China’s City Winners

Wuhan City Profile
China’s City Winners: Wuhan

Key Features
• A key Tier 1.5 city and the leading city of Central China
• Massive infrastructure investments in the city and surrounding region are realising the potential of its central location
• An industrial powerhouse with global scale, now diversifying and climbing the ‘value chain’
• Education infrastructure is boosting labour quality and productivity
• Strong demand drivers across all real estate sectors are supporting asset price growth, but with some short-term supply risks
• Considerable potential as a logistics hub

Jones Lang LaSalle’s View

A hundred years ago, the inland metropolis of Wuhan stood alongside Beijing, Shanghai and Guangzhou as one of China’s leading cities. Wuhan fell behind in the later twentieth century as the modernising coastal provinces powered ahead of the interior, but now the city is experiencing a renaissance that promises to help it regain some of its earlier prominence. In recent years, Wuhan has re-emerged as one of the country’s fastest-growing urban centres – in 2011 it was China’s 11th largest city by GDP, and economic forecasts indicate that it will rank 8th by 2015. Moreover, Jones Lang LaSalle’s World Winning Cities research indicates that Wuhan region will be among the world’s top 40 economic hubs by 2020.

Capital of Hubei Province, Wuhan is Central China’s largest city by population and economic size, and has been a key beneficiary of central government initiatives to develop the country’s inland regions. The city is known throughout China for being at the country’s geographic heart; it straddles the Yangtze River, sits at the confluence of many major overland transport routes, and is at the crossroads of China’s rapidly-developing high-speed rail network.

A strong industrial base, anchored by some of China’s largest steel and automobile makers, has earned Wuhan comparisons with Chicago and Detroit. The city is building on this foundation by aggressively courting investment in three major development zones and, in recent years, has attracted international manufacturers such as Honda, Foxconn and PepsiCo.

Wuhan is also seeking to move up the ‘value chain’ by encouraging high-tech manufacturing and research, as well as growth in its service sector. Such aspirations are bolstered by one of the country’s largest concentrations of educational resources. Only Beijing has a larger number of higher education institutions and, measured by student population, Wuhan is China’s premier college town: in 2011 it had over 920,000 students enrolled in higher education, far exceeding Beijing’s total of 579,000. Wuhan’s status as an inland education hub has enabled its workforce to be one of China’s best educated, while remaining low cost.

Wuhan is also Central China’s core retail market, attracting shoppers from throughout Hubei Province (and beyond) to the malls and department stores lining Jiefang Avenue. The city is leading the way in the new generation of outdoor retail plazas and has two of China’s longest shopping streets.

The city’s government is presiding over an infrastructure boom - massive even by Chinese standards - which is interlacing the city with new subways and expressways. Plans are also underway to develop regional rail links to eight nearby cities that eventually will be incorporated into a larger metropolitan area of over 30 million people; these links will be vital to facilitate movement between Wuhan and a swelling pool of workers and shoppers.

Wuhan’s real estate market is expected to see strong growth across all sectors over the coming years. The city’s office, retail and residential markets are forecast to expand beyond their traditional centres in the Hankou submarket, with Wuchang in particular likely to experience an especially large influx of high-end residences and shopping malls. Wuhan’s widening transport network will also stimulate development in the city’s more decentralised areas. In addition, Wuhan’s hotel sector is growing rapidly, and the city is attracting interest from logistics developers due to its massive potential as the emerging logistics hub for Central China.

City GDP, 2011

Source: Economist Intelligence Unit (EIU)
### Economic Dashboard

#### Size
- Resident Population (million, 2011): 10.0
- GDP (US$ billion, 2011): 106.5
- Employment (million, 2010): 5.0

#### Growth

#### Infrastructure
- Rail Passengers (million, 2011): 85.1
- Freight Traffic (million tons, 2011): 418.0

#### Openness
- Utilised FDI (US$ billion, 2011): 3.76
- Exports (US$ billion, 2011): 11.7

#### Wealth
- GDP/Capita (US$, 2011): 10,767
- Disposable Income per Capita (US$, 2011): 3,742

#### Education and Labour
- Higher Education Institutions (2011): 79
- Total Annual Graduates (000s, 2011): 241
- Unemployment (% 2011): 3.94
- Average Wage Rates (US$, 2011): 7,194
Wuhan’s Urban Landscape

Three Towns, One City
Unique among Chinese cities, Wuhan is composed of three once independent towns - Hankou, Wuchang and Hanyang - which sit on opposite banks of the Yangtze and Han rivers. The three towns were united to form the Wuhan metropolis in 1927, but have retained distinct economic and cultural differences. Today, residents of the three towns still see themselves as quite individual, much in the way that the residents of New York City’s boroughs do.

Hankou – the traditional financial and retail hub
Hankou is the most densely-populated urban area and is the city’s traditional financial and retail centre. It is the location of Wuhan’s city government headquarters, and also the area of choice for multinational service firms and foreign consulates. Of Wuhan’s three towns, it currently has Wuhan’s most developed infrastructure, with a light rail, a subway line and one of the city’s three main railway stations; it is also the town nearest to the airport. Hankou is home to most of Wuhan’s Grade A offices, its only luxury shopping mall and the city’s most expensive cluster of high-end residences. Although Hankou does not have formal boundaries, the portion inside the third ring road - which is composed of the Jiang’an, Jianghan and Qiaokou districts – is generally recognised as being the main part of Hankou.

Wuchang – the technology and education hub
Sitting opposite Hankou on the Yangtze’s south-west bank, Wuchang is the largest town by size and population and is known for being Wuhan’s technology and education centre. The East Lake development zone is the focal point for Wuhan’s high-tech research and manufacturing sector, and Wuchang also is home to one of the largest concentrations of universities in China. Wuchang is the base for Hubei’s provincial government as well as the location of the city’s two other main railway stations (including its new high-speed rail station). The town is currently undergoing a wave of retail, residential and office development that will provide residents and businesses with alternatives to the traditional Hankou core. Inside the third ring road, Wuchang is composed of the Wuchang, Qingshan and Hongshan districts.

Hanyang – the industrial hub
Hanyang is the smallest of the three towns in terms of both area and population. It has been long known as an industrial town, and is home to the Wuhan Economic & Technological Development Zone, one of China’s most important centres for automobile production, as well as a major base for electrical appliance manufacturing and food processing. In recent years, Hanyang has been redeveloping some of its old riverfront industrial areas for commercial and residential use. It is the only town that corresponds with a single district, Hanyang district.
Demographics

An urban population of 5.5 million
At the end of 2011 there were some 10 million people living in Wuhan’s administrative area, of which 8.3 million were registered Wuhan residents and the remainder were students and migrant workers from outlying areas. As in most Chinese cities, Wuhan’s registered population is divided between urban residents in Wuhan city and those living in the rural hinterland that falls under the city’s jurisdiction. Local statistics show that Wuhan city’s urban population in 2011 was 5.5 million, making Wuhan city slightly smaller than west China’s Chengdu but significantly larger than its Central China peers, Zhengzhou and Changsha.

