development of the financial sector. The construction of supertall office buildings has been a key component of this strategy. For example, Taipei 101 was constructed as part of a move to grow the financial industry in Taiwan. In Kuala Lumpur, the Petronas Towers were built in accordance with the government's wish to reduce Malaysia's dependence on the oil and gas industry and develop its financial sector. Elsewhere, the Burj Khalifa – the tallest building in the world – was built as part of the United Arab Emirates' government plan to gain more international recognition for Dubai and help support the growth of the country's services sector, while reducing its reliance on the oil industry.

# Steps to success: Enriching the occupier experience

In recent years, developers have sought to create vertical communities in supertall office buildings by integrating work areas with retail, hospitality, residential, and leisure facilities, in order to enrich the experience of occupiers and other users, with the ultimate aim of enhancing the image and prestige of the building. These components can include:

- Luxury hotels Guangzhou IFC, SWFC, and KK 100 all have five-star hotels on the top.
- Executive Clubs Occupiers can use executive clubs to host/entertain senior staff and clients.
- Observation floors Hong Kong ICC, KK100, and Taipei 101 have observation decks on high floors with public access. Canton Tower, Guangzhou has an observation wheel on the top floor.
- Fireworks, lights, and music shows Taipei 101, Hong Kong ICC, and KK100 launch firework displays and light and music shows during major festivals.
- Filming locations The high profile and iconic look of supertall office buildings means they are often featured in major movies.

### Key Drivers of Leasing Office Space In Asian Supertalls

CBRE Research recently conducted a survey of its office leasing agents in key markets around the region, asking them to rank the various criteria influencing a company's decision to lease space in a supertall office building (see Figure 5).

### The positive image and branding

associated with supertall office buildings is often cited by tenants as a key reason behind their leasing decision. Occupiers frequently use their location in tall office buildings as a marketing tool to boost their corporate image and branding.

Most supertall office buildings are **very well located** in prime districts or newly developed CBDs. These locations boast high standards of infrastructure and connectivity to transportation networks. This is particularly true in a number of major cities in China, where local authorities are supporting the creation of new CBDs as means of city redevelopment and infrastructure investment.

The **building quality** of supertall office buildings is very high. Planning, designing, constructing, and operating a supertall office building is very demanding and must overcome numerous challenges, including wind and earthquake resistance, fire separation and elevator connectivity. The

power back-up, air-conditioning and water supply systems are generally of a much higher standard than in other Grade "A" office buildings.

**Large floor plates** are another feature of supertall office buildings. Multinational tenants – particularly those in the financial sector – generally prefer large floor plates.

Many supertall office buildings are mixed-use; this creates an efficient and integrated vertical community. Tenants of supertall buildings can utilize retail, hospitality, and other services within the same building. For example, the SWFC includes office facilities, the 15-floor Park Hyatt hotel, 25 restaurants, and 3 floors of shopping facilities. For occupiers, the ability to offer a range of facilities to their clients and staff is a major draw.

# Why do tenants occupy space in supertall office buildings?

Taipei 101, Taipei: "Supertall office buildings can improve tenants' recruitment and retention of staff. Potential employees believe it will be a comfortable and prestigious working location."

**SWFC, Shanghai:** "Supertall office buildings provide tenants with spectacular views of surrounding areas such as mountains, harbors, and cityscapes."

Kingkey 100 (KK100), Shenzhen: "The property management of supertall office buildings is

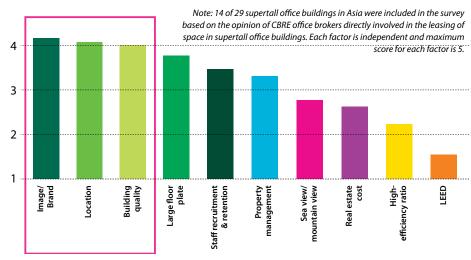


Figure 5. Factors influencing tenant selection of space in supertall office buildings. Source: CBRE Research / CTBUH, June 2014

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performed to a very high standard, particularly maintenance, security, and upgrading."

