

Best-Performing Cities ASIA 2014

THE REGION'S MOST DYNAMIC ECONOMIES



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ASIA CENTER
MILKEN INSTITUTE

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ABOUT THE MILKEN INSTITUTE

A nonprofit, nonpartisan economic think tank, the Milken Institute works to improve lives around the world by advancing innovative economic and policy solutions that create jobs, widen access to capital, and enhance health. We produce rigorous, independent economic research—and maximize its impact by convening global leaders from the worlds of business, finance, government, and philanthropy. By fostering collaboration between the public and private sectors, we transform great ideas into action.

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Executive Summary

Our inaugural Best-Performing Cities Asia report provides a fact-based, comprehensive benchmarking system for evaluating established and emerging global metropolitan areas in the region. What are the critical factors for success? Which places in Asia possess or are developing the traits that will lead to success in building sustainable economies and high-quality jobs?

With the establishment of the Milken Institute's Asia Center in Singapore, we decided that it would be useful to adapt one of our most recognized tools in the United States, the Best-Performing Cities index, to provide an objective measurement of recent regional economic progress in Asia. It is our belief that local places—cities and regions—are where jobs are created and sustained, determining the economic prosperity of a nation's citizens. National governments provide the macroeconomic policies and institutional arrangements that are conducive to fostering dynamic regional economies.

Mayors, governors and other public officials regularly cite our U.S. index as an independent measure of performance, tracking their progress and assessing the impact of changes they have made to improve their regional economies. Unlike opportunity rankings based on projected success, the Milken Institute Best-Performing Cities Asia index is based on actual economic performance assessing job and income growth and the strength of industries on a value-added basis. By creating an Asian index of Best-Performing Cities, the Milken Institute aims to provide investors, businesses and policymakers the tools to compare cities and evaluate business environments that facilitate solid economic performance.

- » **Shenzhen, China**, captured the **top spot** in our inaugural Best-Performing Cities Asia. This seems especially fitting as Shenzhen was the birthplace of China's modern economy over three decades ago. It is now attempting a transition to a higher value-added, indigenous-based economic development model.
- » Six of the Top 10 cities are in China: in addition to Shenzhen, they are **Guangzhou (#2); Chengdu (#3); Tianjin (#4); Beijing (#7); and Shanghai (#10)**. This is perhaps not too surprising given China's rapid economic growth, but nevertheless demonstrates the remarkable geographic dispersion of the country's rise to the world's second-largest economy.
- » **Singapore (#8)** was the only "developed" economy among the Top 10—a remarkable accomplishment since the bulk of the metrics reward fast-growing cities. Singapore exhibits how to transition from a low-cost location to an open international economy based on human capital, research and innovation capacities.
- » Three additional countries had cities in the Top 10: **Delhi, India (#5); Kuala Lumpur, Malaysia (#6); and Ho Chi Minh City, Vietnam (#9)**. Each has its own formula for success.

ASIA'S ECONOMIC TRENDS

In a brief span of 50 years, Asia transitioned from being economically remote to today's dynamic global production center and aspiring center of innovation. Asia now accounts for 35 percent of the world's gross domestic product (GDP). Even more impressively, the developing nations in Asia represents 25 percent of global GDP, up from just 14.5 percent in 2000. The Asian Tigers (Hong Kong, Singapore, South Korea and Taiwan), provided examples for today's aspirants: China, India, Malaysia, Indonesia and Vietnam, to name a few. Today, many cities in Asia have become familiar destinations for global business travelers. These globalized cities are inseparable nodes for global trade, financing and manufacturing production networks.

Asia's growth story continues to unfold on several broad fronts:

1. Regional trade integration and an extension of the global supply chain.
2. Urbanization and upgrading the industry value chain to maintain competitiveness and promote the growth of the middle class.
3. Transforming from location of production to center of innovation.

The growth prospects for Asia are bright. It is a rapidly transforming region with favorable demographics and a fast-evolving industrial landscape. China will continue to lead the region despite growth slowing to around 7 percent. India and ASEAN nations will play a more critical role in the future. The election of reform-minded Narendra Modi to prime minister of India offers the hope of ambitious structural reforms to propel economic growth to Chinese standards.

However, ASEAN nations are the key to bringing the Asia success story to full fruition. The ASEAN demographics are more favorable when compared with China, India and mature economies such as South Korea and Japan. The potential for rapidly forming a concentrated labor force through urbanization and industrial clustering is the greatest in ASEAN members. For example, 50 percent of Indonesia's population is below 30 years of age.

2014 BEST-PERFORMING CITY ASIA

Shenzhen, China, has been the economic development story that most cite as the leading model for success among emerging Asian global cities. As economic activity grew and industries concentrated in the region, Shenzhen officials recognized that their low-cost model couldn't be sustained. Higher value-added—and better-paying—industries such as telecommunications, finance, biopharmaceuticals, and other knowledge-based sectors have been fueling current growth.

Even as labor-cost advantages dissipate, Shenzhen remains a major production hub in Southeast Asia. Foxconn, a Taiwan-based telecommunications manufacturer, has significant manufacturing facilities in Shenzhen that produce iPhones for Apple and assemble components for many other firms. Perhaps the best example of Shenzhen indigenous manufacturing success is Huawei, the world's largest telecommunications networking, equipment and services provider. Nearly half of Huawei's employees engage in research and development at multiple R&D centers.

And despite the slowdown in international trade, Shenzhen experienced job growth of 27.4 percent and household income growth of 76.6 percent over the past five years. Given that Shenzhen in 2012 already had the highest per-capita household income in China in purchasing power parity terms at US\$9,940, it may well become the first Chinese city to achieve middle-income status.

BEST-PERFORMING CITIES ASIA 2014: TOP 10

#1 Shenzhen (Guangdong), China

#2 Guangzhou (Guangdong), China

#3 Chengdu (Sichuan), China

#4 Tianjin, China

#5 Delhi, India

#6 Kuala Lumpur, Malaysia

#7 Beijing, China

#8 Singapore, Singapore

#9 Ho Chi Minh City, Vietnam

#10 Shanghai, China

THE REST OF THE TOP 10

Five other Chinese cities are among the Top 10. Guangzhou, the provincial capital of Guangdong and located on the northern end of the Pearl River Delta region, grabs second place. Guangzhou began its economic transformation shortly after Shenzhen by using its strategic port location as a major competitive advantage in attracting large international manufacturing firms. Automotive, electronics and petrochemicals are its three leading anchor industries. Guangzhou's income per capita is now just US\$600 behind Shenzhen's.

Chengdu is third. The capital of Sichuan province, it is the star performer of inland China. In many respects, Chengdu is a second-generation economic success story for China. Authorities adopted the "Go West" economic development strategy by offering incentives in reaction to rising costs in coastal China. Chengdu has probably transformed its economic position more over the past decade than any other city in China. If our evaluation criteria were applied to all major cities in the world, it is quite possible that Chengdu would lead in several.

Tianjin, one of China's four municipalities, claims fourth place. Just 70 miles southeast of Beijing, it is the country's fourth-largest port, located on the Bohai Bay. Tianjin has been one of China's fastest-growing regions since 2000.

Beijing, the seat of the government of the second-largest economy in the world, placed seventh with its strong transportation assets, large and educated population, and long-term assets that support economic activity. Meanwhile, Shanghai came in at 10th place. It may surprise some that this major financial center that is developing a world-class skilled workforce didn't nab a higher spot on our index. However, our findings show that it hasn't been able to compete with other Chinese coastal locations where high-tech manufacturing has propelled recent growth.

Delhi, India, captured fifth place. Delhi is unique among major urban centers of emerging Asian countries in that its service industries, rather than multinational manufacturers, have driven its economic development. Key service sectors propelling its economy include information technology consulting services, telecommunications, banking and finance, media and tourism.

Kuala Lumpur, Malaysia, is sixth. It is the country's hub for finance, IT, real estate and professional services. A leader in Islamic banking, with a large domestic market and established financial sector, it could be a formidable player in Asia. Ho Chi Minh City, Vietnam, was ninth. Although its per-capita household income still lags behind most other best performers, manufacturing has been growing at a rapid clip. It is attracting more foreign direct investment—in the first half of 2014, \$1.08 billion worth of projects in the city were approved. Additionally, Samsung announced in June 2014 that it would be investing \$1 billion to build an electronics factory in the Ho Chi Minh City Hi-Tech Industrial Zone.