Population in Major Cities, 2010 Census

Most of Wuhan’s urban residents live in seven densely-populated core districts, while the surrounding suburban districts are mostly rural.

Wuhan Population Density by District

People per sq km

- Gray: 300 - 600
- Light gray: 601 - 1,100
- Medium gray: 1,101 - 3,000
- Dark gray: 3,001 - 7,100
- Very dark gray: 7,101 - 14,000
- Black: 14,001 - 21,000

Source: Wuhan Statistics Bureau
A youthful and educated workforce
People of working age (15-64) comprise about 79% of Wuhan’s population, about the same proportion as in China’s Tier 1 cities yet higher than other major inland cities such as Zhengzhou, Changsha and Chengdu. The city’s workforce is relatively youthful with nearly one-third of the population aged 15-34 - greater than the national average and most probably a result of the large number of students and recent graduates. This pool of young, well-educated workers is drawing technology-intensive industries to the city, while the ample supply of inexpensive manual labour is also helping to attract labour-intensive industries away from the rising wage costs of China’s coastal provinces.

A city cluster of 31 million people
Wuhan is the focal point of Hubei Province’s ‘8+1’ policy, a plan to create an infrastructure that interconnects Wuhan and eight surrounding cities and to form a metropolitan area officially called the ‘Wuhan City Cluster’. Currently, the cities that comprise the cluster contain over 31 million people1 and have a GDP of RMB 1.19 trillion (US$186.9 billion)2, comparable in economic size to Minneapolis or Sydney. As the ‘8+1’ plan comes to fruition over the next decade, a large satellite population will be drawn into Wuhan’s retail catchment area and labour market flows. Based on current economic forecasts, the Wuhan City Cluster will be among the world’s 40 largest economic hubs by 2020.

Planned ‘8+1’ Wuhan City Cluster

Source: Hubei Statistical Yearbook 2011

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1. 31 million includes both urban populations and rural hinterlands of each of the ‘8+1’ cities. The city-dwelling population in the city cluster region can be expected to grow as the region urbanises.

2. In this paper, monetary values are expressed in the currency reported (either RMB or US$), with the other currency in parenthesis and calculated with the year-end 2011 exchange rate of 6.3444 RMB/US$. 
Education

Robust higher education infrastructure

Wuhan boasts a growing, diverse workforce that benefits from one of China’s largest concentrations of educational facilities. The city is home to 79 institutions of higher learning, second only to Beijing. Seven of Wuhan’s universities are a part of China’s ‘211’ project to raise 100 of the country’s top schools to world-class status in the 21st century. Wuhan University and the Huazhong University of Science and Technology, in particular, are recognised as two of China’s best schools.

Wuhan produced more than 241,000 graduates in 2011 and, according to the Sixth Population Census data, the number of people in the city with a tertiary education or above accounts for 25.2% of the total population, nearly double the 2000 rate of 12.3% and one of the highest in the country. In 2010 the average salary in Wuhan was RMB 45,643 (US$7,194) compared to RMB 57,473 (US$9,058) in Guangzhou. Along with the city’s impressive education profile, these relatively low labour costs have played a key role in its recent success in attracting R&D capacity and manufacturing plants away from the coast.

More than 100 scientific and technological research institutes, such as the Yangtze River Scientific Research Institute, have set up branches in Wuhan, employing over 80,000 scientists and technical experts. The Chinese Academy of Sciences also operates one of its 13 branch offices in Wuhan.

University Students, 2011

Source: CEIC

3. In the ‘211’ plan, the ‘21’ refers to the twenty-first century, and the final ‘1’ is shorthand for ‘100’ in schools.
An industrial powerhouse of global scale

Wuhan’s modern development took off after the founding of the People’s Republic of China in 1949, when the city benefited from the central government’s ‘Third Front’ policy to develop inland industrial centres far from the vulnerable coastal areas. Under China’s planned economy, the city demonstrated early prowess in heavy industries such as iron, steel and vehicle manufacturing.

As China’s reforms accelerated in the 1980s and 1990s, Wuhan built on its industrial strengths, developing automobile manufacturing, steel production and equipment-making as some of its pillar industries. A major thrust of this effort has involved a wholesale reorganisation of former socialist factory enterprises into highly-commercial state-owned industrial titans. For example, the state-owned car maker Dongfeng Motor Corporation has entered into multiple joint ventures with foreign automobile giants, such as Citroën and Nissan, that have helped to now make it one of China’s top car producers. Similarly, Wuhan Iron and Steel Company (WISCO), which was established with Soviet assistance in the 1950s, has grown to such an extent that it is now the world’s fourth largest steelmaker by output. These two companies both occupy spots in the global ‘Fortune 500’ and their scale and success has led to them being some of the city’s largest sources of tax revenue. Their development has also stimulated a mature supply chain of supplementary parts companies and logistics firms that are further boosting the city’s industrial economy.

Wuhan’s Major Industries, 2011

Moving up the ‘value chain’

Wuhan has made efforts to diversify its economy beyond heavy industry, encouraging the development of advanced manufacturing and information technology, and on a broader front it has witnessed significant growth in food processing, energy, light industry, textiles and pharmaceuticals. The city is also home to a growing number of professional services firms and banks – it has the largest concentration of financial institutions in Central China, including branches of eight foreign banks.

The city’s advantageous geographical situation and well-developed transport infrastructure is helping Wuhan to position itself as the research, manufacturing and distribution base for Central China, and it has striven to attract international investment to three state-level development zones. Many foreign and domestic enterprises have now established a presence in these zones, such as Foxconn, which is seeking lower costs away from the more expensive coastal provinces. Others, like Pfizer and Huawei, have been attracted by Wuhan’s educated labour pool. By September 2012, 98 ‘Fortune 500’ companies and over 5,000 multinational corporations had invested in Wuhan; at year-end 2011, the total investment of foreign firms in the city equated to a contracted value of more than US$23.3 billion (RMB 147.8 billion) and a current contribution of 20% of the city’s total tax revenues.

Wuhan’s import and export volumes are both increasing rapidly, with total import-export volumes up 25.9% y-o-y in 2011 to US$22.7 billion (RMB 144.0 billion). While Wuhan’s trade volumes are only about 5% of the volume of the more outward-oriented Shanghai, they are rising at a faster rate.

