



**Economic Prospects of the Development of the
Guangdong-Hong Kong-Macao Greater Bay Area:
The Competitive Advantages and Importance of the
Service Sector**

by

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Economic Prospects of the Development of the Guangdong-Hong Kong-Macao Greater Bay Area: The Competitive Advantages and Importance of the Service Sector[§]

Terence Tai-Leung Chong¹

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CHAPTER 1. EXECUTIVE SUMMARY

1.1 Background

1.1.1 In 2015, the State Council, in its 13th Five-Year Plan for Economic and Social Development, initiated a national strategy on the development of the Guangdong-Hong Kong-Macao Greater Bay Area (GBA). It covers the Hong Kong Special Administrative Region, Macao Special Administrative Region, and nine cities in Guangdong province, namely, Guangzhou, Shenzhen, Zhuhai, Foshan, Huizhou, Dongguan, Zhongshan, Jiangmen, and Zhaoqing (hereinafter referred to as the nine cities in the Pearl River Delta). The Outline Development Plan for the Guangdong-Hong Kong-Macao Greater Bay Area issued by the CPC Central Committee and the State Council in 2019 proposed to build the GBA into a world-class city cluster, an international science and technology innovation hub, an important support area for the “Belt and Road” Initiative and a demonstration zone for in-depth cooperation between the Chinese Mainland and Hong Kong as well as Macao, and a high-quality living circle fitting for living, working and travelling.

1.1.2 As one of the most open and economically vibrant regions in China, the economic potential of the GBA is compelling; the region accounts for less than 1% of China’s total land area yet possesses around 7% of the country’s population and contributes 11% of the nation’s GDP as of 2022. If regarded as a stand-alone economy, the GBA would have ranked around 10th in 2022 (with a GDP of over RMB 13 trillion), surpassing several G20 countries (such as South Korea, Australia, Mexico) and Singapore.

1.1.3 Since the mid-20th century, cities in the GBA have developed rapidly by taking advantage of their unique geographical locations and strategic advantages, morphing from an agricultural economy in the late 20th century to manufacturing one and now making the transition to a knowledge-based and innovative economy. The construction of the GBA is in the context of “one country, two systems, three customs territories and three currencies” without international precedent. The development trajectory of the GBA is different from those of other bay areas and the Yangtze River Delta, and even has unique advantages.

1.1.4 Making effort to promote high-level financial opening up is one of the key directions of the central financial work. The 2023 Central Financial Work Conference proposed to "steadily expand the institutional opening up of the financial sector, enhance the facilitation of cross-border investment and financing, and attract more foreign financial institutions and long-term capital to set up business in China". The GBA's positioning and strong economic and industrial foundation have provided strong demand and support for financial development. Meanwhile, the GBA has also undertaken the mission of piloting China's financial opening-up.

1.1.5 Optimizing the structure of capital supply and enabling financial services to better serve the real economy are the purposes of China's financial development. However, at present, Chinese enterprises (SMEs in particular) lack access to multiple financing channels, especially cross-border financing, and are unable to obtain sufficient financial resources for scientific and technological innovation, advanced manufacturing and green development.

1.1.6 As a major national development strategy, there is no lack of conceptual consensus concerning the macroeconomic benefits of the development of the GBA. However, the way to achieve this vision deserves more in-depth study. Various sectors of society remain on the sidelines about the tangible opportunities available from the development of the GBA, specifically about what policy measures should be adopted to attract domestic and foreign enterprises to the GBA and achieve long-term development.

1.2 Objectives and Scope of the Study

1.2.1 The formulation of *The Outline Development Plan for the Guangdong-Hong Kong-Macao Greater Bay Area* is premised on the existing competitive advantages of the GBA in relation to other development regions in Mainland China as well as other bay areas in the world. To consolidate and strengthen the existing competitive advantages of the GBA, it is important to not only create synergies between the industries and markets of its cities, but also systematically upgrade its

economic structure and explore solutions to overcome the middle-income trap.

1.2.2 To build the GBA into world-class bay area, we shall study how Chinese companies can grow globally from an economic perspective, and why foreign investors prefer the GBA over investing in other comparable regions. To this end, Chapter 2 of this report compares the competitiveness of the GBA with three other regions: the San Francisco Bay Area, the Tokyo Bay Area and the Yangtze River Delta.