Singapore comes in at eighth, the only developed economy in the Top 10. It consistently records job growth at an emerging-economy city pace. In 2012, approximately 39,000 researchers conducted R&D at more than 750 private, government and nonprofit institutions. The vast majority (86 percent) of the research spending was split between two fields where Singapore excels: engineering and technology, and biomedical and related sciences.

Introduction

In 2013, the Milken Institute established a new Asia Center with headquarters in Singapore, a rising hub of global finance and innovation. Our location at the gateway to Asia gives the Milken Institute the opportunity to analyze the demographic trends, trade relationships and capital flows that will define the future. In addition to conducting economic and policy research, we are building new relationships between sectors and regions around the globe while identifying opportunities for the strategic deployment of public, private and philanthropic capital to build prosperity.

TRACKING PERFORMANCE ACROSS BUSINESS CYCLES

The Milken Institute has published an annual ranking of the Best-Performing Cities in the United States for more than a decade, with the first index released in 1999 in partnership with *Forbes* magazine. Businesses, economic development agencies, governments and public-policy groups in U.S. cities use the index as a consistent, objective tool to assess and monitor recent economic performance.

Mayors, governors and other public officials regularly cite our report as an independent measure of performance, tracking their progress and assessing the impact of changes they have made to improve their regional economies. Unlike opportunity rankings based on projected success, the Milken Institute Best-Performing Cities index is based on actual economic performance assessing job and wage growth and the strength of knowledge-based industries.

IDENTIFYING ASIA'S MOST DYNAMIC CITIES

By adding an Asian index of Best-Performing Cities, the Milken Institute aims to inform and help investors, businesses and policymakers compare cities in Asia and evaluate business environments that facilitate solid economic performance. To capture the areas that are driving much of Asia's dynamic growth, the Best-Performing Cities index focuses on regions rather than nations. It is in world cities like Singapore and Hong Kong that financial giants locate their headquarters, and in growing metropolitan areas like Kuala Lumpur that educated entrepreneurs are bringing their innovations to market. Opportunities for cross-pollination of ideas and industries meet a large and growing middle-class consumer market in Asia's densely populated cities, and by focusing on these regions we are assessing the prosperity and potential in some of the most dynamic economies in the world.

To increase human, social and financial prosperity, regions need strong performance in industries that create and sustain quality jobs. High value-added industries employ a larger portion of educated and skilled workers, creating a workforce that is more flexible and able to adapt to innovations as industries develop. The Milken Institute Best-Performing Cities Asia index includes three measures that aim to capture the prevalence of high-quality jobs in a metropolitan area, looking at the short- and medium-term growth rates in high value-added industries, and the per-capita household income (adjusted to purchasing power parity to aid comparison across countries).

METHODOLOGY

The Milken Institute Best-Performing Cities Asia index ranks 24 global Asian cities based on their economic performance. The index measures growth in jobs, household income and high value-added industries over five years (2008-2013) to adjust for extreme variations in business cycles. It also incorporates the most recent one-year performance (2012-13) in these areas. In addition, it ranks 2012 per-capita household income at purchasing power parity,¹ to assess the regional economies' emphasis on high-quality jobs.

Best-Performing Cities Asia is solely an outcomes-based index. It does not incorporate input measures (business costs, cost-of-living components and quality-of-life conditions such as pollution or commute times). These measures, although important, are prone to wide variations and can be highly subjective.

COMPONENTS OF THE BEST-PERFORMING CITIES ASIA INDEX	WEIGHT
Job growth (2008-13)	0.125
Job growth (2012-13)	0.125
Income growth (2008-13)	0.125
Income growth (2012-13)	0.125
High value-added industry growth (2008-13)	0.125
High value-added industry growth (2012-13)	0.125
Per-capita household income at PPP (2012)	0.250

As uniform data are not available for all of the cities ranked, the Best-Performing Cities Asia index uses close substitutes in some cases.² For the cities outside of China, income growth is based on changes in personal disposable income, while changes in household income are used for the Chinese cities. Similarly, changes and concentrations in gross value added are used as the basis for the high value-added industry measures outside of China while gross domestic product by industry is used for the Chinese cities.

The definition of “high value-added industries” also varies across regions.

Within China, it includes:

- » Manufacturing and utilities
- » Transport, storage and post
- » Banking and insurance

Outside of China, it includes:

- » Manufacturing
- » Transportation, information, communication
- » Financial services
- » Business services

In India and China, data on states and provinces are used as proxies for their largest metropolitan area when city-specific information was unavailable. In the case of the Chinese cities of Shenzhen, Guangzhou and Chengdu, city data were available for the employment and income measures, but province-level data were used for the high value-added industry growth.

In ranking cities in Asia, we encounter much larger variations than are observed when comparing metropolitan regions within the United States. Emerging economies have the potential for more dramatic growth off smaller economic bases than established developed economies in Japan, for example, and the added emphasis given to the per-capita household income at purchasing power parity attempts to capture the quality of the jobs in each city. In our inaugural Best-Performing Cities Asia index, we have chosen to focus on the cities where dynamic growth is occurring. As we develop this index in future years, we aim to refine our analysis to improve consistency across economies and hone the high value-added industry definition.

Economic Conditions in Asia

THE TRENDS DRIVING PROSPERITY

In a short 50-year period, Asia has transformed from being an economic backwater to today's rapidly evolving global production center. Asia now accounts for 35 percent of the global gross domestic product (GDP). Perhaps the most astounding sign of widespread economic growth is the fact that developing Asian nations contribute close to 25 percent of the global GDP, up from only 14.5 percent in 2000. The Asian ascent to prosperity has not only continued uninterrupted, but spread widely from a few nation-regions in the 1990s to many others in a short time span of two decades. The rise of Asian Tigers (Hong Kong, Singapore, South Korea and Taiwan) in the 1980s through 1990s provided examples for today's aspiring nations of China, India, Malaysia, Indonesia and Vietnam, among others. Indeed, the rising tide of Asian prosperity lifted the economic development of almost all Asian nations. Today, many cities in Asia have become familiar destinations for global business travelers. These globalized cities are inseparable nodes for global trade, financing and manufacturing production networks. From Hong Kong's claim as Asia's World City to Singapore's reputation as a global financial and innovation center, to Shenzhen as the World Factory, these cities can be viewed through many lenses as the future of Asia and are the ultimate representation of what progressive, competitive and creative dynamic industrial and commercial regions should be.

Building upon relatively stable political environments and favorable demographic trends, the transformation of many successful Asian economies relies on building an adaptive manufacturing export base, institutionalized financing mechanisms and markets, and urbanization. These three pillars are credited with launching the exceptional growth of the Asian Tiger economies and their effective leap past the "middle-income trap" that is so common to emerging markets. The Asian Miracles are still going strong despite the global financial and economic meltdown in 2008 and a slow global recovery thereafter. Indeed, Asian economies' growth was only dampened during and after the crisis but development trends remain intact. Industry clustering and urbanization remain the broader macro trend, the yardstick for economic development, and a means to eradicate poverty.

Today, the Asian growth story continues as nations in Asia reorient their economies after the global financial and economic crisis. The economic and development trends in Asia focus broadly on several fronts:

1. Regional trade integration and an extension of the global supply chain.

ASEAN nations' efforts to intensify cooperation and coordination in trade and financing can be viewed as a means to deepen economic ties and integration to maintain a stronger supply chain in the region.³ In addition, it is a strategy to leverage their huge local demand base, a 600-million-strong population, to counter much slower growth in Europe and the U.S. According to the International Monetary Fund (IMF), intraregional trade expanded by an average 10 percent per year from 1990 through 2012, twice as fast as in non-Asian regions. The rise of a middle class in China and subsequently its stronger final demand has increasingly heightened the impact of the "China spillover" on other economies around the world. Of no less importance is that many smaller economies in Asia need to coordinate to capture the opportunity as well as to balance potential negative economic synchronization.

