# Best-Performing Cities CHINA 2016

The Nation's Most Successful Economies



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## **Executive Summary**

This second edition of Milken Institute's Best-Performing Cities (BPC) China series analyzes the latest and most comprehensive official data to continue tracking the recent economic performance of Chinese cities. The main purpose of this series is to offer a tool to monitor and evaluate the economic dynamics of cities in China and improve their performance. In addition, this work provides businesses with insight into economic trends to explore potential investment opportunities in China.

Following the methodological framework from our inaugural BPC China index, the 2016 ranking index incorporates nine indicators: one-year (2013-2014) and five-year (2009-2014) job growth, one- and five-year wage growth, one- and five-year gross regional product (GRP) per-capita growth, three-year (2011-2014) foreign direct investment (FDI) growth, the share of FDI and GRP (2014), and the location quotient (LQ) for high value-added industry employment (2014). Like last year, we also present two separate rankings—one for the first- and second-tier cities and the other for the third-tier cities—to reflect the fact that cities belonging to the former group are normally larger in size and receive more support from the central government.

Increased openness, re-orienting the economy and urban clustering have all led to economic improvement. The escalation of openness comes from China's Twelfth Five-Year Plan (FYP) for 2010 to 2015 and the "One Belt, One Road" (OBOR) initiative, which expands China's trading activities with Central Asia, Europe, and Africa. These strategies have largely shaped urban economic development in the country and their impact is particularly pronounced on our top-ranked cities. Many Chinese cities have also been restructuring their local economies as China's economy has entered a "new normal" characterized by a lower yet more innovation-based growth trajectory.

Many more-developed cities such as Shenzhen have been transitioning their economies from low-end, low-cost manufacturing to innovation-based, high value-added industries while many less-developed cities have taken over low-end manufacturing by leveraging their cheaper production costs. Urbanization is one of the country's more obvious development strategies, causing massive migration and visible growth in residential properties and commercial developments. Major urban clusters have been emerging and are incorporating neighboring cities. In turn, these clusters play a key role in driving regional economies.

Many cities in the Top 10 list for both groups have been integrated into one of the major urban clusters and benefit from both expanding urbanization and the OBOR initiative. According to the World Bank, at the end of 2015 China's urbanization rate reached 56 percent, surpassing the targeted rate of 51 percent set by the 12<sup>th</sup> FYP. On the whole, cities in the less-developed inland regions elevate their growth rates as large-scale urbanization continues to drive regional economic growth. The refining of policies and restructuring of industries has lifted growth rates in leading development cities as well. Climbing the value chain, diversifying their industries, and streamlining their review processes for investors also led to the economic success of these top-performing cities.

Here are some key findings from our 2016 BPC China ranking:

- » Moving up from 11th place last year, Guiyang grabs the crown in our 2016 first- and second-tier city ranking. Its performance in growth of jobs, wages, GRP, and FDI are all among the Top 10. Despite its location in the less-developed southwest, the city has benefited from the central government's effort to bridge the gap between the coastal and inland regions. In particular, the OBOR initiative helps Guiyang receive more investment, stimulating growth.
- » Like last year, Shanghai and Tianjin stand in second and third places. Shenzhen moves up by six places to secure fourth place, followed by Chengdu, Dalian, Nanchang, Chongqing, Xi'an, and Haikou respectively. Shanghai and Shenzhen are the most notable in this group, as both have been designated as "Free Trade Zones" in China. In addition, high value-added and research and development (R&D) industries are growing in the Shanghai and Shenzhen regional economies.
- » Nanchang, Xi'an, and Haikou are newcomers to the Top 10 list. Overall, cities belonging to large urban clusters (Yangtze River Economic Belt: Shanghai; Pearl River Delta Economic Zone: Shenzhen; Chengdu-Chongqing Economic Zone: Chengdu and Chongqing) have strong economic performance. The OBOR project largely helps drive the economic development of most Top 10 cities, Xi'an in particular.
- » Ranked 95<sup>th</sup> overall last year, Zhoushan moves to the top spot among third-tier cities. In particular, it has a strong performance in one- (ranked 1<sup>st</sup>) and five-year (ranked 5<sup>th</sup>) job growth. Its recent strong growth can be largely attributed to its port location as well as the OBOR effort and 12<sup>th</sup> FYP.
- » Along with Zhoushan, five cities is—Weifang, Xiangyang, Baoji, Meishan, and Liupanshui is—have their debut in the Top 10 list. As in the previous ranking, cities including Taizhou (ranked 3<sup>rd</sup>), Suzhou (ranked 5<sup>th</sup>), Nantong (ranked 6<sup>th</sup>), and Suqian (ranked 9<sup>th</sup>) in Jiangsu Province are in the Top 10 list. These four Jiangsu cities, along with Zhoushan in Zhejiang Province, are all part of the Yangtze River Economic Belt. However, it is notable that several inland cities, including Xiangyang (ranked 4th), Baoji (ranked 7<sup>th</sup>), Meishan (ranked 8<sup>th</sup>), and Liupanshui (ranked 10<sup>th</sup>) also enter the Top 10. The OBOR initiative and these cities' proximity to major urban clusters chiefly explain their recent economic improvement.
- » In general, cities from the northeast regions in China, with the exception of Dalian, have a lackluster performance in our ranking. This reflects upon the region's difficulty in restructuring an older industrial base that relies on energy, steel production and less diversified heavy industries. Notably, the economies of Changchun fell from eighth spot in 2015 to 11th in 2016.

Table	1. Best-Performing Cities China 2016		
Rank	First- and second-tier cities	Rank	Third-tier cities
1	Guiyang, Guizhou (贵州省, 贵阳市)	1	Zhoushan, Zhejiang (浙江省, 舟山市)
2	Shanghai (上海市)	2	Weifang, Shandong (山东省, 潍坊市)
3	Tianjin (天津市)	3	Taizhou, Jiangsu (江苏省, 泰州市)
4	Shenzhen, Guangdong (广东省, 深圳市)	4	Xiangyang, Hubei (湖北省, 襄阳市)
5	Chengdu, Sichuan (四川省, 成都市)	5	Suzhou, Jiangsu (江苏省, 苏州市)
6	Dalian, Liaoning (辽宁省, 大连市)	6	Nantong, Jiangsu (江苏省, 南通市)
7	Nanchang, Jiangxi (江西省, 南昌市)	7	Baoji, Shaanxi (陕西省, 宝鸡市)
8	Chongqing (重庆市)	8	Meishan, Sichuan (四川省, 眉山市)
9	Xi'an, Shaanxi (陕西省, 西安市)	9	Suqian, Jiangsu (江苏省, 宿迁市)
10	Haikou, Hainan (海南省, 海口市)	10	Liupanshui, Guizhou (贵州省, 六盘水市)







### Introduction

In order to better track China's transition from a high-growth stage of development to a more moderate, sustainable economy, the Milken Institute last year initiated the Best-Performing Cities (BPC) China ranking. Following the structure of that report, our 2016 BPC China ranking utilizes the most recently released official data to construct a composite index to track the economic performance of Chinese cities.

The main goals are threefold:

- » Provide policymakers, planners, practitioners, investors, and academics with a tool to monitor and evaluate the economic performance of Chinese cities.
- » Give direction to Chinese cities to make improvements.
- » Create a venue to explore relatively untapped markets and business opportunities in the increasingly eclectic development landscape of China.

The index incorporates nine indicators from periods ending in 2014: one- and five-year job growth, one- and five-year wage growth, one- and five-year gross regional product (GRP) per-capita growth, three-year foreign direct investment (FDI) growth, the share of FDI and GRP, and the location quotient (LQ) for high value-added industry employment. Given that first- and second-tier cities typically received more support from the central government compared with third-tier cities, this index categorizes cities into two groups. The large city group includes the first- and second-tier cities while the small city group incorporates the third-tier cities. Large and small city groups are then ranked separately to present more meaningful comparisons.

Guiyang grabs the crown in the large city group, followed by Shanghai, Tianjin, Shenzhen, Chengdu, Dalian, Nanchang, Chongqing, Xi'an, and Haikou. Guiyang, Nanchang, Xi'an, and Haikou make their debut in the Top 10 club. For the small city group, Zhoushan stands at the top, followed by Weifang, Taizhou, Xiangyang, Suzhou, Nantong, Baoji, Meishan, Suqian, and Liupanshui respectively. Six of these cities are newcomers to the Top 10 list. Like the previous ranking, cities in Jiangsu Province have a strong presence in the Top 10 small city list. Overall, most cities in Top 10 for both the large- and small-city groups are parts of major urban clusters like the Yangtze River Economic Belt or have benefited from central government policies such as the "One Belt, One Road" (OBOR) initiative. The ranking showcases new regional development trends that reflect China's economic development strategies under the guidance of the new five-year plan. Simply put, China is implementing development policies that enable market access internationally and domestically. Several important cities in the west and southwest regions exhibit strong growth resulting from these policies. Furthermore, more established cities and urban clusters will continue to expand at a slower pace with a focus on "quality growth." The development scheme attempts to refine the development imbalance between large urban centers and smaller surrounding cities by broadening the size of the three largest urban clusters: the Jing-Jin-Ji Megalopolis, the Yangtze River Economic Belt, and the Pearl River Delta Economic Zone.

As China's urbanization broadens and deepens, more cities will become growth engines for the nation's economy. The evolution from a low-cost "world factory" to a more innovation-based economy is drastically transforming regional development and growth. Many Chinese coastal and developed cities are relinquishing their emphasis on low-end and labor-intensive manufacturing and pursuing more high-end, high value-added innovation-driven industries. As this process unfolds, many smaller and inland cities are taking over the low-end manufacturing functions by leveraging their lower labor and land costs. These changes will benefit smaller and less-developed cities by allowing them to be better integrated into the more developed neighboring clusters. By tracking these cities' performance over time and understanding the key reasons behind their success and failure, this ranking index will help us to make informed decisions to improve urban life.



## Overview: China's Economic Development

Since China's opening in the late 1970s, investments, urbanization, and exports have been the engines powering rapid economic development and double-digit growth. However, China's economic expansion has slowed in recent years because of both external and domestic factors. The government has recognized, as many scholarly works have indicated, that the economy will not grow at the double-digit pace it experienced in the past three decades. China's economic development entered a new paradigm of "New Normal" that signals a transition from the export-driven (low-cost manufacturing) to the new economy (innovation-based industries). In addition to its economic slowdown, China will be further constrained by the issues of an aging population, industrial overcapacity, and excessive inventory of new residential property in many third-tier cities.

To address these challenges, China has proposed a number of initiatives to promote development that is sustainable, environmentally friendly, and domestic-consumption driven. In 2013, China proposed the idea of "One Belt, One Road" (or "The Belt and Road" or OBOR) that promotes China's economic collaboration with Europe, Asia, and Africa through investment, commerce, and trade. This strategy consists of two economic corridors. One is the "Silk Road Economic Belt" that integrates countries in Central Asia, West Asia, the Middle East, and Europe. The other is the "21st Century Maritime Silk Road" which seeks collaboration across countries in Southeast Asia, Oceania, and North Africa. For China as a whole, the OBOR initiative is an important strategy to deal with overcapacity (e.g., steel production) through exploring new markets for exports. From the regional development perspective, this initiative helps ignite the economic growth of China's less-developed regions and cities by facilitating the flow of people, capital, and information-sharing both domestically and internationally.

China's latest responses to new challenges are illustrated in its Thirteenth Five-Year Plan (13<sup>th</sup> FYP), which lays out development goals for the 2016-2020 period. They include creating "a moderately prosperous society." Part of this goal requires doubling China's GDP by 2020 and maintaining an annual growth rate of 6.5 percent to 7 percent. The plan also calls for doubling per-capita income by 2020 from the 2010 level of US\$4,400. The plan has five principles: innovation, openness, coordination, inclusiveness, and green. One overarching principle is to shift economic development from focusing on scale to focusing on quality.

Recognizing its rapidly diminishing advantages in cheap labor and land, China is focusing on innovation. In 2015 China introduced the "Made in China 2025" initiative that focuses on industries such as robotics, aviation, information and communication technology, rail transportation equipment, new energy automobiles, and biomedicals. The initiative aims to transform China from a low-cost, low-quality "world factory" to a high value-added, high-quality world manufacturing platform. To achieve this goal, many Chinese firms have been following the "China Internet Plus" initiative by incorporating the Internet and other technologies such as the Internet of Things into their manufacturing and marketing processes. Many cities in China have followed suit. For instance, the robotics industry has recently experienced rapid growth in our top-ranked large cities such as Shanghai (ranked second) and Chongqing (ranked eighth). In addition, China is also encouraging its young citizens to be entrepreneurial and start their own innovation-based businesses.

China is making a marked effort to be more open and collaborative. It seeks to achieve this by establishing more free trade zones and adding trade agreements with other countries. China's OBOR initiative further demonstrates its ambition in implementing this principle of openness. The principle of "quality" economic growth includes more equitable distribution of economic dividends and development opportunities. China also aims to coordinate development that bridges the gaps

between income levels across various social groups. To accomplish this, China is trying to increase the rate of urbanization and reduce unbalanced development by creating integrated urban clusters such as the Jing-Jin-Ji, Yangtze River, and Pearl River Delta clusters. Additionally, China is attempting to create an inclusive society where all citizens have fair opportunities for career development and sharing wealth. Aside from economic development, leaders have paid more attention to environmental protection and sustainable development by developing industries such as new materials and new energy.

