



Best-Performing Cities CHINA 2018

THE NATION'S
MOST SUCCESSFUL
ECONOMIES

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 MILKEN INSTITUTE

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EXECUTIVE SUMMARY

What was the recent economic performance of Chinese cities? What are the key drivers for Chinese urban growth? Since 2015, the Milken Institute's Best-Performing Cities China series has been tracking their economic performance. Our ranking index for this version comprises nine indicators—one-year (2015-2016) and five-year (2011-2016) growth for jobs, wages, and gross regional product (GRP) per capita, three-year (2013-2016) foreign direct investment (FDI) growth, FDI/GRP ratio (2016), and the location quotient (LQ) for high value-added industry employment (2016). This index categorizes Chinese cities into large and small groups to yield more meaningful comparisons and insights.

HERE ARE THE HIGHLIGHTS OF THE 2018 RANKINGS:

SHENZHEN IN GUANGDONG PROVINCE CLAIMS THE NO. 1 SPOT AMONG LARGE CITIES

after having placed No. 4 for two years in a row. Transitioning from a low-cost manufacturing base (particularly for electronics) to a more innovation-based, high value-added hub, Shenzhen has recently earned the title of "China's Silicon Valley." The city's recent success can be largely attributed to its friendly business policies as well as to its welcoming entrepreneurial environment.

CHONGQING secures second place in the large urban group. Together with **CHENGDU** in Sichuan province (No. 7), these cities have recently become the growth engines for China's western region. Chongqing and Chengdu have relatively low business costs compared with other early developed cities such as Beijing, Shanghai, and Shenzhen. In addition, these two cities have developed diversified industries and encouraged entrepreneurial activities. All these efforts help bolster their economies. **TIANJIN** holds the third spot with its strong performance owing to its high-level FDI and diversified industries, and the high value-added sectors in particular. **ZHENGZHOU** in Henan province and **GUIYANG** in Guizhou province are placed No. 4 and No. 5 respectively. Both cities have recently attracted some high value-added, innovation-based industries, which have rocketed their economies upwards. For example, Zhengzhou has enticed Foxconn to set up an iPhone plant that manufactures roughly half of the world's iPhones and has made Zhengzhou known as the "iPhone City."

Although most cities in northeast China have been struggling in recent decades, **CHANGCHUN** in Jilin province has experienced relatively better economic performance and stands at No. 6. Traditionally known for its auto and film production, the city has recently reoriented its industrial composition towards the service industry, which helps diversify and balance the city's industrial structure. **HEFEI** in Anhui province captures the eighth spot. Like Guiyang, Hefei has also been developing high value-added industries. In 2012, it established an industrial complex called "Voice Park" where many companies such as iFLYTEK develop voice-control devices and technologies. **XI'AN** (No. 9) in Shaanxi province and **HANGZHOU** (No. 10) in Zhejiang province round out the top 10 list. As a pivotal node on the One Belt, One Road initiative, Xi'an's strong performance was largely fueled by the inflow of FDI. Hangzhou, long known for its scenic views and historical legacy, has transformed itself by cultivating internet-related industries.

DONGGUAN IN GUANGDONG PROVINCE HOLDS THE CROWN AMONG SMALL CITIES. Although the city has suffered economically in the past few years, its efforts in restructuring its economic base have paid off. The city has recently developed high value-added industries and in particular, it has worked to develop a robotics sector and introduced automation to manufacturing activities.

In addition to Dongguan, three other cities in Guangdong province—**FOSHAN** (No. 3), **ZHUHAI** (No. 5), and **ZHONGSHAN** (No. 8)—enter the top 10 list for the small city group. These cities have also made efforts to upgrade their industrial structures. The “Great Bay Area” framework, which intends to link up nine cities in Guangdong province, Hong Kong, and Macau, will further strengthen this regional cluster.

The strong performance of **SUINING** (No. 2) in Sichuan province can largely be attributed to its one- and five-year job growth numbers. The strong standing of **ANSHUN** (No. 10) in Guizhou province is driven by its one- and five-year GRP per capita growth. FDI, together with the One Belt, One Road initiative play a key role in propelling the growth of **WUHU** (No. 4) in Anhui province and **JIUQUAN** (No. 7) in Gansu province. Despite their strong performance this year, these cities need to develop more diversified and high value-added industries to enhance their long-term economic health. **JI'AN** in Jiangxi province holds sixth place. In fact, the city has been in our top 10 list previously—in 2015 (No. 9) and 2017 (No. 4)—which shows its relatively stable performance among its peers. **SUZHOU** (No. 9) in Jiangsu province has also performed well in our previous rankings. Its strong performance lies in its well-developed industries focusing on the high-tech sector.

Table 1. Best-Performing Cities China 2018

Rank	First- and Second-Tier Cities	Third-Tier Cities
1	Shenzhen, Guangdong (广东省, 深圳市)	Dongguan, Guangdong (广东省, 东莞市)
2	Chongqing (重庆市)	Suining, Sichuan (四川省, 遂宁市)
3	Tianjin (天津市)	Foshan, Guangdong (广东省, 佛山市)
4	Zhengzhou, Henan (河南省, 郑州市)	Wuhu, Anhui (安徽省, 芜湖市)
5	Guiyang, Guizhou (贵州省, 贵阳市)	Zhuhai, Guangdong (广东省, 珠海市)
6	Changchun, Jilin (吉林省, 长春市)	Ji'an, Jiangxi (江西省, 吉安市)
7	Chengdu, Sichuan (四川省, 成都市)	Jiuquan, Gansu (甘肃省, 酒泉市)
8	Hefei, Anhui (安徽省, 合肥市)	Zhongshan, Guangdong (广东省, 中山市)
9	Xi'an, Shaanxi (陕西省, 西安市)	Suzhou, Jiangsu (江苏省, 苏州市)
10	Hangzhou, Zhejiang (浙江省, 杭州市)	Anshun, Guizhou (贵州省, 安顺市)

Figure 1a. Top 10 First- and Second-Tier Cities



Figure 1b. Top 10 Third-Tier Cities



INTRODUCTION

China's economy is transitioning from a labor-intensive one to a more innovation-based, high value-added one. To trace these economic changes, the Milken Institute, beginning in 2015, has published four editions of the Best-Performing Cities (BPC) China rankings. Our 2018 BPC China ranking follows the structure of previous reports, and uses the most recent official data to construct a composite index for tracking the economic performance of Chinese cities.

The main goals of these rankings are threefold:

- First, they provide policymakers, planners, practitioners, investors, and academics with a tool to monitor and evaluate the economic performance of Chinese cities;
- Second, they provide guidance for Chinese cities in making improvements;
- Third, they provide a channel for exploration of relatively untapped markets and business opportunities in the increasingly eclectic development landscape of China.

The index incorporates nine indicators for periods ending in 2016: 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, proportion of FDI to GRP, and the location quotient (LQ) for high value-added industry employment. Given that first- and second-tier cities have typically received more support from the central government in the past and are at different developmental stages compared with third-tier cities, this index has two categories. The large city group includes the first- and second-tier cities, while the small city group comprises the third-tier cities. The large and small city groups are ranked separately so as to allow for more meaningful comparisons.

For the large city group, Shenzhen holds the crown. Located in the Pearl River Delta Economic Zone, Shenzhen has been cultivating its innovation-driven economy and has been granted the title of "China's Silicon Valley."¹ The recent development of the "Greater Bay Area" will further amplify the city's economic influence on regional development. Cities in the Diamond Economic Zone (i.e., Chongqing (No. 2), Chengdu (No. 7), and Xi'an (No. 9)) also have strong economic performance and demonstrate the momentum of the region's ongoing growth. Tianjin, located in the Jing-Jin-Ji mega-region, stands in third place. Zhengzhou (No. 4), Guiyang (No. 5), Hefei (No. 8), and Hangzhou (No. 10) all have developed high-tech, high value-added industries that enable them to have estimable economic performance. Despite being situated in poorly performing northeast China, Changchun is able to capture sixth place due to its industrial base.

As for the third-tier cities, Dongguan secures the top place. Although many factories have either shut down or moved out of the city in recent years, Dongguan has been busy reinventing itself by cultivating more high value-added industries such as robotics. In fact, some of its neighboring cities, including Foshan (No. 3), Zhuhai (No. 5), and Zhongshan (No. 8) in the Guangdong Province, are also doing well economically. The "Greater Bay Area" plan should further strengthen these cities' economic performance. Suining in Sichuan Province, which sits between Chengdu and Chongqing, holds second place in the region, which may be largely due to the expansion of the Diamond Economic Zone. Wuhu in Anhui Province stands in fourth place; its proximity to Hefei and Nanjing gives it location-specific advantages. Ji'an (Jiangxi Province) ranks No. 6 and has made our top 10 list twice in the past—No. 9 (2015) and No. 4 (2017). Suzhou (No. 9) in Jiangsu Province was also a new entry to our ranking, thanks to both its pivotal location and diversified economy. Jiuquan (No. 7) and Anshun (No. 10) enter the top 10 list for the very first time. Both the expansion of regional clusters and the One Belt, One Road initiative may have largely contributed to their recent growth.



OVERVIEW

CHINA'S ECONOMIC DEVELOPMENT

China is in dramatic transition. No longer experiencing double-digit economic growth, its economy instead has settled into a respectable but lower growth rate range between 6-7 percent annually. As the central planners prescribed, the Chinese economy has shifted from quantity growth to higher quality growth in recent years. Prior to the early 2010s, China had been long known as the world's low-cost manufacturing site for inexpensive products such as clothing and consumer electronics. In recent years, however, China has been cultivating its homegrown innovation and technology capacity, as it is no longer simply content with the moniker of the world's factory in an export-oriented economy. The key strategy for China to achieve this goal is the "Made in China 2025" initiative. The major goal of this initiative is to transform the Chinese economy to focus on more advanced, high value-added manufacturing sectors such as robotics, aerospace, and energy-efficient vehicles.² China is striving to reinvent itself from C2C (Copy to China) to CFC (Copy from China).

China's grand ambition has borne fruit. In the summer of 2016, China finished building the world's largest single-dish radio telescope, the Five-hundred-meter Aperture Spherical Telescope (FAST), in Guizhou province. With its technological prowess, China now boasts about its so-called "New Four Inventions of China"—high-speed rail, mobile payment systems, online shopping, and bike-sharing schemes. China is also developing a 5G network, the next generation of mobile internet connectivity, which may place it at the forefront of building technologies and setting industry standards. These examples further demonstrate China's ambitious efforts at restructuring its economy. On the policy front, the strategy is meant to elevate productivity growth and the contents of high value-added production in the economic system in light of a rapidly aging population and disappearing population dividends in the Chinese society.

In addition to industrial upgrades in the domestic setting, China has intensified its efforts toward further internationalization in service, currency, and financing in global markets. The One Belt, One Road initiative continues to propel China's economic development internationally. The initiative attempts to bind domestic and regional development by connecting with international emerging trade ports and markets directly. It drives the economic growth of the cities along its routes domestically and globally. As an example, Zhengzhou (No. 4 in the large city rankings) in Henan province, due to its pivotal location, has been a vital transportation node. Its economy has been booming in recent years. Foxconn established a plant here in 2011 mainly dedicated to iPhone production and is responsible for roughly half of the world's iPhones. The city is now known as "iPhone City." More and more multinational corporations set up operations here to take advantage of logistics benefits provided by the city.