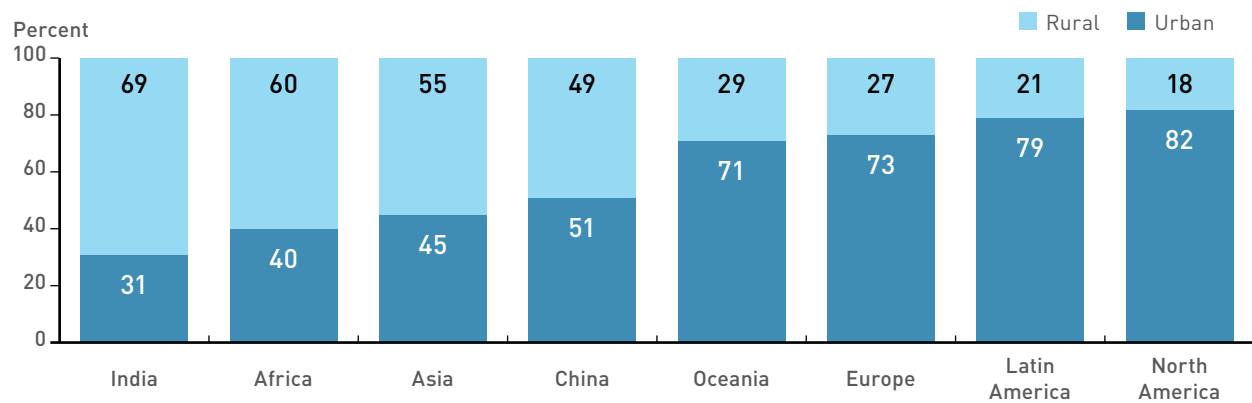
2. Urbanization and industry upgrades as a means to maintain competitiveness and promote the growth of the middle class.

Urbanization has been impressive in Asia. A great deal of it coincides with the building of industry clusters and capacity. China has been the leading nation in moving its citizens from rural areas to newly built urban centers. In 1979, at the dawn of reform, China's urban population was 19 percent, and by 2011, it rose to

51 percent. Through this massive urbanization, China has been credited with lifting more than 300 million of its citizens from poverty to the middle class. Along with rapid social and human development, China also created global super production centers of electronic goods such as Shenzhen and expanded the port city of Shanghai to become the largest global trade hub and an aspiring global financial center.

Urbanization is bringing people closer to economic opportunity

Share of rural vs. urban population by region, 2011



Source: United Nations.

China's success and its impressive growth in the last three decades were largely built on the rapid formation of urban centers and industry clusters. China developed appropriately to its different stages of industrialization in sequence: the Pearl River Delta in the South in the 1980s; Zhangjiang Delta in the East in 1990s; the Tianjin development zone in the North East in the 2000s; and the latest, the Zhongqing development zone in the Central region. These mega-regions not only house the rising middle class, but are now becoming the international hubs for apparel, furniture, electronic and electrical machinery, automobile and airplane, and chemical and energy production. As newer mega-clusters were formed, high-tech contents in newer ones often surpassed those of previous ones. The policy of adopting and reshaping economic and industrial development based on both internal and global conditions is perhaps the most important factor in China's success.

3. Transforming from location of production to center of innovation.

A great part of Asia's success in the last two decades can be traced to the determination of many Asian governments to compete on the global stage as well as their effective and consistent implementation of policies that enabled the transformation of industries and the reorientation of their economies. The four Asian Tigers successfully transitioned from export manufacturing-based economies to financial service and trade-driven economies (particularly Hong Kong and Singapore). Taiwan and South Korea have become critical parts of global supply chains and R&D hubs for manufactured goods. Although it has been a rare case in economic development that a country has so effectively and swiftly switched from labor-intensive production to an innovation high value-added economy, the success of the Asian Tigers does serve as a great aspirational and practical model for other nations in the region.

This trend in Asia will continue and deepen, as China and Malaysia embark on this path. In the last two People's Congress conferences, the Chinese government strategy had two consistent themes: continue and deepen efforts on urbanization and re-orient its economy and industry to a high-tech, high value-added one. The Guangdong government's experiment on promoting high-tech industries by forcing out dated, inefficient and polluting ones during 2008-2010 yielded mixed results. However, the strategic

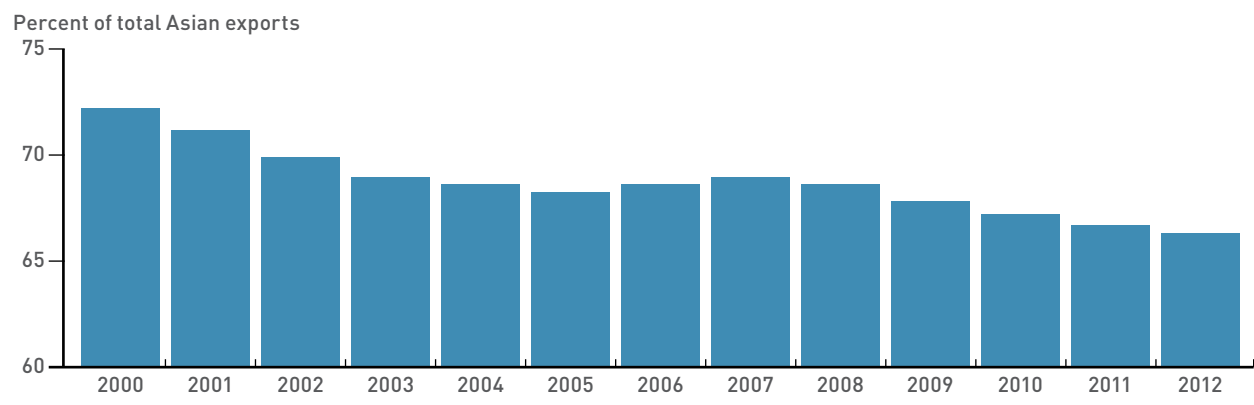
guidance and government intentions are clear. There will be a preference for high value-added and innovative industries in future cluster development in China. Other Asian nations tied closely within the integrated regional trade network will have to adjust their economies and industries in order to maintain competitiveness.⁴ Developed Asian economies such as South Korea are evolving accordingly as external competition intensifies. South Korea has to adapt to the new landscape, where it has to compete both on innovation against a far stronger technology giant in Japan and on production efficiency against China. The success story of South Korea illustrates the changing patterns in Asian exports, manufacturing bases and the quest for talent.

A KEY ROLE ON THE GLOBAL STAGE

Asia's economic growth and stability are important to the global economic system, just as North America and Europe are critical to world economic prosperity. But Asia's importance has increased on the world stage recently. In the last few years, Asia's economy has grown at such a rate that other economies could not attain—this is in sharp contrast to other continents where either growth was decimated, as in Western Europe, or the size and connectivity of the economy was too small to counter the global crises, such as in Africa and Eastern Europe. As much of Europe is still heavily burdened by high debts and stalling economies at the moment, a strong and steady Asia will help keep the global economy in order, and could help Europe escape economic stagnation.

The rate of development in Asia has over time become crucial to the global manufacturing supply chain. As illustrated in the chart below, more than 65 percent of Asian production is still consumed by the rest of the world, although Asian internal trade has risen based on strong GDP growth in recent years. On the flip side, it can also be a measurement of how dependent Asia's economic prosperity is on other parts of the world. In fact, the rise of Asia in the past 50 years has been heavily reliant on exporting to the world.

Asia's exports to rest of world



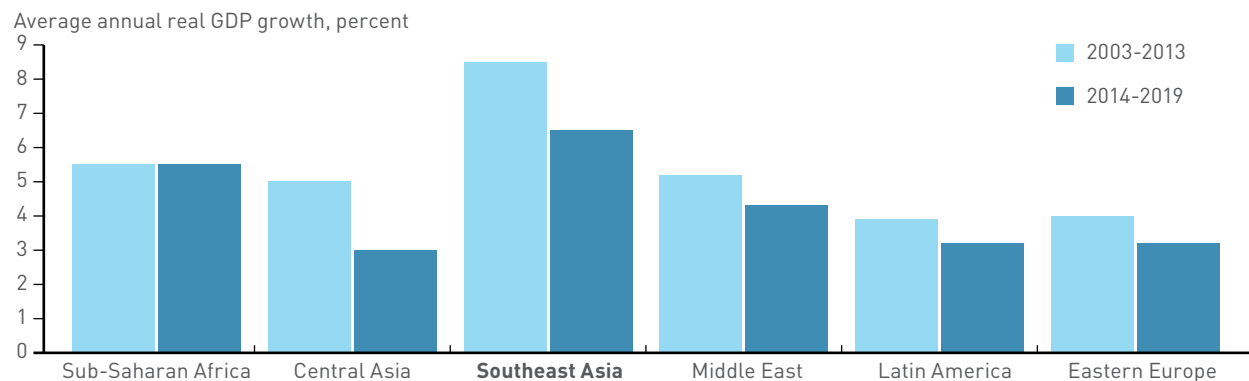
OUTLOOK

The growth prospects for Asia are bright. It is a rapidly transforming region with favorable demographics and a fast-evolving industrial landscape. The entrenched manufacturing supply chain provides linkages that can benefit growth among nations in the region. Asia averaged an almost 6 percent rate of annual growth over the last two decades. It is not surprising then that many Asian leaders and global thinkers have suggested that the 21st century is the Asian Century. Asia accounts for 55 percent of the global population, only 35 percent

of global GDP and 32 percent of global trade. Indeed, gaps remain, but opportunities abound. A recent IMF economic growth projection seems to support the notion that Asian nations are realizing the Asian Century. East Asia has maintained a robust expansion in the last decade and is projected to continue to grow in the next five years (chart below). Currently, China has only 51 percent of its population residing in urban areas. Continuing its pragmatic policy, the nation's growth will move forward as its urban and industrial landscapes change. However, the bigger potential growth for Asia relies on its developing economies transforming as the Asian Tigers and China have done.

