Pudong’s Skyscraper Economy

The Driving Force Behind Shanghai Becoming a Landmark Global City
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Pudong plays a key role in realising Shanghai’s vision of becoming an “excellent global city”, and prime offices in the CBDs will be a driving force in its development. Compared to the leading global cities, London and New York, Pudong’s CBD lacks a high number of top companies and clusters of modern service activities; its occupier base is also too narrow.

Colliers expects demand for prime office space in Pudong to stay firm, with demand spilling over from the CBD to the DBDs. Finance tenants will benefit from new policies, but demand from TMT tenants should grow faster. By area, new supply beyond core Lujiazui should expand east and south; New Bund-Expo and the North Riverfront will be new development hotspots; and the Huamu-Longyang road cluster will eventually emerge as a financial and business district. Big tenants should focus on these areas for expansion.

Colliers recommends that the Shanghai city government accelerate the opening-up of the finance and service sectors to attract more global company headquarters and top service businesses. The government should also guide diversification in prime office buildings with a focus on technology and creative activities. Landlords must heed the growing importance of foreign financial and TMT groups as tenants, and plan services accordingly. They should also study flexible workspace and devise more innovative and flexible leasing models.

Executive Summary

Pudong plays a key role in realising Shanghai’s vision of becoming an “excellent global city”. The “Skyscraper Economy”, i.e. the prime office environment in the CBD, will be a driving force in Pudong’s development. Compared to the so-called Alpha+++ global cities, London and New York, Pudong’s CBD requires further development in the following areas: a) number and calibre of multi-national companies (e.g. Fortune 500 groups); b) number of clustered modern service businesses; c) diversity of occupier sectors.

After thorough analysis, Colliers draws the following conclusions about the future of Pudong’s office market:

1. While demand for prime offices in Pudong will maintain healthy and steady growth, the future supply in CBDs will be extremely limited, driving demand to spill over to DBDs with sufficient supply.

2. In terms of demand, the financial sector (especially foreign institutions) should benefit from new plans and policies, and see growth accelerate. Meanwhile, the TMT sector should maintain rapid growth, and so diversify the tenants in Pudong’s prime office market.

3. In terms of district, new supply beyond core Lujiazui will expand eastwards and southwards. New Bund-Expo and the North Riverfront will be development hotspots in the short to mid-term, and the Huamu-Longyang road cluster should emerge as a financial and business district once the development of the 19 plots adjacent to Longyang Road station is complete.

4. In terms of leasing strategy, more tenants will prefer models which offer flexibility to adapt to a dynamic environment. Flexible workspace, which is expanding fast in the office market, should therefore become a normal option for companies in the future.

Colliers makes the following recommendations to three major stakeholders in Pudong’s future:

The city government should:

> Accelerate the opening-up of the finance and service sectors to attract more global company headquarters and top service groups. This should boost Pudong’s influence and its connections to the global economy;

> As in London and New York, guide diversification in prime office buildings with a focus on technology and creative businesses to enhance interaction and collaboration among tenant sectors.

Large office landlords should:

> Heed the growing importance of foreign financial and TMT groups as tenants, and plan services accordingly;

> Study the flexible workspace sector, and develop leasing models that respond to tenants’ increasing demand for flexibility and innovation.

Large occupiers should:

> Consider flexible office leasing models to adapt to the dynamic market environment;

> Pay attention to the new office supply in New Bund-Expo and North Riverfront clusters over the next 3-5 years for expansion or upgrading; and consider the new completions in the Huamu-Longyang Road cluster over the next 5-8 years as part of a long-term leasing strategy (especially for financial companies).
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Research Background

Shanghai’s master plan and GaWC

In January 2018, Shanghai officially issued The Shanghai Master Plan 2017-2035 (hereafter referred to as “Shanghai 2035”), which confirms the ambition of the city of Shanghai to be “one of the chief municipalities of China and the core of a world-class city cluster in the Yangtze River Delta area. Shanghai is also an international centre of economy, finance, trade and shipping, scientific and technological innovation and a cultural metropolis as well as a national historical city. Shanghai will be an excellent global city and a modern socialist international metropolis with world influence.” It also sets the vision of Shanghai in 2035: to build an excellent global city, an admirable city of innovation, humanity and sustainability, a modern socialist international metropolis with world influence.

The term “Global City” or “World City” is taken from the Globalisation and World Cities (GaWC) Research Network at Loughborough University, UK. As a global leading thinktank on cities in globalization, GaWC regards global cities as nodes in the world’s economic system and classifies them into levels of world city network integration. Shanghai was classified as an Alpha+ city in “The World According to GaWC 2016”, while the Alpha++ category includes only two cities, London and New York. By adopting “excellent global city” as its vision, Shanghai demonstrates a desire for integration and an ambition to achieve as much global influence as London and New York in the future.

Figure 1: The World According to GaWC 2016 (Class Alpha)
The “Skyscraper economy” contributes to the agglomeration of resources and capital. As of Q1 2017, there were over 239 office properties with eight stories or above in Lujiazui Financial City, of which 90 paid an annual tax of at least RMB100 million. These tax revenue streams have become a key income source for the Pudong and Shanghai municipal governments. In addition, the “skyscraper economy” plays the following strategic roles in realising Shanghai’s vision of integration and global influence.