REGIONAL DEVELOPMENT

In its 13th Five-Year Plan, China emphasized the importance of coordinated regional development by strengthening regional clusters, including the Pearl River Delta Economic Zone, the Yangtze River Delta Economic Belt, the Diamond Economic Zone, and the Jing-Jin-Ji mega-region as growth engines for economic development. The regional nodes in these various clusters are now being linked with the One Belt, One Road initiative.

The Jing-Jin-Ji mega-region consists of Beijing, Tianjin, and Hebei Province. The development of this mega-region not only intends to reduce the congestion in Beijing and Tianjin, but also help enhance less developed areas. In addition to the development of the Xiong'an New Area, other parts of this mega-region are also growing. For example, the Wuqing District in Tianjin was once an agricultural village and borders Beijing and Hebei Province. Its locational advantage and low land costs made the Wuqing District a logistics center that has attracted major players in e-commerce. For instance, Amazon and Vipshop, a Chinese e-commerce company, built their warehouses here. Moreover, Wuqing has convenient transportation links with highways and high-speed rail. The first NBA-themed lifestyle center, which was opened on April 25, 2018, is also located in Wuqing.³

Within the Pearl River Delta Economic Zone, a more recent development is the “Greater Bay Area” initiative. This initiative intends to link nine cities across Guangdong province, and the two Special Administrative Regions, Hong Kong and Macau, to form an urban cluster. The Chinese version of the bay area intends to mimic similar areas in New York, San Francisco, and Tokyo, as the Chinese government envisions a technological innovation hub that can drive China’s economic growth. To nurture this plan, China has also improved this region’s transportation infrastructure. The Hong Kong-Zhuhai-Macau Bridge is scheduled to open in the fall of 2018. The grand plan is to leverage the highly internationalized and mature economies of Hong Kong and Macau with regions and cities that have abundant spatial development opportunities in Guangdong province. Hong Kong-Shenzhen-Guangzhou serve as the three anchor cities that will lead in a 69-million strong, consumer-based economy in southern China. If the plan is fruitful, it will combine a global money center with an emerging technology base and numerous research facilities to form a super innovative cluster.

In addition to the development of regional clusters, one of the major goals the central government hopes to achieve is to narrow the economic development gaps among regions, and between urban and rural areas. To do so, the central government proposed plans such as the “specialty towns (*tese xiaozhen*)” initiative. The population of these towns is under 500,000, and the goal is to have 1,000 such towns by 2020.⁴ Although the effectiveness of this initiative remains debatable, the effort demonstrates China’s ambition in furthering the economies of different regions and narrowing the development gaps between them.

METHODOLOGY

The 2018 Milken Institute Best-Performing Cities China index divides 264 Chinese cities into two groups, one for large cities and one for small- and medium-sized cities. The large cities group comprises 34 first- and second-tier cities, while the latter is made up of 230 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 proportion of FDI within GRP and the concentration of high value-added industry employment. Growth in jobs, wages, and per-capita GRP is evaluated over one-year (2015-2016) and five-year (2011-2016) periods. The one-year period highlights the most recent economic dynamics, while the five-year period adjusts for extreme variation in the recent business cycle. FDI growth is measured over a three-year (2013-2016) period and is also evaluated by share of GRP in 2016. The concentration of high value-added industry employment is quantified by using a location quotient (LQ) for employment in those industries in 2016. High value-added industries comprise the sectors of manufacturing, transportation, storage and postal services, information transmission, computer services and software, financial intermediation, real estate, and leasing and business services. These sectors typically act as a major catalyst for growth in local economies. Recent theoretical and empirical work suggests that both FDI and high value-added industries play critical roles in bolstering China's economy; hence, these indicators are more heavily weighted in this index. Table 2 lists the nine indicators used to construct the index and their respective weightings.

Table 2. Components of the Best-Performing Cities China Index

Indicator	Weighting
1-year job growth (2015-2016)	0.100
5-year job growth (2011-2016)	0.100
1-year wage growth (2015-2016)	0.100
5-year wage growth (2011-2016)	0.100
1-year GRP per-capita growth (2015-2016)	0.100
5-year GRP per-capita growth (2011-2016)	0.100
3-year FDI growth (2013-2016)	0.125
FDI/GRP (2016)	0.125
LQ for high value-added industry employment (2016)	0.150

Undocumented modifications in counting methods, reclassifications based on policy changes, and other changes can cause discrepancies or abnormalities in the cities' recorded data.

Consequently, some data adjustments were made to construct a more consistent index and to reflect current urban development status and economic trends more closely. To minimize volatility in ranking results, the Milken Institute employs a ranking method (based on weighted z-scores) that differs from the method used to calculate the Best-Performing Cities series for the United States. The alternate method used here provides a ranking that better captures the economic development of Chinese cities. For more details regarding data and methodology, please see the Appendix.



**TOP
10 | Best-Performing
Cities 2018**

FIRST- AND SECOND-TIER CITIES



SHENZHEN, GUANGDONG

	1-YEAR (2015–2016)	5-YEAR (2011–2016)		
Job Growth	22nd	3rd	3-Year FDI Growth (2013–2016)	17th
Wage Growth	13th	1st	FDI/GRP (2016)	20th
GRP Per-Capita Growth	26th	17th	LQ for High Value-Added Industry (2016)	1st

As one of the leading technology and innovation centers in China, Shenzhen tops its first- and second-tier city peers in this year's rankings. The city has three out of nine indicators ranked in the top five among regions. The city's LQ for high value-added industry employment and five-year wage income growth are ranked first, while five-year job growth is ranked third.

With a registered household population of 3.85 million in 2016⁵ and many millions more resident workers, Shenzhen has been a symbol of the success of the Chinese reform and opening since 1978. Rising from its humble beginnings as a small agrarian and fishing village to today's metropolis, Shenzhen is frequently referred to as the "Silicon Valley of China" for its innovative, outward-looking economy.

As the city's economy continues to evolve, from apparel to electronic watches to today's communication devices, the Internet of Things, and bio-tech, Shenzhen's strong position in technology-based development has placed the city's economic performance among the best in our ranking over the last few years. The city has been consistently ranked in the top five. Its new economy, represented by information, high-tech equipment manufacturing, green tech, and digital, accounts for 37.7 percent of regional GDP.⁶

The industrial transition of the city and China overall propels and sustains Shenzhen's trail-blazing economy. As the nation transforms from a manufacturing to a service economy,

regions like Shenzhen are well placed. The city's established technology firms and institutions such as Tencent, Huawei, Foxconn, and Beijing Genomic Institute are very much part of the city's historical economic development as well as its long-term supporters. As an early starter focusing on electronic and telecom goods manufacturing, in the last decade the regional economy has rapidly transitioned to e-commerce and digital economy as talent and knowledge accumulated. The city's tech-based economic development is ahead of the curve in national efforts proposed by the central government two years ago.

The "Greater Bay Area" cluster development framework has raised the economic development perspective for Shenzhen. Along with Hong Kong-Macau and Guangzhou, Shenzhen will become an anchor city in the super urban cluster in southern China, comparable to the Jing-Jin-Ji and Yangtze River clusters in central northern China. The "Greater Bay Area" development plan is ambitious, but it does lay out a vision of Shenzhen as an innovative city to leverage Hong Kong's world class financial market. Although much groundwork needs to be done for greater integration and closer collaboration of these economies, the Hong Kong government's proposed budget for a HK\$50 billion science and technology fund for research and development (R&D) and commercialization will encourage Shenzhen-based companies and scientists to engage and collaborate on projects in Hong Kong.⁷

#2

CHONGQING

	1-YEAR (2015–2016)	5-YEAR (2011–2016)		
Job Growth	2nd	1st	3-Year FDI Growth (2013–2016)	23rd
Wage Growth	20th	10th	FDI/GRP (2016)	8th
GRP Per-Capita Growth	4th	3rd	LQ for High Value-Added Industry (2016)	24th

Chongqing ranks second place again in our 2018 Best-Performing Cities China index. As one of the twin engines propelling growth for the Greater Western Development (the other city is Chengdu, Sichuan), Chongqing's robust economic development is expected to produce spill-over effects for the surrounding regions in the western high plateau of China. The strong economic performance is reflected in the 2018 index by the five-year and one-year job growth indicators, which Chongqing ranks first and second respectively. Supported by solid gains in the job market, Chongqing's GRP per-capita growth also ranks well on both the one-year and five-year measures in 2018.

Chongqing is a mega city with a registered household population of 34 million in 2016.⁸ As the largest city in China, Chongqing's population edges out the populations of both Beijing and Shanghai of 28 million. The city's economy is diversified and has long been an industrial production base in the western part of China. Today, Chongqing's heavy industries, such as vehicles, transportation equipment, iron and metal works, and military equipment, account for 70 percent of industry output, but unlike typical heavy industrial bases in the northeast of China, Chongqing is also rapidly creating a presence in electronic and telecom equipment production.⁹ In 2016,

communication and electronic equipment accounted for almost 17 percent of the industrial output with impressive growth of 16.8 percent. The establishment of production facilities by Foxconn and Acer Inc. in Chongqing's New North Zone are among the new additions to the city's existing electronic production.

Chongqing's ascendancy and staying power among its peers in our ranking has much to do with its pivotal role in the Great Western Development, which was initiated almost a decade and a half ago. Apart from being one of the two mega cities in the Sichuan Valley, Chongqing is a key waterway transport hub along the Yangtze River and a formidable industrial base that is increasingly outward looking, particularly toward central Asian and European markets. Currently, the city's exports, via the "One Belt" architecture to central Asia and Europe, are still in the early stages of development. However, as the One Belt, One Road initiative takes root in central Asia and Europe, Chongqing can further leverage its workforce and industrial base to raise the share of exports in its economy. Currently, Chongqing's exports, compared to cities such as Shenzhen and Tianjin, only account for 15 percent of its GRP in 2016.¹⁰



TIANJIN

	1-YEAR (2015–2016)	5-YEAR (2011–2016)		
Job Growth	26th	28th	3-Year FDI Growth (2013–2016)	2nd
Wage Growth	4th	26th	FDI/GRP (2016)	1st
GRP Per-Capita Growth	31st	32nd	LQ for High Value-Added Industry (2016)	7th

Tianjin has rebounded to third place in this year's rankings after a disappointing ranking of 15th in 2017. Four indicators account for the improvement: one-year wage growth, three-year FDI growth, FDI/GRP, and LQ for high value-added industry employment. As the largest, most important commercial port in northern China, Tianjin's economy depends heavily on international trade. In addition to the seaport, Tianjin Binhai International Airport is an important air cargo center in China. As such, total trade value accounts roughly for 38 percent of the GRP in 2016.¹¹

As a port city, Tianjin also is one of the earliest industrialized cities in China. The geography, its proximity to the nation's capital, and its long tradition of manufacturing puts the city in an advantageous position. Today, foreign investors and multinational corporations value the city's logistical advantages and versatile manufacturing base and have partnered with Tianjin in their operations in China. Foreign firms have created joint ventures in sectors ranging from aircraft and transportation equipment manufacturing to communication equipment. Airbus' joint venture is the company's first and only assembly operating outside of Europe. The city's multi-platform structure enables Tianjin to serve as the energy, chemical production, high-tech manufacturing, and commercial center of the Bohai Bay Economic Zone. Some of the noted industries in Tianjin are

metal processing, passenger cars, electronic goods, raw chemical materials and products, transportation equipment, and petroleum processing.¹²

Commercial trade and a diversified industrial structure are the two pillars of the Tianjin economy. They have helped propel strong economic development and growth for the city in the last 20 years. As the city's industrial base has become more diversified and migrates to the higher value-added end of the production spectrum, Tianjin has been given a new mandate by the central government to integrate and collaborate with neighboring Hebei province on economic development and urbanization. Hence, the current and future growth of Tianjin rests on the role the city is expected to play in the future—an anchor to the further development of the largest urban cluster, the Jing-Jin-Ji urban cluster. The city has been given an economic agenda and provided with preferential incentives and policies by the central government to promote coordination, collaboration, and complimentary development that will integrate the economies of Hebei, Beijing, and Tianjin. Although a detailed plan is not available, it is likely that Tianjin will have the opportunity to facilitate trade from inland areas and to further upgrade its infrastructure and industry.