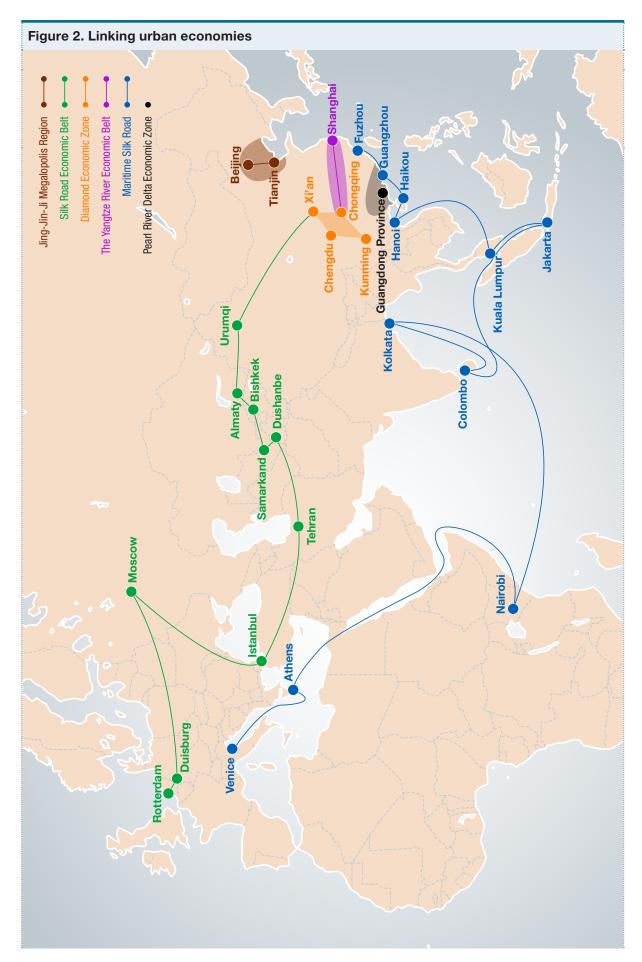
In addition to the OBOR initiative and the 13<sup>th</sup> FYP, China is working to bolster its economy using financial tools. One approach is to form initiatives and institutions such as the Asian Infrastructure Investment Bank (AIIB). Another is to internationalize its currency, the renminbi (RMB), so that countries can use it as payment in international trade and investment. In 2015, China's RMB was included in the International Monetary Fund (IMF)'s reserve currency basket. This development will help further open and integrate China's financial market with others in the world.

#### REGIONAL DEVELOPMENT

One of the key principles of the 13<sup>th</sup> FYP is coordination that aims to create more balanced regional development (e.g., between coastal and inland regions). Given the rising labor and land costs in coastal cities, many have decided to transform their economies from low-end manufacturing to high value-added innovation industries. Inland cities, on the other hand, are taking over the manufacturing function by leveraging their low business costs. In addition to the use of macro-economic policies, China has been trying to further its urbanization rate by using city centers as economic growth engines. Additionally, China has been trying to form urban and regional clusters such as the Jing-Jin-Ji Megalopolis, the Yangtze River Economic Belt, and the Pearl River Delta Economic Zone to drive urban economic development. This strategy, together with the OBOR initiative, creates a synergy where both more-developed and less-developed economies benefit from one another (Figure 2). This strategy will also help boost the development of a production supply chain in closer proximity. This policy will prove to be a strategic step to strengthen industry-integration and competitiveness in China.

The Jing-Jin-Ji Megalopolis consists of three city/province regions—Beijing, Tianjin, and Hebei Province—and has over 130 million people. In contrast to Beijing and Tianjin, the primary industries of Hebei Province are steel, metallurgy, and machinery, all of which utilize low-skilled workers. Beijing and Tianjin have been magnets for job seekers in China, particularly from the two cities' neighboring Hebei Province. Beijing is increasingly overcrowded and administratively overburdened. The by-products of rapid development can be seen with the severe traffic jams and pollution in the capital. By bundling these three regions together, more companies have moved from Beijing and Tianjin to Hebei Province to take advantage of its lower business operating costs. Beijing is now decentralizing some of its administrative functions to Tongzhou. In the future,¹ the city of Baoding in Hebei may also take on some administrative roles from Beijing.² All of these changes help relieve Beijing and Tianjin's traffic and air pollution while helping Hebei Province host more advanced businesses and practices that will transform its industrial structure.

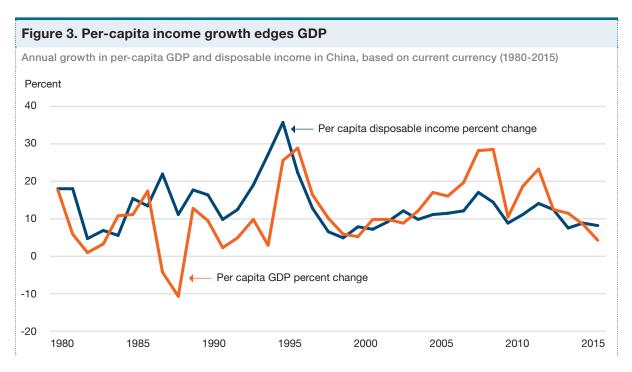
The Yangtze River Economic Belt consists of cities along the Yangtze River including major cities like Shanghai, Chongqing, and Chengdu. This urban cluster covers an area of 2.05 million square kilometers and accounts for more than 40 percent of China's population.<sup>3</sup> In 2015, the city government of Chengdu proposed the idea of forming the "Diamond Economic Zone" that comprises Chengdu, Xi'an, Chongqing, and Kunming.<sup>4</sup> This idea is meant to create a better synergy with the OBOR initiative and allow the Yangtze River Economic Belt to bolster urban and regional development.



Sources: Milken Institute.

The Pearl River Delta Economic Zone is one of China's earliest urban clusters. It is one of the key clusters that helped China become the "World's Factory." Yet many cities in this region, such as Shenzhen, have been recently transforming their economy from an emphasis in low-cost manufacturing to high-tech manufacturing and services. This urban cluster is now leading China to a new industrial era.

Regional economic development and clustering has been the driver to China's successful transformation from a very poor nation to a nation that is fully integrated into global trade and commerce hubs over the last 30 years. China's GDP per capita rose from US\$182.50 in 1979 to US\$7,924.70 in 2005.<sup>5</sup> In addition, China's per capita disposable income has been hovering around a 10 percent annual growth rate (Figure 3), which supports China's rising consumption-driven economy. Public infrastructure construction and industry clustering have been and will continue to be key drivers of real-economy sector development in China. If major cities and clusters such as Shenzhen, Shanghai, Tianjin, Chongqing, and Chengdu represent the past focal points for regional development, then the greater western region is the current and future focus of development. In all, western China is the new frontier for large-scale regional and urban development. China's success will require an equity of prosperity among less-developed western areas and the better-developed coastal regions.



Sources: Disposable income per capita from the National Bureau of Statistics retrieved by Thomson Reuters; GDP per capita from the World Bank and OECD data banks retrieved by the World Bank.

## Methodology

The 2016 Milken Institute Best-Performing Cities China index catalogs 260 Chinese cities into a largest-cities group and a small-sized and medium-cities group. The largest-cities group comprises 33 first- and second-tier cities while the small- and medium-sized group is made up of 227 third-tier cities. The two groups are ranked separately based on economic performance with an emphasis on growth measurements. The index measures growth in jobs, wages, per-capita gross regional product (GRP), and foreign direct investment (FDI), while also measuring the share of FDI and GRP and the concentration of high value-added industries. Growth in jobs, wages, and per-capita GRP is evaluated over one-year (2013-2014) and five-year (2009-2014) periods. The one-year period captures the most recent economic dynamics and the five-year period adjusts for extreme variation in the recent business cycle. FDI growth is measured over a three-year (2011-2014) period and the FDI is also evaluated by measuring its share over GRP in 2014. The concentration of high valueadded industries is quantified using a location quotient (LQ) for employment in those industries in 2014. The sectors of manufacturing; transport, storage and post; information transmission, computer services and software; financial intermediation; real estate; and leasing and business services define high value-added industry. This group of sectors typically is considered a major catalyst for the growth of a local economy. Recent theoretical and empirical work suggests that both FDI and high value-added industries play critical roles in bolstering China's economy, and these indicators are more heavily weighted in this index as a result. Table 2 lists the nine indicators used to construct the index and their respective weights.

Table 2. Components of the Best-Performing	Cities China Index
Indicator	Weight
1-year job growth (2013-2014)	0.100
5-year job growth (2009-2014)	0.100
1-year wage growth (2013-2014)	0.100
5-year wage growth (2009-2014)	0.100
1-year GRP per-capita growth (2013-2014)	0.100
5-year GRP per-capita growth (2009-2014)	0.100
3-year FDI growth (2011-2014)	0.125
FDI/GRP (2014)	0.125
LQ for high value-added industry employment (2014)	0.150

Undocumented modifications in counting methods, reclassifications based on policy changes, and other changes can cause discrepancies or abnormalities in the data recorded for a city. Consequently, some data adjustments were made to construct a more consistent index and to reflect the current urban development status and economic trends more closely. In rare and extreme cases, cities such as Yinchuan in Ningxia Province, Xingtai in Hebei Province, Chenzhou in Hunan Province, cities were omitted from our ranking to maintain consistency. To minimize volatility in ranking results the Milken Institute employs a ranking method (based on weighted z-scores) that differs from the method used for our Best-Performing Cities series for the United States and Asia. The alternative method used here provides a ranking that better describes the economic development of Chinese cities. For more details regarding data and methodology, see the Appendix.



# Cities China

(First- and second-tier cities)

# #1 Guiyang, Guizhou

1-year job growth (2013-2014)	<b>5</b> TH	1-year GRP per-capita growth (2013-2014)	<b>2</b> ND
5-year job growth (2009-2014)	<b>10</b> TH	5-year GRP per-capita growth (2009-2014)	<b>1</b> ST
1-year wage growth (2013-2014)	<b>5</b> TH	3-year FDI growth (2011-2014)	<b>4</b> TH
5-year wage growth (2009-2014)	<b>5</b> TH	FDI/GRP (2014)	<b>25</b> ™
		LQ for high value-added industry employment (2014)	<b>31</b> ST

GUIYANG jumped 10 spots from last year's ranking of 11th to make its Top 10 debut at No. 1. Guiyang shows particular strength in five-year GRP per capita and three-year FDI growth, which are ranked first and fourth, respectively. The city ranks highly among seven of the nine indicators that make up the composite index in this year's ranking. The city's weaker measurements are the share of FDI to GRP and the concentration of high value-added industries in the regional economies. These shortcomings reflect the city's relatively nascent stage of connecting to global economies and being less developed as compared the majority of tier 1 and 2 cities.

Over the past 30 years, Guiyang has experienced urban development on the largest scale of any Chinese city. So it is no surprise that construction sites saturate the city as the central government pours in resources to lift what was once one of the poorest large cities in China. Everything from high-tech incubators to massive apartment buildings are popping up, and investors are taking notice.

With the construction of hotels, amusement parks, skyscrapers, massive numbers of residential apartments, and a monorail, it is easy to see why this city climbed our ranking so quickly.<sup>6</sup> From 2010 through 2016 there were 150 million square meters of residential property floor space under construction. These residences will be filled by no more than one-third current Guiyang residents and up to 60 percent people from surrounding rural areas. The city's population is expected to double once the new living quarters are full.<sup>7</sup>

Squelching talk of Guiyang becoming another ghost town resulting from building too much too quickly, the city attracted several big-name businesses to open operations there, including Foxconn. The world's largest consumer electronics producer unveiled a new campus in 2014, adding its first manufacturing base with facilities built with environment sustainability as the focus.<sup>8</sup> To encourage tech innovation, Guiyang also offers incentives for incubators to locate in the city's high-tech zone.<sup>9</sup>

The city's development follows the key policy agenda laid out by the central government over the last few years. The policy aims to close the gaps among east and west regional developments with the help of central government funding and stronger support. Additionally, Guiyang is a key railway transportation hub linking southern China cities such as Guangzhou and Shenzhen to southwestern markets such as Kunming, in Yunnan Province, where OBOR will extend past the national border to Southeast Asian economies.



1-year job growth (2013-2014)	<b>1</b> ST
5-year job growth (2009-2014)	<b>5</b> TH
1-year wage growth (2013-2014)	<b>10</b> TH
5-year wage growth (2009-2014)	<b>3</b> RD

Shanghai takes second place for the second year in a row. The city's strong economic fundamentals and steady growth reflect a strong showing among all indicators. The city's LQ for high value-added industry, FDI/GRP, five-year wage growth, and one- and five-year job growth all stand among the Top 10. Notably, its one-year job growth between 2013 and 2014 is ranked first. Shanghai has been growing rapidly over the last decade and shows no sign of slowing.

In 2014, although Shanghai's registered population was roughly 14 million,<sup>10</sup> its actual number of residents exceeded 24 million. Shanghai is still one of the most desirable locations to seek residency and employment. In fact, most foreign corporations, including consulting, pharmaceuticals, and financial services firms, prefer to have their Chinese headquarters in Shanghai. Colonized prior to 1949 by several foreign countries, Shanghai has been a melting pot that accommodates a variety of peoples and cultures. In the last 60-plus years, the city has been the de facto capital market in the People's Republic of China, as well as having key roles in areas such as technology, IT and R&D. Given its port location, Shanghai has also been the hub for international trade and financial services. Shanghai is one of the four municipalities directly governed by the central government, reflecting the city's intimate ties to the national economy both commercially and politically.