#### Do supertall office buildings command a rental premium?

The completion of supertall office buildings sometimes initially results in a slight market supply imbalance. However, the key differentiators identified above enable supertall office buildings to command a rental premium over other Grade "A" office buildings in the same (sub)market after the first rent review cycle. This rental premium is between 10-40% above the average Grade "A" rent in the same submarket. However, the key differentiators of supertall office buildings vary by market, meaning that the rental premium can also vary. For example, rents in Taipei 101 are only 5–10% higher than in other Grade "A" buildings in the Xinyi CBD in Taipei. In Shanghai, however, the SWFC commands an average rental premium of more than 30% compared to other Grade "A" office buildings in the Pudong submarket where it is located.

Rents in supertall office buildings also vary significantly between the upper and lower zones, usually between 50–100%. This is partly explained by the fact that large occupiers or anchor tenants are frequently offered reduced rents to fill in vacant space on lower floors during the preleasing stage, while upper floors are reserved for tenants willing to pay higher rents for the most prestigious space in the building (see Figure 6).

### Supertall Office Buildings' Tenant Mix

Authorities in a number of cities in Asia are supporting the construction of supertall office buildings, as they believe it will help them establish their market as a financial center. One straightforward way to assess whether this objective has been achieved is to look at the tenant mix of supertall office buildings.

The Downtown district of Manhattan - home to Wall Street - is regarded as one of the world's leading financial centers. In this market, tenants in the financial services, business services, and legal sectors occupy the bulk of space, accounting for 58% of total tenants. Occupiers in the real-estate and technology, media, and telecommunications (TMT) sectors are also increasing their footprint in the area (see Figure 7).

The analysis reveals that, perhaps unsurprisingly, the tenant mix in supertall office buildings in Asia is similar to that in the downtown district of Manhattan. The banking and financial services sector accounts for around 55% of the total occupied space in supertall office buildings across Asia. Occupiers in this sector lease space in supertall office buildings because of the key differentiators outlined above, and also because many of them receive incentives from authorities keen to expedite the development of their markets or a specific district into a financial center.

Business-services and legal firms are another key occupier of supertall office buildings in the

region, accounting for 16% of total occupied space. Supporting business units such as accounting, consulting, and legal firms need to be in close proximity to the companies they serve in the banking and financial services sector.

The TMT sector is an up-and-coming user of supertall office buildings and now accounts for 11% of total occupied space in such buildings in the region. Occupiers in this sector have been increasingly active in leasing prime space in recent years and are upgrading from decentralized areas offering cheaper rents.

Within Asia, certain cities and certain buildings have been more successful in attracting financial sector tenants. Supertall office buildings such as Two International Finance Centre (Two IFC) and the International Commerce Centre (ICC) in Hong Kong - an established financial hub - understandably have a high proportion of financial-sector tenants. However, a look at the tenant mix of individual buildings in emerging financial hubs in the region presents a different picture. One success is the SWFC. More than half of the space in the building is occupied by tenants from the financial services sector. The Shanghai government has provided attractive tax incentives to banking and financial services firms to take up space.

The performance of other supertall office buildings in emerging financial centers in Asia

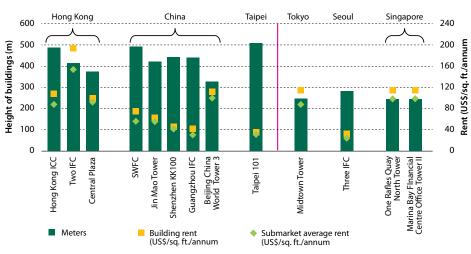
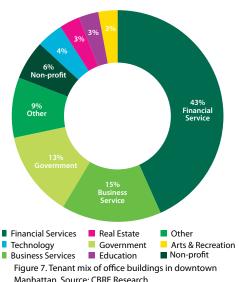