In its recent 12th Five-Year Plan, Wuhan announced goals to become a world-class advanced manufacturing centre, a modern service centre and a comprehensive national transportation hub. Within the plan, primary designated growth industries include new-generation information technology, energy-saving and environmental protection industries, alternative energy, biotechnology, high-end equipment manufacturing and alternative energy vehicles.
Emphasis on developing services

Key to Wuhan’s medium-term growth plans is an effort to maintain the city’s role as an industrial powerhouse while expanding the role of services in its economy to 52% by 2015. Tertiary sectors designated for development include tourism, financial services and professional services. As of the end of 2011 the city’s tertiary industries accounted for 48.9% of Wuhan’s economy, compared to 48.2% for secondary and 2.9% for primary industries. Wuhan’s tertiary sector is currently smaller than that of Tier 1 cities but larger than other major Central China cities and similar to Western China’s regional leader, Chengdu.

GDP by Industry, 2011

As the ‘8+1’ plan expands the city’s infrastructure and the Wuhan City Cluster begins to take shape, Wuhan’s economy will adjust to leverage its easy access to surrounding cities. Satellite cities will gradually take on supporting roles within the metro area’s manufacturing supply chains, with business services and other ‘command and control’ functions being centralised, predominantly within Wuhan itself.
Planning and Infrastructure

Massive infrastructure investment
Wuhan’s city government has placed a strong emphasis on infrastructure improvement. In 2011, for example, over 5,700 construction projects were underway within the city limits, part of an ambitious municipal master plan. In addition, Wuhan’s status as Central China’s key city is being reinforced by broader regional and national infrastructure plans that are helping to develop its air, rail, road and river links.

A central hub for China’s high-speed rail network
Wuhan sits at the crossroads of the two most important routes in China’s emerging network of express and high-speed rail lines, putting it within easy reach of Beijing, Shanghai, Guangzhou, Chengdu and Chongqing. The Wuhan-Guangzhou high-speed line, which runs on specialised track, was completed in 2009, as was an express line from Wuhan to Guangzhou. The Wuhan-Beijing segment was completed in 2012. The Wuhan-Chongqing segment is under construction and is expected to be completed by end 2013. The new trains are reducing travel times to a fraction of those made by China’s earlier generation of conventional passenger trains.

Wuhan is served by three major railway stations. The very modern Wuhan Railway Station, with 11 platforms and 20 tracks, opened in Wuchang in 2009 and is a major stop on the Beijing-Guangzhou high-speed line. Wuchang is also home to the earlier Wuchang Railway Station while Hankou Railway Station has recently undergone an extensive renovation and will eventually house Wuhan’s stop on the Shanghai-Chengdu express line.

Central China’s regional air hub
The city’s Tianhe International Airport serves as Central China’s regional hub. It offers services to 72 domestic locations and, with 12.5 million passengers in 2011, is China’s 14th busiest airport by passenger volume. Illustrating the extent of Wuhan’s international business links, the airport offers direct international flights to locations such as Seoul, Tokyo, Ho Chi Minh City, Bangkok and Paris, and is in discussions for additional European routes and a link to the west coast of the United States. Tianhe’s Terminal Two opened in 2008, and in summer 2012 Wuhan began construction of a third terminal and a new runway to be built by 2015. Once completed, these additions will help accommodate projected 2020 passenger volumes of 38 million.

Express and High-Speed Rail (HSR) Links

<table>
<thead>
<tr>
<th>From Wuhan To:</th>
<th>Distance (km)</th>
<th>Journey Time: Fast Train (hours)</th>
<th>Journey Time: Regular Train (hours)</th>
<th>Completed (est.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beijing</td>
<td>1,225</td>
<td>4</td>
<td>10+</td>
<td>Dec 2012</td>
</tr>
<tr>
<td>Guangzhou</td>
<td>1,069</td>
<td>3.5</td>
<td>12+</td>
<td>Dec 2009</td>
</tr>
<tr>
<td>Shanghai</td>
<td>820</td>
<td>5+</td>
<td>11+</td>
<td>April 2009</td>
</tr>
<tr>
<td>Chongqing</td>
<td>911</td>
<td>4+</td>
<td>14+</td>
<td>(End 2013)</td>
</tr>
</tbody>
</table>

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4. Rail routes are depicted in this map when they are served by either a D or G-level train. D-level trains are earlier generation express trains with maximum speeds of 250 km/hr (though some run at 200 km/hr or slightly slower). G-level trains are the latest technology and run on specialised tracks at speeds of up to 300 km/hr. Officially China only calls the G-level trains ‘high-speed rail’, but most D-level trains also meet the high-speed rail criteria put forth by the International Union of Railways.
Improving intra-urban road network

Wuhan is served by 13 national highways that link it to regions across China. Within the city, efforts are being made to improve the road network to relieve congestion and ease cross-Yangtze travel. This includes the expansion and improvement of the city’s network of concentric ring roads: the first ring is completed and elevated portions are being added to the second, while a third ring is nearing completion and a fourth is at the planning stage. At the same time, five new Yangtze River bridges are planned for completion by 2016 to supplement the existing six bridges and one tunnel. Traffic planners hope that by 2015 it will be possible to travel between any two locations inside the second ring road in less than 30 minutes.

Ambitious metro line expansion

Wuhan plans to introduce an average of one new metro line each year from 2012 through 2017. The above-ground Line 1 currently serves Hankou, while Line 2 extends across the Yangtze to reach Wuchang. 140 km of inner city passenger rail is scheduled to be constructed, which will significantly ease the flow of commuters between Wuhan’s three towns.

Stable power supply

Wuhan’s proximity to the Three Gorges Dam along the Yangtze River guarantees a steady, stable supply of power that supports the growth of energy-intensive industries and helps the city to avoid the summer blackouts and power outages that plague many of China’s other interior cities. PetroChina’s West-East natural gas transmission line also guarantees a stable flow of natural gas to the city, and allows 96% of the urban area to have a gas supply.
Major Development Areas

Wuhan contains three state-level economic development zones, located around the edge of the city’s central residential and commercial areas, that serve as focal points for investment in designated sectors. Complementing and sitting between these zones, and also improving Wuhan’s ‘offer’, is a new central business district (CBD) that is taking shape on an undeveloped plot of land near the city centre.