ZHENGZHOU, HENAN

	1-YEAR (2015–2016)	5-YEAR (2011–2016)		
Job Growth	14th	6th	3-Year FDI Growth (2013–2016)	18th
Wage Growth	3rd	2nd	FDI/GRP (2016)	15th
GRP Per-Capita Growth	7th	20th	LQ for High Value-Added Industry (2016)	8th

Zhengzhou climbs three places to rank fourth on the 2018 Best-Performing Cities China index. The city continues to perform well as its five-year job growth ranks sixth, complementing a second place for five-year wage growth. One-year wage growth also ranks third among the first- and second-tier cities. One-year GRP per-capita growth ranks seventh, and LQ for high value-added employment stayed at eighth place. The region has improved its growth recently relative to other first and second tier cities, and its rise in economic standing, from a region that was perceived to be low growth in central China is an indicator of the government's policy and mandate taking effect.

Zhengzhou is located in central China and is the capital city of Henan province with a registered household population 8.27 million in 2016.¹³ The city is known for its role as the linchpin of China's rail transportation system—all major railways crossing China intersect at Zhengzhou. As an important logistics hub in China and manufacturing center in Henan province, Zhengzhou is relatively unknown simply because China's economic

development and growth policy favored coastal regions for the better part of the past 30 years. As the Chinese government began to prioritize its policy in favor of domestic market development, Zhengzhou's development pace changed noticeably. On top of being a railway hub, Zhengzhou's airport has become internationalized as it gained direct connections with international destinations in the last several years.

Zhengzhou is also a key manufacturing center in central China. The city's industry composition is concentrated in manufacturing and goods production. The secondary industry represents a relatively large share of the economy—over 52.8 percent in 2016 and 55.5 percent in 2015, while the tertiary industry represents 44.4 percent and 47.1 percent in 2015 and 2016, respectively.¹⁴ Zhengzhou's high-tech parks and industrial zones are home to global players such as Foxconn and Caterpillar and domestic food processing firms like Sanquan. All these firms share a common trait—they depend on timely and rapid global and nationwide shipments.¹⁵

	1-YEAR (2015–2016)	5-YEAR (2011–2016)		
Job Growth	11th	7th	3-Year FDI Growth (2013–2016)	3rd
Wage Growth	8th	5th	FDI/GRP (2016)	19th
GRP Per-Capita Growth	13th	1st	LQ for High Value-Added Industry (2016)	32nd

Guiyang drops two positions from third in the 2017 ranking to fifth in this year's ranking. In the two-year period from 2016 to 2018, the city has dropped five spots. The one-year job growth ranks 11th and GRP per-capita growth ranked 13th. The recent ranking is in sharp contrast to the robust growth in the last few years. Despite the city's falling rank, Guiyang's inflow of foreign investment is still competitive relative to other first- and second-tier cities. Its three-year FDI growth is ranked third. Given Guiyang's limited industrial resources and commercial platform, the FDI inflow rank is perhaps indicative of ample opportunities on the ground and also signals that policy support from government plays a key role in regional development. Indeed, there are firms, both international and domestic, that either have or are considering setting up big data centers in the province. These firms include Alibaba, Qualcomm, IBM, Huawei, Tencent, Baidu, Lenovo, and Foxconn.¹⁶

The capital city of Guizhou province, Guiyang had a registered household population in 2016 of 4 million.¹⁷ The province is one of the less developed areas in China due to its landlocked position as well as the region's topography. The mountainous terrain and high altitude have hindered the development of a large-scale manufacturing base. However, the region is a transportation hub for rail travel from the east and southeast to the high plateau of China. Economic development

has become a top priority for Guizhou given the intention to develop the Greater Western region in China as well as the government's determination to eradicate poverty. Guiyang, as the capital city of the region, is expected to lead in transforming its industry and modernizing the city's infrastructure and economic base.

Infrastructure building has been at the top of the economic agenda for Guiyang, and much of the growth in the city comes from building up the municipality's infrastructure, particularly its transportation, in the hope that the region can link up with the outside world in a more cost-effective fashion. Guiyang, as a transportation node in the One Belt, One Road Initiative, has become a transportation and communication hub for the southwestern region of China and Southeast Asia. The development of Guiyang is a long-term process, and its development model might differ from other regions in China. From the outset, the city modeled its development as an "Eco City," deploying renewable energy and solar power for the region's energy consumption. As for industrial development, Guiyang is moving to become a big data storage and processing center and artificial intelligence (AI) hub.¹⁸ The city is turning its disadvantages—such as a smaller population base, the challenges of obtaining human capital, and vast sparse landscape—into advantages.

	1-YEAR (2015–2016)	5-YEAR (2011–2016)		
Job Growth	20th	9th	3-Year FDI Growth (2013–2016)	7th
Wage Growth	18th	9th	FDI/GRP (2016)	2nd
GRP Per-Capita Growth	8th	18th	LQ for High Value-Added Industry (2016)	12th

Changchun reappears on our top 10 list of the best cities ranking for the first time since 2015, when the city was ranked eighth. This year, Changchun is elevated by two positions to be placed sixth. The city ranks ninth in five-year job and wage growth, eighth in one-year GRP per-capita growth, seventh for three-year FDI growth, and second for FDI/GRP in our 2018 ranking. The city appears to have turned around even though the national economy has cooled in the last few years.

Changchun is the capital city of Jilin province located in northeast China. The city's registered household population of 7.5 million in 2016 saw a modest decline of 0.05 percent from the year before.¹⁹ The city's two pillar industries, film and automobile production, went through many ups-and-downs as China transitioned from a centrally planned economy to a more market-based one. Globalization has presented challenges not only for Changchun but the entire northeast economy, and these regional economies have failed to keep up with the growth momentum of the nation. As such, central and local governments and scholars have come to a consensus that a revival of the regional economy is urgent and critical to China's future development.²⁰

Central and regional governments have devised policies and provided budget support to revive economic growth for the northeast region as a whole in the last decade and a half. However, the results have been uneven. Changchun, however, has come out ahead of the pack. The city recorded GRP growth at 7.7 percent in 2016, up from 6.5 percent in 2015. The growth rate edged over the national average of 6.7 percent by a full percentage point.²¹ The city economy is supported by several key companies based in Changchun. CRRC Changchun Railway Vehicles Co. Ltd. is

one of the largest rail equipment makers in the world. The company employs 14,000 workers and has been a key contributor to the health of the city economy as demand for building high-speed rail remains high.

Fundamentally, Changchun's growth revival comes from reforming and restructuring its existing industries. However, no less important are efforts to promote and nurture new industries to diversify regional economies' heavy dependence on commodities and traditional core industries such as steel. It seems that the transformation in Changchun is taking hold. According to the local government, Changchun's industries, both traditional and emerging, have been fueling growth as of late. Industrial restructuring, better supply chain management and the promotion of services, and binding core industries with emerging ones are a few of the strategies implemented locally to promote industry competitiveness and economic growth. On another front, the government is streamlining its operations to accommodate business needs on project approval and coordination.²²

The economic reform and industry revitalization in Changchun are very much government-driven, as the core industries in the region are all state-owned, which is well represented by the FAW (First Auto Work) Group. The ongoing transformation of the regional economy, from a heavy industry focus to a service-oriented one will need to have the active participation of the private sector. Plateauing population growth, with a slight decline in the last few years, does suggest that the region needs to reinvent itself quickly.

	1-YEAR (2015–2016)	5-YEAR (2011–2016)		
Job Growth	3rd	2nd	3-Year FDI Growth (2013–2016)	27th
Wage Growth	17th	3rd	FDI/GRP (2016)	16th
GRP Per-Capita Growth	29th	10th	LQ for High Value-Added Industry (2016)	16th

Chengdu, as the second largest city in the province and the provincial capital of Sichuan province, has been performing superbly in growing its economy in recent years. The city has been ranked No. 1 twice since our ranking began in 2015. Along with its sister city Chongqing in Sichuan, both cities have performed well in last decade. Chengdu's robust performance places four indicators among the top 10: one-year and five-year job growth, five-year wage growth, and five-year GRP per-capita growth.

However, the city does show weakness in the ranking this year. The overall standing of indicators has retreated from the 2017 ranking. Most notably, one-year wage growth and three-year FDI/GRP declined in their standing from a year before. Chengdu's economic growth slowed to 7.7 percent in 2016 from 7.9 percent in 2015,²³ which might have impacted one-year GRP per-capita growth.

The economic success of Chengdu and Chongqing can be credited to favorable national policies such as the Great Western Development plan, and recently the One Belt, One Road initiative. However, local government, existing industrial structure and strength, leadership, and geography also play key roles in the process. Many provinces in the western part of China are covered under the Great Western Development plan, but none have come close to the achievement garnered by Chengdu.

Chengdu's sustained economic success rests on its strong manufacturing base that was built decades ahead of recent economic

development. Manufacturing capability for military equipment and aerospace production in Chengdu can be dated back to the 1960s during the Cold War and the Sino-Soviet Union conflict. In addition, perhaps more importantly, many engineers and skilled labor and their families migrated from coastal cities like Shanghai to Chengdu. These inherent advantages provided Chengdu with fundamentals and knowhow for further development. Chengdu is leveraging its capability for higher value-added production and enterprise with its location. Recently, global pharmaceutical giant Sanofi announced plans to set up a global research and development operations hub in Chengdu's Life Sciences Park.²⁴

As the city's economy continues to prosper and expand, building infrastructure that connects it with more locations around the globe and industry clustering that enhances the productivity with width and depth can certainly help sustain development. In addition to the traditional venues of lobbying companies to locate in the city through tax incentives and preferential policies, Chengdu has raised the game for attracting talent, families, and companies to the city through promoting the city's well-known cultural elements. Sichuan Opera, tea culture, and bookstores are key cultural aspects that government and private citizens are promoting to sell the city to the outside world. To further enhance the city's "intellect culture," Chengdu's city government set up a policy to assist entrepreneurs opening brick-and-mortar bookstores throughout the city.²⁵

	1-YEAR (2015–2016)	5-YEAR (2011–2016)		
Job Growth	6th	4th	3-Year FDI Growth (2013–2016)	6th
Wage Growth	11th	7th	FDI/GRP (2016)	17th
GRP Per-Capita Growth	5th	6th	LQ for High Value-Added Industry (2016)	25th

Hefei takes the eighth spot, appearing for the second time in our top 10 list. In 2015, the city was ranked sixth. The overall performance is robust. Compared with those in 2017, six of the nine variables we evaluated are ranked in the top 10. The weakest measure for Hefei comes from LQ for high value-added employment, which ranks twenty-fifth, suggesting that the regional economy still leans toward traditional sectors rather than services and high-tech industries. Hefei's strengths appear consistently in the form of a strong job market and steady regional economic expansion. Job growth performance was solid in both the 2015 and 2018 rankings. Hefei's one-year and five-year job growth on this occasion ranks in sixth and fourth place, respectively.