1. Prime office properties accommodate business headquarters, which promote the city’s position in global cooperation.

While globalisation transforms businesses, global and regional headquarters make decisions to allocate resources. Take Alpha++ global cities as an example, New York City is home to 44 global headquarters of 2017 Fortune 500 companies, while London has attracted the European headquarters of nearly one-third of Fortune 500 companies, and houses branches of almost all major global financial institutions. In recent decades, the Pudong government has successfully attracted corporate headquarters to its CBDs, including Core Lujiazui and Zhuyuan. By the end of 2017, over 300 headquarters had been registered in Lujiazui Financial City, including 90 regional headquarters, which account for 40% of Pudong’s total and one fifth of Shanghai’s. These headquarters not only generate tax revenues, but also tighten the city’s connection to the world economy, laying a concrete foundation for realising Shanghai’s vision of being an “excellent global city”.

2. Prime office properties promote clusters of modern service businesses, enhancing the city’s influence on regional and global economy.

Globalisation drives inter-city cooperation and flows of goods, capital, talent and information, and through prime office properties districts are able to attract clusters of value-added service industries and so attract professional talent. According to the Pudong government, Lujiazui Financial City is home to nearly 800 licensed financial institutions, 727 financial service firms and 4,000+ professional service firms as of end-2016. This aggregation coupled with business headquarters empowers Shanghai to have further influence on the regional and world economy.

“Cluster Effect” – London Financial City and Manhattan Financial District

By the end of 2017, the City of London has a 9.37 million sq m (10.1 million sq ft) stock of prime office properties within its 2.6 sq km land area. The City contributes GBP48.1bn (USD67.8bn) in Gross Value Added (GVA), equal to 13% of London’s or 3% of the UK’s output. In 2016, the City’s finance sector generated nearly half of London’s financial value, or 27% of the UK’s.

The Financial District is located at the downtown Manhattan in New York City with a land area of 2.1 sq km. Its 9.06 million sq m of prime office properties (2017) are home to over 3,000 financial and insurance companies and 10,000+ professional service firms from various industries, in addition to key institutions like NYSE and NASDAQ. Similar to the two global financial districts, Lujiazui Financial City has attracted clusters of

Table 2: Skyscraper cluster effect (Pudong CBD, London City, Manhattan Financial District)

<table>
<thead>
<tr>
<th>Land Area</th>
<th>Pudong CBD, Shanghai</th>
<th>City of London</th>
<th>Manhattan Financial District, NYC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total stock of prime office</td>
<td>2.86 million sq m (Grade A)</td>
<td>9.37 million sq m (Grade A &amp; B)</td>
<td>9.06 million sq m (Grade A &amp; B)</td>
</tr>
<tr>
<td>Average rents: Grade A office</td>
<td>About RMB11.8 psm per day (USD1.88)</td>
<td>About RMB17.8 psm per day (USD2.83)</td>
<td>About RMB12.0 psm per day (USD1.90)</td>
</tr>
<tr>
<td>Cluster effect: Factor markets</td>
<td>13 national and municipal factor markets of futures, diamonds, oil, financial futures, talents, agricultural products, chemical industry and gold.</td>
<td>Key institutions such as London Stock Exchange, Lloyd’s of London, London Metal Exchange, London International Financial Futures and Options exchange, etc.</td>
<td>Key institutions such as New York Stock Exchange, American Stock Exchange, NASDAQ, New York Futures Exchange, etc.</td>
</tr>
<tr>
<td>Cluster effect: Headquarters</td>
<td>Over 300 headquarters, including 90 regional headquarters, accounting for 40% of Pudong’s total and 1/5 of Shanghai’s.</td>
<td>European headquarters of 1/3 of Fortune 500 companies.</td>
<td>10 global headquarters of 2017 Fortune 500 companies.</td>
</tr>
<tr>
<td>Cluster effect: Modern service businesses</td>
<td>Nearly 800 licensed financial institutions, and more than 4,000 business service firms; 1,128 shipping agencies, including 911 shipping services firms.</td>
<td>Most of the 24,000+ companies are finance and business service providers, and 75% of the total employed population is concentrated in these areas.</td>
<td>Over 3,000 financial and insurance companies and 10,000+ professional service firms from various industries.</td>
</tr>
</tbody>
</table>

Source: Public information, Colliers International, Pudong Government, City of London Corporation and Fortune.com

1 * Source: GLA Economics, July 2016, as quoted on the City of London website. Figures are for 2014.
resources and capital in its prime office properties. However, compared to the so-called Alpha++ global cities, Pudong’s CBD requires further development in the following areas:

1. **Number and calibre of multi-national companies** (e.g. Fortune 500 groups);
2. **Number of clustered modern service businesses.**

### Status of Pudong’s Prime Office Market

#### Brief introduction and submarkets

Major submarkets in Pudong include core Lujiazui and Zhuyuan as CBDs, and Huamu, New Bund and Expo as decentralised business districts (DBDs). As New Bund and Expo are still under development, they are currently classified as emerging clusters. As of end-2017, the total stock of Pudong’s Grade A office was 3.81 million sq m (41.0 million sq ft). Core Lujiazui has the biggest stock of 2.18 million sq m (23.5 million sq ft), followed by Zhuyuan with a stock of 680,000 sq m (7.3 million sq ft).