Wuhan East Lake High-Tech Zone (Optical Valley / ‘Guanggu’)

Approved in 1991, this 518 sq km zone was designed to exploit Wuchang’s strong academic base and R&D potential, and in 2009 was raised to the same administrative level as Beijing’s successful Zhongguancun high-tech area. The East Lake zone is often referred to as ‘Optical Valley’ (‘Guanggu’), a reference to its historical focus on industries such as fibre optics, photo-electronics and laser technology. The formation and growth of many companies in these fields has been facilitated by overseas collaborations, a notable example being the Yangtze Optical Fibre and Cable Co Ltd (YOFC), which was jointly founded in 1988 by a local government subsidiary and Philips, the Dutch multinational electronics company - the firm is now the domestic leader in the fibre optic and cable market. Japanese IT firm NEC has formed a similarly successful fibre optic joint venture in the zone.

Beyond ‘optical’ industries, the East Lake zone has business and research parks that are encouraging investment in sectors such as software, pharmaceuticals and back-office functions. Huawei Technologies is establishing a large R&D centre in the zone’s Future Technology City, while Pfizer and Bayer have become early foreign investors in the zone’s biotech-oriented Wuhan National Bioindustry Base (also called ‘Biolake’). Elsewhere in the zone, Microsoft, IBM and other global technology and communications firms have set up in the Optical Valley Software Park, while the business park at Optics Valley Financial Harbour is striving to become the back-office service centre of China, and has already attracted 20 ‘Fortune 500’ companies. The zone has also been successful in attracting advanced manufacturers such as Foxconn and Honeywell.

In 2011 the gross output value of the zone was RMB 289.8 billion (US$45.7 billion).

Wuhan Economic & Technological Development Zone (WEDZ)

Approved in 1993, this 203 sq km zone is best known as the home of the Dongfeng Motor Corporation and its European and Asian joint ventures which produce hundreds of thousands of cars annually to serve both Central China and markets further afield. Nissan, Honda and Citroën all have manufacturing bases in the zone and benefit from shared supply chains and component suppliers. Besides automobile production, the zone also subsidises developments in machinery, electronics, food and beverage processing, building materials and pharmaceuticals.

In 2011 the gross output value of the zone surpassed RMB 168 billion (US$26.5 billion).
Wujiaoshan Economic and Technological Development Zone
Established in 1992 and raised to national-level in 2010, this 497 sq km zone is one of Central China’s main centres for food processing and appliance manufacturing. It has attracted investments from PepsiCo, Danone and CocaCola, as well as a range of auto parts, electrical appliance and pharmaceutical companies. Wuhan’s 12th Five-Year Plan has set a goal for the zone to become the city’s largest logistics centre and a key logistics hub for Central China. FedEx, UPS and Cosco all have a presence in the zone, and the area is also attracting interest from major international logistics property developers.

In 2011 the zone generated a gross output value of RMB 46.3 billion (US$ 7.3 billion).

Wangjiadun CBD
Located close to Wuhan’s existing financial heart around Jianshe Avenue in downtown Hankou, Wangjiadun is set to become the largest new business district in Wuhan. Once a military airport, the redeveloped area covers 7.4 sq km of land and the city is investing heavily to make it a significant finance, insurance, trade and consulting hub. Though the project has seen delays due to complications in acquiring land, several developers have now started construction in the area and the CBD is expected to take rapid shape over the remaining decade. It is anticipated that the new office cluster at Wangjiadun will merge with Jianshe Avenue to become Wuhan’s dominant CBD.
Business Environment

Policy framework to attract foreign investment
Wuhan's government has enacted a range of policies to improve the local business environment and attract foreign investment, mostly from preferred industries and ‘Fortune 500’ firms. In particular, Wuhan is seeking to entice manufacturers (especially those in the high-tech field) with discounted loans, favourable land policies and regulatory fees, reduced income taxes and tax deductions for R&D spending, and through a RMB 120 million (US$18.9 million) annual fund to support target industries. The municipal and various district governments are also providing financial support, land guarantees and expedited visa procedures to firms that set up headquarters in Wuhan. The city is also targeting service outsourcing and software firms with cash awards, tax incentives, favourable loan and tax policies, and employee training services.

Wuhan is offering particularly generous incentives to foreign banks, including lump-sum cash rewards of RMB 10 million (US$1.6 million) for newly-arrived institutions. Foreign banks in the city will be refunded all local corporate taxes and will have half of their local business taxes waived within a set period of the banks setting-up, and, as a further incentive, the city government is also providing expedited visa processing and relocation services to financial executives and their families.
Major Employers

**Wuhan Iron and Steel Corporation (WISCO)**
WISCO was founded in 1958 as one of the first major iron and steel complexes in the People’s Republic. Today, its annual production totals more than 40 million tons, making WISCO the world’s fourth largest iron and steel maker. In 2010, operating income was RMB 191 billion (US$30.1 billion) with total assets of RMB 204 billion (US$32.2 billion), and the company was ranked 340th in the ‘Fortune 500’. WISCO has now expanded itself into three main businesses: iron and steel manufacturing, new high-tech industry and international trade. Wuhan Iron and Steel Company Limited, the iron and steel making subsidiary, has more than 40,000 employees.

**China First Metallurgical Group Co., Ltd**
China First Metallurgical Group Co., Ltd specialises in construction, real estate development, natural resources development and equipment manufacturing. Employing 7,100 workers, the company is at the forefront of the EPC (engineering, procurement and construction) industry.

**China Gezhouba Group Co., Ltd**
The Gezhouba Group is a state-owned contract construction firm that designs, engineers and builds power plants, dams, roads, bridges and other infrastructure within China and also abroad; it is also involved in real estate. The firm employs over 40,000 including some 14,000 technical specialists. Headquartered in Hankou, the company is best known for its work on the nearby Three Gorges Dam.

**Wuchang Shipbuilding Industry Co., Ltd**
Wuchang Shipbuilding Industry Co. Ltd is one of the main subsidiaries of the China Shipbuilding Industry Corp. (CSIC). Formerly known as Wuchang Shipyard, it has expanded itself into three main businesses: iron and steel manufacturing, new high-tech industry and international trade. Wuhan Iron and Steel Company Limited, the iron and steel making subsidiary, has more than 40,000 employees.

**Jointown Pharmaceutical Group Co., Ltd**
Jointown Pharmaceutical is China’s third largest distributor of pharmaceuticals and medical devices, and the largest distributor that is not state-owned. Headquartered in Hanyang, Jointown employs more than 10,000 people and posted operating income of RMB 24.8 billion (US$3.9 billion) in 2011.
Major Investments

**Dongfeng Honda Automobile Co., Ltd**
Dongfeng Honda, a 50:50 joint venture between the Honda Motor Company and Dongfeng Motor Corporation, completed its second production centre in Wuhan in July 2012. With an investment of RMB 2 billion (US$315 million), the plant has an annual production capacity of 100,000 units and has plans to expand to 240,000 units in the future. Reducing vehicle painting times and recycling waste heat has allowed the facility to achieve significant reductions in CO₂ and VOC emissions.