Asia's future growth also depends on the success of India and ASEAN nations. Indian Prime Minister Narendra Modi has set an ambitious growth agenda to emulate China's expansion. The expectation is high since the planned new development agenda is a first in decades. At the current pace of urbanization (32 percent in 2011), India has a big gap to fill, but the potential growth can be as significant to the Indian economy as it will be to Asia's and the world's growth. Should India succeed, Asia can extend its high growth for many years to come.

Southeast Asia's real GDP growth compared with other regions



Sources: IMF, Guggenheim Investments. Actual data as of March 31, 2014.

Note: 2014-2019 data are based on IMF projections. Central Asia includes Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan. Southeast Asia includes Bangladesh, Bhutan, Brunei Darussalam, Cambodia, China, Fiji, India, Indonesia, Kiribati, Laos, Malaysia, Maldives, Marshall Islands, Micronesia, Mongolia, Myanmar, Nepal, Palau, Papua New Guinea, Philippines, Samoa, Solomon Islands, Sri Lanka, Thailand, Timor-Leste, Tonga, Tuvalu, Vanuatu and Vietnam.

The table below shows an IMF projection for Asia's GDP growth. Notably, Japan's economy will have slower growth rates than its developing and emerging counterparts. Macro policy aside, the projection captures the fact that the Japanese economy has very marginal potential for urbanization and large-scale change in industry building. Japan remains the slowest-growing economy in Asia. Its outlook has become more stable as the Japanese government engages in structural reform to rejuvenate its economy. However, its role as a financing center, technology enabler and leader will ensure its critical position in the Asian Century.

China will continue to lead despite its lower projected rate of growth in the near term. It is expected that the Chinese government will implement reforms on public project investment and financial and capital markets, which will have a cooling effect on growth. However, fiscal outlay on infrastructure investment and urbanization will continue, which can sustain a healthy economic expansion.

ASEAN nations are the key to bringing the Asia success story to fruition. Many high-growth economies in Asia are in ASEAN, and collectively they represent the third-largest base of consumer demand in the region. In addition, the demographics are more favorable when compared with China, India and mature economies such as South Korea and Japan. The potential for rapidly forming a concentrated labor force through urbanization and industrial clustering is the greatest in ASEAN members; for example, 50 percent of the Indonesian population is below 30 years of age.

GDP GROWTH RATES IN DEVELOPED AND EMERGING ASIAN COUNTRIES

	2011	2012	2013	2014	2015	2016
East Asia						
China	9.3	7.7	7.7	7.5	7.3	7.0
Hong Kong SAR	4.8	1.6	2.9	3.7	3.8	3.9
Japan	-0.5	1.4	1.5	1.4	1.0	0.7
South Korea	3.7	2.0	2.8	3.7	3.8	3.8
Taiwan, province of China	4.2	1.5	2.1	3.1	3.9	4.2
South Asia						
Bangladesh	6.5	6.1	5.8	6.0	6.5	6.8
India	6.6	4.7	4.4	5.4	6.4	6.5
Sri Lanka	8.2	6.3	7.3	7.0	6.5	6.5
ASEAN						
Brunei Darussalam	3.4	0.9	-1.2	5.4	3.0	3.7
Cambodia	7.1	7.3	7.0	7.2	7.3	7.3
Indonesia	6.5	6.3	5.8	5.4	5.8	6.0
Lao PDR	8.0	7.9	8.2	7.5	7.8	8.0
Malaysia	5.1	5.6	4.7	5.2	5.0	5.0
Myanmar	5.9	7.3	7.5	7.8	7.8	7.8
Philippines	3.6	6.8	7.2	6.5	6.5	6.2
Singapore	6.0	1.9	4.1	3.6	3.6	3.6
Vietnam	6.2	5.2	5.4	5.6	5.7	5.8
Emerging Asia*	7.9	6.7	6.5	6.7	6.8	6.7

Source: IMF World Economic Outlook

* Emerging Asia includes Bangladesh, Bhutan, Brunei Darussalam, Cambodia, China, Fiji, India, Indonesia, Kiribati, Lao PDR, Malaysia, Maldives, Marshall Islands, Micronesia, Mongolia, Myanmar, Nepal, Palau, Papua New Guinea, Philippines, Samoa, Solomon Islands, Sri Lanka, Thailand, Timor-Leste, Tonga, Tuvalu, Vanuatu and Vietnam.

Note: Estimates begin 2013.

Indeed, opportunities abound in Asia, but challenges remain. What propelled Asian economies forward at a high rate for almost 50 years might have shifted. The economic fundamentals for many Asian nations remain very positive, but external economic and financial environments have changed. The recent rounds of World Trade Organization talks highlighted the shifting landscape of international trade. Much slower growth in Europe will dampen the effect of Asian export-driven growth models. Should Asia desire to maintain such a high growth rate, new and reliable economic growth drivers have to be identified.

Another potentially inhibiting factor for the up and coming “tigers” in Asia is the role of infrastructure building. The backbone of effective industry clustering and urbanization that can fuel rapid economic expansion and high growth is the building of roadways, ports and communication infrastructure. South Korea, Singapore, Hong Kong and Taiwan have been investing in and reinventing their infrastructure since their economic growth took off. However, these economies are small and geographically concentrated. Infrastructure building for nations such as Indonesia, India and others in South Asia may prove more challenging. Geographical factors aside, China’s funding and planning mechanisms are difficult to replicate. Its political system and centralized planning process facilitate swift planning and speedy implementation, enabling China to anticipate and, in many cases, proactively support growing industries.



TOP 10 BEST-PERFORMING CITIES ASIA

The Region's Most Dynamic Economies

SHENZHEN, CHINA, claimed the top position in our inaugural index of Best-Performing Cities Asia. This seems only apropos given that Shenzhen, in many respects, has become the poster child for China's emergence as the world's second-largest economy. It is a model being emulated to one degree or another all around the country following its designation as a Special Economic Zone more than three decades ago, which encouraged foreign investors to establish joint-venture manufacturing facilities. Initially, foreign manufacturers took advantage of Shenzhen's low labor costs—fueled by the influx of migrant workers attracted to job opportunities—and produced toys, textiles, clothing and electronics, primarily for export.⁵ Shenzhen's strategic location, bordering Hong Kong in the Pearl River Delta region, aided its economic development. After rapid economic growth, Shenzhen is no longer a low-cost location in China and has been transitioning to an economy based on higher value-added industries such as telecommunications, finance, biopharmaceuticals, and other knowledge-based activities.

Although other major cities in China have witnessed strong growth in recent years, Shenzhen still ranks high among them. Over the five-year period ending in 2013, Shenzhen had the second-fastest job growth among China's major cities and the Asian cities included in our rankings.⁶ Between 2008 and 2013, Shenzhen experienced job growth of 27.4 percent. Even with slower growth in 2013, largely attributable to weaker export markets, Shenzhen was fifth among Asian cities in the rate of job creation. Perhaps even more remarkably, over the same five-year period, Shenzhen recorded household income growth of 76.6 percent, also placing it in fourth. This is a noteworthy accomplishment when one considers that

Shenzhen already had the highest per-capita household income in China in purchasing-power parity terms, at US\$9,940 in 2012. Shenzhen's per-capita GDP was estimated at \$15,000 in 2013.⁷ Further, Shenzhen was among the top five cities in high value-added output growth over the past five years and in 2013.