As the capital city of Anhui province and an ancient city in China, Hefei is best known for its educational institutions and as a regional transportation hub where land and waterway traffic intersect. Hefei has gradually built up its modern manufacturing capability in the last twenty years from a thin industrial base. Today, the secondary industry, represented by manufacturing and goods production, accounts for more than 50 percent of GRP.²⁶ Hefei became an alternative production location due to the relocation of many small- and mid-size manufacturing firms escaping high costs in the coastal region. As the manufacturing base strengthened, local industry clustering took place. Today, the city's top five manufacturers are automobile and

parts, equipment manufacturing, household appliances, food processing, and electronic displays.²⁷

In 2017, as the manufacturing sector became more dominant in the economy, the Hefei government invested 237 billion yuan in the secondary industry, up 11.8 percent from the year before.²⁸ The city's gamble on developing its manufacturing sector has obviously been a winning one. As of 2017, there were 2,561 vigorous manufacturing firms residing in the city. The majority are small- to mid-size businesses, with only 12 firms reaching 5 billion yuan in annual sales. Hefei's strategy to groom and promote manufacturing is very much counter to most national development trends, as many cities, particularly capital cities, tend to aim at the expansion of the service sector and some, such as Shanghai and Beijing, have even discouraged manufacturing activity.

Hefei's economy grew at an average annual rate of 16 percent from 2007 to 2016²⁹—what the locals describe as the "golden years." The economic miracle, as some might call it, can be attributed to the city harnessing a period of high entrepreneurship, rising costs in the coastal areas, and facilitating export markets. Manufacturing could have a great future for Hefei, especially if the city can intensify the linkage between locally renowned research-based institutions, such as the China University of Science and Technology.

	1-YEAR (2015–2016)	5-YEAR (2011–2016)		
Job Growth	18th	11th	3-Year FDI Growth (2013–2016)	8th
Wage Growth	14th	11th	FDI/GRP (2016)	3rd
GRP Per-Capita Growth	25th	12th	LQ for High Value-Added Industry (2016)	11th

Xi'an appears on the top 10 list for the second time and takes the ninth spot in the ranking. FDI as a share of GRP ranks highly at third place, followed by three-year FDI growth, which ranks eighth. Xi'an's favorable FDI rankings are indicative of the city's potential for growth. The one-year GRP per-capita growth is placed at 25th, the lowest among the nine variables.

Xi'an is an ancient capital of China and the capital city of Shaanxi province, with a registered population in 2016 of 8.25 million.³⁰ Although Xi'an often gives the impression that it is only a destination for Chinese cultural and heritage tourism, its economic foundation is actually rooted in aviation and aerospace, military equipment production, high-tech R&D, information technology (IT), and lastly tourism. Because of the existing industry clusters and talent, Xi'an has become a hotbed of FDI. Global firms from various industries such as silicon chip making, electrical vehicle production, and pharmaceuticals have set up operations in Xi'an. Samsung Corporation, through two subsidiaries, built a manufacturing plant for flash memory chip production and another plant to build electric vehicles.³¹

In March 2018, three leading animal health companies, Boehringer Ingelheim, KMOH, and ZNWT announced their intention to establish a joint venture in Xi'an to target foot-and-mouth disease in China with an investment of 840 million yuan. The joint venture project will establish a new company, Meili Omni-Honesty, for vaccine production. The new entity is located at the Airport New City in Xi'an.³²

Beyond its technological strength and talent, Xi'an's intangible and inherent assets lie in the city's legacy and location. The One Belt, One Road initiative directly benefits Xi'an the most perhaps. The city was once the gateway and starting point of the ancient Silk Road. Today, under the initiative, Xi'an will serve as the starting point of the modern "Silk Road." It has been tasked by the central government to "develop itself to be the base for reforming and opening up inland regions." Under these new policy directives, Xi'an will need to expedite the construction for logistics, warehousing, and other infrastructure. All will promote the city's legacy as well as investment flow.³³

	1-YEAR (2015–2016)	5-YEAR (2011–2016)		
Job Growth	17th	26th	3-Year FDI Growth (2013–2016)	12th
Wage Growth	6th	12th	FDI/GRP (2016)	9th
GRP Per-Capita Growth	3rd	14th	LQ for High Value-Added Industry (2016)	17th

Hangzhou takes the tenth spot and appears for the first time on our top 10 list. The city moves up six places from 16th in last year's ranking. Among the nine variables, Hangzhou ranks sixth for one-year wage growth and third for one-year GRP per-capita growth. The city also placed ninth for the FDI share of regional output.

Hangzhou is the capital city of Zhejiang province with a registered population in 2016 of 7.36 million.³⁴ Although Hangzhou is often known for its serene and picturesque lakeside views, it is home to some of the most vibrant companies in China—Alibaba, Netease, Geely, and Samsung, to name a few. Until recently, tourism, culture, and recreation were the city's pillar industries.

All that changed when the Internet of Things became a reality. Hangzhou today is fast-becoming known as the epicenter of China's e-commerce, blockchain, and cloud computing. In 2016, the information economy in Hangzhou—inclusive of e-commerce, big data and cloud computing, software, mobile telecom, integrated circuit (IC), and AI, among others—produced 268 billion yuan of output and accounted for 24 percent of Hangzhou's GRP, while the city's tourism, culture, and recreation only generated 80.1 billion yuan by comparison.³⁵

The information economy grew 22.8 percent, while tourism grew only 13.3 percent. Hangzhou is at the forefront of urban development in China and has been described as the smartest city in China. Alibaba is partnering with the city to monitor and guide traffic in real time with computing power backed by AliCloud. City Brain, as the monitoring system is called, enables the city's infrastructure to adapt to residents' behavior. Other IT companies in Hangzhou are working with schools and hospitals to improve outcomes of the services they provide.³⁶

Hangzhou's economic performance is solid, maintaining a near double digit growth from 2012 through 2016, but growth slowed to only 8 percent in 2017. Ever since e-commerce and IT industries took hold in Hangzhou, the city has transformed. Hangzhou's municipal government should be credited for its work with local industries and the support given to their ventures. The city's economy and industry structure evolved quickly because of rapid expansion of the IT and e-commerce industries. Hangzhou's service sector has grown quickly: its service sector accounted for 58.2 percent in 2015, 61.2 percent in 2016, and 62 percent in 2017.³⁷ What is astonishing about the rapid ratio change is that both the primary and secondary industries grew modestly.

COMPLETE RESULTS: FIRST- AND SECOND-TIER CITIES

Change in Rank over 1 Year			City	Province	City Tier	1-Year Job Growth (2015-2016)		5-Year Job Growth (2011-2016)		1-Year Wage Growth (2015-2016)		5-Year Wage Growth (2011-2016)		1-Year GRP Per-Capita Growth (2015-2016)		5-Year GRP Per-Capita Growth (2011-2016)		3-Year FDI Growth (2013-2016)		FDI/GRP (2016)		LQ for High Value-Added Industry Employment (2016)	
2017 Rank (Tier 1 & 2 Cities)	2018 Rank (Tier 1 & 2 Cities)																						
3	4	1	Shenzhen	Guangdong	2	22	3	13	1	26	17	1	20	17	17	17	17	20	1	23	8	24	
0	2	2	Chongqing		1	2	1	20	10	4	26	31	32	23	20	18	15	15	1	3	19	32	
12	15	3	Tianjin		1	26	28	4	26	31	32	2	7	20	18	15	8	1	2	1	7	12	
3	7	4	Zhengzhou	Henan	2	14	6	3	2	7	20	13	17	17	17	17	17	20	1	3	19	32	
-2	3	5	Guiyang	Guizhou	2	11	7	8	5	13	13	1	1	1	1	1	1	1	3	19	32	12	
8	14	6	Changchun	Jilin	2	20	9	18	9	8	8	18	18	18	18	18	18	18	7	2	1	12	
-6	1	7	Chengdu	Sichuan	2	3	2	17	3	29	29	10	10	27	27	27	27	16	16	16	16	16	16
5	13	8	Hefei	Anhui	2	6	4	11	7	5	5	6	6	6	6	6	6	17	25	17	17	25	
2	11	9	Xi'an	Shaanxi	2	18	11	14	11	25	25	12	12	12	12	12	12	8	3	3	11	11	
6	16	10	Hangzhou	Zhejiang	2	17	26	6	12	3	3	14	14	12	12	12	12	9	9	17	17	17	
8	19	11	Xiamen	Fujian	2	10	14	2	23	12	29	29	19	19	19	19	19	10	10	10	10	10	
5	17	12	Beijing		1	8	22	12	19	2	23	23	5	5	14	14	14	9	9	9	9	9	
-3	10	13	Qingdao	Shandong	2	27	24	21	16	24	22	14	14	6	6	6	6	6	4	4	4	4	4
-5	9	14	Nanchang	Jiangxi	2	15	8	5	6	15	15	25	25	5	5	5	5	5	28	28	28	28	28
-9	6	15	Shanghai		1	33	13	30	13	1	25	21	21	7	7	7	7	7	3	3	3	3	
5	21	16	Wuhan	Hubei	2	5	25	9	30	22	22	4	4	4	4	4	4	4	4	20	20	20	
-12	5	17	Nanjing	Jiangsu	2	28	5	19	4	11	11	4	4	4	4	4	4	26	21	13	13	13	

Change in Rank over 1 Year	2017 Rank (Tier 1 & 2 Cities)			2018 Rank (Tier 1 & 2 Cities)			City			Province			City Tier			1-Year Job Growth (2015-2016)			5-Year Job Growth (2011-2016)			1-Year Wage Growth (2015-2016)			5-Year Wage Growth (2011-2016)			1-Year GRP Per-Capita Growth (2015-2016)			5-Year GRP Per-Capita Growth (2011-2016)			3-Year FDI Growth (2013-2016)			FDI/GRP (2016)			LQ for High Value-Added Industry Employment (2016)		
-6	12	18	Lanzhou	Gansu	2	7	10	32	18	20	8	1	32	33																												
8	27	19	Nanning	Guangxi	2	12	15	1	8	19	2	31	31	34																												
-2	18	20	Fuzhou	Fujian	2	19	17	15	14	6	11	15	22	26																												
9	30	21	Jinan	Shandong	2	4	30	7	20	27	24	13	25	14																												
2	24	22	Ningbo	Zhejiang	2	31	34	22	33	10	26	11	12	5																												
-3	20	23	Changsha	Hunan	2	30	32	25	25	16	13	10	13	18																												
2	26	24	Guangzhou	Guangdong	2	13	29	27	32	28	21	20	23	6																												
3	28	25	Shijiazhuang	Hebei	2	21	20	23	17	9	28	16	26	15																												
-1	25	26	Harbin	Heilongjiang	2	25	31	28	28	17	19	9	11	21																												
-19	8	27	Kunming	Yunnan	2	16	18	10	15	14	5	29	27	30																												
-6	22	28	Haikou	Hainan	2	1	21	16	22	21	9	34	33	22																												
2	31	29	Taiyuan	Shanxi	2	23	16	29	24	18	27	28	28	19																												
3	33	30	Hohhot	Inner Mongolia	2	24	12	26	27	30	30	22	24	31																												
-8	23	31	Urumqi	Xinjiang	2	9	19	24	21	32	31	24	30	29																												
0	32	32	Dalian	Liaoning	2	29	33	33	34	33	33	32	18	2																												
-4	29	33	Yinchuan	Ningxia	2	34	23	31	29	23	16	30	34	27																												
0	34	34	Shenyang	Liaoning	2	32	27	34	31	34	34	33	29	23																												

**TOP
10 | Best-Performing
Cities 2018**

THIRD-TIER CITIES





DONGGUAN, GUANGDONG

	1-YEAR (2015–2016)	5-YEAR (2011–2016)		
Job Growth	102nd	1st	3-Year FDI Growth (2013–2016)	136th
Wage Growth	129th	1st	FDI/GRP (2016)	22nd
GRP Per-Capita Growth	50th	143rd	LQ for High Value-Added Industry (2016)	1st

Dongguan is located in southeast China, north of Shenzhen. In 2016, the city had a household registered population of two million residents.³⁸ Dongguan has three indicators ranked No. 1 this year: five-year job growth, five-year wage growth, and the LQ for high value-added industry employment.