**Shanghai General Motors Co., Ltd**
Shanghai GM, the joint venture of China’s SAIC Motor and General Motors (GM), has invested US$1.1 billion (RMB 7.0 billion) in a new factory scheduled to open in 2014 with a production capacity of 300,000 units per year. Located in Jingang New District, the plant will cover 2.3 sq km. The Wuhan plant will be Shanghai GM’s fourth - following those in Shanghai, Yantai and Shenyang - and total annual production is expected to reach 2 million units by 2015.

**PepsiCo**
In 2012, PepsiCo opened a new food manufacturing plant in Wuhan as part of its US$2.5 billion (RMB 15.9 billion) expansion into China. Supplying Central and Western China, the 25,000 sq-m plant is PepsiCo’s first LEED compliant site in the country; it will use 30% less water and 20% less power than its 2006 baseline manufacturing guidelines. China’s snack market was estimated to have reached RMB 77 billion (US$12.1 billion) in sales by year-end 2012, with PepsiCo as the fifth largest seller.

**Lenovo**
Founded in Beijing in 1984, Lenovo has quickly expanded to become the world’s largest PC maker, with revenue exceeding US$21 billion (RMB 133 billion) in 2011. It plans to expand beyond its core PC business with a US$800 million (RMB 5.1 billion) investment in a mobile device base in Wuhan. The facility, which will combine development, production and sales operations, is expected to open in 2013. Revenues from the base are planned to surpass US$1.6 billion (RMB 10.2 billion) by 2014.

**Deutsche Telekom**
Europe’s largest telecommunications company announced in July 2012 its intention to build a ‘global development centre’ in Wuhan’s East Lake development zone. The centre will serve as a point of production from which the firm’s corporate customer arm, T-Systems, can provide services to multinational firms within China. The centre will cost up to US$50 million (RMB 317 million) and will employ around 1,000 people when it opens in 2014.

**Pfizer**
The world’s largest pharmaceutical company has established its second R&D facility in China (after Shanghai) in Wuhan’s East Lake development zone. The facility employs around 200 people and focuses on radiation biology, supporting the firm’s global clinical drug development projects.

**Huawei Technologies**
Huawei is the world’s largest telecommunications equipment maker and one of China’s largest private companies. In 2012 the company began constructing an RMB 5 billion (US$788 million) R&D centre in Wuhan’s East Lake development zone. Scheduled to be completed by 2015, the centre will eventually employ over 10,000 technical staff.
Real Estate Overview

Real Estate Dashboard, Q4 2012

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<th>Market Size</th>
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<tr>
<td>Total Offices Stock (000s sq-m)</td>
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<td>Grade A</td>
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<tr>
<td>Grade B</td>
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<td>Total Retail Stock (000s sq-m)</td>
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<td>Number of Hotels (Five-Star)</td>
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<table>
<thead>
<tr>
<th>Benchmark Values</th>
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<tbody>
<tr>
<td>Office Construction Grade A (000s sq-m)</td>
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<tr>
<td>Office Vacancy Grade A</td>
</tr>
</tbody>
</table>

| Offices Grade A – Rents (RMB per sq-m pa)             | 1,367 |
| Offices Grade A – Management Fees (RMB per sq-m pa)   | 321   |
| Retail – Rents (RMB per sq-m pa)                      | 6,615 |
| Retail – Management Fees (RMB per sq-m pa)            | 350   |
| High-end Residential Prices (RMB per sq-m)            | 12,251|
| Hotels – Room Rates, Five-Star (RMB)                  | 600   |
| Offices Grade A – Indicative Yields                   | 5-6%  |

Source: Jones Lang LaSalle

Key Players

Investors
- Vanke, Poly, Gemdale, Greenland, China Oceanwide
- HK New World, Shui On Land, Wanda, Poly, Yu Long, Wuhan Ping’an Real Estate
- Global Logistic Properties, Goodman
- Shangri-La, Marco Polo, New World, Westin
- Wushang Group, Wanda, Poly

Source: Jones Lang LaSalle

Key Transactions

Investors
- **Ping An Trust** bought Corporate Center 5 at Wuhan Tiandi for RMB 963 million (US$151.2 million) in Q3 2011
- **Rongzhong Investments Group Co., Ltd** acquired Optics Valley International Plaza as a distressed property for RMB 1 billion (US$157.6 million) in Q4 2009
- **Shanghai Pudong Development Bank** purchased half of Wuhan Jingying International Tower (now renamed SPD Tower) for RMB 190 million (US$29.9 million) in Q1 2008
- **New World China Land** purchased New World Department Store - World Trade Tower Branch for HKD 885.4 million (US$113.7 million) in Q1 2008

Occupiers
- **Bayer HealthCare** leased 1,500 sq m in Corporate Center 5 in Q3 2012
- **Bank of Tokyo-Mitsubishi** leased 2,000 sq m in Corporate Center 5 in Q1 2012
- **Bank of East Asia** leased 2,000 sq m in Corporate Center 5 in Q4 2011
- **Ernst & Young** leased 2,000 sq m in Minsheng Bank Tower in Q3 2011
- **China International Capital Corporation (CICC)** leased 1,000 sq m in New World Center in Q1 2010

Source: Jones Lang LaSalle

The Wuhan municipal government has been using real estate development as a means of stimulating economic growth, and has heavily promoted sales of large redevelopment sites at relatively low prices. Real estate investment has grown at an average rate of 25.9% annually since 2000, reaching RMB 127.4 billion (US$20.1 billion) in 2011.
## Jones Lang LaSalle’s View

### Industrial
With its strong relationships with the auto industry and growing high-tech sector, Wuhan’s industrial property market has developed swiftly over recent years. As the business environment, strategic location and pool of well-skilled labour improves, then more companies are anticipated to establish or expand manufacturing bases in the city in the near future. Moreover, Wuhan has a potentially massive (but as yet underdeveloped) market for logistics real estate, and Jones Lang LaSalle expects it to be a major logistics hub by 2020. As major international developers express interest, the city is channeling logistics activity into a number of areas, most importantly the Wujiaoshan Economic and Technological Development Zone.