In the last two decades, Shanghai has transformed several times, specializing in many new industries. Pudong New District development is a model example of the transformation. Established in 1993, Pudong New Area has developed several pillar industries such as high-tech and finance. Targeting the large pool of China's youth population, it has also been nurturing its cultural and creative industries. For example, Shanghai has established the Shanghai Animation and Comics Museum and hosted various events to cultivate its animation, comics, and video-game industries.

1-year GRP per-capita growth (2013-2014)	13 TH
5-year GRP per-capita growth (2009-2014)	<b>32</b> ND
3-year FDI growth (2011-2014)	14 TH
FDI/GRP (2014)	<b>6</b> TH
LO for high value-added industry employment (2014)	<b>4</b> TH

In 2013, China (Shanghai) Pilot Free-Trade Zone was established in Pudong New Area in an effort to establish a free trade zone meant for financing, financial innovation and international exchanges. It focuses on service trades and allows foreign institutions to conduct business with the most favorable economic, financial and tax advantages in China. Pudong, once a lackluster suburb, is now growing and among the most prosperous areas in China. With its economic success, Pudong New Area is also dedicated to creating a more sustainable urban environment that reflects China's green goal specified in the 13th FYP. Pudong only allows businesses that can meet its environmental regulations to operate in its territory. Its vibrant economy and high-amenity environment have also attracted international talent.

The recent opening of the Shanghai Disney Resort adds further luster to Shanghai. In a nutshell, the location, openness, and supportive government policies together make Shanghai one of the most prosperous economies in China.



1-year job growth (2013-2014)	<b>30</b> TH
5-year job growth (2009-2014)	13 <sup>TH</sup>
1-year wage growth (2013-2014)	<b>29</b> TH
5-year wage growth (2009-2014)	16 <sup>TH</sup>

1-year GRP per-capita growth (2013-2014)	16 TH
5-year GRP per-capita growth (2009-2014)	<b>9</b> TH
3-year FDI growth (2011-2014)	13 TH
FDI/GRP (2014)	<b>2</b> ND
LQ for high value-added industry employment (2014)	<b>7</b> TH

As the effort to strengthen the super cluster Jing-Jin-Ji Megalopolis continues, Tianjin's economy had a strong showing, clocking in at No. 3 again. Tianjin continues to shine in our foreign capital utilization and high valueadded industry categories. A decade of building up infrastructure and expanding its industrial base have yielded a positive return that is reflected in the robust growth in per-capita income. However, a slightly slower one-year job and wage income growth indicates a tapering off in the region's robust development.

Tianjin is a diverse multi-platform economy that incorporates energy, industry, finance, and transportation sectors. This mega city has a long history of serving the Chinese economy as one of the earliest industrialized regions. As the central planners expand the city's role from mega producer of civilian aircrafts to electronic goods, the region is also destined to become a financial innovation center specializing in commodity trading, including carbon exchanges.

Geography is the foundation of the city's development. Tianjin benefits from its location as the closest coastal city to China's capital, Beijing. Tianjin is only 66 miles or a 30-minute ride away on China's ever-expanding high-speed rail line from the Capital. The recent effort to fully integrate the region's three major areas-Beijing, Hebei Province, and Tianjin-highlights the city's role economically and politically. Tianjin and Beijing are slated to be the economic heart of the triad with Hebei Province acting as a spatial buffer zone allowing Tianjin's and Beijing's urban frontiers to expand as needed. The central planners' ambition to turn this energy-producing city into a model eco-city will serve as an example for other cities seeking ecological improvement.11 By all counts, the development of the city is only in the beginning stage of a long march.

As part of an overarching effort to focus the economy on personal consumption, Tianjin increased its minimum wage by 12 percent in April of 2014. For a minimum wage worker in Tianjin this means an increase of 180 yuan per month.<sup>12</sup> Similar changes were made in Beijing and Shanghai. With its new role as a co-economic hub to Beijing, it is no wonder new developments have been popping up throughout the city. The Ritz-Carlton, Wanda Vista Tianjin, and Shangri-La hotels made their debuts in 2013 and 2014, a sign of an increase in wealthy travelers coming to Tianjin.13



#### Shenzhen, Guangdong

1-year job growth (2013-2014)	<b>27</b> TH
5-year job growth (2009-2014)	<b>2</b> ND
1-year wage growth (2013-2014)	<b>8</b> TH
5-year wage growth (2009-2014)	<b>2</b> ND

1-year GRP per-capita growth (2013-2014)	<b>31</b> ST
5-year GRP per-capita growth (2009-2014)	<b>33</b> RD
3-year FDI growth (2011-2014)	<b>21</b> ST
FDI/GRP (2014)	<b>22</b> ND
LQ for high value-added industry employment (2014)	<b>1</b> ST

**Shenzhen** comes in at No. 4 this year, jumping six spots from its previous rank. The city is particularly strong in job and wage growth. Like last year, its high value-added industry LQ tops all large cities.

Shenzhen has a 2014 registered population of 3.3 million.<sup>14</sup> In the past, Shenzhen cemented itself as a low-cost manufacturing hub on the southeastern coast of China. However, Shenzhen has recently been shifting from an old model to an innovative one. The city is now earning a reputation for innovation within manufacturing largely due to its openness<sup>15</sup> and engineering talent. Shenzhen is still a major player in electronic hardware manufacturing—some have even dubbed it the "Silicon Valley of hardware"<sup>16</sup>—but the integration of innovation and manufacturing has made Shenzhen a rising incubator of innovative technology businesses.

New innovative companies are gravitating toward Shenzhen for its established manufacturing supply chains and transport connections. In addition, its location near Hong Kong offers banking and financial support and strong logistics services. The city's relatively low level of traffic and air pollution compared with other major Chinese cities like Beijing and Shanghai also serve as an advantage to entice new businesses.<sup>17</sup> For instance, Intel announced a new Shenzhen-based innovation center designed to promote and accelerate the development of Intelbased devices in China.<sup>18</sup> Intel's CEO, Brian Krzanich, also put up a \$100 million Smart Device Innovation Fund specifically for developing new and better mobile devices. In addition to R&D and manufacturing, Shenzhen also provides great access to markets. For instance, Shenzhen's Huaqiangbei electronics market is among the world's largest electronics wholesale markets.

Not only is the city a tech hub—Shenzhen is also a fertile ground for startup companies. Following the central government's 2014 initiative to encourage mass entrepreneurship and innovation, Shenzhen has been striving to provide a platform for new companies. Shenzhen has been cultivating the environment for "makerspace" events, which showcase innovation. Shenzhen has held the Shenzhen Maker Faire since 2012.

As one of the pioneers in China's new economy, Shenzhen has been reinventing itself. Qianhai is a new area where both the central and local government intend to cultivate innovation to drive China's economic growth. Supported by China's Twelfth Five-Year Plan (2011-2015), China intends to craft Qianhai as a place that is innovative, offers efficient markets, and is globally connected. The Qianhai and Shekou Area of Shenzhen in the China (Guangdong) Pilot Free Trade Zone opened in 2015 and its pillar industries include finance, modern logistics, and information and technology services (including virtual reality). With this development, Shenzhen and the rest of the Pearl River Delta are helping China to transform from the world's factory to a major player in the innovation space.



#### Chengdu, Sichuan

1-year job growth (2013-2014)	8 TH
5-year job growth (2009-2014)	<b>8</b> TH
1-year wage growth (2013-2014)	<b>26</b> TH
5-year wage growth (2009-2014)	13 <sup>TH</sup>

1-year GRP per-capita growth (2013-2014)	<b>15</b> ™
5-year GRP per-capita growth (2009-2014)	<b>5</b> TH
3-year FDI growth (2011-2014)	18 TH
FDI/GRP (2014)	<b>5</b> TH
LQ for high value-added industry employment (2014)	16 ™

**Chengdu** is fifth among the first- and second-tier cities, sliding four places from last year's ranking. Despite the drop in its overall ranking, its performance in one- and five-year job growth, five-year per capita GRP growth, and the FDI/GRP ratio is still strong, standing among the Top 10 in those categories.

Chengdu is the capital city of Sichuan Province, with a 2014 registered population of 12 million.<sup>19</sup> Though mountainous and landlocked, it is located in China's geometric center and is a transitional point to northwest and southwest China as well as to Central Asia and Europe. Fueled by the OBOR initiative, Chengdu's economic importance has increased.

Chengdu has nurtured diverse industries. In the last two decades, Chengdu has allocated large amounts of resources to cultivate high value-added industries such as information technology and biomedicals. The Chengdu Hi-Tech Industrial Development Zone was established in 1988 and was elevated to a national industrial park in 1991. These efforts spurred growth that drew more than 200 Fortune 500 companies to open local operations. Now Chengdu is home to major companies like Texas Instruments (TI), which built a 358,000 square-foot assembly and test operation center. In November 2014 TI announced it would be reinvesting and opening a new wafer bumping facility in 2016.

This zone also provides a "Think Zone" platform for startups with ideas but no funding. This incubator provides entrepreneurs with free office space and equipment to lower new businesses' initial costs as well as networking opportunities with venture capitalists. In 1997, Chengdu built the National Software Industry Base (Chengdu) industrial park. In addition to high-tech industry, Chengdu also leverages its tourism resources to drive economic growth. For instance, Chengdu established the Chengdu Research Base of Giant Panda Breeding in 1987 and now it is a tourism attraction.

To further bolster its economy, Chengdu has been building new industrial parks. Tianfu New Area is deemed a new driving force for Chengdu's economic growth. Its pillar industries include biomedicals, intelligent manufacturing, creative design and emerging finance. To attract foreign investments, Chengdu initiated several international collaborations. For example, the city established the Chengdu China-France Eco-Zone centered on auto manufacturing and the China-Germany Medium- and Small-Enterprise Collaboration Zone in 2014.

Chengdu has several high-quality educational institutions that provide local businesses an abundant talent pool, such as Sichuan University, Southwest Jiaotong University, and the University of Electronic Science and Technology of China. Following the government's policies of encouraging startups and entrepreneurship, these local universities have also provided assistance to students to start their own businesses.

The transcontinental railway connecting Chengdu, Xinjiang, Kazakhstan, Russia, and Lodz, Poland opened in 2013. It was extended to Xiamen in 2015. The transportation infrastructure helps Chengdu to become an indispensable part of the OBOR strategy and facilitate China's trade with Europe and Central Asia. This railway offers a more efficient way of exporting goods such as electronics and materials by cutting delivery time from around 45 days by ship to as little as 12 days from Chengdu to Lodz, while still being significantly cheaper than shipping by air.

In addition, Chengdu has been expanding its aviation infrastructure. To add capacity beyond the existing Shuangliu International Airport, it is building the Tianfu International Airport, which is expected to open in 2020. Once this new airport is completed, Chengdu will be the third city in China (with Beijing and Shanghai) with two international airports.<sup>20</sup> The transcontinental railway together with these two international airports will strengthen Chengdu's logistic roles in the OBOR initiative.



1-year job growth (2013-2014)	<b>32</b> ND
5-year job growth (2009-2014)	<b>27</b> TH
1-year wage growth (2013-2014)	<b>31</b> ST
5-year wage growth (2009-2014)	<b>24</b> TH

1-year GRP per-capita growth (2013-2014)

5-year GRP per-capita growth (2009-2014)

18 TH

3-year FDI growth (2011-2014)

20 TH

FDI/GRP (2014)

1 ST

LQ for high value-added industry employment (2014)

2 ND

Dalian dropped two spots to No. 6 after a considerable slow-down in short-term job and wage growth. In part, the slowdown reflects weakened northeastern economies in general, but the city stays in our Top 10 by continuing to perform well in foreign capital usage and high value-added industry employment. We are likely to see this trend continue in Dalian as it moves away from a heavy-industry base to rely more on trade, service, logistics, and foreign investment.

As part of the transition to build up the city from being a strong regional market to a larger cluster city, there is a marked effort to increase its connection to outside markets both domestically and internationally. A blueprint has been completed for the world's longest submarine tunnel connecting the cities of Dalian and Yantai.<sup>21</sup> This \$42.4 billion project will attempt to create three separate tunnels, one for cars, one for trains, and one for maintenance, underneath Bohai Bay.<sup>22</sup> The tunnels are meant to spur economic development by connecting China's rustbelt cities in the north to its wealthier eastern coastal cities.<sup>23</sup>

Dalian also has plans to build a new \$4.3 billion airport on an 8.07 square-mile (20.9 square-km) artificial island. The airport is expected to be one of the world's largest, serving as a sign of Dalian's growth. The city is expected to outgrow its current airport, Zhoushuizi, by the year 2020.<sup>24</sup> Clearly, new infrastructure will be a dominating growth engine in the region. The air-sea connectivity will further invigorate the region's already sizable and strategic roles in logistics, tourism, and transportation.

On top of national public investments in infrastructure, the region seeks foreign investment as well. As an older industrial and seaport city, Dalian is gearing up to build up its financing by leveraging its logistics base. The Dalian Commodity Exchange began trading iron ore futures contracts and new plastics futures contracts in late 2013 and early 2014.<sup>25</sup> The city, along with Tianjin, hosts the largest futures contract exchanges in China. As Dalian expands its footprint in financial trading services, it aims to diversify its economic base and become the "most livable and beautiful Chinese city" to grow at a stable rate.