The city has traditionally been an industrial city, particularly known for its Original Equipment Manufacturer (OEM) activities such as shoe and electronic goods production. However, as labor costs continue to rise, more factories are moving out of Dongguan to Southeast Asia, as is the case with Microsoft, which shut down its Nokia plant in Dongguan and relocated to Vietnam in 2015.³⁹

Despite the termination of operations at many factories, existing and new manufacturers have embraced automation by gradually replacing human workers with robots. Following the national strategy to upgrade manufacturing through automation, the Dongguan municipal government has also

gone further in this initiative by introducing the so-called “Robot Replace Human (*jiji huanen*)” program in 2014. This program provides qualified firms with 10-15 percent subsidies to upgrade their equipment.⁴⁰ Since September 2014, 505 factories across the city have invested 4.2 billion yuan in robotics.⁴¹ According to *The Economist*, the city has set aside 200 million yuan annually to help its factories replace human workers.⁴² The Songshan Lake XBot Park was established in 2014. In 2018, Songshan Lake High-Tech Industrial Development Zone proposed a policy that promotes further development of robots and intelligent equipment industries. All these efforts have demonstrated Dongguan’s determination towards upgrading its industrial base. Dongguan also catches a windfall from new firms relocating to the city as rapidly escalating real estate costs in nearby Shenzhen force some companies to leave. Huawei, for example, has relocated some operations from its Shenzhen location to Dongguan in hope to minimize its operational costs.

#2

SUINING, SICHUAN

	1-YEAR (2015–2016)	5-YEAR (2011–2016)		
Job Growth	1st	11th	3-Year FDI Growth (2013–2016)	133rd
Wage Growth	112th	106th	FDI/GRP (2016)	168th
GRP Per-Capita Growth	26th	32nd	LQ for High Value-Added Industry (2016)	61st

Suining is located east of Chengdu and northwest of Chongqing. In 2016, the city had a household registered population of 3.8 million.⁴³ The city is particularly strong in two indicators: one-year job growth (No. 1) and five-year job growth (No. 11).

Suining is celebrated for its cultural heritage and natural beauty. In particular, it is known for Guanyin (Goddess of Mercy) Culture and has a myriad of ancient temples. It has won several awards for its green and scenic environment, and to further boost its green

reputation, in 2017 the city established a Green Development Academy that provides a platform for interactions and training for green development.⁴⁴

Suining has two major industrial clusters. The National Suining Economic Technological Development Zone (founded in 1992) is the key industrial cluster in the city, while the Innovation Industrial Park (established in 2001) focuses on the food, machineries, auto parts, electronics, textile, and medical sectors.⁴⁵



FOSHAN, GUANGDONG

	1-YEAR (2015–2016)	5-YEAR (2011–2016)		
Job Growth	68th	5th	3-Year FDI Growth (2013–2016)	169th
Wage Growth	88th	2nd	FDI/GRP (2016)	113th
GRP Per-Capita Growth	135th	186th	LQ for High Value-Added Industry (2016)	4th

Foshan is located in southeast China, west of Guangzhou, with a household registered population of four million in 2016.⁴⁶ Like last year, Foshan clinches third place in our ranking. It has three indicators in the top five list: five-year job growth (No. 5), five-year wage growth (No. 2), and the LQ for high value-added industry employment (No. 4).

For many westerners, Foshan is known for its kung-fu movies depicting the hometown stories of Huang Feihong and Yip Man, who is the martial arts teacher of Bruce Lee, and is famous for its martial arts schools. This legacy also attracts many tourists to the city.

In addition to tourism, Foshan has also long been known as a manufacturing city. Today, the city has become a main player in consumer electronics and robotics. The Midea Group, a Fortune 500 company, is

headquartered here. This company is a renowned industry player domestically in consumer electronics such as microwaves. In 2015, it formed a joint venture with Yaskawa, a Japanese robotics outfit.⁴⁷ In 2016, Midea acquired Kuka, a German robotics firm.⁴⁸

In addition to upgrading its manufacturing sector, Foshan has also been crafting its industrial design sector. The Guangdong Industrial Design City is located here and was established in 2009. With this cluster, Foshan intends to help enterprises build their own brands and produce products with better quality and higher value to bolster its economic growth. To help businesses obtain funding, China established the Guangdong Financial High-Tech Service Zone in 2007 in Foshan. This platform has helped many firms start and sustain their businesses.

	1-YEAR (2015–2016)	5-YEAR (2011–2016)		
Job Growth	31st	62nd	3-Year FDI Growth (2013–2016)	36th
Wage Growth	121st	103rd	FDI/GRP (2016)	5th
GRP Per-Capita Growth	62nd	17th	LQ for High Value-Added Industry (2016)	23rd

Wuhu ranks fourth in this year's list. The city has three indicators in the top 25: five-year GRP per capita growth (No. 17), the FDI/GRP ratio (No. 5), and the LQ for high value-added industry employment (No. 23). In fact, the city's GDP and GDP per capita ranked second among all prefecture-level cities in Anhui in 2016, which demonstrates the economic importance of Wuhu in the provincial economy.

The Yangtze River passes through this city, which is located about 95 miles from Hefei and 60 miles from Nanjing. These factors make Wuhu a pivotal location for interconnected, regional transportation networks. In 2016, the

city registered a household population of 3.9 million.⁴⁹

Established in 1993, the Wuhu Economic and Technological Development Zone has three pillar industries—vehicle and auto parts manufacturing, electronic appliances, and new materials.⁵⁰ Wuhu's auto industry is growing. Chery, a Chinese auto manufacturer, is headquartered here. The city is also the home to a Chinese cement company, Anhui Conch Cement. More recently, Wuhu also tried to tap into other areas. For example, since 2011 it has hosted the China (Wuhu) Science Products Expo Fair that shows the city's ambition to step into a more high-tech, value-added space.

#5

ZHUHAI, GUANGDONG

	1-YEAR (2015–2016)	5-YEAR (2011–2016)		
Job Growth	138th	146th	3-Year FDI Growth (2013–2016)	76th
Wage Growth	116th	123rd	FDI/GRP (2016)	4th
GRP Per-Capita Growth	113th	112th	LQ for High Value-Added Industry (2016)	8th

Zhuhai is located north of Macau and west of Hong Kong. In 2016, Zhuhai registered a household population of 1.15 million.⁵¹ It has two indicators in our top 10 list: FDI/GRP ratio (No. 4) and LQ for high value-added industry employment (No. 8).

The city has two major industrial parks. The Zhuhai National Hi-Tech Industrial Development Zone was established in 1992, where software, integrated circuit design, internet, mobile network, smart power grid equipment, new energy, biomedicals, intelligent manufacturing, and robotics are the major industries.⁵² Established in 2000,

THSP Zhuhai Zone offers co-working spaces, incubators, and accelerators to encourage entrepreneurial activities.

Gree Electric Appliances Inc., a major Chinese appliance manufacturer, is headquartered in Zhuhai. It has recently benefited from a booming consumer electronics market driven largely by China's urbanization, investing a great deal of resources in R&D and acquiring patents. In addition to Gree, Zhuhai is also the home to one of the world's major developers of unmanned surface vessels (USV), Oceanalph.

#6

JI'AN,
JIANGXI

	1-YEAR (2015–2016)	5-YEAR (2011–2016)		
Job Growth	166th	19th	3-Year FDI Growth (2013–2016)	60th
Wage Growth	75th	8th	FDI/GRP (2016)	19th
GRP Per-Capita Growth	37th	12th	LQ for High Value-Added Industry (2016)	39th

Ji'an stands at sixth place in our ranking this year. It has a number of indicators ranked among the top 20, including five-year job growth (No. 19), five-year wage growth (No. 8), five-year GRP per capita growth (No. 12), and FDI/GRP ratio (No. 19). The city has twice before attained a spot in the top 10—in 2015 (No. 9) and in 2017 (No. 4).

Ji'an had a household registered population in 2016 of 5.4 million.⁵³ It is situated at a strategic location that links the southeastern with the middle part of China. In addition to

its strategic highway and railway network infrastructure, the Jinggangshan Airport now has flights connecting to China's major cities such as Beijing, Shanghai, Shenzhen, Chengdu, Xiamen, Xi'an, and Guangzhou.

The city hosts several industrial parks. Six kilometers from downtown Ji'an, the National Jinggangshan Economic and Technological Development Zone has three pillar industries—electronic information, biomedicals, and advanced manufacturing.⁵⁴

#7

JIUQUAN, GANSU

	1-YEAR (2015–2016)	5-YEAR (2011–2016)		
Job Growth	26th	40th	3-Year FDI Growth (2013–2016)	1st
Wage Growth	163rd	94th	FDI/GRP (2016)	146th
GRP Per-Capita Growth	166th	200th	LQ for High Value-Added Industry (2016)	158th

Jiuquan claims the seventh spot in our 2018 ranking for small cities, with its three-year FDI growth indicator topping the entire third-tier city group.

In 2016, Jiuquan had a household registered population of 1.1 million.⁵⁵ Jiuquan is positioned right on China's northwest border, with Mongolia to its north. It held a strategic position on the ancient Silk Road, but now has the only land port in Gansu Province.

The major industries in Jiuquan are petroleum and electric power. Moreover, the city has been known as an aerospace base that is the home to the Jiuquan Satellite Launch Center. Recent activity at the center was the launch of the Shenzhou 11, a manned spaceflight, in October 2016. The city has also recently been cultivating its renewable energy sector by focusing on wind power.

	1-YEAR (2015–2016)	5-YEAR (2011–2016)		
Job Growth	161st	7th	3-Year FDI Growth (2013–2016)	152nd
Wage Growth	153rd	7th	FDI/GRP (2016)	125th
GRP Per-Capita Growth	164th	149th	LQ for High Value-Added Industry (2016)	3rd

Zhongshan is a city in southeast China, located north of Zhuhai and south of Foshan and Guangzhou. In 2016, Zhongshan had a household registered population of 1.61 million.⁵⁶ Zhongshan stands in eighth place in our overall ranking. It has strong performance in three aspects: five-year job growth (No. 7), five-year wage growth (No. 7), and LQ for high value-added industry employment (No. 3).

Zhongshan is known for its redwood furniture cluster in the Dachong village. To foster this industrial sector, the city established a “Redwood Cultural Exposition Town.” Zhongshan also has a strong lighting industry cluster. In addition to these industries, the city has recently been developing new industries. The video gaming industry is one such example. Founded in 2013, the Tsuihang New Area is gradually becoming one of the industrial hubs in the city. It has been designated by the central government as an

advanced equipment manufacturing base for products such as wind power equipment. The city also built a district for the gaming and recreation industry in 2014. To support this industry, the city has been holding the China (Zhongshan) International Games and Amusement Fair since 2008. In addition, Zhongshan is the laboratory for cashier-less technology. The world’s first 24-hour, self-service convenience Bingo Box store opened here on August 1, 2016.

