

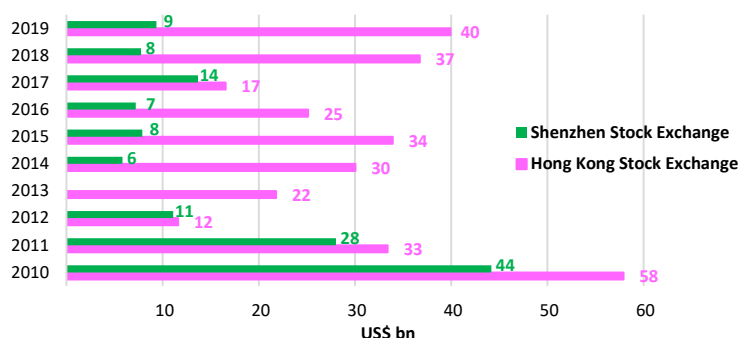


Competitiveness of Hong Kong in GBA

Figure 1 – Socioeconomic indicators of GBA, 2019

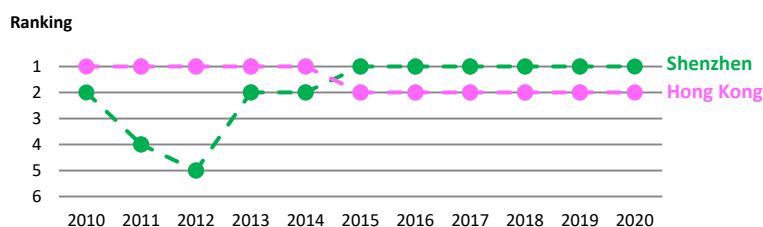
	Area (km ²)	Population (million)	GDP (US\$ billion)
Shenzhen	1 997	13.44	389.8
Hong Kong	1 107	7.52	365.7
Guangzhou	7 249	15.31	342.0
Foshan	3 798	8.16	155.6
Dongguan	2 460	8.46	137.3
Huizhou	11 347	4.88	60.5
Macao	33	0.68	53.9
Zhuhai	1 736	2.02	49.7
Jiangmen	9 507	4.63	45.6
Zhongshan	1 784	3.38	44.9
Zhaoqing	14 891	4.19	32.6

Figure 2 – IPO funds raised in Hong Kong and Shenzhen, 2010-2019^(a)



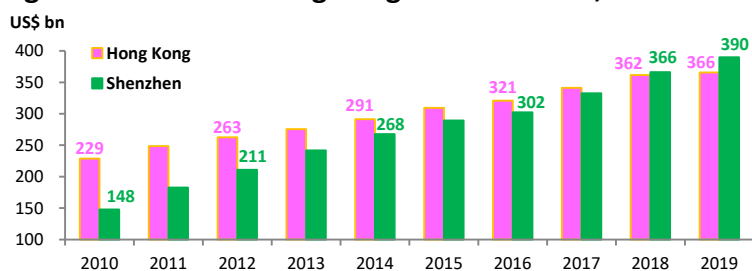
Note: (a) IPO activities were suspended in Shenzhen Stock Exchange from October 2012 to January 2014 and from July 2015 to November 2015.

Figure 3a – Urban competitiveness between Hong Kong and Shenzhen, 2010-2020^(a)



Note: (a) Ranking is based on the publication year of the study.

Figure 3b – GDP of Hong Kong and Shenzhen, 2010-2019



Highlights

- The Guangdong-Hong Kong-Macao Greater Bay Area ("GBA") comprises the two Special Administrative Regions of Hong Kong and Macao, as well as nine cities in the Guangdong Province. Being one of the four largest Bay Areas in the world, GBA covered 56 000 km² with a combined population of 73 million and Gross Domestic Product ("GDP") of around US\$1,678 billion at end-2019 (**Figure 1**).
- Among the GBA cities, Hong Kong has established its competitive edge in financial and professional services. Hong Kong Stock Exchange (HKEX) is one of the world's most active markets for Initial Public Offerings ("IPO"), raising a total of US\$308 billion during 2010-2019 (**Figure 2**). In comparison, Shenzhen Stock Exchange raised IPO funds of US\$135 billion over the same period. Meanwhile, Hong Kong boasts a vibrant and diverse professional services sector, making it an ideal platform for both Mainland companies to go global and large multinationals to expand their business in the Mainland.
- Nevertheless, there have been concerns over the competitiveness of Hong Kong relative to that of other GBA cities, particularly in today's knowledge-based economy where innovation and technology play an increasingly important role in economic growth and development. Shenzhen, a technology and innovation powerhouse in GBA, has overtaken Hong Kong as the most competitive Chinese city since 2015 (**Figure 3a**).
- In recent years, Shenzhen has transformed itself from a low cost manufacturing base to an innovation-led technology hub, with advanced technology-related sectors accounting for about one-third of GDP in 2018. Shenzhen's economy surpassed Hong Kong's for the first time in 2018 (**Figure 3b**) and maintained its lead in 2019.