#### Nanchang, Jiangxi

1-year job growth (2013-2014)	<b>15</b> ™
5-year job growth (2009-2014)	<b>6</b> TH
1-year wage growth (2013-2014)	<b>21</b> ST
5-year wage growth (2009-2014)	<b>6</b> TH

1-year GRP per-capita growth (2013-2014)	14 TH
5-year GRP per-capita growth (2009-2014)	13 TH
3-year FDI growth (2011-2014)	16 TH
FDI/GRP (2014)	<b>4</b> TH
LQ for high value-added industry employment (2014)	25 TH

Nanchang takes seventh place in our index, moving up from 14th last year. Its five-year job and wage growth and its FDI/GRP remain strong, among the Top 10 of all first- and second-tier cities. Its one- and five-year GRP per-capita growth moved up from 28<sup>th</sup> and 26<sup>th</sup> last year to 14<sup>th</sup> and 13<sup>th</sup> this year.

In 2014, Nanchang had a registered population of nearly 5.2 million.<sup>26</sup> The city is adjacent to the Ganjiang River and has a number of lakes. It has a well-established transportation network consisting of highways, railways, ports, and an airport.

The city has spawned a number of pillar industries. It hosts strong modern manufacturing for the automobile and military industries. To nurture these, Nanchang has developed several industrial parks. One park, Nanchang National High-Tech Industrial Development Zone, the Jiangxi Microsoft Technology Center was established in 2005.

Nanchang can expect to see some tourist dollars come as the Nanchang Wanda Cultural Tourism City attracts people to its brand-new theme park, Wanda City. The \$3 billion park opened in May 2016, just a few weeks before Shanghai's Disneyland. Wanda City boasts more Chinese culture-centered attractions and is meant to serve as the homegrown rival of Shanghai Disney.<sup>27</sup>

Nanchang also has a strong pool of talent from its higher educational institutions such as Nanchang University, Nanchang Hangkong University, and Nanchang Institute of Technology. These institutions provides Nanchang's industries with a high-quality workforce.



1-year job growth (2013-2014)	11 TH
5-year job growth (2009-2014)	<b>20</b> TH
1-year wage growth (2013-2014)	11 TH
5-year wage growth (2009-2014)	<b>4</b> TH

1-year GRP per-capita growth (2013-2014)

5-year GRP per-capita growth (2009-2014)

4 TH

3-year FDI growth (2011-2014)

5-year FDI/GRP (2014)

7 TH

LQ for high value-added industry employment (2014)

Moving up from ninth place last year, **Chongqing** places eighth in our 2016 ranking. It still holds strong positions for five-year wage growth (fourth) and FDI/GRP (seventh). It is notable that the city's rankings in one- and five-year GRP per capita growth have risen remarkably and stand at third and fourth places, respectively.

In 2014, Chongqing's registered population was close to 33.8 million.<sup>28</sup> As one of the four municipalities directly run by the Beijing, Chongqing has recently experienced fast growth, largely benefiting from favorable policies such as China's "Go West" initiative, which is aimed at funneling aid to less-developed western regions and narrowing the gap with the coastal region. More recently, China's OBOR initiative further fuels its economy.

From the regional development perspective, Chongqing is located at the heart of China's territory. Its location makes Chongqing a pivotal point that connects inland and coastal China to reach international markets. The city now has a complete transportation network including aviation, railways, highways, light rail, and ferries. In 2011, the opening of the Yuxinou Railway extending from Chongqing to Germany began facilitating trade between China and European countries. Chongqing also became the first inland railway port station in China to transport international parcels using the Trans-Eurasia International Railway in 2014.<sup>29</sup> The new infrastructure and new free trade zones strengthen Chongqing's logistics role while reducing transport costs.

Chongging has developed diverse industries. In particular, it has been recently known for its information technology (IT) and auto industries. Compared with China's coastal cities, Chongqing has lower business operation costs and more convenient access to China's inland markets. Therefore more IT manufacturers have recently been established in Chongging. To better serve its emerging IT industry, Chongging established the Xiyong Weidianzi Industrial Park (2005) and the Liangijang New Area<sup>30</sup> (2012). The city is now one of the world's major laptop manufacturing bases, hosting a complete supply chain for the product. In 2014, Chongqing produced 61 million laptops.31 Liangjiang New Area is also nurturing the automotive, cloud data processing, and financial industries.

In addition to central government support, its location and transportation network, and its diverse industries, Chongqing's recent success can also be attributed to its rapid adjustments to streamlined rules and processes to accommodate the needs of businesses.

Chongqing's economic growth has not gone unnoticed by foreign investors. The city drew in a good portion of a \$400 million investment in western China by the Australian global integrated property company, Goodman Group. The investment was used for the 190,000 square-meter Goodman Chongqing Airport Logistics Park. The park boasts eight warehouses and is estimated to have an end value of \$130 million.<sup>32</sup>



1-year job growth (2013-2014)	<b>24</b> TH
5-year job growth (2009-2014)	<b>14</b> TH
1-year wage growth (2013-2014)	<b>7</b> TH
5-year wage growth (2009-2014)	19 TH

1-year GRP per-capita growth (2013-2014)	<b>5</b> TH
5-year GRP per-capita growth (2009-2014)	12 TH
3-year FDI growth (2011-2014)	<b>5</b> TH
FDI/GRP (2014)	10 TH
LQ for high value-added industry employment (2014)	<b>14</b> TH

Xi'an debuts in our Top 10 list, taking the ninth spot. Up six places in our index ranking from 2015, Xi'an shows strength in our FDI categories and has made significant improvements in short-term wage and GRP growth. The higher ranking also reflects the city's strong improvement in attracting FDI in the last three years.

Xi'an has experienced rapid urbanization recently and has greatly improved its public transit system. As an ancient capital, the city is considered one of the most popular tourist destinations for Chinese cultural and heritage tours. As the gateway to the greater western area of China, Xi'an is also known to be a business destination and serves as a major R&D center. Xi'an is considered one of the most developed cities in the northwestern region of China and is home to several manufacturing and R&D bases of global high-tech companies. With its location and industrial base, Xi'an is expected to benefit from the OBOR initiative.

Not only are 1,000 multinational companies located in the Xi'an high-tech development zone, but the city has also seen 340 biomedical companies begin production.<sup>34</sup> This type of clustering attracted the Fortune 500 company Johnson & Johnson to build its largest supply chain production base. The \$300 million project will be in the Xi'an high-tech development zone and become the top biopharmaceutical factory in China. Completion of the project is expected in 2018.<sup>35</sup>

In October of 2015, Samsung SDI announced that it would be the first global battery company to build an electric vehicle (EV) battery plant in China. Samsung SDI is slated to invest \$600 million in phases to target \$1 billion in sales by 2020, making Xi'an the world center of the EV battery industry.<sup>36</sup>

As an OBOR constituent, Xi'an will serve as western China's logistics hub. This designation is largely due to its location at the start of the Silk Road economic belt. In the Xixian New Area, there are two logistics parks in the works that will form a comprehensive trade network. One park will handle land-based logistics and the other will oversee air trade. The logistics parks will make up a free-trade zone that is meant to prepare the city to become China's next free-trade area.<sup>37</sup>



1-year job growth (2013-2014)	<b>7</b> TH
5-year job growth (2009-2014)	<b>9</b> TH
1-year wage growth (2013-2014)	<b>12</b> <sup>th</sup>
5-year wage growth (2009-2014)	<b>11</b> TH

1-year GRP per-capita growth (2013-2014)	<b>1</b> st
5-year GRP per-capita growth (2009-2014)	<b>3</b> RD
3-year FDI growth (2011-2014)	<b>30</b> TH
FDI/GRP (2014)	<b>26</b> TH
LQ for high value-added industry employment (2014)	<b>27</b> TH

Haikou appears in the Top 10 ranking for the first time at the tenth position. Similar to the ninth-ranked Xi'an, Haikou's strong showing among the first- and secondtier cities is due in part to its strong performance in recent GRP per-capita and short-term job growth. It is also worth noting that Haikou's GRP per capita growth has been strong in recent years, ranking at first and third in one-and five-year growth respectively. Its spot lower in the ranking is due to lower relative FDI and a lower high-value added component in the regional economy.

As the capital of Hainan province, which was the latest established province in the PRC in 1988, Haikou is among the smallest in terms of population among all capital cities in China, with a population of 2.17 million people.<sup>38</sup> The Province is at the southern tip of China, has a tropical climate and was traditionally known for its resource-based economy, and later as a favorite domestic tourism destination. Hainan Province is a special economic development zone, the first and only province in China to be granted that status.

In recent decades, Haikou has gained attention for its rapid industrialization in the automobile and pharmaceutical industries, the latter being an extension of the regional economy's established food processing industry. In the recent National Congress meetings, Hainan Province was designated to spearhead the development of biopharmaceutical industries to complement health care and retirement industries. To facilitate the development, the state council has authorized three development zones-Haikou Free Trade Zone, Hainan International Science and Technology Industrial Park, and Haikou National New Hi-Tech Industrial Development Zone<sup>39</sup>—with a focus on biopharmaceuticals, microelectronic and IT, optical, and oceanic and Environmental Protection. These zones are an attempt by the central planners to expedite the development of high value-added industries in the island economy.

As industrialization takes root in Haikou, tourism has remained the key sector in this rapidly expanding regional economy. Tourism has grown rapidly since 2009. As of 2015, visits to Hainan have reached 50 million.<sup>40</sup> Haikou, as the largest city in the island economy, no doubt has taken its share of this tourism. The combination of building up biopharmaceutical/health care and tourism can further the development of a medical tourism industry in Haikou.

There are many new initiatives to further the development of high value-added industries in Haikou and the Hainan economies since 2010. Geographical proximity to ASEAN economies and status as China's warmest province during winter sets the island economy in an advantageous position for future development, which is planned by China's Reform and Development Council.

#### COMPLETE RESULTS: FIRST- AND SECOND-TIER CITIES

Rank Change	2015 Rank	2016 Rank	City	Province	City Tier	1-Year Job Growth (2013-2014)	5-Year Job Growth (2009-2014)	1-Year Wage Growth (2013-2014)	5-Year Wage Growth (2009-2014)	1-Year GRP Per Capita Growth (2013-2014)	5-Year GRP Per Capita Growth (2009-2014)	3-Year FDI Growth (2011-2014)	FDI/GRP (2014)	LQ for High Value-Added Industry Employment (2014)
10	11	1	Guiyang	Guizhou	2	5	10	5	5	2	1	4	25	31
0	2	2	Shanghai		1	1	5	10	3	13	32	14	6	4
0	3	3	Tianjin		1	30	13	29	16	16	9	13	2	7
6	10	4	Shenzhen	Guangdong	2	27	2	8	2	31	33	21	22	1
-4	1	5	Chengdu	Sichuan	2	8	8	26	13	15	5	18	5	16
-2	4	6	Dalian	Liaoning	2	32	27	31	24	32	18	20	1	2
7	14	7	Nanchang	Jiangxi	2	15	6	21	6	14	13	16	4	25
1	9	8	Chongqing		1	11	20	11	4	3	4	28	7	30
6	15	9	Xi'an	Shaanxi	2	24	14	7	19	5	12	5	10	14
7	17	10	Haikou	Hainan	2	7	9	12	11	1	3	30	26	27
-3	8	11	Changchun	Jilin	2	25	17	23	12	25	14	9	3	11
4	16	12	Qingdao	Shandong	2	16	28	13	21	20	17	7	8	3
-7	6	13	Hefei	Anhui	2	26	1	32	1	7	22	23	20	26
18	32	14	Nanning	Guangxi	2	6	19	1	17	4	11	31	32	32
4	19	15	Wuhan	Hubei	2	17	32	9	25	8	2	8	11	20
2	18	16	Zhengzhou	Henan	2	12	4	14	7	23	31	25	14	10
-12	5	17	Nanjing	Jiangsu	2	4	3	30	9	10	8	29	21	13
-11	7	18	Xiamen	Fujian	2	13	7	18	14	28	28	26	13	8
2	21	19	Changsha	Hunan	2	21	24	16	18	17	7	12	17	12
5	25	20	Hangzhou	Zhejiang	2	10	16	15	15	11	19	17	9	17
1	22	21	Ningbo	Zhejiang	2	28	25	17	26	26	21	15	15	5
6	28	22	Guangzhou	Guangdong	2	23	18	3	30	24	20	24	24	6
0	23	23	Urumqi	Xinjiang	2	20	12	20	8	9	6	10	31	24
2	26	24	Fuzhou	Fujian	2	9	11	22	10	21	15	22	27	22
9	34	25	Lanzhou	Gansu	2	14	22	4	20	6	16	2	33	33
7	33	26	Taiyuan	Shanxi	2	2	21	2	23	29	30	11	18	19
-14	13	27	Beijing		1	18	29	19	22	19	27	19	19	9
3	31	28	Shijiazhuang	Hebei	2	3	30	6	29	30	26	3	30	15
1	30	29	Harbin	Heilongjiang	2	29	33	24	33	22	23	1	16	21
-18	12	30	Kunming	Yunnan	2	33	26	33	27	18	10	6	12	29
-2	29	31	Jinan	Shandong	2	31	31	27	32	12	25	27	28	18
-8	24	32	Hohhot	Inner Mongolia	2	19	23	28	31	27	24	32	29	28
-13	20	33	Shenyang	Liaoning	2	22	15	25	28	33	29	33	23	23



# Top 10 Best-Performing Cities China (Third-tier cities)



## Zhoushan, Zhejiang

1-year job growth (2013-2014)	<b>1</b> ST	1-year GRP per-capita growth (2013-2014)	<b>83</b> RD
5-year job growth (2009-2014)	<b>5</b> TH	5-year GRP per-capita growth (2009-2014)	<b>122</b> ND
1-year wage growth (2013-2014)	137 TH	3-year FDI growth (2011-2014)	<b>52</b> ND
5-year wage growth (2009-2014)	164 TH	FDI/GRP (2014)	<b>121</b> ST
		LQ for high value-added industry employment (2014)	<b>85</b> ™

**ZHOUSHAN** claims the top position of our 2016 ranking, moving up from 95th place last year. The city's one-year job growth ranks No. 1 among all third-tier cities and its five-year job growth ranks No. 5.