The construction of the Shenzhen-Zhongshan Corridor began on December 21, 2017. Once construction is completed, the corridor will play a key role in the transportation networks of the “Greater Bay Area,” consisting of Guangdong province, Hong Kong, and Macau.⁵⁷ This corridor will shorten the commute time not only between Shenzhen and Zhongshan, but also for other cities in this area.

	1-YEAR (2015–2016)	5-YEAR (2011–2016)	
Job Growth	192nd	9th	3-Year FDI Growth (2013–2016)
Wage Growth	181st	9th	FDI/GRP (2016)
GRP Per-Capita Growth	148th	146th	LQ for High Value-Added Industry (2016)

Suzhou is located west of Shanghai. Due to its pivotal location and pleasant weather, the city has remained economically prosperous since ancient times. In 2016, Suzhou had a household registered population of 6.78 million.⁵⁸ Suzhou has ranked in the top 10 since the launch of this ranking in 2015. This year, it has several indicators ranked highly—five-year job growth (No. 9), five-year wage growth (No. 9), and the LQ for high value-added industry employment (No. 2).

Suzhou has been upgrading its industries in recent years, focusing on new energy, biotech, new medicine, and advanced equipment manufacturing. Established in 2011, Innovent Biologics, a leading biopharmaceutical company in China, is headquartered in the

Suzhou Industrial Park.⁵⁹ In addition, Suzhou also strives to become a rising star in the field of AI. In 2013, Microsoft established a research center here—Microsoft’s Suzhou Research Institute—and plans to focus on AI research.⁶⁰ On May 10, 2018, Suzhou held the 2018 Global AI Product Application Expo, which further demonstrates Suzhou’s dedication to progress in the AI field.

Kunshan, a county-level city under Suzhou, has co-evolved with Suzhou. Kunshan used to focus on OEM activities. Firms in Kunshan have been upgrading and putting more resources into R&D and has now formed a complete supply chain of LCD panels.

#10

ANSHUN,
GUIZHOU

	1-YEAR (2015–2016)	5-YEAR (2011–2016)		
Job Growth	25th	76th	3-Year FDI Growth (2013–2016)	16th
Wage Growth	27th	52nd	FDI/GRP (2016)	91st
GRP Per-Capita Growth	7th	1st	LQ for High Value-Added Industry (2016)	96th

Anshun rounds up our top 10 list for third-tier cities. The city is particularly strong in two indicators: one-year (No. 7) and five-year (No. 1) GDP per capita growth. Located southwest of Guiyang, the provincial capital of Guizhou in 2016 had a household registered population of three million.⁶¹

The city is known for its beverage industry including beer and Baijiu (Shaojiu). In addition, the city has developed its pharmaceutical industry. In 2013, Anshun, together with

Qingdao, co-built an industrial zone focusing on new materials, equipment manufacturing, electronics and information, cultural tourism, and health care sectors. In 2015, this zone had 13,910 employees.⁶²

Anshun has several higher education institutions including Anshun University, the Vocational and Technical College of Anshun, the Guizhou Aerospace Vocational and Technological College, and Guizhou Mechanical and Industrial Vocational College.



COMPLETE RESULTS: THIRD-TIER CITIES

Change in Rank over 1 Year	2017 Rank (Tier 1 & 2 Cities)	2018 Rank (Tier 1 & 2 Cities)	City	Province	City Tier	1-Year Job Growth (2015-2016)	5-Year Job Growth (2011-2016)	1-Year Wage Growth (2015-2016)	5-Year Wage Growth (2011-2016)	1-Year GRP Per-Capita Growth (2015-2016)	5-Year GRP Per-Capita Growth (2011-2016)	3-Year FDI Growth (2013-2016)	FDI/GRP (2016)	LQ for High Value-Added Industry Employment (2016)
22	23	1	Dongguan	Guangdong	3	102	1	129	1	50	143	136	22	1
97	99	2	Suining	Sichuan	3	1	11	112	106	26	32	133	168	61
0	3	3	Foshan	Guangdong	3	68	5	88	2	135	186	169	113	4
13	17	4	Wuhu	Anhui	3	31	62	121	103	62	17	36	5	23
13	18	5	Zhuhai	Guangdong	3	138	146	116	123	113	112	76	4	8
-2	4	6	Ji'an	Jiangxi	3	166	19	75	8	37	12	60	19	39
189	196	7	Jiuquan	Gansu	3	26	40	163	94	166	200	1	146	158
54	62	8	Zhongshan	Guangdong	3	161	7	153	7	164	149	152	125	3
1	10	9	Suzhou	Jiangsu	3	192	9	181	9	148	146	156	42	2
NA	NA	10	Anshun	Guizhou	3	25	76	27	52	7	1	16	91	96
-5	6	11	Taizhou	Jiangsu	3	34	6	150	3	12	23	132	59	129
19	31	12	Kaifeng	Henan	3	3	64	4	47	51	25	191	150	53
37	50	13	Jiaozuo	Henan	3	8	47	17	43	81	133	96	41	16
43	57	14	Huizhou	Guangdong	3	15	133	32	108	106	81	163	58	5
27	42	15	Hebi	Henan	3	108	94	45	145	133	108	54	3	40
-9	7	16	Luohe	Henan	3	52	65	195	59	88	157	92	8	14
-5	12	17	Chuzhou	Anhui	3	28	81	145	46	104	41	31	11	62
49	67	18	Xuchang	Henan	3	7	35	22	48	76	122	77	63	20
NA	NA	19	Hengshui	Hebei	3	171	162	1	134	2	113	115	115	148
36	56	20	Mudanjiang	Heilongjiang	3	182	161	178	166	180	124	3	40	142
-5	16	21	Jiaxing	Zhejiang	3	103	170	106	181	55	150	107	14	6
17	5	22	Zunyi	Guizhou	3	78	83	108	38	21	5	6	123	165
26	49	23	Chifeng	Inner Mongolia	3	126	149	147	180	194	138	2	165	197
-2	22	24	Huanggang	Hubei	3	11	13	10	20	84	52	18	160	92

Change in Rank over 1 Year				City	Province	City Tier	1-Year Job Growth (2015-2016)		5-Year Job Growth (2011-2016)		1-Year Wage Growth (2015-2016)		5-Year Wage Growth (2011-2016)		1-Year GRP Per-Capita Growth (2015-2016)		5-Year GRP Per-Capita Growth (2011-2016)		3-Year FDI Growth (2013-2016)		FDI/GRP (2016)		LQ for High Value-Added Industry Employment (2016)				
	2017 Rank (Tier 1 & 2 Cities)	2018 Rank (Tier 1 & 2 Cities)					4	14	69	224	71	48	13	36	97	87	110	104	2	98	12	111	196	50	47	25	175
13	38	25		Shangqiu	Henan	3	4	14	16	13	36	97	87	110	104												
-24	2	26		Bengbu	Anhui	3	56	69	224	71	48	19	49	2	98												
105	132	27		Pu'er	Yunnan	3	98	152	7	36	38	3	12	111	196												
-3	25	28		Ganzhou	Jiangxi	3	93	86	98	29	11	51	74	17	82												
-16	13	29		Suzhou	Anhui	3	63	2	97	119	91	50	47	25	175												
28	58	30		Maanshan	Anhui	3	180	128	170	172	92	188	112	1	79												
2	33	31		Putian	Fujian	3	16	31	42	50	46	26	81	94	32												
141	173	32		Meishan	Sichuan	3	66	82	2	118	90	39	171	148	132												
41	74	33		Xinyu	Jiangxi	3	67	54	113	15	67	178	93	43	17												
3	37	34		Zhangzhou	Fujian	3	58	102	55	98	6	21	101	49	31												
0	35	35		Weihai	Shandong	3	48	168	87	154	140	105	84	47	7												
-22	14	36		Jiujiang	Jiangxi	3	207	139	172	64	33	37	53	6	71												
NA	NA	37		Bozhou	Anhui	3	77	50	143	77	29	63	42	15	103												
44	82	38		Xiangtan	Hunan	3	6	29	135	188	57	53	41	24	101												
-24	15	39		Ningde	Fujian	3	54	16	110	23	83	16	30	130	56												
-31	9	40		Yichang	Hubei	3	72	48	80	21	56	18	56	145	30												
27	68	41		Zhoukou	Henan	3	29	27	30	24	90	40	118	90	70												
-18	24	42		Yichun	Jiangxi	3	90	70	101	57	40	44	80	39	37												
47	90	43		Yingtan	Jiangxi	3	197	44	180	14	98	74	72	46	26												
-18	26	44		Xiangyang	Hubei	3	50	12	48	112	66	20	35	93	69												
-5	40	45		Ezhou	Hubei	3	39	126	28	130	70	61	25	56	45												
18	64	46		Luoyang	Henan	3	75	92	63	121	58	164	109	13	63												
-39	8	47		Yangzhou	Jiangsu	3	199	8	194	4	17	24	164	72	124												
-16	32	48		Beihai	Guangxi	3	113	173	33	136	9	8	13	98	87												
5	54	49		Shiyan	Hubei	3	21	61	59	86	42	31	20	105	52												
-14	36	50		Xuancheng	Anhui	3	55	230	122	92	87	90	46	9	60												
0	51	51		Pingxiang	Jiangxi	3	47	36	123	34	74	121	83	57	58												

Change in Rank over 1 Year		2017 Rank (Tier 1 & 2 Cities)		2018 Rank (Tier 1 & 2 Cities)		City		Province		City Tier		1-Year Job Growth (2015-2016)		5-Year Job Growth (2011-2016)		1-Year Wage Growth (2015-2016)		5-Year Wage Growth (2011-2016)		1-Year GRP Per-Capita Growth (2015-2016)		5-Year GRP Per-Capita Growth (2011-2016)		3-Year FDI Growth (2013-2016)		FDI/GRP (2016)		LQ for High Value-Added Industry Employment (2016)	
NA	NA	52	Langfang	Hebei	3	23	127	39	90	89	62	116	66	46															
-24	29	53	Fuzhou	Jiangxi	3	172	26	95	11	61	67	17	53	146															
139	193	54	Ulanqab	Inner Mongolia	3	131	141	49	111	202	161	10	7	201															
NA	NA	55	Bijie	Guizhou	3	22	63	36	30	20	4	14	133	229															
3	59	56	Shantou	Guangdong	3	12	22	66	22	13	76	165	178	57															
18	75	57	Rizhao	Shandong	3	85	43	83	53	130	139	126	60	29															
-13	45	58	Changzhou	Jiangsu	3	153	66	210	96	49	77	154	34	15															
-40	19	59	Suqian	Jiangsu	3	202	10	211	6	22	13	145	106	77															
96	156	60	Neijiang	Sichuan	3	201	73	3	16	108	110	177	183	127															
-60	1	61	Nantong	Jiangsu	3	158	3	228	5	24	30	130	51	160															
-16	46	62	Liaoyuan	Jilin	3	97	58	139	51	153	85	88	36	72															
9	72	63	Shanwei	Guangdong	3	115	34	79	26	103	128	196	172	11															
-11	53	64	Zhenjiang	Jiangsu	3	191	104	175	116	53	42	182	52	13															
15	80	65	Zhoushan	Zhejiang	3	74	4	120	161	4	168	134	114	89															
20	86	66	Huzhou	Zhejiang	3	82	107	72	127	72	125	140	31	41															
-2	65	67	Chenzhou	Hunan	3	89	130	65	143	47	73	48	16	167															
-20	48	68	Chizhou	Anhui	3	84	72	187	75	123	86	69	20	109															
NA	NA	69	Tongren	Guizhou	3	33	51	20	17	14	2	186	202	223															
49	119	70	Xinyang	Henan	3	88	46	8	61	171	95	98	75	138															
-43	28	71	Zhumadian	Henan	3	167	25	29	25	178	45	100	102	91															
50	122	72	Xining	Qinghai	3	87	171	54	151	54	89	9	161	84															
-30	43	73	Jieyang	Guangdong	3	118	15	142	10	167	75	207	211	25															
4	78	74	Sanya	Hainan	3	20	18	86	12	102	158	147	32	180															
-4	71	75	Jiangmen	Guangdong	3	42	154	51	79	124	177	172	103	12															
26	102	76	Chaozhou	Guangdong	3	46	33	82	32	68	99	193	186	24															
-56	21	77	Huai'an	Jiangsu	3	195	20	220	27	16	10	144	45	80															
-34	44	78	Jingmen	Hubei	3	45	164	100	138	52	65	57	79	49															

