

GLOBAL CITIES INITIATIVE
A JOINT PROJECT OF BROOKINGS AND JPMORGAN CHASE

NANJING

GDP (country rank), 2012 ¹	Share National GDP, 2012 ²	GDP/Capita, 2012 ³	Population, 2012 (country rank) ⁴	Share National Pop., 2012 ⁵	GaWC Global City Ranking, 2010 ⁶	# Global 2000 HQs, 2012 ⁷	GDP/c Growth 1993- 2012 ⁸
\$159,829,802,530 (16)	1.29%	\$24,955	6,404,677 (26)	0.47%	245	3	22.53%

1) Benchmarks — what is the city's recent ranking performance in terms of global firms, connectivity, diversity, range of cultural assets, immigrants, visitors?

Located in the economic powerhouse of the Yangtze River Delta region, 200 miles inland from Shanghai, Nanjing is a former capital of China and today a thriving six-million-person metro area. The historic city is growing steadily from a previous position of relative anonymity. Rated just inside the world's top 250 cities by the Global Urban Competitiveness Project, ⁹ its growth has merited the label of an emerging "middleweight" city in McKinsey's recent Urban World project. At the national level the city is rated by the Chinese Academy of Social Sciences as approximately the seventh most competitive in China and also rated strongly for governmental management. ¹⁰ This is largely attributable to its status as the capital of one of the top-performing provinces in China, Jiangsu.

Higher education is Nanjing's most significant international asset. Nanjing University places 186th and 251st on two major higher education benchmarks, and it has competitive strengths in natural sciences. The university is a fulcrum for annual international conventions, for which the city is ranked by the International Congress and Convention Association as just outside the world's top 200, on a par with Houston and Pasadena. In other softer attributes, Nanjing still has room for improvement. Mercer ranks its quality of life 135th among 221 global cities, well behind Shanghai and Guangzhou.

2) Narrative — the city's journey into and through globalization. What kind of economic and development trajectory

has it taken? What has changed over time?

Nanjing is a dynastic city with Pacific connections dating back well over 2,000 years. In periods of peace the river city with links to all four corners of China thrived as a commercial, textiles, and cultural center, briefly becoming the most populated city in the world during the fourth century. Over the next millennium it was repeatedly destroyed and rebuilt by ambitious emperors, including most notably the Ming Emperor Yuanzhang, who restored former glories in the 14th century. Its size, power, and feats of engineering meant it developed early diplomatic and trade connections with India and the Far East, focused on printing and shipbuilding.

Nanjing's capacity to engage globally over the next five centuries was hampered by highly destructive political infighting and later the humbling invasion by the British in the 1840s. More war and devastation followed despite growing wealth and retail consumption, but after its liberation in 1949 the city began rapid industrialization geared around state-owned mechanical, automotive, steel, and chemical factories. The city was initially a beneficiary of the ruthless state-led model and investment in scientific universities, but poor managerial and economic decisions and an overdependence on large institutions resulted in sluggish economic growth. Since the opening up of the Chinese economy in the 1980s, the city's leading international sector has been electronics exports – notably flat-panel TV display products. Development zones flourished in the 1990s due to their proximity to the river port and favorable tax conditions.

Nanjing's economy is gradually being transformed as leaders look to deepen its scientific base and make the region synonymous with innovation and entrepreneurship. Higher education is an enduring advantage. With several recognized science- and technology-oriented anchor institutions, from military colleges to agriculture and aeronautics universities, Nanjing is able to sell firms the prospect of having large pools of able and affordable talent to choose from. The city openly seeks the much-coveted status of Oxford or Cambridge in the Eastern hemisphere. The municipal government has undertaken an unprecedented professional development project in pillar industries, which aims to deliver training for one million middle- and high-skilled knowledge workers up to 2022. It is also in the process of building China's premier software-oriented university, and the forthcoming 2014 Youth Olympics is accelerating inner-city road and rail infrastructure redevelopment.

Since 2009, Nanjing has had more political space to diversify its economy and make better use of the city's industrial strengths and geographic location. The city government is committed to the attraction of outstanding Chinese human capital in software, finance and insurance, and creative industries. The new Nanjing 321 Talent Plan aims to bring in at least 3,000 leading entrepreneurial talents up to 2016, with the specific intention of convincing Chinese expatriates with European and North American work experience in nuclear energy, precision mechanisms, bio-engineering, and medicine to return to Nanjing. Much of its new business strategy therefore hinges on the international connections forged by China's entrepreneurial elite.