### Offices
Central China’s rapid growth has drawn many domestic and international firms into establishing a presence in Wuhan, which has helped Grade A rents to rise rapidly since 2010 after several years of slow growth. Though Grade A office demand in Wuhan remains lower than inland China’s top office market, Chengdu, Wuhan’s historical undersupply and its limited three to five-year pipeline in the traditional CBD should allow rents to continue appreciating at stable rates. Most office development and take-up activity is concentrated in Hankou, much of it around Jianshe Avenue. Wuchang may attract more MNCs in the future, however, as it completed its first Grade A buildings in 2012 and continues to cement itself as a preferred location with the city’s high-tech industries.

### Residential
Wuhan’s high-end residential market continues to perform well as rising demand compensates for national housing purchase restriction policies. Major national and international developers have established a presence in the city and the supply pipeline will remain sizeable for the foreseeable future. Downtown Hankou is the traditional centre of the high-end market, but in recent years there have been more projects ‘going up’ in Hanyang and especially in Wuchang. In coming years, high-end development will extend beyond the second ring road to decentralised parts of all three towns, as improving transport infrastructure brings areas further afield within commuting distance.

### Retail
Wuhan’s retail market has been expanding rapidly on the back of rising spending power among the city’s shoppers. Hankou is home to the only luxury mall in the city and also its most established shopping street, but Wuchang also has a large existing retail stock and a sizeable portion of future supply. The expanding metro network will increase the accessibility of many central shopping clusters and also facilitate the growth of new decentralised retail precincts. Shopping malls are gradually displacing department stores as the most popular retail format, with open-air pedestrian street-style malls being particularly common across Wuhan’s shopping landscape.

### Hotels
The number of ‘star-rated’ hotels in Wuhan reached 96 in 2011, of which 13 are five-star and 29 are four-star. Luxury hotels are mostly located in Hankou, though future supply will be more evenly distributed across the city. Upper-end hotel supply is expected to double by 2015 which will raise a risk of oversupply. However, Wuhan’s speedy growth and status as Central China’s leading city should help keep business brisk and prevent a serious fall in occupancy rates.
Industrial

Massive potential in business parks and logistics

Wuhan is Central China’s top industrial centre and, on top of its strong legacy in heavy industries such as steel and auto manufacturing, is endeavouring to climb the ‘value chain’ by aggressively encouraging investment in high-tech industries. The local government has sponsored the development of a number of business parks, which are most prominent in the East Lake High-Tech Zone; here, the Optical Valley Software Park, Optics Valley Financial Harbour and Biolake have all had success in attracting investment from foreign firms.

Wuhan has vast potential as a logistics market, lying at the crossroads of the nation’s main transportation arteries, while also being a formidable manufacturing centre and retail market in its own right. Central China currently has limited volumes of international-grade logistics space, and interest among major global developers to establish a presence in Wuhan is high. Logistics development has been slow to this point, but that situation is beginning to change: Global Logistic Properties is currently building two facilities with a combined GFA of 230,000 sq-m that are scheduled to be delivered by 2014, and other major international developers also are looking to acquire land parcels.

Wuhan’s government is channeling logistics activity into five main areas of the city. The most important is the Wujiashan Economic and Technological Development Zone in Dongxihu district which, in addition to being an important manufacturing hub for appliances, electromechanical goods and food processing, is being targeted by the city to become Central China’s largest logistics and trading centre. In the next few years the zone will strengthen its role as both a distribution hub for retail and other goods, and as a cluster of refrigerated facilities serving the ‘chilled and frozen’ supply chain needs of nearby food processing projects. Among the other preferred logistics areas, the Tianhe Airport area will be developed further to serve air freight and distribution needs; the Zhuankou area in Hanyang will provide logistics services to Hanyang’s automobile industry; the Zhengdian area will serve much of Wuchang’s industries; and the Yangluo area on the Yangtze will be built up to serve river traffic.
Offices

Attracting Central China headquarters

Wuhan has 521,900 sq-m of Grade A and 1,157,900 sq-m of Grade B office space, with total space close to 1.68 million sq-m. Hankou contains the traditional CBD of Wuhan and is home to seven of the city’s nine Grade A buildings and the majority of its MNC tenants. Jianshe Avenue, known as Wuhan’s ‘finance street’, is the location of choice for many domestic banks as well as several international ones, including HSBC, Mizuho Corporate Bank and Société Générale. Over the past two years, the city’s development as the economic heart of Central China, combined with a rapid growth in its tertiary sector, has attracted an increasing number of firms looking to establish Central China headquarters. Backed by strong demand and limited new high-quality space in the Hankou CBD, average Grade A rents in 2011 experienced a significant annual increase of 24.2% y-o-y, having been largely stable for more than five years up until the end of 2010. The momentum continued in 2012, with rents growing over 20% y-o-y.

Wuchang town contains the East Lake development zone as well as a cluster of high-tech and IT companies, and has been playing an increasing role in Wuhan’s office market. Wuchang’s first two Grade A office buildings were completed in 2012, which is expected to attract more MNCs to the town. Wuchang’s Grade B stock grew by nearly 50% to 578,000 sq-m in 2012, with a further 300,000 sq-m expected by 2015. Much of this space is reserved for owner-occupiers; for example, Industrial Bank and Import-Export Bank have each purchased part of the Guangze Center project, which was completed in late 2012.

Wuhan’s Grade A office stock is expected to increase to 704,500 sq-m by the end of 2015, as four office towers are completed in Hankou. The first of these towers will not be finished until 2014 and, as a result, Wuhan’s Grade A office supply will be limited in the short term. This will help to avoid the oversupply seen in other regional centres (like Chengdu) and will allow Wuhan’s rents to maintain a stable appreciation.

Looking five to 10 years ahead, the growth of the new CBD in Wangjiadun (near Jianshe Avenue) could lead to a significant increase in supply in Hankou and the formation of a greatly expanded CBD area; in the longer term this will provide potential tenants with more options and a temporary state of oversupply.
Residential

**Wuchang will become the main growth pole**

Major domestic and international developers, such as New World Development, CR Land and Shimao Property, started entering Wuhan’s high-end residential market in around 2005, when high-end prices were in the middle of a growth surge, growing 15-20% y-o-y from 2005 to the first half of 2008, before falling through 2009 as the Global Financial Crisis took hold. Supportive economic policies then helped spur sales prices to begin rising again in late 2009. However, price growth has moderated since 2011 as the central government has imposed policies to ‘cool’ the housing market, though Wuhan has avoided the steep price drops experienced by other cities.