Despite rising labor costs, Shenzhen remains a major production hub in Southeast Asia. Foxconn, a Taiwan-based telecommunications manufacturer, has significant facilities in Shenzhen, with more than 270,000 employees producing iPhones for Apple and assembling components for numerous other firms.⁸ Many foreign multinationals, such as GE and Hyundai, have operations



Shenzhen

Guangdong, China

JOB GROWTH (2008-13)	2 ND
JOB GROWTH (2012-13)	5 TH
INCOME GROWTH (2008-13)	4 TH
INCOME GROWTH (2012-13)	2 ND
HIGH VALUE-ADDED INDUSTRY GROWTH (2008-13)	4 TH
HIGH VALUE-ADDED INDUSTRY GROWTH (2012-13)	5 TH
PER-CAPITA HOUSEHOLD INCOME AT PPP (2012)	10 TH



based in the region. A key strategy was to capitalize on knowledge transfer from foreign multinational firms by encouraging joint ventures with large private domestic firms and state-owned enterprises.

A number of original design manufacturers were spawned and several industry clusters were formed. BYD was among those indigenous firms to be established. Its founder, Wang Chuanfu, set out to become a major player in the rechargeable-batteries market by competing against Japanese imports. Within 10 years, BYD captured more than half of the world market for mobile phone batteries.⁹ Perhaps the best example of Shenzhen manufacturing success is Huawei, the world's largest telecommunications networking, equipment and services provider. Nearly half of Huawei's employees are engaged in research and development at multiple R&D centers. ZTE Corp. is another leading player in telecommunications equipment with operations in more than 140 countries. Additionally, Shenzhen Hepalink Pharmaceuticals is the only Chinese firm with U.S. Food and Drug Administration approval to export the active ingredients of Heparin, a blood thinner derived from pig intestines.¹⁰

Shenzhen now brands itself as the City of Innovation. This is based on its rapid transformation into a dynamic world-class hub of the knowledge economy. In 2012, high-tech industries represented over

30 percent of the city's GDP.¹¹ Shenzhen's mayor, Xu Qin, set a GDP growth target of 9 percent for 2014, after a reported 10.5 percent gain in 2013. Much of this growth was achieved in information technology and other high-tech industries. Xu's projection is based upon continued growth in Shenzhen's six strategic industries—biotechnology, information technology, new energy, new materials, telecommunications, and the cultural and creative industry—which accomplished an estimated gain of 19.8 percent in 2013.¹²

Other efforts are underway to diversify Shenzhen's economy from its manufacturing origins. As other major cities in Guangdong province achieved rapid economic growth, the region required new sources of commercial services such as banking and finance services. Earlier this year, JPMorgan, recognizing the corporate banking opportunity among its clients in the region, opened a major branch in Shenzhen.¹³ China's State Council has approved development of a new financial center in the Qianhai area. It is envisioned as a miniature version of Hong Kong, working as a complementary location given its cost advantages, by offering incentives such as exemption from personal income tax. The Qianhai financial district could serve as a model for a modern financial services industry in China and work with Hong Kong to support the development of broader RMB-based capital flows in the future.



Guangzhou

Guangdong, China

JOB GROWTH (2008-13)	4 TH
JOB GROWTH (2012-13)	6 TH
INCOME GROWTH (2008-13)	3 RD
INCOME GROWTH (2012-13)	1 ST
HIGH VALUE-ADDED INDUSTRY GROWTH (2008-13)	4 TH
HIGH VALUE-ADDED INDUSTRY GROWTH (2012-13)	5 TH
PER-CAPITA HOUSEHOLD INCOME AT PPP (2012)	11 TH



GUANGZHOU, CHINA, the provincial capital of Guangdong, located farther north in the Pearl River Delta region than Shenzhen, takes second place in our index. Guangzhou began its economic transformation shortly after Shenzhen by using its strategic port location to attract large international manufacturing firms. Automotive, electronics and petrochemicals are its three leading anchor industries. They account for one-third of Guangdong’s value-added industrial output.¹⁴ The region’s automotive-parts producers are major suppliers to Honda and Toyota, among others. Guangzhou Automotive Industry Group is the largest employer in the metro area, with China Southern Airlines and Guangdong Foreign Trade Group close behind. More than 170 Fortune Global 500 firms have initiated investment projects in the broader region. Much like Shenzhen, the city is attempting to shift to a more research and development-based economy from a low-cost manufacturing center.

Even as lower value-added manufacturing shifts to inland regions of China, accelerating job growth there, Guangzhou has remained in the upper tier of performers. Over the past five years, Guangzhou’s job growth has ranked fourth, but slipped to sixth in 2013 among the Asian cities in our list. In a testament to its diversification strategy, Guangzhou placed third in income growth from 2008-2013, while capturing first in the same category in 2013. It has largely

closed the income gap with Shenzhen, which started out substantially higher, now just US\$600 per capita behind. Many officials believe that Guangzhou’s GDP will rival that of Hong Kong and Singapore by 2015 or 2016.¹⁵ While per-capita GDP will lag behind for some years, it illustrates how double-digit growth compounds over a short period of time.

Guangzhou is China’s third-largest site for conventions and exhibitions, following just Beijing and Shanghai. Its top-rated facilities assisted in developing an important travel and tourism sector. The city boasts the largest number of colleges and universities in South China. There is much potential here, and economic officials recognize the need to further encourage quality research that can be parlayed into creating innovative firms—ones capable of making a global mark. A key asset moving forward is the Guangzhou Institutes of Biomedicine and Health as the region attempts to capitalize on its biopharmaceutical assets.¹⁶ The Guangzhou Development Research Institute at Guangzhou University has delineated the actions that will be required to further this transformation.



Chengdu Sichuan, China

JOB GROWTH (2008-13)	1 ST
JOB GROWTH (2012-13)	4 TH
INCOME GROWTH (2008-13)	1 ST
INCOME GROWTH (2012-13)	6 TH
HIGH VALUE-ADDED INDUSTRY GROWTH (2008-13)	1 ST
HIGH VALUE-ADDED INDUSTRY GROWTH (2012-13)	3 RD
PER-CAPITA HOUSEHOLD INCOME AT PPP (2012)	19 TH



CHENGDU, CHINA, ranks third in our index. The capital of Sichuan province, Chengdu is the star performer of inland China. And in many respects, it is a second-generation economic success story for China. Authorities adopted the “Go West” economic development strategy by offering incentives in reaction to rising costs in coastal China. Chengdu has probably transformed its economic position more than any other city in China over the past decade. Real GDP growth has averaged 17.6 percent over the past 10 years.¹⁷ Chengdu was first in three growth categories on our list: five-year job growth at 30 percent; five-year income growth at 89.2 percent; and five-year high value-added GDP growth of 121.8 percent. If our evaluation criteria were applied to all major cities in the world, it is quite possible that Chengdu would lead in several. Its key industrial sectors include electronic components, medicines, food, automotive, petroleum, chemicals and metallurgy and building materials.¹⁸

The Chinese Central Government, as part of its “Go West” initiative, invested substantial resources in modernizing the infrastructure in Chengdu. One of the largest benefits was in attracting multinational auto companies such as Volkswagen and Toyota. Chengdu has been an important base for Chinese electronics since Mao moved them to protect against outside attack. Chengdu University for Electronic Science and Technology, one of China’s oldest and

most successful, was an important reason behind Mao’s decision. Beginning in the late 1990s, foreign multinational electronics firms recognized the region as having the expertise necessary to establish operations there. Then in 2005, Chengdu was put on the map when Intel chose to establish its central R&D and manufacturing operations here, and dozens of firms followed.¹⁹ Chengdu is also known for its aeronautical manufacturing and research. Boeing, Airbus and General Electric have manufacturing facilities located here. Cessna hopes to establish a center for medium-aircraft production in the region. China’s most advanced military jets are designed and manufactured in the area as well.

Chengdu officials have ambitious growth plans, too. An important statement of that ambition is the city’s Global Center, the largest building in the world in terms of floor space.²⁰ Chengdu economic development officials have targeted economic growth to exceed China’s national rate by 5 percentage points over the next five years. It is already the main financial hub of Western China and will be targeted for additional growth. Chengdu is attempting to attract an even higher number of international high-tech manufacturing facilities. Nevertheless, it has its own firms engaged in research and development such as Sichuan Kelun Pharmaceutical Co.