#### Table 3: Stock and rents of Pudong Grade A office submarkets (2017)

<table>
<thead>
<tr>
<th>Stock ('000 sq m)</th>
<th>Core Lujiazui</th>
<th>Zhuyuan</th>
<th>Huamu</th>
<th>Expo</th>
<th>New Bund</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>218</td>
<td>68</td>
<td>54</td>
<td>17</td>
<td>15</td>
<td>9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rent (RMB/sqm/day)</th>
<th>Core Lujiazui</th>
<th>Zhuyuan</th>
<th>Huamu</th>
<th>Expo</th>
<th>New Bund</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>12.5</td>
<td>9.5</td>
<td>8.2</td>
<td>6.7</td>
<td>6.4</td>
<td>-</td>
</tr>
</tbody>
</table>

The vacancy rate of the Pudong CBD market including core Lujiazui and Zhuyuan increased 5 percentage points YOY to 13.2% at end-2017, mainly due to new completions, such as Shanghai Tower, China Life Finance Centre, Century Link T2, and Lujiazui Financial Holdings Plaza. The average rent of Pudong CBD showed a slight drop to RMB11.8 psm per day (USD 1.88) at year-end after years of steady growth.

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**Figure 2: Pudong key existing Grade A office submarkets**

Source: Colliers International
The Pudong grade A office market recorded several major leasing transactions from the finance, professional services and TMT sectors in 2017. The largest three transactions by area were all from domestic firms, showing a firm growth through the year. Notably, a few transactions from law firms were more than 10,000 sq m (107,650 sq ft), which rarely happened in the past.

### Table 4: Major leasing examples in Pudong Grade A office market (2017)

<table>
<thead>
<tr>
<th>Tenant</th>
<th>Sector</th>
<th>Leasing Area (sqm)</th>
<th>Project</th>
<th>Cluster</th>
</tr>
</thead>
<tbody>
<tr>
<td>China Guangfa Bank</td>
<td>Finance</td>
<td>17,000</td>
<td>China Life Finance Centre</td>
<td>Lujiazui</td>
</tr>
<tr>
<td>Bank of Tianjin</td>
<td>Finance</td>
<td>14,000</td>
<td>BaoSteel Riverside</td>
<td>Expo</td>
</tr>
<tr>
<td>Changjiang Securities</td>
<td>Finance</td>
<td>10,000</td>
<td>Century Link T1</td>
<td>Zhuyuan</td>
</tr>
<tr>
<td>PICC</td>
<td>Finance</td>
<td>9,000</td>
<td>Century Link T1</td>
<td>Zhuyuan</td>
</tr>
<tr>
<td>Dentons</td>
<td>Professional Service</td>
<td>15,000</td>
<td>Shanghai Tower</td>
<td>Lujiazui</td>
</tr>
<tr>
<td>Albright Law Offices</td>
<td>Professional Service</td>
<td>10,000</td>
<td>Shanghai Tower</td>
<td>Lujiazui</td>
</tr>
<tr>
<td>Zhong Lun</td>
<td>Professional Service</td>
<td>7,800</td>
<td>IFC 1 &amp; 2</td>
<td>Lujiazui</td>
</tr>
<tr>
<td>Apple</td>
<td>TMT</td>
<td>10,000 (Expansion)</td>
<td>Lujiazui</td>
<td></td>
</tr>
<tr>
<td>Facebook</td>
<td>TMT</td>
<td>2,400</td>
<td>Century Link T1</td>
<td>Zhuyuan</td>
</tr>
</tbody>
</table>

**Source:** Colliers International

### Tenant mix and trends

In 2017, 51% of the total leasing transactions in Pudong office market were from the financial sector, making it the segment with the highest gross take-up, followed by professional service (25%) and Technology, Media and Telecoms (TMT) (13%). The financial industry still dominates the office leasing market in Pudong’s CBD, and forms the driving force behind its skyscraper economy.

### Outlook for Pudong’s Prime Office Market

#### Industry trends and opportunities

Foreign enterprises will lead financial sector’s spill over

**Status: Financial industry keeps rising, driving demand to spill over**

The proportion of tertiary industry within Shanghai’s total GDP increased rapidly from 52% in 2006 to 69% in 2017. This expansion has helped drive the rapid development of Shanghai’s prime office market in recent years. At the same time, the proportion of finance industry within the total grew at a fast pace, increasing from 10.3% in 2008 to 17.3% in 2017. According to Pudong’s leasing transactions recorded in 2017, 51% of the transactions came from finance companies. Looking forward, foreign financial institutions should benefit from the opening policy, and we expect that the finance sector will continue growing steadily in the future.
As the development of the Lujiazui CBD has been saturated in recent years, the new demand has shown sustained spill-over into other areas. According to the leasing transactions that we have monitored, more and more financial businesses are flowing to decentralised areas. Three reasons can explain the trend:

1. Supply of Grade A office buildings in the CBDs is limited
2. DBDs has an obvious rental advantage
3. Accessibility and infrastructure are mature in many DBDs after years of development

Therefore, demand from financial businesses for office space in core Lujiazui has spilled over to surrounding submarkets like Zhuyuan and Huamu. Considering the growth trend of the sector and beneficial plans and policies, demand will probably stay strong and continue to spill over to decentralised districts.