In 2014, its registered population was close to a million.<sup>41</sup> Zhoushan is an island city on the largest island of the Zhoushan archipelago. Its proximity to the East China Sea and the estuary of the Yangtze River has made it an important location for commerce since ancient times. In addition to its strategic location, its harbor's deep draft allows it to accommodate vessels of various sizes. These natural advantages have boosted its importance as one of China's emerging ports.

Port-related industries naturally serve as the main driving force for Zhoushan's economic development. Vessel repair, logistics, commodity trade, and petrochemicals are the city's major industrial sectors.

China's national policies play a critical role in bolstering Zhoushan's recent growth. It is one of the key posts of China's "Maritime Silk Road." In addition, as specified in the 12<sup>th</sup> FYP (2011-2015), "Zhoushan Archipelago New Area" became the fourth national New Area in 2011, following Shanghai's Pudong, Tianjin's Binhai, and Chongqing's Liangjang. The New Area leverages the ocean resources to cultivate its economy particularly in logistics, seafood, and tourism. During the 12<sup>th</sup> FYP, Zhoushan's average annual GDP growth rate was 9.9 percent, which was the highest in Zhejiang Province.<sup>42</sup> The "China (Zhoushan) Marine Science City" opened in August 2015. It serves as an R&D base for maritime technologies.



1-year job growth (2013-2014)	217 TH
5-year job growth (2009-2014)	<b>167</b> TH
1-year wage growth (2013-2014)	195 TH
5-year wage growth (2009-2014)	<b>172</b> ND

1-year GRP per-capita growth (2013-2014)	109 TH
5-year GRP per-capita growth (2009-2014)	<b>163</b> RD
3-year FDI growth (2011-2014)	<b>3</b> RD
FDI/GRP (2014)	<b>1</b> ST
LQ for high value-added industry employment (2014)	<b>41</b> ST

Weifang grabs the second position this year, moving up from 98<sup>th</sup> place. Its dramatic improvement in three-year FDI growth (from 187<sup>th</sup> to 3<sup>rd</sup>) and the FDI/GRP ratio (132<sup>nd</sup> to 1<sup>st</sup>) drive the boost in its overall ranking.

The city, in northeast China, had a 2014 population of nearly 8.9 million.<sup>43</sup> Weifang is a transportation pivot point in the Shandong Peninsula with seaports, railways, highways, and an airport. It is also part of the Yellow River Delta High-Efficiency and Ecological Economic Zone and the Shandong Peninsula Blue Economic Zone.

Weifang is a city traditionally known for handicrafts such as paper cutting, wood engravings of new-year pictures, and kite making. It claims the title "World Kite Capital" and has the Weifang World Kites Museum. It hosts the annual Weifang International Kite Festival which attracts thousands of visitors every year. Weifang has been trying to leverage its cultural assets by establishing the Weifang National Advertisement Industrial Park which facilitates idea exchange, manufacturing, marketing, and sales.

In addition, Weifang is also known for agriculture. Since 2000, Weifang has been holding the China (Shouguang) International Vegetable Sci-tech Fair, which introduces technologies to agriculture. The Xiashan Ecological and Economic Development Zone, founded in 2015, focuses on organic agriculture, health and cultural tourism, and green industries.

Other industrial pillars of modern Weifang include machinery and equipment, automobiles, petrochemicals, salt chemicals, textile and garment, food processing, paper-making and packaging. Weifang's car sales surpassed those of Qingdao for the very first time in 2013, making it the largest auto market in Shandong Province.<sup>44</sup>

Weifang has three major industrial zones. The State Weifang High Tech Industry Development Zone was established in 1992. It currently focuses on auto and equipment manufacturing, electronics, information technology, and biomedicals. The Shandong Weifang Economic Development Zone specializes in equipment manufacturing, new energy, new materials, and modern services. The Weifang Binhai Economic-Technological Development Zone, established in 1995, focuses on advanced manufacturing, chemical engineering, green energy, and port logistics.

Weifang is currently developing its 3D printing industry. It established a 3D Printing Technology and Innovation Center. With this initiative, Weifang is transforming its industrial base from traditional machinery manufacturing to advanced manufacturing that introduces new technologies to spawn new industries.



1-year job growth (2013-2014)	11 TH
5-year job growth (2009-2014)	<b>3</b> RD
1-year wage growth (2013-2014)	<b>6</b> TH
5-year wage growth (2009-2014)	<b>1</b> ST

1-year GRP per-capita growth (2013-2014)

5-year GRP per-capita growth (2009-2014)

3-year FDI growth (2011-2014)

FDI/GRP (2014)

LQ for high value-added industry employment (2014)

21 ST

68 TH

199 TH

LQ for high value-added industry employment (2014)

Taizhou moved from fifth to third this year. Like last year, it has strong performance in the one- and five-year job and wage growth categories. This year its five-year job growth is ranked No. 3 and five-year wage growth is ranked No. 1.

In 2014, Taizhou had a registered population of about 5.1 million. Taizhou is on the north shore of the Yangtze River. It now has a comprehensive transportation network including airports, railways, highways, and a port. Its proximity to other major cities such as Shanghai, Suzhou, and Nanjing make this city a pivotal location for logistics and market access. It is part of the Yangtze River Economic Belt.

Taizhou is known in particular for its shipbuilding and biomedical industries. The city has been China's major shipbuilding base. China Medical City (CMC), established in 2004 in Taizhou, became a national level biomedical cluster in 2009. CMC demonstrates Taizhou's ambition to nurture biomedical/ pharmaceutical industries (e.g., drug, vaccine, and medical equipment), and has attracted many talented domestic and international professionals from related fields. International academic institutions and companies have a presence in its territory.46 CMC is a platform for R&D, manufacturing, exhibition/ conference,47 trade, and health care. It also provides ancillary services including intellectual property protection, startup financing, policy consultation, new drug applications, and information- and resource-sharing. Since the development and commercialization of a new drug normally requires more than 10 years and a large amount of money, CMC also offers many resources such as free space and equipment as well as streamlined administrative processes that help minimize startups' R&D costs.

In addition to the shipbuilding and biomedical industries, Taizhou has been nurturing other industries by establishing several industrial zones. For example, Gaogang Hi-tech Industrial Park, a provincial industrial park, was established in 2002. General power and automobile parts, new decoration material, information technology, and life and health are the major industries. In addition, in 2012, China National Offshore Oil Corporation (CNOOC) started building an integrated refinery and petrochemical complex in Taizhou. This new site will become a major production unit of lubricating base oil. To facilitate trade, the Taizhou Integrated Free Trade Zone also provides incentives to lower the costs of imports and exports.

Taizhou's government has been striving to streamline the review process and reduce costs for investors.<sup>49</sup> Given the advent of China's aging population and the attention paid to healthy living, Taizhou's biomedical industry will be the key driving force for the next generation's economic engine.



1-year job growth (2013-2014)	10 TH
5-year job growth (2009-2014)	<b>8</b> TH
1-year wage growth (2013-2014)	<b>8</b> TH
5-year wage growth (2009-2014)	<b>10</b> TH

1-year GRP per-capita growth (2013-2014)	<b>32</b> ND
5-year GRP per-capita growth (2009-2014)	<b>2</b> ND
3-year FDI growth (2011-2014)	<b>57</b> TH
FDI/GRP (2014)	129 TH
LQ for high value-added industry employment (2014)	26 TH

Xiangyang is ranked No. 4, moving up from 29<sup>th</sup> place last year. Many indicators for this city in our ranking index moved up. One- and five-year job and wage growth and the five-year GRP per capita growth are all among the Top 10. The five-year GRP per capita growth notably stands in second place.

Xiangyang, with a 2014 registered population of nearly 6 million,<sup>50</sup> is a city with a long history. The Han River, a tributary of the Yangtze River, passes through this city. Due to its location, Xiangyang was an important military and commerce post in ancient China. In the modern era, it is still an important transportation and logistics hub connecting inland and coastal China as well as other countries with its railways, highways, and airports.

There are three development zones in Xiangyang: the Xiangyang Hi-Tech Industry Development Zone, the Xiangyang Economic and Technological Development Zone, and the Yuliangzhou Economic Development Zone. The Xiangyang Hi-Tech Industry Development Zone was established in 1992. It focuses on two major industry sectors: advanced manufacturing (e.g., electric car manufacturing) and modern services (e.g., financial services). The Xiangyang Economic and Technological Development Zone opened in 2010 and its major industries include equipment manufacturing, electronics and electrical engineering, energy conservation, machinery, and shoe and clothing making. The Yuliangzhou Economic Development Zone mainly focuses on promoting tourism by leveraging Xiangyang's scenic and cultural legacy.

Despite these zones, Xiangyang has been mainly known for such industrial sectors as textile and auto manufacturing. The rising status of this city may have to do with the fact that since 2002 this city has been devoting itself in the R&D of auto batteries. <sup>51</sup> In January 2015, the city ambitiously announced its plan to become "China's Capital for Auto New Energy" that aims to develop new energy technology for cars. This ambition, however, may face severe challenges in the next few years because it has been relied on heavily both the central and local government subsidies that may come to an end after 2020.



1-year job growth (2013-2014)	18 TH
5-year job growth (2009-2014)	<b>6</b> TH
1-year wage growth (2013-2014)	<b>38</b> TH
5-year wage growth (2009-2014)	<b>7</b> TH

**Suzhou** grabbed the crown in our previous ranking but drops slightly to fifth this year. It's ranking in one-year GRP per capita growth fell from first to 162<sup>nd</sup> place, which explains its overall decline. Yet, the performance of most of its other indicators in our index did not change dramatically. Suzhou's LQ for high value-added industry remains No. 3 as last year, a sign of Suzhou's strong economy.

Suzhou's strong economic performance can be attributed to its industrial clustering, talent pool, and openness. The Suzhou Industrial Park (SIP) has been one of the key growth engines for its economy and it has successfully attracted foreign companies and R&D facilities. For instance, in 2013, Microsoft Search Technology Center Asia (also known as Microsoft Search Innovation Center) opened its third Asia R&D facility in SIP. With its presence, Microsoft and the city have been collaborating in making Suzhou a smart city. Suzhou's openness to accept and accommodate migrants also leads to economic success. Suzhou is among the top Chinese cities receiving migrants. Although Suzhou's registered population in 2014 was 6.6 million,<sup>52</sup> its non-registered population (i.e., people without hukou) was nearly 7 million.<sup>53</sup> The local government has further streamlined its population registration system to accommodate more migrants.

Despite being open and entrepreneurial, its proximity to Shanghai subjects Suzhou to severe competition with the larger city, which has a free-trade zone. Many enterprises have moved from Jiangsu Province to Shanghai for the advantages that the free-trade zone offers.<sup>54</sup> To address this challenge, Suzhou is seeking assignment as a free-trade zone.

1-year GRP per-capita growth (2013-2014)	<b>162</b> ND
5-year GRP per-capita growth (2009-2014)	170 TH
3-year FDI growth (2011-2014)	182 ND
FDI/GRP (2014)	<b>29</b> TH
LQ for high value-added industry employment (2014)	<b>3</b> RD

Like Shenzhen, Suzhou has recently been cultivating its creative industry and crafted itself as an incubator for startups. For example, Suzhou has held five "China Suzhou Cultural and Creative Design Industry" expos since 2012. Since 2009, Suzhou has been hosting the "Venture Contest for International Elites" that attracts inventors in various fields to present their innovations. The diversifying and emerging industrial base will enable Suzhou to have more sustained economic growth.



1-year job growth (2013-2014)	<b>7</b> TH
5-year job growth (2009-2014)	<b>1</b> ST
1-year wage growth (2013-2014)	<b>23</b> RD
5-year wage growth (2009-2014)	<b>4</b> TH

1-year GRP per-capita growth (2013-2014)	<b>20</b> TH
5-year GRP per-capita growth (2009-2014)	<b>88</b> TH
3-year FDI growth (2011-2014)	170 TH
FDI/GRP (2014)	<b>50</b> TH
LQ for high value-added industry employment (2014)	<b>171</b> ST

Nantong takes sixth, slipping from second place last year. Despite this, its performance in most of our indicators remains stable and is considered strong. While its one-year wage growth drops from second to 23<sup>rd</sup> place, the city's five-year job growth moves from third place to the top.

Nantong is a port city with a 2014 registered population of nearly 7.7 million.55 It has developed major industries such as textiles, petrochemicals, machinery, electronics, and port-related industries. Industrial parks in Nantong further expand its economic diversity. Nantong Binhai Park, which was established in 2012, focuses on equipment manufacturing, energy, new material, aircraft manufacturing, and logistics. Nantong Economic and Technological Development Zone's primary industries include textile, equipment manufacturing, precise machinery, new materials, and pharmaceuticals.56 Su-Tong Science and Technology Park has six pillar industries—precise machinery, information technology, biotechnology, new material, new energy, and modern services. Established in 1993, Nantong Chongchuan Economic Development Zone's pillar industries include information technology, new energy, ship building/repairs, logistics, and outsourcing. Jiangsu Nantong Gangzha Economic Development Zone was established in 1993 and it focuses on ship building/repairs, logistics, the Internet of Things, and e-commerce. Nantong is currently cultivating its entertainment industry. An animation industrial park was opened in June 2016 to develop comics, animation, and games.