Competitiveness of Hong Kong in GBA (cont'd)

Figure 4 – Hong Kong universities with top-100 QS World University Rankings by subject, 2020

Subject	University ^(a) (Rank)
Electrical & Electronic Engineering	HKUST (22), HKU (32), CityU (51-100), CUHK (51-100), PolyU (51-100)
Computer Science & Information Systems	HKUST (26), CUHK (30), HKU (38), CityU (51-100), PolyU (51-100)
Mathematics	CUHK (31), HKUST (34), HKU (43), CityU (51-100)
Chemical Engineering	HKUST (32), HKU (51-100)
Chemistry	HKUST (29), HKU (42), CUHK (51-100)
Physics & Astronomy	HKUST (47), HKU (51-100)

Note: (a) HKUST = The Hong Kong University of Science and Technology;
 HKU = The University of Hong Kong;
 CUHK = The Chinese University of Hong Kong;
 CityU = City University of Hong Kong; and
 PolyU = The Hong Kong Polytechnic University.

Figure 5 – R&D expenditure as a percentage of GDP, 2019 or the latest year

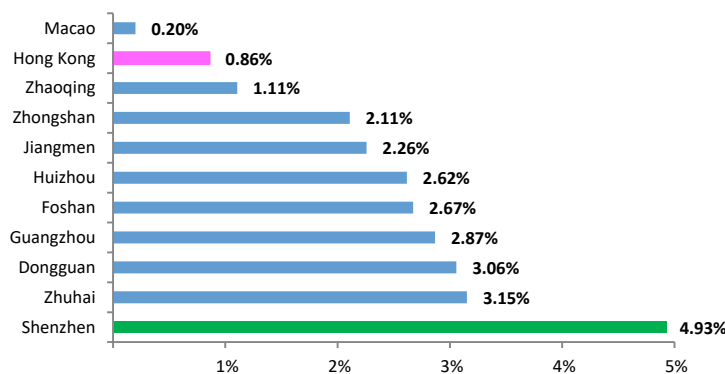
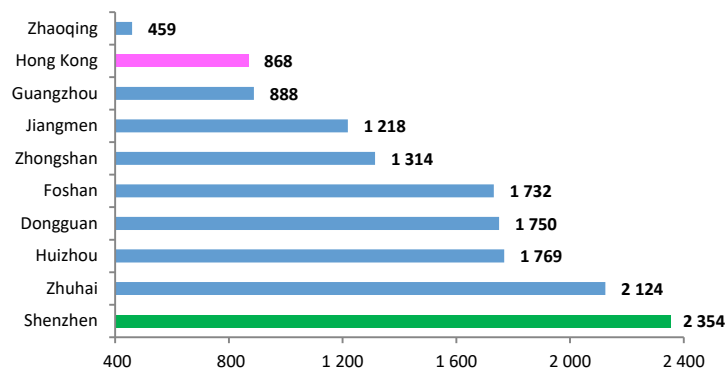


Figure 6 – Number of R&D personnel per 100 000 employment, 2019 or the latest year^(a)



Note: (a) The figure for Macao is not available.

Highlights

- According to the recently published 14th Five-Year Plan, Hong Kong will be developed into an international innovation and technology centre. Hong Kong is renowned for its basic research as evidenced by the high positions occupied by local universities in the Quacquarelli Symonds ("QS") World University Rankings 2020 in subjects related to innovation and technology (**Figure 4**).
- Nevertheless, there are a couple of areas which Hong Kong might need to catch up with other GBA cities when developing into an innovation and technology centre. Firstly, the promotion of innovation and technology requires sufficient financial resources to support research and development ("R&D") activities. Yet, Hong Kong trails all but Macao in GBA as measured by the amount of gross expenditure on R&D ("GERD") as a percentage of GDP (**Figure 5**).
- Secondly, adequate supply of R&D talent is also essential for the development of innovation and technology centre. Yet, Hong Kong lags behind in the availability of R&D talent. In 2019, it had 868 R&D personnel per 100 000 employment, the second lowest among all GBA cities (**Figure 6**).
- Low GERD/GDP ratio and R&D talent gap might weigh on Hong Kong's competitiveness in attracting innovation and technology companies to establish their footholds in the territory. According to a study conducted in 2019, there were 43 unicorns (i.e. start-ups with valuation over US\$1 billion) in GBA. Shenzhen attracted the most number of unicorns (25), followed by Hong Kong (eight) and Guangzhou (seven).

Data sources: Latest figures from Constitutional and Mainland Affairs Bureau, Bureau of Statistics of Guangdong Province, Census and Statistics Department, Chinese Academy of Social Science, Hong Kong Stock Exchange, Shenzhen Stock Exchange and QS World University Rankings.

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