**Planning for financial and service industries**

One of Shanghai’s objectives in its 13th Five-Year Plan is to ‘strive to be a top global financial centre’. Meanwhile Shanghai 2035 sets the target for the financial industry’s added value to reach 18% of the city’s GDP, which indicates that finance and related service industries will continue to play a leading role in Shanghai’s economic growth over the medium to long run.

Pudong has also set numerous related economic objectives, including that “the added value of tertiary industry should remain above 70% of total GDP”, that “regional headquarters of multinational companies and domestic enterprises should increase by a total of 50 in five years”, that the added value of shipping service industry should reach 5% of city’s GDP”, and that ‘the value of service trading should account for 50% of the total’. These ambitious targets should drive the development of Pudong’s financial and service sectors with sufficient government support, and therefore stimulate demand for high quality office space.

**Influential policy: further opening financial sector**

The cross-border flow of factors in the context of globalisation has been pushing China to open its financial sector, and China has indeed gained power in global finance affairs by doing so. After the 19th CPC National Congress at the end of 2017, China introduced a new agenda for opening its financial sector, including relaxing or eliminating ownership limits in commercial banks, securities, futures, asset management and insurance companies. The Shanghai government followed this path immediately by issuing a memo to reduce many restrictions on market access for foreign financial and service businesses. These policies should
have a positive impact on Shanghai’s financial industry from several perspectives:

1. The total amount of Shanghai’s financial institutions will increase, strengthening the sector’s ability to support the real economy.
2. Foreign institutions will spur domestic firms to be more competitive, regulated and globalised.
3. The policies should lead to more reciprocal openings for Chinese capital, gaining China a better position in global financial market.

The opening policy ensures the financial industry of Shanghai a sustainable growth in the future.

**Influential policy: Free trade port establishment**

The 19th Party Congress Report pointed out that “Free trade zones should be enabled to implement more reforms, and explore opportunities to establish free trade ports.” The world’s well-known free trade ports including Hong Kong, Singapore, Hamburg, and Rotterdam are also global hub ports, and have strong and sustainable local economies. In general, the implementation of free trade port policy should benefit Shanghai’s economy in the following two ways in particular:

1. Free trade port will accelerate cross-border capital flow and currency exchange, which will attract more domestic and foreign financial institutions to settle in the area.
2. A complete eco-system of shipping industry, including financing, trading and brokerage can be established by eliminating restrictions on international shipping. Hong Kong and Singapore are perfect examples of implementing this strategy and have gained power in the global shipping industry. While Yangshan Port already ranked first in the world on annual trade throughput, Pudong will take the opportunity of beneficial policy to enhance its position on the value chain and attract more global shipping financial and service businesses.

**Market trend: Proportion of foreign financial firms’ take-up stabilized**

According to Collier’s recorded leasing transactions, the take-up proportion from domestic financial businesses increased sharply throughout the past five years. However, the figure for foreign firms stabilised at 22% in 2017. Given the opening-up policies, we expect that foreign financial firms will grow and will be more active in Pudong office market.
### Table 5: Major plans and policies for Shanghai’s financial industry

<table>
<thead>
<tr>
<th>PLAN AND POLICY</th>
<th>PROVISIONS RELATED TO FINANCIAL INDUSTRY</th>
</tr>
</thead>
</table>
| Shanghai Master Plan (2017-2035) | • In 2020, Shanghai will establish the fundamental framework of an innovation center of science and technology with global influence and basically build itself into an international center of economy, finance, trade and shipping as well as a modern socialist international metropolis.  
• The proportion of financial industry’s added value ought to reach 18% of the overall GDP by 2035 (the current figure is 17.3% by the end of 2017). |
| The Thirteenth Five-Year Plan for Economic and Social Development in Shanghai | • To establish an global financial centre corresponding to the nation’s real economy and the international position of RMB, to develop channels that incorporates the innovation, exchange, pricing and liquidation function of RMB products, to establish a world-class multilevel, competitive, influential financial market for domestic and international investors, and effectively improve financial regulations and risk monitoring. |
| The Development Plan for Shanghai To Strive for A Global Financial Centre During the Thirteenth Five-Year | • To build a strong global financial market dominated by RMB products to allocate financial resources, and develop a fair, open, innovative and cooperative financial service system. |
| The Thirteenth Five-Year Plan for National Economic and Social development in Pudong New District | • Strive for a central district of global financial centre and improve the its proportion of financial sector’s added value to reach 50% of city’s total by 2020.  
• Connect Lujiazui, Expo, Zhangjiang, Jinqiao and Waigaoqiao clusters and relevant neighborhood to develop a “1+4+N” multi-hub strategy, in order to meet the rapid growing demand of financial sector, particularly the emerging financial businesses |
| Propositions on accelerating the opening process of the outward-oriented economy | • In service sector, eliminate restrictions for auditing, architect and design, credit rating institutions, relax restrictions for banks, security companies, security investment funds, futures companies, insurance brokerages, and continue pushing to further open telecom, internet, culture and transportation with order. |
| 19th CPC National Congress Report | • Free trade zones should be enabled to implement more reforms, and explore opportunities to establish free trade ports. |
| Accelerate financial innovation in Free Trade Zone to help develop Shanghai into global financial centre | • Extend cross-border exchange and use of RMB, further open financial service sector, and improve financial regulations to better leverage free trade zone as financial innovation pilot area to achieve the city’s goal of global financial centre. |
| Ministry of Finance | • Relax financial institutions’ ownership restriction to 51% for both direct and indirect foreign investors, including securities, fund management and futures company’s, and there will be no restrictions on ownership after 3 years of implementation of the policy above. |