Wuhan’s high-end market is spread across six primary clusters. The Jiang’an submarket in Hankou has the highest-quality housing, with the easiest access to transport and amenities as well as the highest prices by some distance (about 15,000 RMB per sq-m); it has projects facing the Yangtze River as well as developments concentrated around the picturesque inner city lakes. Also in Hankou are the Jianghan and Qiaokou clusters, mature urban areas that have convenient access to Wuchang and Hankou. Jianghan is home to the planned new CBD of Wangjiadun, which over the next decade will see a massive pipeline of high-quality new developments (currently dominated by national developer Oceanwide International).

Hanyang is in the process of redeveloping its riverfront industrial zones into commercial and residential areas, which will provide some of Wuhan’s most affordable river views. Developers Landsea and Vanke have both launched major housing developments in Hanyang near the central Longyang Avenue.

Wuchang contains two residential submarkets. One is clustered around the Yangtze River’s south bank; the other covers both the traditional commercial centre of Hongshan Square and extends east to serve the growing concentration of universities and research facilities in the East Lake High-Tech Zone.

The submarkets in Hanyang and Wuchang will both benefit from the new metro lines and bridges that will improve connectivity with the employment hubs in Hankou. Expanding transport infrastructure in these areas will increase the amount of land available for development and ensure rapid growth, particularly in Wuchang.

Looking ahead, the demand for high-end residences in Wuhan will continue to be strong. However, inventories will rise steeply through 2013 as existing projects launch large numbers of new units at the same time, and new projects add their own supply to the market, especially in Wuchang. Capital value growth will slow in 2013 as supply outstrips demand, while price growth is expected to re-accelerate from 2014 as the supply wave passes and strong sales help reduce inventories.

**Wuhan High-end Residential Supply to 2015**

![Wuhan High-end Residential Supply to 2015](chart.png)

Source: Jones Lang LaSalle Real Estate Intelligence Service (REIS)
Retail

Expanding consumer class supports growing supply

Wuhan contains about 3.3 million sq-m of retail space, with about 1 million sq-m in department stores and 2.3 million sq-m in shopping malls. Hankou has the city’s oldest and most established retail clusters, with its wide selection of department stores and shopping centres attracting shoppers from Wuchang and Hanyang as well as the greater Wuhan region. The pedestrianised Jianghan Road in Hankou is the city’s oldest retail street and remains a favourite mass market destination. Wuhan International Plaza is the city’s only luxury shopping mall and anchors the city’s retail core along Hankou’s Jiefang Avenue. This mall and its neighbours are owned by the Wushang Group and are Wuhan’s top-performing retail properties.

Wuhan’s retail market has grown rapidly over the past five years, fuelled by a growth in consumer spending power. Urban per capita disposable income nearly doubled from RMB 12,400 (US$1,954) in 2006 to RMB 23,700 (US$3,735) in 2011. Accordingly, retail sales in the city have risen at an annual rate of 18% since 2006, reaching RMB 295.9 billion (US$46.6 billion) in 2011. While Wuhan is less famous for ‘free-spending’ than its inland peers, Changsha, Chongqing and Chengdu, it has made significant strides in becoming a major retail city: as of mid-2012 it ranked third behind Beijing and Shanghai in terms of presence of fast-fashion outlets such as C&A and H&M.

Shopping malls are overtaking department stores as Wuhan’s dominant retail format. The most recent example is Wanda’s ‘Han Jie’, a shopping centre with an open-air pedestrianised street format that lies between two lakes in Wuchang, which has become a major attraction for tourists as well as local shoppers. Open-air format malls are popular among developers in Wuhan, with major examples including Shui On’s Wuhan Tiandi, Guanggu World City, Sone Park and West Garden.
Though Hankou remains the city’s primary retail destination, Wuchang has emerged as a major retail force in its own right, with total stock almost equal to Hankou’s. The recently-opened Metro Line 2 will greatly benefit properties around Wuchang’s Guanggu and Jiedaokou retail clusters, and the opening of further lines will help the development of new retail precincts in Wuhan’s decentralised areas, which are projected to grow rapidly after 2013. One example of such a scheme is the 240,000 sq-m Or-Sun Century Square project which will open in 2016 in decentralised Wuchang.

Major developers that are currently building or proposing projects in Wuhan include CapitaLand, Hutchinson and Shui On, and they are contributing to a total retail stock for the city that is forecast to more than double to 7.3 million sq-m by 2016. This increase creates a risk of oversupply, but we have found that the number and distribution of planned malls is appropriate for the size of Wuhan’s population. Notably, much of the planned supply is set to follow expanding transport routes and residential development in decentralised areas. This should help to spread new supply around Wuhan’s area and mitigate the risk of oversupply.
Hotels

International brands target Wuhan

Data from the China National Tourism Administration shows that Wuhan currently has 96 ‘star-rated’ hotels; of these, 13 are five-star and 29 are four-star, for a total of 42 high-end hotels. By the end of 2011, Wuhan’s upper-end hotel market had 4,690 rooms in its domestic and international brands - around 62% of these are located in Hankou town and 26% in Wuchang. The typical occupancy rate for Wuhan’s upper-end hotels has hovered around 65% over recent years, with average daily rates (ADR) ranging between RMB 550 and 650 (US$87 and $102). The rate is somewhat seasonal and normally peaks between 70-80% from March to May, and September to December. Hotel demand is primarily from the corporate sector, followed by MICE and then leisure demand. Compared to other provincial capitals in Central China, the ADR of Wuhan’s five-star hotels ranks third behind Taiyuan and Zhengzhou.

Wuhan’s upper-end hotel stock is expected to double between 2012 and 2017, with approximately 4,800 rooms planned in Hankou, Hanyang and Wuchang. 2014 will be the busiest year, with 2,160 rooms coming onto the market. The new entrants comprise many international hotel brands such as Hilton, Sheraton, InterContinental, Holiday Inn, Regal, Ritz-Carlton, Grand Hyatt and Howard Johnson.

Wuhan’s future hotel supply will replace some outdated stock, but may also test the market’s ability to absorb supply and might impact upper-end hotels’ performance. On the other hand, Wuhan is benefiting from both a central government-sanctioned push to cement its status as Central China’s leading city, as well as economic growth and improving infrastructure, which should facilitate the growth of domestic and international travel to the city. It is anticipated that overall hotel demand will continue to expand, insulating existing and future hotels from serious oversupply.
Final Observations

Wuhan’s undisputed status as the primary city of Central China has made it a key beneficiary of national efforts to develop the region. The city shares a number of strengths with China’s other inland regional centres, including a well-developed industrial base, low-cost labour force and rapidly-improving intra-city infrastructure. What separates Wuhan from other inland centres is its central location, the full potential of which is being realised through national infrastructure investments such as high-speed railway lines that make access to major economic regions easier than from any other Chinese city. Wuhan also stands out for its higher education sector, which enrols more students per year than any other Chinese city and provides a steady stream of talent to the city’s growing tertiary industries. The city’s location advantages and capable workforce are both increasingly important factors in attracting MNCs and major domestic firms.