Figure 6. Rental differential between supertall office buildings and their submarkets. Source: CBRE Research



Manhattan, Source: CBRE Research

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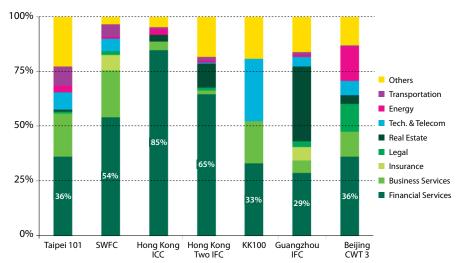


Figure 8. Tenant mix of major supertall office buildings in Asia. Source: CBRE Research

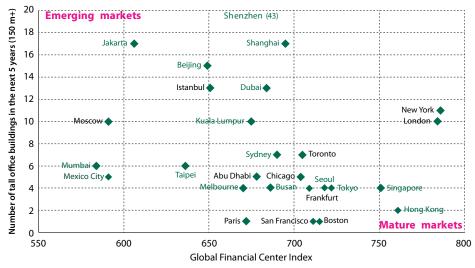


Figure 9. Global financial centers and the new supply of tall office buildings. Source: CBRE Research / CTBUH / Z/Yen Group, June 2014

has been mixed (see Figure 8). The likes of KK100 in Shenzhen, Guangzhou IFC in Guangzhou, China World Tower 3 in Beijing, and Taipei 101 in Taipei all have a relatively lower proportion of financial sector tenants. Nevertheless, although the Cai Wu Wei submarket of Shenzhen caters mostly to the technology and telecommunications sector, KK100 has still managed to attract a higher proportion of finance-sector tenants compared to other Grade "A" buildings in the district.

In other cities, the industry specification of the local market has impacted the tenant mix of supertall office buildings. This partly underlines why the "build and they will come" strategy is often not as successful as expected. It takes time for the local market to refocus and adapt.

For example, a number of major real estate companies are headquartered in Guangzhou. Several of these firms have taken space in Guangzhou IFC for self-use; the proportion of space occupied by tenants in this sector is therefore similar to the proportion of space occupied by financial-services firms. Another example is Beijing, where oil and energy companies are among the major drivers of office demand. Many large oil and energy companies have leased space in China World Tower 3 as their headquarters.

In Seoul, the local government planned the creation of the Yeouido Business District submarket as a new financial hub. The area is home to a number of tall and supertall office buildings, but has so far failed to attract a

critical mass of financial- and related-sector tenants.

These examples underline the fact that attempts to develop cities into national or international financial centers by constructing supertall office buildings to attract the finance sector have been largely unsuccessful. The "build and they will come" strategy adopted by emerging financial centers in Asia has not worked. While Shanghai has attracted a steady flow of financial sector occupiers and is making gradual progress towards establishing itself as a financial hub, other cities have been unable to attract the same caliber and volume of tenants, despite constructing high-quality supertall office buildings.

This reflects the reality that there are far more important success factors required than the mere construction of supertall office buildings for a city to establish itself as a regional or global financial center. These factors include the business environment, legal, and tax systems, market transparency, political stability, government efficiency, transport, and telecommunications infrastructure, capital flows, human capital, and reputational factors such as innovation. Cities such as Zurich, Geneva, Luxembourg, and Washington D.C., are all ranked in the top 20 of the GFCI, but do not have any office buildings taller than 150 meters.

## The Future Supply of Tall and Supertall Office Buildings in Asia

Most attempts by emerging cities to establish themselves as financial centers via the construction of supertall office buildings have so far been unsuccessful. However, the development pipeline of tall office buildings in emerging markets such as China, Indonesia, Malaysia, and India remains significant (see Figure 9).