Nantong is on the northern bank of the Yangtze River opposite bank, Shanghai and Suzhou. The opening of the Sutong Yangtze River Bridge in 2008 and Chongqi Bridge (also known as the Chongming–Qidong Yangtze River Bridge) in 2011 cut the travel time from Nantong to Suzhou and Shanghai to less than two hours. Due to its proximity to Shanghai, Nantong's economy is tied to Shanghai. Nantong has co-built several industrial parks with Shanghai. To further illustrate Nantong's ties with Shanghai, the outside investment and resources of Qidong (a county-level city under Nantong) come from Shanghai.<sup>57</sup>



1-year job growth (2013-2014)	<b>60</b> TH
5-year job growth (2009-2014)	<b>126</b> TH
1-year wage growth (2013-2014)	<b>89</b> TH
5-year wage growth (2009-2014)	135 TH

Ranked 82<sup>nd</sup> last year, **Baoji** secures the seventh spot in our third-tier ranking. It had remarkable improvement in three-year FDI growth and FDI/GRP indicators. In particular, its three-year FDI growth stands at the

Baoji is an industrial city with a 2014 registered population of 3.8 million. Founded in 1992, the Baoji Hi-Tech Industrial Development Zone focuses on five major industries including advanced manufacturing, new materials, information technology, biomedicals, and modern food processing. In particular, it is known for manufacturing vacuum circuit breakers, petroleum steel tubes, textile electronics, new materials, and special-purpose automobiles. This industrial park also follows China's recent initiative in cultivating innovation. Given its historic and scenic resources, Baoji is also attempting to leverage these assets to develop its tourism industry.

top of all third-tier cities.

1-year GRP per-capita growth (2013-2014)	126 TH
5-year GRP per-capita growth (2009-2014)	<b>69</b> TH
3-year FDI growth (2011-2014)	<b>1</b> ST
FDI/GRP (2014)	<b>42</b> ND
LQ for high value-added industry employment (2014)	59 TH

Baoji's recent development has been benefiting from central government policies like the "Go West" and OBOR initiatives. It has highways and both traditional and high-speed railways connecting with other cities. Baoji is about two hours' driving time west of Xi'an. The transcontinental railways also connect Baoji with Chengdu and help it to better integrate into and benefit from the OBOR strategy.



1-year job growth (2013-2014)	<b>87</b> TH
5-year job growth (2009-2014)	<b>55</b> ™
1-year wage growth (2013-2014)	<b>1</b> ST
5-year wage growth (2009-2014)	<b>3</b> RD

1-year GRP per-capita growth (2013-2014)	<b>63</b> RD
5-year GRP per-capita growth (2009-2014)	<b>73</b> RD
3-year FDI growth (2011-2014)	<b>152</b> ND
FDI/GRP (2014)	114 TH
LQ for high value-added industry employment (2014)	<b>125</b> ™

Meishan captures the eighth place in our ranking, moving up from the 84<sup>th</sup> last year. This city's wage and GRP per capita growth performance have been greatly improving. In particular, its one-year wage growth ranks first and its five-year wage growth ranks No. 3.

Meishan has a 2014 registered population of 3.5 million. It gained its prefecture-level city status in 2000. The city is located at the center of Sichuan Province, one-hour driving distance south to Chengdu. Given its proximity to Chengdu, its recent development has been tightly integrated with Chengdu's economy.

In 2013, Meishan started building the Meishan Modern Industrial New Town, which is also known as a section of the Tianfu New Area. Nonferrous metal, logistics, and biomedicals are booming industry sectors in this new area. This town has also attracted some international businesses. For instance, Amazon announced it would establish an e-commerce operation center there.<sup>59</sup>

In addition, Meishan has recently been developing its chemical and petroleum industries. The Chengdu-Meishan Petrochemical Zone (CMPZ), founded in 2010, is among the three major petrochemical bases in Sichuan Province. Meishan Jinxiang Chemical Engineering Park was established in 2010.

Meishan has recently upgraded its transportation network, improving its connection with Chengdu. Despite this, Meishan needs to better its industrial strengths and be more closely integrated with Chengdu to make economic growth more sustainable.



1-year job growth (2013-2014)	<b>207</b> TH
5-year job growth (2009-2014)	<b>7</b> TH
1-year wage growth (2013-2014)	<b>51</b> ST
5-year wage growth (2009-2014)	<b>5</b> TH

1-year GRP per-capita growth (2013-2014)	28 TH
5-year GRP per-capita growth (2009-2014)	<b>22</b> ND
3-year FDI growth (2011-2014)	16 TH
FDI/GRP (2014)	<b>71</b> ST
LQ for high value-added industry employment (2014)	<b>94</b> TH

Suqian, ranked No. 4 last year, placed ninth this year. Its decline has to do with its one-year job and wage growth. Except for the job and wage indicators, most other indicators have improved this year. In particular, one-year per-capita GRP growth moved up from 193<sup>rd</sup> to 28<sup>th</sup> place.

In 2014, Suqian had a registered population of 5.8 million. <sup>60</sup> It is in the northern part of Jiangsu, which is traditionally deemed less developed than the southern part of that province. Despite this, Suqian is located at the intersection of the Huaihai Economic Zone and the Yangtze River Economic Belt. In addition, as a prefecture-level city designated in 1996, Suqian has been receiving a great deal of policy support from the provincial government <sup>61</sup> and providing investors with favorable tax and land acquisition incentives. Due to its geographic advantage, policy support, and its relative low cost in its surrounding region, <sup>62</sup> Suqian has become one of the fastest-growing cities in Jiangsu Province.

Suqian has plentiful tourism resources including water (e.g., the Grand Canal, Luoma Lake, and Hongze Lake), forests (e.g., Santaishan Forest Park), historic assets, and baijiu (i.e., sorghum wine). By leveraging these, the city has been cultivating its tourism industry. Also, Suqian has been striving to become an eco-city. With its natural resources, Suqian has been developing solar and wind power industries. In addition, Suqian focuses on the food-and-beverage industry. In 2014, GDP from this industry surpassed RMB 50 billion. <sup>63</sup> Ancillary industries such as packaging and logistics have also become pillars for this city.

Suqian owns several industrial parks. The Suqian Economic and Technological Development Zone was founded in 1998 and it currently focuses on smart home appliances, food and beverages, and photoelectronics. Suzhou-Suqian Industrial Park, initiated in 2006, is fostering information technology, precise machinery, new energy, and new materials. Luoma Lake Headquarters Economic Zone was established in 2013 and its main functions are R&D activities and financial services.

Echoing China's Internet Plus initiative, Suqian opened its Electronic Commerce Industrial Park in 2015 to encourage e-commerce as the city's new growth engine. It encourages startups by providing preferential incentives such as free space and utilities. In addition, Suqian has been improving its infrastructure. A high-speed rail line is being built that will connect Suqian with other major regional cities such as Lianyungang, Nanjing, and Shanghai. Once completed in 2019, the line is expected to further facilitate Suqian's integration into the regional economy. However, Suqian's recent economic growth has been largely associated with its preferential policies and low business operating costs.



1-year job growth (2013-2014)	<b>167</b> TH
5-year job growth (2009-2014)	<b>124</b> TH
1-year wage growth (2013-2014)	<b>101</b> ST
5-year wage growth (2009-2014)	115 TH

1-year GRP per-capita growth (2013-2014)	<b>3</b> RD
5-year GRP per-capita growth (2009-2014)	<b>9</b> TH
3-year FDI growth (2011-2014)	<b>2</b> ND
FDI/GRP (2014)	<b>64</b> TH
LQ for high value-added industry employment (2014)	<b>222</b> ND

**Liupanshui** rounds off our third-tier Top 10, moving up from 39<sup>th</sup> last year. It had strong performance in three-year FDI growth (second) and a remarkable improvement in the one- (third) and five-year (ninth) GRP per-capita growth indicators.

In 2014, Liupanshui had a registered population of nearly 3.3 million.<sup>64</sup> This city has plenty of agricultural (e.g., fruit and tea) and mineral (e.g., coal and steel) resources. It has several agricultural exemplary zones. Liupanshui is also a place with a historic legacy and scenic views and it is leveraging these resources to make tourism an additional economic growth engine. Liupanshui has been nurturing biomedicals to boost its economy.<sup>65</sup>

Liupanshui is a regional transportation and logistics hub with highways, railways, and an airport. It has been improving its transportation infrastructure to make itself a better business environment. Liupanshui ranked No. 6 among the 2014 China's Top-10 Cities with Best Investment Environment. <sup>66</sup> The improvement of railway network will shorten its commuting time with Guiyang, Chengdu, and Chongqing and give the city further economic strength.

### COMPLETE RESULTS: THIRD-TIER CITIES

Rank Change	2015 Rank	2016 Rank	City	Province	1-Year Job Growth (2013-2014)	5-Year Job Growth (2009-2014)	1-Year Wage Growth (2013-2014)	5-Year Wage Growth (2009-2014)	1-Year GRP Per Capita Growth (2013-2014)	5-Year GRP Per Capita Growth (2009-2014)	3-Year FDI Growth (2011-2014)	FDI/GRP (2014)	LQ for High Value-Added Industry Employment (2014)
94	95	1	Zhoushan	Zhejiang	1	5	137	164	83	122	52	121	85
96	98	2	Weifang	Shandong	217	167	195	172	109	163	3	1	41
2	5	3	Taizhou	Jiangsu	11	3	6	1	21	68	199	86	118
25	29	4	Xiangyang	Hubei	10	8	8	10	32	2	57	129	26
-4	1	5	Suzhou	Jiangsu	18	6	38	7	162	170	182	29	3
-4	2	6	Nantong	Jiangsu	7	1	23	4	20	88	170	50	171
75	82	7	Baoji	Shaanxi	60	126	89	135	126	69	1	42	59
76	84	8	Meishan	Sichuan	87	55	1	3	63	73	152	114	125
-5	4	9	Suqian	Jiangsu	207	7	51	5	28	22	16	71	94
29	39	10	Liupanshui	Guizhou	167	124	101	115	3	9	2	64	222
-8	3	11	Yangzhou	Jiangsu	13	4	130	6	8	81	200	63	116
-2	10	12	Yichang	Hubei	51	30	13	15	34	7	77	165	24
21	34	13	Huizhou	Guangdong	24	166	30	90	47	84	150	25	5
39	53	14	Jiujiang	Jiangxi	22	95	10	34	55	56	50	10	60
93	108	15	Xiangtan	Hunan	3	16	174	144	96	27	70	36	42
0	16	16	Huai'an	Jiangsu	8	13	36	21	13	41	194	41	77
133	150	17	Jinhua	Zhejiang	26	11	2	22	99	153	158	176	181
7	25	18	Zhaoqing	Guangdong	64	51	39	39	53	59	145	18	19
12	31	19	Sanya	Hainan	16	10	5	12	142	17	172	33	194
-11	9	20	Ji'an	Jiangxi	37	19	32	14	124	83	101	27	51
60	81	21	Zhongshan	Guangdong	160	174	121	2	148	167	179	99	2
18	40	22	Luohe	Henan	69	91	27	54	15	183	53	9	15
-4	19	23	Jieyang	Guangdong	36	12	104	8	75	60	130	153	27
-4	20	24	Zhuhai	Guangdong	98	132	61	97	44	178	124	4	7
103	128	25	Foshan	Guangdong	133	2	74	217	153	216	153	66	4
-19	7	26	Changzhou	Jiangsu	110	15	55	24	27	117	193	40	18
28	55	27	Putian	Fujian	30	20	16	16	65	63	136	108	35
0	28	28	Wuhu	Anhui	46	18	88	31	56	213	47	8	25
3	32	29	Chuzhou	Anhui	81	142	45	55	25	34	26	14	76
NA	NA	30	Huanggang	Hubei	2	22	185	45	40	77	14	197	151
118	149	31	Zunyi	Guizhou	27	89	14	56	4	12	13	185	164
22	54	32	Xiaogan	Hubei	96	75	46	11	61	65	104	106	34
41	74	33	Anshun	Guizhou	82	67	114	64	2	4	30	125	120
130	164	34	Beihai	Guangxi	42	110	37	121	5	3	85	132	78
29	64	35	Shiyan	Hubei	70	52	22	41	35	14	76	143	46
51	87	36	Ningde	Fujian	19	17	49	23	67	28	56	156	70
-25	12	37	Yingtan	Jiangxi	48	37	207	13	105	13	122	68	53