Source: Public information, consolidated by Colliers International

### As one of three major demand sources, TMT sector will be leading tenants’ diversification

#### Market trend: TMT’s share of transactions in prime office market showing steady increase

Colliers’ leasing transaction data indicates that the TMT industry’s share of yearly leasing transactions in Pudong’s Grade A office market has maintained steady growth since 2013. In 2017, the proportion represented by the TMT sector reached 13.1%.

Colliers’ Radar report “Impact of Artificial Intelligence on Real Estate” issued in October 2017, which provides an in-depth analysis of changing trends affecting technology sector occupiers, suggests that technology companies will potentially consider prime office buildings in the CBD or CBD fringe as their work space option in addition to business parks. The major reason for this key conclusion is that acquiring and retaining talent is the greatest challenge facing the technology sector, and talent is concentrated in prime locations offering metropolitan lifestyle amenities and convenient public transportation.

#### Figure 10: TMT sector’s share of leasing activity in Pudong Grade A office market (2013-2017)

![Figure 10: TMT sector’s share of leasing activity in Pudong Grade A office market (2013-2017)](image)

Source: Colliers International Research

In fact, leasing activity from the TMT sector in prime office buildings accounts for a substantial portion of the premium office market in London and New York. According to Colliers’ leasing data for the City of London, the TMT sector accounts for about 25% of the transaction volume in the prime office market in the region. In contrast, Pudong still has a significant growth potential. While we believe that disruptive technologies such as artificial intelligence and blockchain will enjoy rapid growth in China, it is foreseeable that the
technology sector’s share of leasing transactions in Pudong prime office market will rise accordingly.

### Table 6: Major TMT occupiers in Pudong CBDs, Manhattan financial district, and City of London

<table>
<thead>
<tr>
<th>Pudong CBD</th>
<th>Manhattan Financial District</th>
<th>City of London</th>
</tr>
</thead>
<tbody>
<tr>
<td>🇨🇳</td>
<td>🇬🇧</td>
<td>🇬🇧</td>
</tr>
</tbody>
</table>

Source: FT.com, Colliers International Research

### Figure 11: Financial districts’ take-up comparison by business sector (2017)

Source: Colliers International Shanghai, London, New York

### Plans and policies: to advance technology and cultural and creative industries

Shanghai has successively introduced a series of plans and policies for the development of technology and cultural and creative industries over the past two years. "Shanghai’s Master Plan 2035" stated that the city is "an international centre of scientific and technological innovation" as well as a "culture metropolis". It also sets certain specific goals on this matter as sub-targets. For example, by 2035, the total research and development (R&D) expenses should reach 5.5% of Shanghai’s GDP; meanwhile the proportion of employees in the cultural and creative sector should account for about 10% of the city’s total employment population.

In July 2017, China’s State Council issued the "Development Plan for New Generation of Artificial Intelligence". In the same year, the 19th National Congress report mentioned that China needs "to promote further integration of artificial intelligence and the real economy", which means that artificial intelligence has become a nation-wide development strategy. In December 2017, the Shanghai Municipal Government announced the “Opinions on Accelerating the Innovation and Development of the Cultural and Creative Industries of Shanghai” (abbreviated as “Cultural and Creative 50”). It set several ambitious goals for the industries, e.g. “in the next five years, the added value of Shanghai’s cultural and creative industries will account for about 15% of the city's GDP; by 2030, the added value of Shanghai’s cultural and creative industries will account for about 18% of the city's GDP; and by 2035, Shanghai will be fully recognized as a cultural and creative centre with international influence.”

### Outlook: TMT industry and emerging clusters will lead diversification of Pudong office’s tenants

While government support and disruptive technologies coupled with capital should boost TMT industries, Pudong’s future supply of office buildings will be concentrated in the key emerging clusters, e.g. New Bund, meaning the rent will also have an advantage over the CBDs. These well-planned areas with excellent environment and transportation facilities, high quality office buildings and competitive rental will continue attracting tenants from growing sectors such as TMT, high-end manufacturing and flexible workspace. Pudong’s tenant mix will therefore become more diversified.

### Case Study: Diversification of tenants in London’s business districts

As the UK has promoted the development of TMT sector in recent years, media and technology companies have been increasing their shares of the office market in the business districts, particularly in the West End area. In 2017, the proportion of yearly leasing demand (by area) from the media and technology sector reached 25% of the district’s total amount. In addition, the same figure for flexible workspace (a considerable portion of which is also occupied by technology and media companies) was 22%, making it the second largest group.

### Figure 12: West End take-up by business sector (2017)

Source: Colliers International London
As one of the most powerful financial districts, the City of London adds about 1,200 start-ups each year, of which 45% are professional service providers and 13% are IT and communication firms. (Source: City of London Corporation). Similarly, about 70% of tenants were financial companies in Canary Wharf 10 years ago, and today this proportion has dropped to around 55% (Source: Canary Wharf Group). The diversification of tenants has made the area’s office market more resilient to financial market cycles. Compared to London’s business districts, tenants in Pudong have a tremendous potential for diversification in the future, and the TMT sector with government support will likely lead the process.