Success in its heavy industries, such as car and steel making, has cemented Wuhan’s role as an industrial powerhouse, and the city is now pushing to diversify its economy towards more advanced manufacturing and services. Areas like the East Lake High-Tech Zone are attracting investments in R&D, back-office functions and high-tech manufacturing. Meanwhile, rising prosperity has turned Wuhan into a significant consumer market, and expanding and extending links with surrounding cities are making it one of the region’s primary retail destinations.

Wuhan’s real estate market is expected to see strong growth across all sectors in the next several years, as robust demand from retail tenants, office occupiers and home buyers supports continued asset price growth. At the time of writing, the most significant short-to-medium-term risks are large supply pipelines in the residential, retail and hotels sectors. However, we believe that an expanding economy and rising incomes will shore up demand for these properties and support continued price appreciation. Many future residential and retail projects will follow Wuhan’s expanding transport infrastructure out of existing submarkets, thereby distributing new projects to previously underserved areas and reducing the risk of localised oversupply.
Definition of Terms

Economic Dashboard

**Population**: Population refers to the total population as at or near year-end 2011. There are two definitions of population:
- Registered population – those officially registered with the police.
- Permanent residence population – those who actually reside permanently in a location, usually longer than one-half year.

Wuhan’s population refers to permanent residence population, as determined by Hubei’s 2011 provincial census.

**GDP**: Refers to the gross domestic (i.e. regional) product of a location.

**Employment**: Refers to the number of persons engaged in labour and receiving remuneration payment or earning business income, including fully employed staff and workers in state-owned, collective-owned, privately-owned or other kinds of economic sectors and otherwise employed persons.

**Population Growth**: Refers to the compound annual growth rate over the 10-year period 2000–2010.

**GDP Growth**: Refers to the compound annual GDP growth rate over the 10-year period from 2001 to 2011.

**Rail Passengers**: Refers to the number of passengers travelling through a city by railway, as determined by number of tickets sold.

**Freight Traffic**: Refers to the volume of freight transported by various means, measured in millions of tons.

**Utilised FDI**: Refers to remittance, equipment and technology financed from abroad, by loans, foreign direct investment (FDI) and other forms undertaken by the Chinese government at all levels, by various departments, enterprises and other economic units.

**Exports**: Refers to value of exports of trade companies registered in Wuhan.

**GDP/Capita**: Refers to total gross domestic product divided by the resident population.

**Disposable Income/Capita**: Refers to the actual income at the disposal of a person which can be used for daily expenses, i.e. total income minus income tax, property tax and other current transfers.

**Higher Education Institutions**: Refers to higher education institutions providing higher education courses and training for senior professionals. They include full-time universities, colleges, high professional schools, high professional vocational schools and others. High education institutions are set up according to the central government’s evaluation and approval procedures. This category may also include some adult education institutions.

**Total Annual Graduates**: Refers to the total number of students graduating with degrees from a higher education institution in a given area.

**Unemployment Rate**: The registered urban unemployment rate refers to the ratio of the number of the registered unemployed to the sum of the number of persons employed and registered unemployed in a location.

**Average Wage Rates**: Average wage rate refers to the average wage of fully employed staff and workers. It is calculated as follows: average wage of fully employed staff and workers = total wages of fully employed staff and workers/average number of fully employed staff and workers.

Real Estate Dashboard

**Offices Grade A Stock**: Refers to the total completed Grade A office space (occupied and vacant). Grade A properties are generally wholly owned and have an above-average condition and amenities suitable for MNC tenants.

**Offices Grade B Stock**: Refers to total completed Grade B office space (occupied and vacant). Grade B reflects a middle-range property in the market.

**Retail Stock**: Represents the total modern retail stock, consisting mostly of shopping malls and department stores.

**Office Construction Grade A**: Refers to the total amount of Grade A office space in properties where construction has commenced and completion is expected between 2013 and 2016.

**Office Vacancy Grade A**: Refers to Grade A office floor space (as a % of total Grade A stock) in existing properties that are physically vacant, ready for occupation in the next three months and are being actively marketed.

**Grade A Office Rents**: Average rents for a whole floor in the mid zone of a Grade A building. Does not include management fees or landlord incentives.

**Grade A Office – Indicative Yields**: Refers to the best (i.e. lowest) yield estimated to be achievable for a notional office property of the highest quality and specification. Indicative yields represent Jones Lang LaSalle’s ‘market view’, based on a combination of market evidence where available, and a survey of expert opinion

**Grade A Office Vacancy Grade A**: Refers to Grade A office floor space (as a % of total Grade A stock) in existing properties that are physically vacant, ready for occupation in the next three months and are being actively marketed.

**Grade A Office Construction Grade A**: Refers to the total amount of Grade A office space in properties where construction has commenced and completion is expected between 2013 and 2016.

**Retail Rents**: Refers to average rents for tenants on the ground floor of modern retail centres (generally shopping malls and department stores). Does not include management fees or landlord incentives.

**Management Fees**: Refers to fees levied by property managers for general upkeep of commercial properties.

**Hotels Room Rates**: Refers to the average daily rate for a standard room for a five-star hotel.

**High-end Residential Prices**: Refers to typical prices (within a range) for high-end residential projects in RMB per square metre.

**Grade A Offices – Indicative Yields**: Refers to the best (i.e. lowest) yield estimated to be achievable for a notional office property of the highest quality and specification. Indicative yields represent Jones Lang LaSalle’s ‘market view’, based on a combination of market evidence where available, and a survey of expert opinion

**Currency**: Monetary values are expressed in the currency reported (either RMB or US$), with the other currency in parenthesis and calculated with the year-end 2011 exchange rate of 6.3444 RMB/US$.
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World Winning Cities

Jones Lang LaSalle’s World Winning Cities programme is a multi-year research initiative designed to draw together the essence of contemporary city competitiveness and to predict the future city winners and losers across the globe. The programme examines trends that will impact on the business and economic landscape and how they are coalescing to create the rising urban stars of the next decade. It is unique in assessing the contribution of real estate to sustainable competitive advantage and the implications for investors, developers, corporate occupiers and city governments. World Winning Cities Research goes beyond description to uncover the ‘why’ of city real estate market dynamics.

http://www.joneslanglasalle.com/Pages/WorldWinningCities.aspx

http://www.joneslanglasalle.com/China50cities

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