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Rank Change	2015 Rank	2016 Rank	City	Province	1-Year Job Growth (2013-2014)	5-Year Job Growth (2009-2014)	1-Year Wage Growth (2013-2014)	5-Year Wage Growth (2009-2014)	1-Year GRP Per Capita Growth (2013-2014)	5-Year GRP Per Capita Growth (2009-2014)	3-Year FDI Growth (2011-2014)	FDI/GRP (2014)	LQ for High Value-Added Industry Employment (2014)
-16	22	38	Bengbu	Anhui	35	50	226	119	11	36	29	3	96
52	91	39	Ezhou	Hubei	80	146	29	17	90	49	112	79	36
29	69	40	Xuchang	Henan	59	43	19	40	36	148	82	84	38
16	57	41	Hebi	Henan	31	104	144	114	80	147	51	5	52
-28	14	42	Zhenjiang	Jiangsu	15	103	84	125	37	101	197	52	14
-5	38	43	Fuzhou	Jiangxi	40	21	42	9	97	105	127	97	148
24	68	44	Zhangzhou	Fujian	38	107	35	66	51	66	163	51	37
28	73	45	Jingmen	Hubei	105	116	41	25	74	19	98	110	47
72	118	46	Shangrao	Jiangxi	34	48	53	20	88	72	128	35	122
73	120	47	Dongguan	Guangdong	180	198	120	195	147	218	121	13	1
NA	NA	48	Lincang	Yunnan	43	38	54	73	33	1	36	147	169
-4	45	49	Yichun	Jiangxi	77	47	63	30	134	70	133	57	49
80	130	50	Panzhihua	Sichuan	152	92	3	91	84	57	195	155	48
42	93	51	Bozhou	Anhui	45	80	141	71	29	104	34	22	103
-6	46	52	Chizhou	Anhui	85	58	151	70	12	38	80	30	113
126	179	53	Shangqiu	Henan	12	40	4	33	66	189	55	128	137
48	102	54	Zhumadian	Henan	14	23	15	27	129	149	96	116	107
162	217	55	Hechi	Guangxi	164	196	143	215	18	212	4	131	178
116	172	56	Guilin	Guangxi	84	102	7	130	72	120	10	182	115
-34	23	57	Rizhao	Shandong	191	41	50	47	141	139	118	67	23
12	70	58	Weihai	Shandong	101	84	105	80	79	207	132	65	9
-51	8	59	Wuxi	Jiangsu	196	24	112	29	195	200	188	70	8
3	63	60	Ganzhou	Jiangxi	83	112	83	48	117	128	142	24	71
29	90	61	Zhuzhou	Hunan	136	111	77	109	23	61	79	61	62
-15	47	62	Pingxiang	Jiangxi	67	65	33	42	145	98	103	75	66
-27	36	63	Xinxiang	Henan	103	46	44	53	107	131	89	44	83
-12	52	64	Shanwei	Guangdong	192	35	109	18	160	158	209	107	13
31	96	65	Chaozhou	Guangdong	177	32	34	26	92	173	186	154	21
12	78	66	Jiangmen	Guangdong	100	82	56	49	168	209	167	49	11
36	103	67	Huangshi	Hubei	119	213	108	19	149	46	75	45	63
9	77	68	Huzhou	Zhejiang	66	76	71	126	101	157	171	39	30
NA	NA	69	Bazhong	Sichuan	23	9	102	62	24	71	28	203	197
57	127	70	Ankang	Shaanxi	68	86	132	148	6	5	15	207	212
77	148	71	Xianning	Hubei	138	138	9	88	19	10	217	195	112
-22	50	72	Xianyang	Shaanxi	111	73	158	81	9	11	86	201	97
79	152	73	Suizhou	Hubei	200	115	21	78	68	29	95	149	82
-44	30	74	Yingkou	Liaoning	214	60	202	111	186	90	146	7	44

Rank Change	2015 Rank	2016 Rank	Oity	Province	1-Year Job Growth (2013-2014)	5-Year Job Growth (2009-2014)	1-Year Wage Growth (2013-2014)	5-Year Wage Growth (2009-2014)	1-Year GRP Per Capita Growth (2013-2014)	5-Year GRP Per Capita Growth (2009-2014)	3-Year FDI Growth (2011-2014)	FDI/GRP (2014)	LQ for High Value-Added Industry Employment (2014)
47	122	75	Yunfu	Guangdong	29	119	28	67	86	143	162	140	39
29	105	76	Suzhou	Anhui	131	94	128	102	14	43	40	37	168
-1	76	77	Jinzhou	Liaoning	76	106	148	137	189	113	32	6	108
NA	NA	78	Shangluo	Shaanxi	9	25	177	82	16	6	214	178	203
32	111	79	Xinyu	Jiangxi	162	88	124	87	144	118	205	59	16
-62	18	80	Yancheng	Jiangsu	159	33	95	50	60	85	201	89	88
NA	NA	81	Ziyang	Sichuan	204	34	199	65	69	16	22	175	105
54	136	82	Heyuan	Guangdong	53	207	43	159	26	141	148	83	20
-23	60	83	Lianyungang	Jiangsu	78	81	170	110	85	91	100	43	80
60	144	84	Jingzhou	Hubei	47	190	17	118	31	37	88	179	100
-58	27	85	Xuzhou	Jiangsu	166	27	113	57	54	93	164	73	132
-19	67	86	Jiaozuo	Henan	116	72	111	132	114	172	120	54	28
58	145	87	Neijiang	Sichuan	6	74	92	94	91	51	207	194	110
NA	NA	88	Maanshan	Anhui	173	62	147	104	172	227	62	2	72
26	115	89	Jiuquan	Gansu	124	39	73	103	217	182	5	184	153
34	124	90	Yangjiang	Guangdong	123	97	48	38	43	32	212	164	104
40	131	91	Hanzhong	Shaanxi	58	130	126	127	10	8	119	209	131
12	104	92	Mianyang	Sichuan	21	87	47	58	93	111	196	146	95
-56	37	93	Tongling	Anhui	102	114	187	101	146	40	190	88	31
0	94	94	Luoyang	Henan	122	100	96	117	169	187	134	17	65
-9	86	95	Yantai	Shandong	89	134	78	128	135	196	141	82	17
-4	92	96	Baoshan	Yunnan	140	117	131	83	45	20	33	104	173
22	119	97	Maoming	Guangdong	112	70	62	46	131	138	9	187	177
37	135	98	Puyang	Henan	129	139	75	122	78	145	18	58	142
14	113	99	Heze	Shandong	108	85	93	37	159	18	23	167	187
65	165	100	Xinyang	Henan	72	64	25	84	115	132	81	90	135
-59	42	101	Binzhou	Shandong	161	83	153	36	166	186	216	136	10
36	138	102	Jingdezhen	Jiangxi	142	172	99	108	112	97	39	115	54
-37	66	103	Zhoukou	Henan	44	53	82	43	187	135	105	111	87
6	110	104	Qinzhou	Guangxi	41	44	60	79	22	78	166	126	195
-79	26	105	Jiaxing	Zhejiang	109	209	227	225	143	169	123	16	6
23	129	106	Luzhou	Sichuan	56	101	76	52	49	39	90	200	174
-46	61	107	Deyang	Sichuan	186	90	145	92	89	106	168	151	40
-57	51	108	Quanzhou	Fujian	202	180	179	120	102	151	180	92	12
-60	49	109	Kaifeng	Henan	146	61	196	134	70	136	38	74	90
-105	5	110	Taizhou	Zhejiang	33	36	90	89	123	199	46	180	69
-32	79	111	Tai'an	Shandong	168	77	169	63	122	161	11	150	123
73	185	112	Baoding	Hebei	28	49	12	60	188	174	135	119	136

Rank Change	2015 Rank	2016 Rank	City	Province	1-Year Job Growth (2013-2014)	5-Year Job Growth (2009-2014)	1-Year Wage Growth (2013-2014)	5-Year Wage Growth (2009-2014)	1-Year GRP Per Capita Growth (2013-2014)	5-Year GRP Per Capita Growth (2009-2014)	3-Year FDI Growth (2011-2014)	FDI/GRP (2014)	LQ for High Value-Added Industry Employment (2014)
115	228	113	Fuyang	Anhui	17	187	86	124	17	126	27	148	156
-70	44	114	Yulin	Shaanxi	'' 71	26	165	77	176	25	27 17	217	208
-27	88	115	Anging	Anhui	91	69	181	61	77	79	175	133	111
44	160	116	Changde	Hunan	141	154	80	163	41	54	44	98	154
-104	13	117	Erdos	Inner Mongolia	104	14	180	44	191	146	140	47	158
-2	116	118	Qiqihar	Heilongjiang	170	215	142	202	204	142	6	53	84
7	126	119	Shantou	Guangdong	145	28	122	28	94	208	210	163	67
NA	NA	120	Xining	Qinghai	184	137	127	105	1	62	220	224	144
34	155	121	Loudi	Hunan	132	140	133	51	128	67	68	101	149
1	123	122	Wuzhou	Guangxi	195	129	20	139	140	21	226	225	58
60	183	123	Yiyang	Hunan	171	144	106	152	38	50	73	138	119
-76	48	124	Dezhou	Shandong	107	56	85	32	161	166	189	196	64
-110	15	125	Liaoyuan	Jilin	206	79	189	74	207	42	83	60	86
55	181	126	Wenzhou	Zhejiang	90	220	100	216	132	190	8	157	61
87	214	127	Shaoyang	Hunan	32	164	24	165	52	86	42	145	179
101	229	128	Zhangjiajie	Hunan	49	162	11	173	30	94	48	120	218
3	132	129	Zhanjiang	Guangdong	61	122	68	98	106	137	20	186	160
72	202	130	Yongzhou	Hunan	86	193	94	201	71	119	91	31	170
-59	72	131	Huaibei	Anhui	199	118	212	171	111	48	59	19	193
29	161	132	Qingyuan	Guangdong	54	152	31	116	82	225	204	127	29
-24	109	133	Yuxi	Yunnan	148	57	161	96	125	134	45	191	93
-45	89	134	Liaocheng	Shandong	150	109	103	59	170	154	178	208	43
-102	33	135	Liuzhou	Guangxi	128	31	139	197	95	55	219	204	91
4	140	136	Pu'er	Yunnan	97	153	97	131	7	15	227	227	150
-78	59	137	Linyi	Shandong	212	29	193	35	157	197	147	171	57
-121	17	138	Tonghua	Jilin	185	78	167	69	197	80	218	181	32
67	206	139	Lishui	Zhejiang	153	194	119	188	138	125	12	135	129
46	186	140	Suining	Sichuan	92	202	67	150	64	74	64	183	130
89	230	141	Guang'an	Sichuan	20	150	26	86	59	64	154	202	220
12	154	142	Sanmenxia	Henan	74	156	115	170	174	150	117	12	188
46	189	143	Nanyang	Henan	25	113	66	112	139	211	93	103	114
71	215	144	Nanping	Fujian	99	210	69	200	50	103	107	169	98
-4	141	145	Yueyang	Hunan	163	188	136	161	81	45	63	158	126
46	192	146	Anyang	Henan	57	108	52	123	158	215	21	102	134
-76	71	147	Nanchong	Sichuan	73	45	213	72	104	47	177	198	140
-49	99	148	Huangshan	Anhui	179	157	206	141	108	112	139	34	146
14	163	149	Shaoxing	Zhejiang	55	66	70	113	116	152	187	141	141
23	173	150	Quzhou	Zhejiang	79	136	91	176	154	160	106	190	50

Rank Change	2015 Rank	2016 Rank	t <b>y</b>	Province	1-Year Job Growth (2013-2014)	5-Year Job Growth (2009-2014)	1-Year Wage Growth (2013-2014)	5-Year Wage Growth (2009-2014)	1-Year GRP Per Capita Growth (2013-2014)	5-Year GRP Per Capita Growth (2009-2014)	3-Year FDI Growth (2011-2014)	FDI/GRP (2014)	LQ for High Value-Added Industry Employment (2014)
R	20	20	City	፵	(2)	. 5 S	<del>1</del> 0	(2,5)	<u>†</u> <u>@</u>	ָה הַ	(P, Q)	H.9	3 5
72	223	151	Chongzuo	Guangxi	143	217	57	207	48	44	19	168	185
7	159	152	Qinhuangdao	Hebei	149	168	98	187	185	219	137	21	55
37	190	153	Meizhou	Guangdong	126	131	58	106	57	188	125	139	139
-47	107	154	Mudanjiang	Heilongjiang	137	197	118	181	183	53	74	56	133
-75	80	155	Zibo	Shandong	182	63	146	76	150	194	155	152	74
15	171	156	Hengyang	Hunan	175	186	168	198	62	109	58	62	147
48	205	157	Guangyuan	Sichuan	115	205	65	177	73	33	31	166	207
-5	153	158	Shaoguan	Guangdong	165	176	117	174	58	115	191	134	101
36	195	159	Zigong	Sichuan	63	184	64	190	120	82	169	219	92
-116	44	160	Yulin	Guangxi	188	98	107	99	39	140	211	218	106
30	191	161	Sanming	Fujian	118	185	81	167	110	99	115	177	128
-79	83	162	Benxi	Liaoning	52	99	211	194	209	159	72	38	81
-152	11	163	Xuancheng	Anhui	227	121	204	100	76	35	35	15	73
-31	133	164	Laiwu	Shandong	75	68	172	156	167	221	203	173	22
47	212	165	Yibin	Sichuan	125	208	135	160	127	100	173	214	89
50	216	166	Ya'an	Sichuan	50	169	40	145	46	114	208	205	196
-111	56	167	Baotou	Inner Mongolia	208	148	203	193	163	184	181	78	33
-103	65	168	Anshan	Liaoning	181	54	184	143	222	223	126	23	45
-107	62	169	Huludao	Liaoning	183	161	160	175	219	191	149	11	68
-31	139	170	Jining	Shandong	147	59	201	93	121	185	156	105	152
26	197	171	Jinzhong	Shanxi	201	218	163	180	184	205	7	72	200
3	175	172	Qujing	Yunnan	62	42	198	169	177	144	37	213	175
-52	121	173	Weinan	Shaanxi	135	128	183	146	119	26	221	226	167
-17	157	174	Baicheng	Jilin	114	160	72	149	201	76	92	117	209
43	218	175	Ulanqab	Inner Mongolia	158	179	123	179	118	133	111	112	198
-70	106	176	Liaoyang	Liaoning	216	192	194	183	218	171	108	28	56
-153	24	177	Lijiang	Yunnan	151	125	116	140	165	24	183	215	214
43	221	178	Hezhou	Guangxi	88	135	59	162	171	175	165	118	182
-45	134	179	Siping	Jilin	120	211	110	184	199	116	60	96	162
27	207	180	Chengde	Hebei	155	171	176	206	156	165	24	161	138
-13	168	181	Chaoyang	Liaoning	134	120	188	147	205	102	66	95	176
-107	75	182	Suihua	Heilongjiang	205	182	197	154	193	52	61	124	163
-58	125	183	Fuxin	Liaoning	209	143	208	151	208	30	78	48	215
40	224	184	Guigang	Guangxi	65	147	87	136	113	164	224	216	165
-88	97	185	Jincheng	Shanxi	139	93	192	129	196	176	143	87	166
NA	NA	186	Jilin	Jilin	178	123	138	168	223	195	113	55	75
-20	167	187	Dongying	Shandong	169	141	164	157	164	192	110	192	109
20	208	188	Huaihua	Hunan	154	177	140	186	173	58	109	172	202