	Change in Rank over 1 Year	2017 Rank (Tier 1 & 2 Cities)	2018 Rank (Tier 1 & 2 Cities)	City	Province	City Tier	1-Year Job Growth (2015-2016)	5-Year Job Growth (2011-2016)	1-Year Wage Growth (2015-2016)	5-Year Wage Growth (2011-2016)	1-Year GRP Per-Capita Growth (2015-2016)	5-Year GRP Per-Capita Growth (2011-2016)	3-Year FDI Growth (2013-2016)	FDI/GRP (2016)	LQ for High Value-Added Industry Employment (2016)
-10	69	79	Xiaogan	Hubei	3	62	90	67	81	121	49	124	85	75	
9	89	80	Heyuan	Guangdong	3	27	132	43	99	15	114	181	144	27	
22	103	81	Xinxiang	Henan	3	173	53	158	55	23	140	67	28	102	
36	118	82	Qinhuangdao	Hebei	3	117	150	81	153	136	194	102	18	54	
11	94	83	Puyang	Henan	3	59	87	144	147	73	68	29	33	118	
4	88	84	Suizhou	Hubei	3	9	103	35	101	107	48	52	124	113	
-15	70	85	Wuxi	Jiangsu	3	186	79	214	110	114	174	131	50	9	
-66	20	86	Zhaoqing	Guangdong	3	112	55	117	41	174	103	194	112	22	
11	98	87	Weifang	Shandong	3	134	95	77	84	151	102	86	100	42	
-58	30	88	Shangrao	Jiangxi	3	203	60	206	31	35	60	73	23	139	
-42	47	89	Zhuzhou	Hunan	3	145	136	186	159	158	98	40	37	50	
-14	76	90	Binzhou	Shandong	3	178	106	159	82	189	171	78	117	10	
-31	60	91	Guilin	Guangxi	3	179	96	154	67	179	14	11	157	123	
0	92	92	Yantai	Shandong	3	142	191	161	164	137	155	91	65	19	
NA	NA	93	Lincang	Yunnan	3	57	89	11	37	60	7	220	226	174	
31	125	94	Xuzhou	Jiangsu	3	189	24	61	62	77	55	135	74	128	
17	112	95	Lu'an	Anhui	3	86	32	177	158	93	69	95	55	112	
56	152	96	Yiyang	Hunan	3	60	198	13	141	32	34	64	119	140	
9	106	97	Jingzhou	Hubei	3	110	100	74	68	75	28	82	155	93	
-43	55	98	Baoshan	Yunnan	3	10	93	24	45	19	9	211	203	181	
65	164	99	Chengde	Hebei	3	114	125	157	152	162	182	5	131	135	
49	149	100	Liuzhou	Guangxi	3	194	67	6	56	142	111	215	213	95	
-8	93	101	Wuzhou	Guangxi	3	30	88	18	54	97	96	208	221	68	
9	111	102	Changde	Hunan	3	70	134	76	109	64	70	22	64	173	
1	104	103	Quanzhou	Fujian	3	106	222	167	210	128	118	117	81	18	
NA	NA	104	Qinzhou	Guangxi	3	17	49	23	33	3	117	203	142	195	
15	120	105	Hengyang	Hunan	3	111	196	71	174	30	58	45	38	157	

Change in Rank over 1 Year	2017 Rank (Tier 1 & 2 Cities)			2018 Rank (Tier 1 & 2 Cities)			City		Province		City Tier		1-Year Job Growth (2015-2016)		5-Year Job Growth (2011-2016)		1-Year Wage Growth (2015-2016)		5-Year Wage Growth (2011-2016)		1-Year GRP Per-Capita Growth (2015-2016)		5-Year GRP Per-Capita Growth (2011-2016)		3-Year FDI Growth (2013-2016)		FDI/GRP (2016)		LQ for High Value-Added Industry Employment (2016)	
-1	105	106	Fuyang	Anhui	3	19	140	68	120	44	84	43	128	145																
-46	61	107	Quzhou	Zhejiang	3	95	157	52	140	95	71	141	174	44																
61	169	108	Qingyuan	Guangdong	3	24	121	50	89	99	169	173	158	35																
-12	97	109	Yongzhou	Hunan	3	69	153	21	230	34	79	37	21	177																
11	121	110	Jingdezhen	Jiangxi	3	128	179	146	146	112	141	79	92	36																
-72	39	111	Lianyungang	Jiangsu	3	100	68	196	76	43	33	162	88	85																
1	113	112	Loudi	Hunan	3	43	169	34	173	117	56	61	68	164																
-3	110	113	Dezhou	Shandong	3	136	45	85	18	161	131	170	180	65																
-41	73	114	Tonghua	Jilin	3	159	77	183	91	218	192	68	27	28																
-63	52	115	Yancheng	Jiangsu	3	154	21	197	40	79	29	179	122	100																
-9	107	116	Yunfu	Guangdong	3	146	91	114	60	85	87	190	170	43																
-40	77	117	Xianyang	Shaanxi	3	49	57	103	73	18	15	201	217	110																
10	128	118	Huangshan	Anhui	3	41	112	90	117	109	36	161	70	153																
-36	83	119	Luzhou	Sichuan	3	65	42	104	28	71	54	33	167	193																
-3	117	120	Erdos	Inner Mongolia	3	200	30	26	97	191	170	108	30	151																
33	154	121	Anqing	Anhui	3	44	84	44	85	134	132	188	137	88																
-41	81	122	Nanyang	Henan	3	125	137	93	88	96	144	89	97	116																
3	126	123	Liaocheng	Shandong	3	107	99	56	63	150	137	187	197	47																
-8	116	124	Yuxi	Yunnan	3	14	39	14	70	177	129	226	229	105																
-46	79	125	Heze	Shandong	3	80	75	31	35	169	72	121	149	188																
13	139	126	Suihua	Heilongjiang	3	40	186	46	128	186	92	55	96	154																
-12	115	127	Baise	Guangxi	3	53	114	58	78	5	38	32	227	200																
-33	95	128	Guang'an	Sichuan	3	141	71	9	58	144	57	106	176	217																
-38	91	129	Mianyang	Sichuan	3	36	41	152	80	139	120	150	147	106																
6	136	130	Xingtai	Hebei	3	94	97	124	131	8	167	113	71	143																
-31	100	131	Linyi	Shandong	3	140	37	174	39	157	151	151	166	67																
-69	63	132	Nanping	Fujian	3	105	187	192	133	111	43	34	141	94																

Change in Rank over 1 Year				City	Province	City Tier	1-Year Job Growth (2015-2016)		5-Year Job Growth (2011-2016)		1-Year Wage Growth (2015-2016)		5-Year Wage Growth (2011-2016)		1-Year GRP Per-Capita Growth (2015-2016)		5-Year GRP Per-Capita Growth (2011-2016)		3-Year FDI Growth (2013-2016)		FDI/GRP (2016)		LQ for High Value-Added Industry Employment (2016)				
	2017 Rank (Tier 1 & 2 Cities)	2018 Rank (Tier 1 & 2 Cities)					92	177	130	142	69	115	23	109	136	12	146	134	Hebei	3	76	98	37	66	199	162	122
-46	87	133	Lishui	Zhejiang	3	92	177	130	142	69	115	23	109	136													
12	146	134	Baoding	Hebei	3	76	98	37	66	199	162	122	101	144													
-2	133	135	Baoji	Shaanxi	3	83	78	109	122	119	47	214	224	66													
51	187	136	Xinzhou	Shanxi	3	165	190	156	190	182	190	4	177	220													
-126	11	137	Nanchong	Sichuan	3	177	17	199	19	86	83	146	187	133													
-3	135	138	Deyang	Sichuan	3	120	113	190	156	63	82	168	162	48													
1	140	139	Yangjiang	Guangdong	3	35	85	99	42	209	64	185	169	120													
-11	129	140	Longyan	Fujian	3	37	215	96	195	100	116	90	127	122													
6	147	141	Qiqihar	Heilongjiang	3	211	220	40	170	173	179	104	44	81													
NA	NA	142	Liupanshui	Guizhou	3	184	167	115	182	65	6	123	83	224													
-2	141	143	Shaoyang	Hunan	3	156	159	102	139	39	35	28	126	187													
-17	127	144	Anyang	Henan	3	163	131	137	135	125	163	85	80	125													
43	188	145	Qujing	Yunnan	3	109	59	19	104	101	148	99	182	179													
22	168	146	Yueyang	Hunan	3	169	199	69	185	145	78	44	134	131													
10	157	147	Xianning	Hubei	3	129	144	53	114	141	27	197	164	130													
-3	145	148	Dazhou	Sichuan	3	5	38	57	100	147	154	128	185	211													
18	167	149	Ya'an	Sichuan	3	61	120	15	74	78	101	176	214	191													
-2	148	150	Hanzhong	Shaanxi	3	119	122	149	132	82	11	159	208	149													
8	159	151	Jilin	Jilin	3	164	172	179	186	200	208	62	29	86													
1	153	152	Zibo	Shandong	3	176	124	171	124	155	176	110	129	76													
-69	84	153	Maoming	Guangdong	3	51	74	94	44	132	134	158	191	170													
46	200	154	Jinhua	Zhejiang	3	149	23	119	150	126	126	70	151	186													
-41	114	155	Fangchenggang	Guangxi	3	222	181	111	203	122	93	7	135	208													
-19	137	156	Meizhou	Guangdong	3	127	116	91	65	80	136	184	171	134													
-19	138	157	Zhanjiang	Guangdong	3	38	105	84	69	105	123	175	196	163													
32	190	158	Laiwu	Shandong	3	204	188	162	206	187	210	94	95	21													
-74	85	159	Guigang	Guangxi	3	132	115	185	49	27	130	58	189	168													