Figure 13: TMT occupiers in London’s business districts

Source: FT.com

Expansion Routes: Southward and Eastward

Coupled with Zhuyuan, Lujiazui is the core of Shanghai or even the country’s financial industry. Despite the recent new completions such as the Shanghai Tower, China Life Finance Centre, and Century Link, the new supply of office buildings in the area has not kept up with the demand for quality office space. Seeking expansion possibilities for new developments beyond the area therefore has become an urgency.

Short term: Southward, Expo-New Bund clustering corporate headquarters, TMT and emerging finance

Status

As a part of Shanghai’s Free Trade Zone, the Expo-New Bund cluster enjoys dedicated support from the government and favourable infrastructure conditions built for Shanghai’s Expo. Domestic financial giants including China UnionPay, China CITIC Bank, Shanghai Pudong Development Bank, and many insurance and investment companies’ headquarters are already located in the area, as well as leading SOEs such as China Commercial Aircraft, State Grid, China Huaneng Group, China Huanian Group, China Aluminum, and Baosteel.

Besides corporate headquarters, the Expo area plays a key role in advancing the city’s cultural and arts industry with key facilities including the Mercedes-Benz Cultural Centre, Chinese Art Palace, and Expo Exhibition Centre.

The New Bund cluster is currently under mass development, and most of the projects are expected to be completed within the next two years. In February 2018, Swire Properties announced that it would acquire a 50% stake in a piece of land to develop a landmark retail project partnering with Shanghai New Bund Industrial Development. The cluster so far has attracted numerous well-known developers including Lujiazui Group, Tishman Speyer, Hong Kong Lands, COFCO Properties, and Swire Properties. In the meantime, the New Bund has a “media city” plan with a construction area of 198,000 sq m targeting cultural and creative industries.

Planning and positioning

The Expo area is positioned to be a demonstration area for the integration of business, culture, entertainment, and residence in Shanghai’s city planning, including the following key terms in both Shanghai and Pudong’s “13th Five-Year Plan”:

- Shanghai’s 13th Five-Year Plan: Leveraging the New Development Bank BRICS to attract more influential financial institutions and multilateral organizations.
- The Expo area should promote functions of business headquarters, cultural exhibition, tourism and leisure, and strive to be Shanghai’s centre of cultural exchange and public activities.
- Pudong’s 13th Five-Year Plan: A “1+4+N” multiple-hub strategy should be deployed to meet the demand of the expanding financial industry, including Lujiazui, Expo, Zhangjiang, Jinqiao, Waigaoqiao and other related clusters.
- The Expo area should aim to be a riverfront modern service belt integrating headquarters, financial and professional service firms, as well as cultural and creative industries. The New Bund area should focus on the development of emerging finance and emerging media industries.

Opportunity

Compared with Lujiazui CBD, the Expo-New Bund area has strong competitive advantages of rental cost for enterprises. As the public transportation system will be completed soon, it is likely to keep attracting more decentralised headquarters and emerging businesses to settle in the area. Key cultural resources including the Mercedes-Benz Cultural Centre, Chinese Art Palace, and Expo Exhibition Centre will also create a favourable atmosphere for cultural and creative industries’ demand for upgrading office.
Short-midterm: Eastward, the North Riverfront transforming to a mixed-use demo area with office, retail and residential properties

Planning and positioning

As proposed in Pudong’s 13th Five-Year Plan, the North Riverfront is repositioned to be a 4-kilometre long world-class waterfront, integrating prime office properties, high end shopping centres, high quality residential complexes, cultural and entertainment facilities and a yacht park to supplement core Lujiazui on business and lifestyle amenities. The Plan also confirms the North Riverfront’s significant role in the development of Yangjing International Shipping Innovation Pilot Zone to upgrade the modern shipping service sector including shipping finance, shipping insurance, and shipping brokerage.

Location and transportation

Adjacent to core Lujiazui, the North Riverfront is at the frontier to accommodate office demand spill over. Its accessibility will be significantly improved soon when Metro Line 14 is completed, which runs through the North Riverfront from east to west and links several mature business districts, such as Lujiazui, the Bund, Huaihai Road and Jingan Temple.

Future opportunities

Driven by the Harbour City project (shipyard area), the North Riverfront ought to attract a substantial amount of spill-over demand from financial and professional service businesses from core Lujiazui. The renovation of the historical shipping wharf and industry plants will also accommodate shipping service firms and cultural & creative companies as planned in Pudong’s 13th Five-Year Plan.

Mid-long term: Eastward, Huamu-Longyang Road will emerge as a financial district

Status

According to local media reports, the Shanghai municipal government is considering setting new exchange centres for securities, futures and other financial derivatives at the east end of Century Avenue near Century Park, guiding the finance industry to expand eastward. Located on the Pudong’s “Lujiazui-Zhangjiang” development axis, Zhuyuan benefits from by its convenient location, four-metro line infrastructure and NYU Shanghai’s talent resources, and is currently the most attractive district for financial sector’s spill-over from core Lujiazui. However, due to lack of future supply of prime office space in both Zhuyuan and Huamu markets in the future, seeking new areas to accommodate rapid growing demand becomes an urgency.