-137 58 195 Tongchuan Shaanxi 93 155 210 189 179	184 1 160 2 185 0 67 2 102 1 174	93 174 206 199 100	157 99 216 159
-10         180         190         Leshan         Sichuan         222         222         152         192         136         9           10         201         191         Dazhou         Sichuan         211         133         182         107         98         13           -16         176         192         Zaozhuang         Shandong         215         96         171         95         130         20           17         210         193         Zhangjiakou         Hebei         174         170         129         211         182         18           -36         158         194         Baishan         Jilin         198         191         200         204         194         9           -137         58         195         Tongchuan         Shaanxi         93         155         210         189         179         3	1 160 2 185 0 67 2 102 1 174	174 206 199	216 159
-16       176       192       Zaozhuang       Shandong       215       96       171       95       130       20         17       210       193       Zhangjiakou       Hebei       174       170       129       211       182       18         -36       158       194       Baishan       Jilin       198       191       200       204       194       9         -137       58       195       Tongchuan       Shaanxi       93       155       210       189       179       3	2 185 0 67 2 102 I 174	199	159
17     210     193     Zhangjiakou     Hebei     174     170     129     211     182     18       -36     158     194     Baishan     Jilin     198     191     200     204     194     9       -137     58     195     Tongchuan     Shaanxi     93     155     210     189     179     3	) 67 2 102 I 174		
-36     158     194     Baishan     Jilin     198     191     200     204     194     9       -137     58     195     Tongchuan     Shaanxi     93     155     210     189     179	2 102 I 174	100	1 1
-137 58 195 Tongchuan Shaanxi 93 155 210 189 179	l 174		161
		69	191
		188	192
3 199 196 Yuncheng Shanxi 39 159 149 158 155 20	3 225	221	102
-10 187 197 Tangshan Hebei 189 181 156 210 202 20	1 144	109	79
15 213 198 Xinzhou Shanxi 193 189 175 153 175 1	) 25	189	221
-37 162 199 Hulunbuir Inner Mongolia 130 201 125 75 192	5 202	211	211
-18 182 200 Chifeng Inner Mongolia 172 165 166 133 152 1	7 206	222	190
-1 200 201 Heihe Heilongjiang 144 200 178 227 87 10	3 41	77	226
-24 178 202 Fangchenggang Guangxi 225 183 224 222 42	3 49	210	186
-33 170 203 Longyan Fujian 224 199 225 199 100 13	3 131	144	117
-161 43 204 Dandong Liaoning 219 105 215 191 220 10	3 198	20	121
-68 137 205 Tongliao Inner Mongolia 94 227 79 68 137	7 213	223	180
-2 204 206 Cangzhou Hebei 95 151 154 223 181 19		162	127
19 226 207 Bayannur Inner Mongolia 106 212 157 182 133 1	l 43	160	217
-39 169 208 Handan Hebei 113 71 205 166 212 23	2 129	80	145
-67 142 209 Fushun Liaoning 213 175 216 212 216 1		85	124
	94	137	201
-8 203 211 Pingdingshan Henan 121 158 162 196 190 2		113	143
-65 147 212 Songyuan Jilin 190 195 190 213 210 13		122	184
-62 151 213 Yangquan Shanxi 127 145 214 219 198 10		46	219
	215	32	225
-114 101 215 Lu'an Anhui 226 206 18 142 103 12		76	183
-181 35 216 Laibin Guangxi 197 163 191 214 180 1		220	155
5 222 217 Linfen Shanxi 176 204 173 205 206 19 -9 209 218 Jiamusi Heilongjiang 194 226 159 203 213 13		159 81	172 205
		142	203
-23 196 219 Shuozhou Shanxi 156 173 134 138 211 20 7 227 220 Datong Shanxi 220 216 209 185 178 20		130	210
-75 146 221 Wuhai Inner Mongolia 203 221 221 208 151 1		170	210
9 231 222 Jixi Heilongjiang 5 223 218 221 221 2		123	213
NA NA 223 Lvliang Shanxi 210 127 219 85 224 15		212	189
-124 100 224 Tieling Liaoning 221 178 220 178 225 25		26	206
-31 194 225 Huainan Anhui 218 203 222 209 215 2		26 94	206
-15 211 226 Shuangyashan Heilongjiang 4 225 223 224 227 2		193	199
NA NA 227 Hegang Heilongjiang 223 224 217 226 226 227		91	223



# Appendix: Data and Methodology

#### CLASSIFICATION AND DESIGNATION OF CITIES

Chinese cities can vary dramatically by population size, geography, strategic economic significance, and central government policy influence. Accordingly, this ranking report classifies Chinese cities into three categories—first-, second-, and third-tier cities—that follow the conventional designation and hierarchy of cities in China.

This ranking report focuses on cities classified as prefecture-level cities or above. <sup>67</sup> There is a broad consensus, but no universal agreement, as to which cities sit atop this hierarchy in the first tier. This ranking defines the first-tier cities as the municipalities directly governed by the Chinese central government (Beijing, Chongqing, Shanghai, and Tianjin). The second-tier cities consist of the capital cities of provinces and five cities (Dalian, Ningbo, Qingdao, Shenzhen, and Xiamen) with special plans approved by the Chinese central government. <sup>68</sup> The rest of the cities in our sample naturally fall into the third-tier city category. It is widely known that first- and second-tier cities have typically received more resources from the Chinese central government, are shaped more heavily by central government policies, and consequently tend to possess more economic power than the third-tier cities. Therefore, to increase comparability among cities, we rank the first- and second-tier cities as one group and the third-tier cities as a separate group.

In 2014, China had a total of 653 cities, of which 273 are prefecture-level and above.<sup>69</sup> Due to changes in the number of cities over time (cities are continuing to be incorporated) and missing or unavailable data for some cities, we include only 260 cities in this ranking report. We classify these 260 cities into three distinct tiers according to their respective economic development status. There are four first-tier cities, 29 second-tier cities, and 227 third-tier cities.

#### DATA AND VARIABLES

Our main sources of data are the 2010, 2012, 2014, and 2015 editions of the China City Statistical Yearbook. Each yearbook publishes data from the year before—e.g., the 2015 edition provides data for 2014. Due to data abnormality for some cities, we sought out other data sources and adjusted for consistency in those cases (further discussion below).

The Best-Performing Cities China composite index consists of nine indicators, which include seven growth measures and two stock measures. Specifically, the index measures the growth in jobs, wages, and per-capita gross regional product (GRP) over one- (2013-2014) and five-year (2009-2014) periods. These six growth measures are commonly used to measure the performance of various economies. The one-year growth measures intend to capture the recent dynamics for Chinese cities, whereas the five-year growth measures aim at tracing a longer economic development trajectory and adjusting for variations in business cycles. The seventh growth measure in the index is for three-year FDI growth (2011-2014). Existing research suggests that foreign direct investment (FDI) plays an essential role in recent economic development in China.<sup>70</sup> This is evidenced by the fact that China was the world's largest recipient of FDI in 2014.<sup>71</sup>

In addition to the three-year FDI growth measures, our index incorporates a measure that depicts the amount of foreign capital actually used. The FDI/GRP ratio is meant to measure the use of foreign capital for local economic development. Together the two measures reflect each city's economic openness and past economic performance while indicating its growth potential.

The ninth and final component of the index is the location quotient (LQ) for high value-added industry jobs in 2014. This report defines the following categories as high value-added industries: manufacturing; transport, storage and post; information transmission, computer services and software; financial intermediation; real estate; and leasing and business services. The LQ is a ratio that compares the concentration of a resource or activity (employment in this case) in a defined area to that of a larger area. In this index, a LQ greater than 1 indicates that a city's high value-added industries have a greater share of the local area employment than other Chinese prefecture level-and-above cities as a whole. Conversely, an LQ of less than 1 indicates a smaller share of employment. This ratio intuitively measures the ability of cities to generate greater economic benefits (such as profits and wages) for future development.

As discussed above, some nonstandard data reporting required alternative data sources and adjustments to ensure consistency. Specifically, certain data for the jobs, wages, GRP, and FDI for some cities appeared to be unreliable due to a change in estimation methods or other unidentifiable reasons. Among the affected cities are Changchun in Jilin Province, Jiayuguan in Gansu Province, Xi'an in Shaanxi Province, Wuhan in Hubei Province, Chengdu and Guangyuan in Sichuan Province, Chongqing, Dongguan, Foshan, and Zhongshan in Guangdong Province. As a result, the data for these cities were not comparable across some time periods and yielded ranking results that may not reflect the true performance status of these cities. To address these issues and better reflect the economic dynamics, we referred to other official statistical yearbooks and government websites to adjust inappropriate data points for them. Lastly, some data for Yinchuan in Ningxia Province, Xingtai in Hebei Province, and Chenzhou in Hunan Province indicate growth unsupported by anecdotal evidence or generally accepted knowledge regarding their performance. For example, although Yinchuan has been recognized as a fast-growing city with a new cloud data center and increased trading thanks to the "One Belt, One Road" initiative, some of the statistics would indicate shocks unsubstantiated by observable facts. For this reason, this index does not include these three cities in the ranking list.

#### METHODOLOGY IN DETAIL

Our ranking measures economic performance of cities in China by focusing on nine indicators. These indicators are then combined into an index by which the 260 cities are ranked for the year 2014.

We adopted a weighted z-score approach. Constructing our ranking index by the weighted z-score method involves five steps. First, we calculate the arithmetic mean and the standard deviation for each indicator. Second, we take the value for each indicator and subtract from it the arithmetic mean for that indicator and divide this differential by the standard deviation, yielding a z-score. Third, we assign weights for each of the nine indicators (indicated in Table 3). In our index, we allocate more weight toward the FDI and LQ variables given that many theoretical and empirical studies suggest that these indicators have played a critical role in driving China's economic development and growth. For each city, multiplying the z-scores for each indicator by the assigned weight for that indicator yields the weighted z-scores. Fourth, we summed up the weighted z-scores associated with each of the nine variables for each city and this gave us a sum of weighted z-scores for each city. Finally, based on the total weighted z-scores, we ranked 33 first- and second-tier cities in one group and 227 third-tier cities in another group.

Table 3. Components of the Best-Performing Cities China Index				
Indicator	Weight			
1-year job growth (2013-2014)	0.100			
5-year job growth (2009-2014)	0.100			
1-year wage growth (2013-2014)	0.100			
5-year wage growth (2009-2014)	0.100			
1-year GRP per-capita growth (2013-2014)	0.100			
5-year GRP per-capita growth (2009-2014)	0.100			
3-year FDI growth (2011-2014)	0.125			
FDI/GRP (2014)	0.125			
LQ for high value-added industry employment (2014)	0.150			



## **Endnotes**

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## **About the Authors**

**PERRY WONG** is managing director of research at the Milken Institute. Wong is an expert on regional economics, development, and econometric forecasting, and he specializes in analyzing the structure, industry mix, and public policies of regional economies. He designs, manages, and performs research on labor and workforce issues, the relationship between technology and economic development, and trade and industry, with a focus on the development and implementation of economic policy in both leading and disadvantaged regions. Wong is actively involved in projects aimed at increasing access to technology and accelerating regional economic growth in California and the American Midwest. In the international arena, he is involved in economic development in southern China, Taiwan, and other parts of Asia.

MICHAEL C.Y. LIN is a research analyst at the Milken Institute. Prior to joining the Institute, Lin was a teaching associate at the University of Southern California (USC) in urban and regional economics, informal housing, policy and program evaluation, and quantitative methods and analysis. His articles have been published in such academic outlets as the *Annals of Regional Science*, and he has published two book chapters about community planning and shrinking cities. He was also involved in writing policy reports on green buildings, sustainable community development, and informal housing. His current work is focused on urban and regional economic development. Lin has also participated in peer reviews for academic journal articles. He holds a Ph.D. in policy, planning, and development with a specialization in urban economics from USC.

**JESSICA JACKSON** is a research analyst in regional economics at the Milken Institute. She conducts research on human capital, innovation and entrepreneurship, and competitiveness as they relate to regional economic development. Jackson's current work includes examining regional competitiveness across United States metros and measuring skills gaps in the creative sector of the Los Angeles metropolitan area. She looks to focus on the impact of education and training on regional development in upcoming research. Prior to joining the Institute, Jackson was a teaching fellow at the University of North Texas teaching courses in macroeconomics. She holds bachelor's degrees in economics and history from the University of North Texas, where she also earned a master's degree in economics focusing on applied econometrics.



1250 Fourth Street Santa Monica, CA 90401 Phone: 310-570-4600 1101 New York Avenue NW, Suite 620 Washington, DC 20005 Phone: 202-336-8930

137 Market Street #10-02 Singapore 048943 Phone: 65-9457-0212

E-mail: info@milkeninstitute.org • www.milkeninstitute.org