Tianjin China

JOB GROWTH (2008-13)	9 TH
JOB GROWTH (2012-13)	7 TH
INCOME GROWTH (2008-13)	2 ND
INCOME GROWTH (2012-13)	7 TH
HIGH VALUE-ADDED INDUSTRY GROWTH (2008-13)	2 ND
HIGH VALUE-ADDED INDUSTRY GROWTH (2012-13)	1 ST
PER-CAPITA HOUSEHOLD INCOME AT PPP (2012)	15 TH



TIANJIN, CHINA, one of the country’s four municipalities, claims fourth place in our index. It is about 70 miles southeast of Beijing and is home to the country’s fourth-largest port located on the Bohai Bay. Tianjin has been one of China’s fastest-growing regions over the past decade. The Central Government has plowed an enormous amount of funding into upgrading the infrastructure. Tianjin ranks second among the Asian cities on our list in five-year income growth and five-year high value-added GDP growth. The city ranked first in high value-added GDP growth in 2013. It has placed an emphasis on higher value-added manufacturing in areas such as electronic information, biomedical, new energy, aviation and defense technology, and heavy machinery.²¹ Its aviation cluster is among the top three in China.

Tianjin is a major center for mobile-phone production (Samsung, Motorola and Sanyo all have significant operations here). Because it is a national economic development zone, Tianjin offers an attractive package of incentives, including low corporate tax rates, and research and development cash awards.²² Numerous multinational firms have set up operations in the city region. Many of these firms have been drawn to the immense potential size of the Chinese consumer market rather than establishing these operations for export production. Another tactic that economic development officials have been pursuing with

success is targeting professional service firms such as computer and data processing, accounting/auditing, consulting and engineering. They provide essential services to manufacturing firms and aid in attracting them. Cloud computing is another growth area as Tianjin can provide the power supply, ample bandwidth and reliable data backup systems.²³ The region has many universities and several are leaders in developing curriculum that will fit the needs of major employers.



Delhi India

JOB GROWTH (2008-13)	11 TH
JOB GROWTH (2012-13)	3 RD
INCOME GROWTH (2008-13)	7 TH
INCOME GROWTH (2012-13)	3 RD
HIGH VALUE-ADDED INDUSTRY GROWTH (2008-13)	3 RD
HIGH VALUE-ADDED INDUSTRY GROWTH (2012-13)	2 ND
PER-CAPITA HOUSEHOLD INCOME AT PPP (2012)	16 TH



DELHI, INDIA, captures fifth place in our index. Delhi is the capital of India and is also a state for administrative purposes. Unlike the major Chinese cities on our list, Delhi's economic development wasn't primarily based on attracting manufacturing operations of large multinational firms. India had more restrictions on foreign direct investment than China, although these restrictions have been eased in recent years.²⁴ It isn't without major international players, however. Cisco India has its headquarters in Delhi and Whirlpool India produces appliances here as well. Delhi is unique among major urban centers of emerging Asia countries in that its service industries have driven its economic development. As India's growth rate has slowed in recent years, Delhi has maintained increases closer to its pace over the previous decade than other metropolitan areas of the country. Delhi was third among cities in our list for one-year job growth, one-year income growth and in five-year high value-added GDP growth. It was second in one-year high value-added GDP growth.

Key service sectors propelling its economy include information technology, IT consulting services, telecommunications, banking and finance, media and tourism.²⁵ Although GDP growth slowed to approximately 9 percent in 2013, Delhi is likely to remain near the top regional performers in India.²⁶ The government has made strides in improving the

business environment. For example, the state has established a single-window approval process to aid entrepreneurs in obtaining required clearances for registering new enterprises. Knowledge-based and high-tech enterprises will receive favorable consideration.²⁷ Two special economic zones have been created to support this initiative. Delhi is becoming an important center for IT consulting services after the top location, Bangalore. IT-enabled services and IT hardware accounted for 43 percent of new jobs generated in Delhi in 2013.²⁸ Delhi accounted for one-fourth of all new jobs created in India during 2013.



Kuala Lumpur Malaysia

JOB GROWTH (2008-13)	3 RD
JOB GROWTH (2012-13)	1 ST
INCOME GROWTH (2008-13)	10 TH
INCOME GROWTH (2012-13)	11 TH
HIGH VALUE-ADDED INDUSTRY GROWTH (2008-13)	11 TH
HIGH VALUE-ADDED INDUSTRY GROWTH (2012-13)	16 TH
PER-CAPITA HOUSEHOLD INCOME AT PPP (2012)	5 TH



KUALA LUMPUR, MALAYSIA, secured the sixth position in our index, thanks to impressive job growth. With the top job growth rate in the past year, and the third-strongest over the past five years, its ranking is supported by a high per-capita household income and solid performance on our income and high value-added industry growth measures. The unemployment rate was 3.2 percent in 2013, and the labor force was just over 900,000 people.²⁹

Kuala Lumpur is Malaysia's economic center, home to its vibrant finance, IT, real estate and professional services clusters.^{30,31} The city's financial services sector, for example, added close to 7,000 jobs in 2012. Benefiting from Malaysia's increased regulatory clarity³², the Islamic banking financial sub-sector continues to strengthen in Kuala Lumpur, which is a world leader in the Islamic sukuk³³ market (Malaysia issued US\$77 billion worth of sukuk in 2013).³⁴ The sector has experienced strong growth globally (17 percent between 2008 and 2012, more than double than the conventional banking sector over the same period)³⁵ and with a large domestic market and an established financial sector, Kuala Lumpur has lots of opportunity for future growth.

The city offers a skilled workforce—35 percent of the labor force in Kuala Lumpur has tertiary education³⁶—and a business-friendly environment.³⁷ It houses the headquarters of leading Asian companies like Axiata, a telecommunications company with 250 million customers in nine high-growth Asian markets.



Beijing China

JOB GROWTH (2008-13)	5 TH
JOB GROWTH (2012-13)	14 TH
INCOME GROWTH (2008-13)	5 TH
INCOME GROWTH (2012-13)	5 TH
HIGH VALUE-ADDED INDUSTRY GROWTH (2008-13)	8 TH
HIGH VALUE-ADDED INDUSTRY GROWTH (2012-13)	10 TH
PER-CAPITA HOUSEHOLD INCOME AT PPP (2012)	13 TH



BEIJING, CHINA, demonstrates its strength on our 2014 index, ranking seventh overall, with competitive five-year job growth and income growth. As the seat of the government of the second-largest economy in the world, strong transportation assets, and a large and educated population, Beijing has long-term assets that support economic activity.

The Beijing economy is on the leading edge as China's economy continues its transition. Only 1 percent of economic output in the city is generated by agriculture, and Beijing is half as concentrated in manufacturing as the nation as a whole—manufacturing and utilities contributed 43 percent of China's gross domestic product in 2013, but only 22 percent of Beijing's gross regional product.

This distinguishes it from the four Chinese cities ranking higher on our index this year. Beijing is an established tertiary center—73 percent of output arises from the service economy, for example from its vital banking and insurance sector. Beijing is home to the world's largest bank by asset size,³⁸ the Industrial & Commercial Bank of China, and is also a center for corporate leadership. More companies on the Fortune Global 500 index are headquartered in Beijing than in any other city.³⁹

Beijing is also experiencing a shift in demand away from investment towards consumption sooner than other parts of China, with consumer spending increasing by 77 percent in the five years ending in 2013, 20 percentage points higher than the average increase in China over the same period.



Singapore

Singapore

JOB GROWTH (2008-13)	6 TH
JOB GROWTH (2012-13)	2 ND
INCOME GROWTH (2008-13)	19 TH
INCOME GROWTH (2012-13)	18 TH
HIGH VALUE-ADDED INDUSTRY GROWTH (2008-13)	15 TH
HIGH VALUE-ADDED INDUSTRY GROWTH (2012-13)	17 TH
PER-CAPITA HOUSEHOLD INCOME AT PPP (2012)	3 RD



SINGAPORE easily makes the Top 10 list in our index despite being a developed economy—an indicator of its economic strength. Ranking second for job growth on our one-year measure and third for per-capita household income at purchasing power parity, Singapore is creating jobs and generating wealth for its residents.

Singapore’s export-driven economy ranked second in the world (to Hong Kong SAR, China) in exports as a share of GDP (191 percent in 2013).⁴⁰ High value-added industries are a major contributor to these exports, and high-technology exports⁴¹ (representing 45 percent of manufactured exports by value) from the city-state were valued at \$128 billion in 2012, with Singapore ranking fourth after the much larger economies of China, Germany and the United States.⁴²

Singapore has key assets that help sustain its economic vitality—for example, it has excellent transportation infrastructure, with high-quality roads, ports and airports making it easy to move goods to market and attract businesses.⁴³ Its workforce is educated, with 27 percent of the non-student population over 25 having earned a university degree, and a further 14 percent with a diploma of professional qualification.⁴⁴ These percentages are projected to continue to rise⁴⁵ as the government invests in higher education⁴⁶.