Markets in China account for almost 60% of the total new supply of tall office buildings set to be completed worldwide within the next five years. Several Tier II cities in China aspire to establish themselves as national or international financial centers. This has resulted in government master planning to

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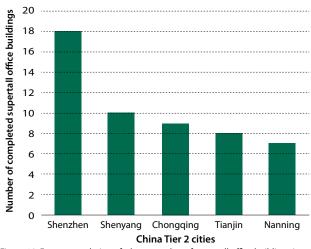


Figure 10. Future completion of a large number of supertall office buildings in China Tier II cities. Source: CBRE Research / CTBUH, June 2014

allocate and encourage developers to build tall office buildings in new and existing CBDs. Tier II cities comprise around 80% of the total supply of tall office buildings in China scheduled to be completed within the next five years, or roughly 47% of total new supply of tall office buildings globally.

China also dominates the development pipeline in the supertall building category over the next five years. The country accounts for 71% of the total future supply of supertall office buildings to be completed in the next five years, with Tier II cities accounting for 51%.

While new supply of supertall office buildings continues to increase, the recent slowdown in the Chinese economy, combined with tighter controls on the "shadow banking" industry, has resulted in weaker demand from the financial sector. This has led to growing concerns of oversupply in a number of markets. Some observers argue that oversupply is not an issue in the long-term, as they expect demand to gradually catch up with supply in Tier II locations as these cities mature, pointing to the pattern of office development witnessed in Beijing and Shanghai in recent years. Although office demand in China will continue to rise in the long term as the country continues to transition to a tertiary industry-driven economy, the level of demand in Tier II cities will remain relatively weak compared to Beijing and Shanghai, as these two markets are already firmly established as the country's political and financial hubs.

### Steps to success: Begin pre-leasing early

Most development in Asia is speculative, meaning that landlords often find their building becomes exposed to the risk of low occupancy during a market downturn. Major new office projects typically begin pre-leasing one year ahead of completion. Supertall office buildings usually begin pre-leasing two years ahead of completion, as they have such a large volume of space to fill.

Beginning pre-leasing early is a crucial part of the process of establishing a supertall office building's credentials as a viable business location. A sizeable early letting to a reputable anchor tenant can also stimulate interest from other occupiers. SWFC, Ping An Financial Center in Shenzhen, and Guangzhou IFC all began pre-leasing two years ahead of completion.

CBRE Research believes that the existence and future completion of a large number of supertall office buildings in Tier II cities such as Shenyang, Chongqing, and Tianjin (see Figure 10) undoubtedly creates a risk of oversupply. These cities are merely regional hubs within China – not national or international financial centers – and lack the means to attract a significant volume of financial sector occupiers to their market. Local governments should therefore be more realistic when forecasting office demand and planning land supply, in order to ensure their cities' stable economic development.

#### Conclusion

Over the next five years, the number of supertall office buildings in China and South Korea will surge, while Indonesia (Jakarta) will see the completion of its first supertall office building in 2015. Financial sector demand will be insufficient to fill the large volume of new supply, but this could provide opportunities for multinational occupiers in other sectors to secure high-quality and prestigious office space in good locations for relatively cheap rents.

CBRE Research has identified all these markets as having a high risk of oversupply in the short term. This pressure is unlikely to diminish in the medium term, and rental growth in these cities is likely to lag behind other Asia-Pacific markets.

Still, landlords of tall and supertall office buildings can command a rental premium; gain international recognition from their high-profile projects, and raise industry standards and expectations related to construction and property management.

Occupiers can benefit from the positive image and branding associated with being a tenant in a tall or supertall office building, and from proximity to supporting industries or services; being situated in a prime district or newly developed CBD, and the flexibility and convenience afforded by large floor plates. Other benefits include enhanced staff recruitment and retention, high standards of property management, spectacular views, sustainability and in-building access to services such as retail and hospitality.

Attempts by cities to establish themselves as financial centers by constructing supertall office buildings to attract financial sector tenants have largely been unsuccessful to date. For such an approach to succeed, it must be implemented in tandem with various other measures, such as creating a healthy business environment, ensuring political stability, establishing effective legal and tax systems, and investing in hardware and software infrastructure.

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