The Pudong Government approved the development plan for 19 plots adjacent to Longyang Road metro station in 2017, with a total land area of 254,000 sq m (2.73 million sq ft). They were then acquired by a consortium led by Shanghai Real Estate Group for RMB13.77 billion (USD2.12 billion) on February 13, 2018. The total GFA of 1.38 million sq m (14.85 sq ft) consists of 1.04 million sq m (11.19 sq ft) of office space which accounts for 75% of the total GFA, 275,000 sq m (2.96 million sq ft) of retail and 63,000 sq m (678,132 sq ft) of cultural facilities. According to the agreement, the consortium is required to own all properties permanently. The development will be fully completed no later than 2026 and will be positioned as a sustainable low carbon multi-functional business hub. The location and transportation advantages of the development are predicted to enable to attract financial, professional service and technology industries.

Location and transportation

The integrated Huamu-Longyang Road cluster is located in-between of core Lujiazui and Zhangjiang Science & Innovation City. It is adjacent to financial exchange institutions and governmental regulatory agencies - Shanghai Banking Regulatory Bureau and Shanghai Securities Regulatory Bureau, which is another superiority to attract financial institutions.

Longyang Road Station is the only metro hub in Shanghai where five metro lines intersect (Line 2, Line 7, Line 16, Line 18, MegLev and the planned airport express), the new supply of the 19 plots therefore has incomparable accessibility——15 minutes to both core Lujiazui and Pudong international airport.

Future opportunities

The Longyang Road development will create a financial and business hub in-between core Lujiazui and Zhangjiang Science & Innovation City, guiding the financial industry to expand further east. It will probably bridge interactions between financial and technology sectors, and hatch development opportunities for fintech and emerging financial industries. A similar case of such urban planning and development is the regeneration of Canary Wharf in London, which sets an excellent example for Huamu-Longyang Road cluster to draw lessons from.
Figure 14: Pudong prime office market expansion routes: southward and eastward

Source: Colliers International
Case Study: Canary Wharf – a financial centre guided by transportation infrastructure

As a traditional centre of finance, global trading and international shipping services, London is one of the two GaWC Alpha++ global cities. With three major business districts, most financial services cluster in the City and Canary Wharf, whereas professional services, as well as cultural and creative industries cluster in the West End.

Figure 15: Locations of three major business districts in London

Source: Public information, Colliers International

The City of London was established as a global financial centre even before the industrial revolution. Its influence declined temporarily as Wall Street emerged, but recovered rapidly from the 1960s. Meanwhile, the West End is a world-renowned drama centre on a par with Broadway, hosting numerous museums and cultural amenities.

Leveraging its cultural and performing arts resources, the local government started strategically cultivating the area in the 1970s, leading to professional services firms as well as cultural and creative agencies clustering here.

Unlike the two traditional business districts, Canary Wharf was an emerging business district led by urban regeneration and metro line development. The development of prime office properties attracted demand from financial institutions spilling over from the City of London. Located in Docklands, Canary Wharf is approximately six kilometres east of the City. This area was once one of the most prosperous piers along the River Thames, waning when manufacturing was driven out of the city centre in the 1970s. Canary Wharf was redeveloped during the regeneration of Docklands, but the real pivot was the completion of the Jubilee Line in 2000. The increased accessibility attracted a large number of businesses and talent in a short time, including the global and European headquarters of leading financial firms.

According to Colliers International London, the total stock of prime office space of these three business districts reached 200 million sq ft (18.64 million sq m) by the end of 2017, with the City accounting for nearly half of this. While Canary Wharf has a comparatively small stock, its accessibility, high quality office properties and relatively low rent make it a qualified competitor. As seen in Figure 16, rents in Canary Wharf enjoy a huge discount to the average rent of the City and the West End. The working population was 39,800 in 2017, with a total GDP of over GBP40 billion (RMB355.2 billion) and growing. Canary Wharf not only accommodates spill over demand for office space, but also strengthens London’s financial industry and its leadership as a global financial centre.

Figure 16: A development timeline of London’s business districts

Source: Public information

Figure 17: stock and rent of prime office properties in the three business districts, London

Source: Colliers International London
Outlook: Office rent in Pudong’s CBD will increase in next five years

Future Supply in Pudong’s CBD

Short-midterm future supply (2018-2022) – New Bund is the hotspot

The New Bund as an emerging cluster will be Pudong’s development hotspot over the next five years, hosting just over 50% of the 1.65 million sq m (17.76 million sq ft) of supply scheduled to come online. In contrast, only 310,000 sq m (3.4 million sq ft) of new completions will be in the CBDs, and there will be nearly no new supply after 2019. The demand spill over for office space therefore will likely to continue.

The greater part of the new supply will be completed in 2018 and 2019, providing an annual average of 600,000 sq m (6.46 million sq ft) to the office market.

Forecast of Rent and Vacancy (2018-2022)

The vacancy rate of Pudong’s CBD area should fall in the next five years as demand should remain strong and supply will be limited, pushing rents upwards. This strong demand in the CBD ought to push cost conscious tenants to the emerging DBDs where large quantities of new supply are coming online.