In 2012, approximately 39,000 researchers conducted R&D at more than 750 private, government and non-profit institutions. The vast majority (86 percent) of the research spending was split between two fields where Singapore excels—engineering and technology, and biomedical and related sciences.⁴⁷ Leading biomedical and pharmaceutical companies such as GlaxoSmithKline and Sanofi-Aventis have manufacturing bases in Singapore.⁴⁸

Foreign direct investment (FDI) in Singapore is robust, with close to S\$750 billion (approximately US\$600 billion) in stock in Singapore in 2012, both as direct equity investment (79 percent of the total) and as net lending from foreign direct investors.⁴⁹ The United States was the largest single country investor (accounting for 14 percent of the total), but ties through incoming FDI to Asia (24 percent) and Europe (35 percent) are also strong. Singapore dedicated 20 percent of its direct investment abroad to China.⁵⁰



Ho Chi Minh City Vietnam

JOB GROWTH (2008-13)	8 TH
JOB GROWTH (2012-13)	8 TH
INCOME GROWTH (2008-13)	13 TH
INCOME GROWTH (2012-13)	15 TH
HIGH VALUE-ADDED INDUSTRY GROWTH (2008-13)	10 TH
HIGH VALUE-ADDED INDUSTRY GROWTH (2012-13)	8 TH
PER-CAPITA HOUSEHOLD INCOME AT PPP (2012)	17 TH



HO CHI MINH CITY, VIETNAM's solid job and high value-added industry growth helped place it ninth in our index. Per-capita household income still lags behind many of its Asian counterpart cities and looks unlikely to catch up in the short term—all of the other Top 10 cities except for Chengdu have higher per-capita household incomes at purchasing power parity, and all but Singapore saw faster income growth over both the last one and five years.

Manufacturing is the largest sector in Ho Chi Minh City, generating 40 percent of gross regional product and creating approximately 28 percent of the jobs in the city in 2013. Based on share of GDP, Ho Chi Minh City's economy is twice as concentrated in manufacturing as the Vietnamese economy. Agriculture provides 2 percent of the employment in Ho Chi Minh City compared with 43 percent for Vietnam.

Ho Chi Minh City has been successful in attracting foreign direct investment, which has increased sharply in recent years, topping US\$2 billion in 2013, according to the municipal department of planning and investment.⁵¹ In the first half of 2014, \$1.08 billion in foreign direct investment projects in the city were approved,⁵² and Samsung announced that it would be investing \$1 billion to build an electronics factory in the Ho Chi Minh City Hi-Tech Industrial Zone in June 2014.⁵³ Concerns have been raised that the generous distribution of incentives to

attract businesses to Vietnam is unsustainable and has not attracted sufficient high-tech investment,⁵⁴ which requires skilled workers. Policy shifts at the national level may impede the rapid growth of foreign investment, but may facilitate more indigenous business expansion.

Although 33 percent of the employed urban population in Vietnam is considered trained (having completed at least three months of vocational training or higher education),⁵⁵ the percentage of the workforce with college degrees is much lower.⁵⁶ The Higher Engineering Education Alliance Program—founded by USAID, Intel and Arizona State University but now including many high-profile private-sector partners—is trying to modernize the training of Vietnamese engineers to better prepare them for work in multinational firms operating in Vietnam.⁵⁷



Shanghai China

JOB GROWTH (2008-13)	17 TH
JOB GROWTH (2012-13)	22 ND
INCOME GROWTH (2008-13)	6 TH
INCOME GROWTH (2012-13)	4 TH
HIGH VALUE-ADDED INDUSTRY GROWTH (2008-13)	12 TH
HIGH VALUE-ADDED INDUSTRY GROWTH (2012-13)	14 TH
PER-CAPITA HOUSEHOLD INCOME AT PPP (2012)	12 TH



SHANGHAI, CHINA, made the Top 10 of our 2014 index on the strength of its income growth. While Shanghai’s job growth cannot compete with the formidable high-tech manufacturing driven growth rates experienced by the Chinese cities that head this year’s rankings, improvements in household incomes have been high both in the past year and in the past five years.

As a major financial center with a large population and a serious commitment to education, Shanghai is developing its large skilled workforce, catering to companies in the high value-added service sectors like banking and professional services. In the 2012 PISA study conducted by the OECD, 15-year-old students in Shanghai ranked better than their peers in all other cities and nations analyzed on both mathematics and reading assessments.⁵⁸

Shanghai is a transportation hub and is now the world’s busiest container port.⁵⁹ The contribution to gross regional product from Shanghai’s wholesale and retail trade sector has increased by more than 150 percent in the past five years, and it is projected to become a more important part of the economy in the next decade.⁶⁰

Prospects for future growth are good, assuming no Chinese banking crisis takes place and the correction in the Chinese real estate market is gentle. The China (Shanghai) Pilot Free Trade Zone⁶¹ was announced in late 2013 with an aim to foster foreign investment and trade through reduced regulatory friction. Details that have emerged on the policies covering the zone suggest that it will not encompass the broad deregulation that some had hoped for, and will focus on bolstering the financial sector.⁶²

Complete Results: 2014 Best-Performing Cities Asia

Overall rank	City	Job growth (2008-13)	Job growth (2012-13)	Income growth (2008-13)	Income growth (2012-13)	High value-added industry growth (2008-13)	High value-added industry growth (2012-13)	Per-capita household income at PPP (2012)
1	Shenzhen (Guangdong)*	2	5	4	2	4	5	10
2	Guangzhou (Guangdong)*	4	6	3	1	4	5	11
3	Chengdu (Sichuan)*	1	4	1	6	1	3	19
4	Tianjin	9	7	2	7	2	1	15
5	Delhi	11	3	7	3	3	2	16
6	Kuala Lumpur	3	1	10	11	11	16	5
7	Beijing	5	14	5	5	8	10	13
8	Singapore	6	2	19	18	15	17	3
9	Ho Chi Minh City	8	8	13	15	10	8	17
10	Shanghai	17	22	6	4	12	14	12
11	Jakarta	7	24	14	19	13	7	9
11	Manila	10	11	16	8	17	4	18
13	Maharashtra*	16	12	9	10	9	11	20
14	Hong Kong	12	9	18	17	19	21	6
15	Taipei	14	17	22	21	18	18	1
16	Tamil Nadu*	18	13	8	13	6	13	21
17	West Bengal*	13	10	11	12	14	9	24
18	Tokyo	19	19	20	22	22	22	2
19	Seoul	15	16	21	20	21	20	8
20	Andhra Pradesh*	20	15	12	16	7	15	23
21	Bangkok	23	23	17	9	20	19	14
22	Karnataka*	21	18	15	14	16	12	22
23	Kyoto	22	20	23	23	24	23	4
24	Osaka	24	21	23	23	23	24	7

* In India and China, data on states and provinces are used as proxies for their largest metropolitan area when city-specific data were unavailable.