Change in Rank over 1 Year	2017 Rank (Tier 1 & 2 Cities)			2018 Rank (Tier 1 & 2 Cities)			City	Province	City Tier	1-Year Job Growth (2015-2016)		5-Year Job Growth (2011-2016)		1-Year Wage Growth (2015-2016)		5-Year Wage Growth (2011-2016)		1-Year GRP Per-Capita Growth (2015-2016)		5-Year GRP Per-Capita Growth (2011-2016)		3-Year FDI Growth (2013-2016)		FDI/GRP (2016)		LQ for High Value-Added Industry Employment (2016)		
	2017 Rank	2017 Change	2018 Rank	2018 Change	2017 Rank	2017 Change	2018 Rank	2018 Change	2017 Rank	2017 Change	2018 Rank	2018 Change	2017 Rank	2017 Change	2018 Rank	2018 Change	2017 Rank	2017 Change	2018 Rank	2018 Change	2017 Rank	2017 Change	2018 Rank	2018 Change	2017 Rank	2017 Change	2018 Rank	2018 Change
-26	134	160	Sanming		Fujian	3	155	174	126	163	120	106	75	152	141													
9	170	161	Handan		Hebei	3	130	80	127	125	170	203	119	62	150													
-39	123	162	Yibin		Sichuan	3	162	194	92	167	115	109	142	195	99													
16	179	163	Taizhou		Zhejiang	3	206	147	136	178	59	156	148	154	73													
46	210	164	Tongling		Anhui	3	116	56	131	95	185	227	167	76	38													
-4	161	165	Zhangjiakou		Hebei	3	144	183	168	187	127	181	26	61	162													
32	198	166	Laibin		Guangxi	3	210	165	5	83	181	202	129	181	184													
-1	166	167	Shaoxing		Zhejiang	3	124	145	38	129	138	187	137	116	161													
-67	101	168	Yulin		Guangxi	3	147	129	107	105	146	127	138	209	137													
-6	163	169	Baotou		Baotou	3	175	176	166	205	203	196	153	73	34													
8	178	170	Hezhou		Hezhou	3	32	135	41	72	25	153	205	193	198													
18	189	171	Lijiang		Lijiang	3	190	151	25	107	1	22	222	223	219													
5	177	172	Shaoguan		Shaoguan	3	122	166	64	149	175	142	199	179	97													
-8	165	173	Sanmenxia		Sanmenxia	3	216	208	215	211	165	183	103	12	169													
1	175	174	Wenzhou		Wenzhou	3	148	205	105	193	28	180	174	175	74													
22	197	175	Yulin		Yulin	3	71	28	128	87	159	197	24	212	190													
7	183	176	Huangshi		Huangshi	3	183	195	118	176	156	159	195	140	78													
-19	158	177	Baicheng		Baicheng	3	91	160	60	115	213	175	65	78	202													
17	195	178	Tangshan		Hebei	3	137	175	151	198	196	209	125	87	83													
-36	143	179	Cangzhou		Hebei	3	123	158	164	157	160	173	71	120	159													
-6	174	180	Jining		Shandong	3	170	110	125	160	149	135	166	138	155													
-39	142	181	Guangyuan		Sichuan	3	81	118	70	102	118	91	192	194	203													
-73	109	182	Tai'an		Shandong	3	198	163	203	177	184	152	51	121	108													
-28	155	183	Jinzhong		Shanxi	3	143	178	182	208	193	198	15	54	182													
-118	66	184	Panzhihua		Sichuan	3	215	52	188	197	41	88	198	188	90													
-13	172	185	Zigong		Sichuan	3	174	123	155	175	129	100	180	218	126													
-56	130	186	Baishan		Jilin	3	185	218	189	202	152	165	59	35	192													

Change in Rank over 1 Year			2017 Rank (Tier 1 & 2 Cities)		2018 Rank (Tier 1 & 2 Cities)		City		Province		City Tier		1-Year Job Growth (2015-2016)		5-Year Job Growth (2011-2016)		1-Year Wage Growth (2015-2016)		5-Year Wage Growth (2011-2016)		1-Year GRP Per-Capita Growth (2015-2016)		5-Year GRP Per-Capita Growth (2011-2016)		3-Year FDI Growth (2013-2016)		FDI/GRP (2016)		LQ for High Value-Added Industry Employment (2016)	
-56	131	187	Chongzuo	Guangxi	3	133	209	73	137	10	107	189	199	194																
-17	171	188	Songyuan	Jilin	3	64	109	160	155	212	185	66	86	189																
15	204	189	Yuncheng	Shanxi	3	157	156	169	126	197	201	27	206	107																
-9	181	190	Huaihua	Hunan	3	99	202	62	183	45	66	183	190	204																
-67	124	191	Leshan	Sichuan	3	221	204	78	168	116	104	178	184	119																
7	199	192	Hulunbuir	Inner Mongolia	3	2	108	132	179	206	147	204	192	209																
1	194	193	Pingdingshan	Henan	3	139	142	191	207	110	195	139	84	147																
13	207	194	Changzhi	Shanxi	3	96	155	200	201	163	215	38	48	172																
13	208	195	Huaibei	Anhui	3	209	189	226	228	192	160	63	10	206																
7	203	196	Dongying	Shandong	3	135	207	141	165	215	191	120	163	117																
-13	184	197	Weinan	Shaanxi	3	73	111	89	162	210	145	200	215	166																
-18	180	198	Tongliao	Inner Mongolia	3	104	117	133	113	195	166	202	216	185																
12	211	199	Bayannur	Inner Mongolia	3	151	184	140	204	204	189	19	118	214																
-56	144	200	Siping	Jilin	3	168	212	148	169	216	184	127	82	176																
-19	182	201	Zaozhuang	Shandong	3	193	119	184	144	188	172	157	173	156																
-17	185	202	Hechi	Guangxi	3	79	182	47	93	168	193	221	225	205																
NA	NA	203	Wuhai	Inner Mongolia	3	152	211	134	220	205	207	227	222	59																
-54	150	204	Zhangjiajie	Hunan	3	101	201	229	219	31	59	39	99	210																
-3	202	205	Linfen	Shanxi	3	150	180	173	171	198	213	111	132	183																
3	209	206	Yangquan	Shanxi	3	208	193	198	227	190	205	114	26	212																
-16	191	207	Jincheng	Shanxi	3	187	101	201	200	214	206	155	107	178																
-46	162	208	Zhaotong	Yunnan	3	18	138	223	199	131	80	218	228	230																
-113	96	209	Jiamusi	Heilongjiang	3	213	228	176	192	172	119	213	198	199																
-5	205	210	Datong	Shanxi	3	121	203	216	222	217	199	105	104	207																
-10	201	211	Yingkou	Liaoning	3	13	197	165	196	225	216	225	200	33																
0	212	212	Hegang	Heilongjiang	3	196	226	138	226	211	221	97	69	227																
9	222	213	Huainan	Anhui	3	214	224	202	224	154	218	143	89	213																

Change in Rank over 1 Year		2017 Rank (Tier 1 & 2 Cities)		2018 Rank (Tier 1 & 2 Cities)		City	Province	City Tier	1-Year Job Growth (2015-2016)		5-Year Job Growth (2011-2016)		1-Year Wage Growth (2015-2016)		5-Year Wage Growth (2011-2016)		1-Year GRP Per-Capita Growth (2015-2016)		5-Year GRP Per-Capita Growth (2011-2016)		3-Year FDI Growth (2013-2016)		FDI/GRP (2016)		LQ for High Value-Added Industry Employment (2016)	
Rank Change	2017 Rank	Rank Change	2018 Rank						Jobs '15-'16	Jobs '11-'16	Jobs '15-'16	Jobs '11-'16	Wage '15-'16	Wage '11-'16	Wage '15-'16	Wage '11-'16	GRP '15-'16	GRP '11-'16	GRP '15-'16	GRP '11-'16	FDI '13-'16	FDI '16	GRPA '16	LQ '16		
1	215	214	Yichun	Heilongjiang	3	160	217	193	148	201	204	216	205	228												
-174	41	215	Ziyang	Sichuan	3	229	143	230	191	183	46	21	159	152												
-56	160	216	Jixi	Heilongjiang	3	218	206	227	225	207	211	50	67	222												
8	225	217	Qitaihe	Heilongjiang	3	227	227	205	229	143	225	8	139	221												
1	219	218	Shuozhou	Shanxi	3	181	200	217	209	208	212	160	143	225												
-13	206	219	Huludao	Liaoning	3	224	192	222	194	219	214	229	220	114												
-28	192	220	Jinzhou	Liaoning	3	212	148	204	189	223	217	224	201	115												
-45	176	221	Heihe	Heilongjiang	3	230	229	12	184	176	94	149	77	218												
2	224	222	Chaoyang	Liaoning	3	217	214	219	217	220	219	217	204	171												
-5	218	223	Panjin	Liaoning	3	188	210	207	214	221	220	209	108	226												
-38	186	224	Liaoyang	Liaoning	3	220	216	209	216	229	229	206	136	64												
-11	214	225	Dandong	Liaoning	3	223	223	208	221	226	223	228	219	121												
-5	221	226	Tieling	Liaoning	3	205	185	213	213	222	226	212	153	216												
-10	217	227	Fushun	Liaoning	3	219	219	218	215	227	224	230	230	111												
-12	216	228	Benxi	Liaoning	3	226	221	212	223	228	228	210	156	55												
-16	213	229	Anshan	Liaoning	3	225	213	221	212	230	230	223	207	51												
-7	223	230	Fuxin	Liaoning	3	228	225	225	218	224	222	219	210	215												

APPENDIX

CLASSIFICATION AND DESIGNATION OF CITIES

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

This index focuses on cities classified as prefecture-level cities or above. There is a broad consensus, but not 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. 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 all cities, we rank the first- and second-tier cities as one group and the third-tier cities as a separate group.

In 2016, China had a total of 657 cities, of which 278 are prefecture-level and above.⁶³ 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 264 cities in this report. We classify these 264 cities into three distinct tiers according to their respective economic development status, which breaks down as four first-tier cities, 30 second-tier cities, and 230 third-tier cities.

DATA AND VARIABLES

Our main sources of data come from the 2012, 2014, 2016, and 2017 editions of the China City Statistical Yearbook. Each yearbook publishes data from the previous year—e.g., the 2017 edition provides data for 2016. Due to data anomalies for certain cities, we sought out other data sources and adjusted for consistency in those cases (see 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- (2015-2016) and five-year (2011-2016) periods. These six growth measures are commonly used to measure the performance of various economies. The one-year growth measures intend to reflect 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 (2013-2016). Existing research suggests that foreign direct investment (FDI) plays an essential role in recent economic development in China, evidenced by the fact that in 2016 China was the world's largest recipient of FDI.

In addition to the three-year FDI growth measures, our index incorporates a measure that depicts the amount of foreign capital actually used with an FDI/GRP ratio. The FDI/GRP ratio measures 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 future growth potential.

The ninth and final component of the index is the location quotient (LQ) for high value-added industry jobs in 2016. 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 one 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 one 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 jobs, wages, GRP, GRP per capita, and FDI for some cities appeared to be revised in later years according to other data sources. The data may be unreliable due to a change in estimation methods or other unidentifiable reasons. Among the affected cities are Chongqing, Shuzhou in Shanxi Province, Lanzhou in Gansu Province, Tianjin, Qinhuangdao in Hebei Province, and Shenzhen 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 of these cities, we referred to other official statistical yearbooks and government websites to adjust inappropriate data points for them.

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 264 cities are ranked for the year 2016.

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 to each of the nine indicators (indicated in Table 3). In our index, we allocate a greater weight to 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, resulting in a sum of weighted z-scores for each city. Finally, based on the total weighted z-scores, we ranked 34 first- and second-tier cities in one group and 230 third-tier cities in another group.

Table 3. Components of the Best-Performing Cities China Index

Indicator	Weighting
1-year job growth (2015-2016)	0.100
5-year job (2011-2016)	0.100
1-year wage growth (2015-2016)	0.100
5-year wage growth (2011-2016)	0.100
1-year GRP per-capita growth (2015-2016)	0.100
5-year GRP per-capita growth (2011-2016)	0.100
3-year FDI growth (2013-2016)	0.125
FDI/GRP (2016)	0.125
LQ for high value-added industry employment (2016)	0.150

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ENDNOTES

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