Outlook for leasing strategy: tenants adopting new leasing models with flexible workspace becoming the norm

Technology is driving companies to have more flexible and agile real estate strategies in order to adapt to rapidly changing market environments. Concurrently, flexible workspace operators have provided companies with alternative leasing options. According to Colliers’ white paper The Flexible Workspace Outlook Report 2018, the flex and core and city campus leasing models are rapidly emerging in the office market. More models are expected to appear as landlord, tenants, and flexible workspace operators evolve and interact in the future.
Market Trend: Flexible workspaces keep expanding in prime office projects

Led by WeWork, flexible workspace operators expanded significantly in Shanghai’s prime office properties in 2017. Colliers’ Flexible Workspace Outlook 2018 argues that with sufficient financing, flexible workspace has taken up prime office space in Grade A office properties in CBDs. As of 2017, there were 285 flexible workspace centres operating in Shanghai, with an average rent of RMB2,030 per desk per month (USD 321.6).

Table 7: Major leasing transaction by flexible workspace (2017)

<table>
<thead>
<tr>
<th>Operator</th>
<th>Project</th>
<th>District</th>
<th>Size (sqm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WeWork</td>
<td>SB 1-1 project</td>
<td>Lujiazui</td>
<td>15,000</td>
</tr>
<tr>
<td>WeWork</td>
<td>Kerry Parkside</td>
<td>Huamu</td>
<td>8,000</td>
</tr>
<tr>
<td>Krspace</td>
<td>Century Link T2</td>
<td>Zhuyuan</td>
<td>5,000</td>
</tr>
<tr>
<td>Atlas</td>
<td>Bank of Shanghai Tower</td>
<td>Lujiazui</td>
<td>3,700</td>
</tr>
<tr>
<td>Star Space</td>
<td>Century Link T1</td>
<td>Zhuyuan</td>
<td>2,500</td>
</tr>
<tr>
<td>WeWork</td>
<td>IFC One</td>
<td>Lujiazui</td>
<td>2,300</td>
</tr>
</tbody>
</table>

Source: Colliers International

In the meantime, operators and landlords have been evolving through competition and cooperation. We have identified three trends since the second half of 2017 in the flexible workspace sector in China:

1. Driven by sufficient financing, leading operators have aggressively taken up prime office space in Shanghai’s business districts and keep expanding their market share by acquiring direct competitors.

2. Operators have been expanding their scope of offerings (e.g. social activities, F&B, and fitness facilities) to fit tenants’ lifestyles rather than focusing on workspace operation.

3. Traditional tenants are using innovative leasing models by working with operators to adapt to the rapidly changing market.

Compared to leasing traditional offices or business centres, flexible workspace provides tenants with a cost-competitive option. As a large quantity of new supply in emerging clusters arrives in the next two years, we expect flexible workspace to continue its relentless growth in 2018 and 2019, and become a mainstream option in tenants’ real estate portfolios.

Conclusions and Recommendations

Pudong plays a key role in realising Shanghai’s vision of becoming an “excellent global city”. The “Skyscraper Economy”, i.e. the prime office environment in the CBD, will be a driving force in Pudong’s development.

Compared to the so-called Alpha++ global cities, London and New York, Pudong’s CBD requires further development in the following areas: a) number and calibre of multi-national companies (e.g. Fortune 500 groups); b) number of clustered modern service businesses; c) diversity of occupier sectors.

After thorough analysis, Colliers draws the following conclusions about the future of Pudong’s office market:

1. Demand in Pudong’s prime office space will remain healthy, and future supply in the CBDs will be extremely limited, driving demand to spill over to new supply in the DBDs.

2. Demand will increase, specifically in the financial sector, and particularly from foreign institutions as they benefit from revised plans and policies from the city government, accelerating their growth. Additionally, the TMT sector will maintain rapid growth, diversifying the tenant mix in Pudong’s prime office market.

3. Geographically, new supply beyond the Lujiazui core will expand eastwards and southwards. New Bund-Expo and the North Riverfront will be the development hotspots in next 3-5 years, and the Huamu-Longyang road cluster will emerge as a financial and business district with the development of the 19 plots adjacent to Longyang Road Station.

4. Tenants will increasingly prefer flexible leasing strategies in order to adapt to a dynamic market environment. This will push flexible workspaces, already aggressively expanding, to become a mainstream alternative for tenants.

Colliers makes the following recommendations to three major stakeholders in Pudong’s future:

The city government should:

> Accelerate the opening-up of the finance and service sectors to attract more global company headquarters and top service groups. This should boost Pudong’s influence and its connections to the global economy;

> As in London and New York, guide diversification in prime office buildings with a focus on technology and creative businesses to enhance interaction and collaboration among tenant sectors.

Large office landlords should:

> Heed the growing importance of foreign financial and TMT groups as tenants, and plan services accordingly;

> Study the flexible workspace sector, and develop leasing models that respond to tenants’ increasing demand for flexibility and innovation.

Large occupiers should:

> Consider flexible office leasing models to adapt to the dynamic market environment;

> Pay attention to the new office supply in New Bund-Expo and North Riverfront clusters over the next 3-5 years for expansion or upgrading; and consider the new completions in the Huamu-Longyang Road cluster over the next 5-8 years as part of a long-term leasing strategy (especially for financial companies).
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