Endnotes

1. Purchasing power parity adjustments are based on the national adjustment factor for 2012 from the World Bank applied to the city level income data.
2. The index was based on data collected from the appropriate national sources and projected by Oxford Economics as part of its Asian Key Cities and Regional Forecasts databank. The data and projections used were obtained from Oxford Economics in July 2014.
3. Wong, Li, and Kim. "Evolving Patterns of Trade in Asia," Milken Institute, 2013.
4. Ibid.
5. Gregory Turk, "China Seeks to Repeat Deng's Shenzhen Success in Shanghai," *Bloomberg News*, September 27, 2013, <http://www.bloomberg.com/news/print/2013-09-26/china-seeks-to-repeat-deng-s-shenzhen-success-in-shanghai> (accessed June 13, 2014).
6. Based upon Oxford Economics estimates for 2013. See <http://oxfordeconomics.com> for additional information.
7. Lin Jing and Zhao Yang, *Chinadaily.com.cn*, October 28, 2013, http://www.chinadaily.com.cn/bizchina/chinadata/2013-10/28/content_17065000.htm (accessed July 10, 2014).
8. Martin Jacques, *When China Rules the World: The End of the Western World and the Birth of a New Global Order* (New York, Penguin Group, 2012), p. 174.
9. Barry Pearton, "Reshaping Shenzhen: Turning a New Page," *Asia Today International*, August/September 2012, pp. 8-9.
10. Ibid.
11. "The 10 Traits of Globally Fluent Metro Areas, Shenzhen," The Brookings Institution, March 2013, p. 2.
12. He Hui Feng, "Hi-tech industry helps Shenzhen beat GDP goal," *South China Morning Post*, January 23, 2014, <http://www.scmp.com/print/business/economy/article/1411321/hi-tech-industry-helps-shenzhen-beat-gdp-goal> (accessed June 13, 2014).
13. Clifford Coonan, "Shenzhen the birthplace of China's economic miracle," *Irish Times*, April 28, 2014, <http://www.irishtimes.com/business/economy/shenzhen-the-birthplace-of-china-s-economic-miracle> (accessed June 13, 2014).
14. <http://guangzhou.made-in-china.com/info/business.html> (accessed June 13, 2014).
15. Mary Cheng, "Guangzhou's GDP approaches Asian Tiger status," *WantChinaTimes*, May 19, 2012, <http://www.wantchinatimes.com/news-subclass-cnt.aspx?id=20120519000004&cid=1102> (accessed June 13, 2014).
16. "Guangdong: Market Profile," HKTDC Research, April 4, 2014, <http://china-trade-research.hktdc.com/business-news/article/Fast-Facts/Guangdong-Market-Profile> (accessed June 9, 2014).
17. Yu Hong, "Chengdu: A Rising Economic Star in Western China," EAI Background Brief No. 843, August 22, 2013.
18. "Chengdu Economic Overview," <http://www.gochengdu.cn/investing/chengdu-economic-overview> (accessed July 9, 2014).
19. "Chengdu IT and Electronics," <http://www.gochengdu.cn/investing/pillar-industries/chengdu-it-electronics> (accessed July 9, 2014).
20. Nathalie Thomas, "Is Chengdu really a wonderland for business?" *Telegraph*, October 11, 2013, <http://www.telegraph.co.uk/finance/china-business/10373330/Is-Chengdu-really-a-wonderland-for-business.html> (accessed July 7, 2014).
21. "China's City Winners: Tianjin City Profile," Jones Lang LaSalle, Global Foresight Series 2013, p. 12.
22. Michael T. Hart, "Tianjin Is on the Move," American Chamber-China, June 2013, <http://www.amchamchina.org/article/7345> (accessed June 9, 2014).
23. Tom Spencer and Adam Skuse, "Middle Class, Development Zones Drive FDI to China," *Site Selection* magazine, May 2013, <http://www.siteselection.com/ssinternational/2013/may/china.cfm> (accessed June 9, 2014).
24. "Multinational Companies in India," Business Maps of India, <http://businessmapsofindia.com/india-company/multinational.html> (accessed July 29, 2014).
25. "Hot Spots 2025: Benchmarking the Future Competitiveness of Cities," The Economist Intelligence Unit, 2013, p. 10.
26. "Delhi's growth rate steady but slowdown casts shadow," *The Times of India*, March 20, 2013, <http://timesofindia.indiatimes.com/city/delhi/Delhis-growth-steady-but-slowdown-casts-shadow> (accessed June 10, 2014).
27. Delhi State Report, India Brand Equity Foundation, <http://www.ibef.org/states/delhi.aspx> (accessed June 10, 2014).
28. "Delhi took top slot as job creator; overall hiring declined in 2013," *The Economic Times*, January 19, 2014, http://articles.economictimes.indiatimes.com/2014-01-19/news/46346748_1_new-job-generation (accessed June 10, 2014).
29. "Federal Territory of Kuala Lumpur @ a glance," Department of Statistics Malaysia, Official Portal, http://statistics.gov.my/portal/index.php?option=com_content&view=article&id=536&Itemid=111&lang=en&negeri=W.P.Kuala%20Lumpur (accessed July 22, 2014).
30. The financial, IT, real estate, and professional services sectors were all two to four times more concentrated in Kuala Lumpur than in Malaysia overall.
31. "Number of employed persons by industry, W.P. Kuala Lumpur, 2010-2012," and "Number of employed persons by industry, Malaysia, 2010-2012," Department of Statistics Malaysia, Official Portal (2013).

32. The Malaysian government enacted the Islamic Financial Services Act in 2013.
33. Sukuk are financial instruments similar to bonds that comply with Islamic religious law.
34. World Islamic Banking Competitiveness Report 2013-2014, Ernst and Young (2013).
35. Ibid.
36. "Number of labour force by educational attainment, Malaysia/State, 1982-2012," data for W.P. Kuala Lumpur in 2012, Department of Statistics Malaysia, Official Portal (2013).
37. Malaysia ranked sixth in the World Bank's annual assessment of business-friendliness. "Doing Business 2014," the World Bank.
38. "Fortune Global 500," *Fortune* magazine, July 7, 2014, <http://fortune.com/global500/industrial-commercial-bank-of-china-25/> (accessed July 31, 2014).
39. Zhang Junmian, "Beijing has most Fortune 500 global HQs," *This Is Beijing*, July 25, 2014. http://beijing.china.org.cn/2014-07/25/content_33053315.htm (accessed July 31, 2014).
40. The World Bank (2014).
41. High-technology exports are products with high research and development intensity, such as in aerospace, computers, pharmaceuticals, scientific instruments, and electrical machinery, according to the United Nations Comtrade database definition.
42. High-technology exports (current US\$), United Nations Comtrade database (2012).
43. The Global Competitiveness Index 2013-2014, World Economic Forum (2013).
44. Educational Attainment, Department of Statistics Singapore, http://www.singstat.gov.sg/statistics/visualising_data/chart/Educational_Attainment.html (accessed July 22, 2014).
45. Share of the population with a college degree is projected to reach 50 percent by 2050 by the International Institute for Applied Systems Analysis and the Vienna Institute of Demographics model.
46. Of the \$9.7 billion spent on recurring educational expenses in Singapore in 2012, 39 percent went to tertiary education.
47. *Yearbook of Statistics Singapore 2014*, Agency for Science, Technology and Research (2014).
48. Singapore Government Economic Development Board, "Pharmaceuticals & biotechnology" webpage, <http://www.edb.gov.sg/content/edb/en/industries/industries/pharma-biotech.html> (accessed July 22, 2014).
49. "Foreign Direct Investment in Singapore by Country/Region, 2003-2012," Department of Statistics Singapore (2013).
50. "Stock of Singapore Direct Investment Abroad By Region/Country, Annual," Department of Statistics Singapore (2012).
51. "Ho Chi Minh City Lures 2 billion USD in FDI in 2013," *Vietnam+*, January 13, 2014, <http://en.vietnamplus.vn/Home/Ho-Chi-Minh-City-lures-2-billion-USD-in-FDI-in-2013/2014/1/44916.vnplus> (accessed July 30, 2014).
52. "Vietnam Metro's Jan-Jun FDI Hit \$1.08 bln," *Thanh Nien News*, June 21, 2014, <http://www.thanhniennews.com/business/vietnam-metro-jan-jun-fdi-hit-108-bln-27540.html> (accessed July 30, 2014).
53. "Samsung to Build \$1Bn Factory in Ho Chi Minh City," *The Business Times*, June 6, 2014, <http://businesstimes.com.vn/samsung-build-1bln-factory-ho-chi-minh-city/> (accessed July 30, 2014).
54. Ngan Anh, "Vietnam Sees FDI Backlash Citing Reckless Tax Breaks, Poor Oversight," *Thanh Nien News*, June 28, 2014, <http://www.thanhniennews.com/business/vietnam-sees-fdi-backlash-citing-reckless-tax-breaks-poor-oversight-27832.html> (accessed July 30, 2014).
55. Percentage of trained employed workers at 15 years of age and above by sex and residence (2012 preliminary), General Statistics Office of Vietnam.
56. For Vietnam, the share of the population with a college or graduate degree was 8.6 percent in 2012, according to the General Statistics Office of Vietnam. This group is likely to be primarily located in urban areas, so the share of the Ho Chi Minh City workforce with at least a college degree is presumed to be much higher.
57. <http://heep.org/info/about-us> (accessed July 20, 2014).
58. PISA 2012, Organization for Economic Cooperation and Development (2013). Note that although Shanghai is a city being compared with whole countries, which may affect its ranking, it also has a population larger than some European countries that were ranked.
59. Handling 32.53 million TEU (20-foot equivalent units) in shipping volume in 2012 according to the World Shipping Council rankings of the Top 50 world container ports, overtaking Singapore (31.64 million TEU in 2012).
60. Based on data and projections from "Asian Key Cities and Regional Forecasts," Oxford Economics (2014).
61. Established in October 2013.
62. "China Hand: Economic Zones Evolve," Economist Intelligence Unit (2014). <http://country.eiu.com/article.aspx?articleid=331976417&Country=China&topic=Economy&subtopic=Regional+developments> (accessed July 28, 2014).

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