3) Elements of international and global orientation - In what ways is the city globally connected and relevant? What sort of trade patterns does it exhibit?

Although Nanjing has very limited population diversity, more than 5,000 international students now study in Nanjing each year, one of the highest figures in mainland China. Roughly a fifth arrive from Korea, and Koreans also make up the largest proportion of the expat workers in the city. Indian and U.S. students make up a further 10th each, drawn by attractive fees and educational opportunities in medicine. A significant number of students arrive from Vietnam, Canada, and even Ghana. Meanwhile the, largest source of visitors beyond East Asia are Americans, Germans, and Malaysians. The city's air links are central to these influxes. The first direct intercontinental connection to Europe was established in 2008 when a route to Frankfurt was unveiled, and enhanced routes to Los Angeles, New York, and Vancouver have boosted connectivity with North America.

Foreign investment is a key driver of Nanjing's economic development in high technology. International firms –

including the world's leading software companies but also large Canadian and French energy firms operating in the nuclear sector – together generate local tax revenue of almost \$1 billion annually. Nanjing has recognized the role foreign institutional R&D investment can play in guaranteeing long-term international flows of investment. Since 2010, technology cooperation programs with universities and institutes in Canada, Vietnam, and Israel have been launched. Nanjing also has particularly strong relationships with Melbourne, having identified the Australian city as a higher education and lifestyle model to aspire to.

4) To what extent is the city's international dimension inherited or intentional?

Nanjing's unique historical attributes as a political and cultural center, combined with its proximity to Shanghai and links to China's northern and western hinterlands, mean it has repeatedly been prioritized within the overall urban framework in which its state operates. In the 20th century, this treatment meant it was the preferential site for large state-owned industrial firms, which benefited from local supplies of natural resources including strontium and sulfur.

State-led intervention has not always been a success or a route to global engagement, but it has mostly guaranteed significant infrastructure, engineering, and architectural investment. National decisions to establish regional and national knowledge institutions have assured a steady flow of talent, while development zones were a major boost for the city's electronics and software competitiveness in the 1980s. More recently, supportive policy initiatives from provincial authorities, combined with a wealthy city government, have (despite interdistrict competition) enabled competitive upgrades in fiber optics, subway infrastructure, and bridges that have supported industry growth.

Nanjing's municipal authorities have constantly and intentionally been improving the city's overall business environment in order to make the possibility of starting a business and working on innovations easier. As the capital of rich Jiangsu province, the city has financial flexibility to invest in high-quality industrial parks in fields such as software animation and power grid automation. As such Nanjing has developed a clear export specialization and supported development with the knowledge that growth potential would attract software giants such as Microsoft, Lucent, Motorola, Siemens, and Epson.

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¹ Brookings analysis of Moody's Analytics and Oxford Economics data.

² Ibid.

³ Ibid.

⁴ Ibid.

⁵ Ibid.

⁶ "The World According to GaWC; Classification of Cities 2010," September, 14, 2011.

⁷ The data were produced by G. Csomós and constitute Data Set 26 of the Globalization and World Cities (GaWC) Research Network (http://www.lboro.ac.uk/gawc/) publication of inter-city data.

⁸ Brookings analysis of Moody's Analytics and Oxford Economics data.

⁹ Pengfei Ni, "Global Urban Competitiveness Report" (Cheltenham: Edward Elgar, 2012).

 $^{^{10}}$ "Top 10 Cities in Gov't Management in China, 2010," Chinese Academy of Social Sciences, 2011.

¹¹ "Statistics Report: International Association Meetings Market Country and City Rankings," International Congress and Convention Association, 2009.

¹² "2012 Quality of Living Worldwide City Rankings," Mercer, December 4, 2012.

¹³ "Nanjing the Most Popular City for Overseas Visitors to Jiangsu Province," Gochina, 2011, available at http://gochina.scmp.com/nanjing/travel/nanjing-most-popular-city-overseas-visitors-jiangsu-province.