1.2.3 We analyze the comparative advantages of these four regions, starting with the three most relevant factors. The first is the service sector as a share of GDP. For an increasingly complex economic region such as the GBA, the share of the service sector is relatively low. In fact, except for Hong Kong, Macao, Guangzhou, Shenzhen and Zhuhai, the proportion in other GBA cities is below 50%.

1.2.4 The second is productivity growth. With diminishing demographic dividend and return on capital investment, improving productivity will be the key to achieving and sustaining high-quality growth. In Chapter 3, we will analyze the existing bottlenecks in productivity growth in the GBA and discuss the importance of the development of productive and knowledge-based services for promoting high-quality economic growth.

1.2.5 Access to capital is the third factor. To accelerate the financial opening up and in-depth integration of the GBA, it is necessary to tap into Hong Kong's unique advantages and role as an international financial centre. However, mainland enterprises and entrepreneurs, especially SMEs and start-ups, have not yet been able to take full advantage of Hong Kong's deep pool of capital. In Chapter 5, we will discuss the constraints faced by mainland SMEs and start-ups in obtaining access to capital and how Hong Kong can help address their challenges.

1.3 Forecasts for the Share of the Service Sector in GDP

1.3.1 Our comparison and analysis show that the share of the service sector to GDP in the GBA lags behind the Tokyo Bay Area and the San Francisco Bay Area. The share of the service sector to GDP is a key indicator for the level of social and economic development. A major challenge in the development of the GBA is that, among the nine Mainland GBA cities, apart from Guangzhou, Shenzhen, and Zhuhai, where the share of the service sector is around 60-70% of the GDP, the other six cities have a service sector that accounts for less than 50% of their GDP and had no significant growth over the last two decades. The experience of other developed economies shows that if this situation continues, the GBA might experience the backwash effect, which entails the migration of production factors from less-developed cities to developed ones, thereby exacerbating the development disparity among GBA cities.

1.3.2 *The 14th Five-Year Plan* for the manufacturing industry released by Guangdong Province in 2021 proposed that “by 2025, the added value of the manufacturing industry will account for more than 30% of GDP, and high-tech manufacturing will account for 33% of the added value of industries above designated size”.² Although the development foundation and conditions of different regions are dissimilar, considering the significant development achievements of Germany and Japan as advanced industrial economies, their experiences are still deemed valuable references. Judging from their experiences, the development of the service industry and that of the high-end manufacturing industry complement each other. The upgrading and transformation of the traditional original equipment manufacturer industry will involve the establishment of high-tech and independent R&D brands. The establishment and enforcement of relevant intellectual property legislation, as well as public awareness about such legislation, should be based on a mature service-oriented economy, a sufficient supply of highly-educated talent, and a well-established legal system. Hong Kong has advantages in financing, market information and intellectual property management and can cooperate with mainland enterprises in the GBA to promote industrial upgrading in the region.

² https://www.gd.gov.cn/zwgk/zcjd/mtjd/content/post_3458754.html

1.3.3 Using Germany and Japan as benchmarks, the long-term development of the GBA will require the proportion of GDP in the service sector of these six cities to exceed 60%. Cities in the GBA that fail to transform their service industries will risk falling into the middle-income trap in the long run, resulting in brain drain. Since residents in economically lagging cities may not have sufficient purchasing power, the solution is to accelerate the development of producer services to support the growth of advanced manufacturing, as well as related industries necessary to attract and retain talent, such as education, health care, and finance.

1.3.4 While each GBA city has its industry mix, overseas experience shows that increasing the share of services to 60% of GDP is a reasonable and achievable goal. Chapter 4 estimates the annual rates of increase in the share of services until 2030 that are requisite for the six GBA cities with services accounting for less than 50% of GDP to attain this goal. For manufacturing cities such as Dongguan and Foshan to grow their service sectors to 60% by 2030, the annual percentage increment in the service sector should reach 2.13% and 1.97% of their GDP, respectively. For non-manufacturing cities such as Zhuhai, the corresponding annual increment would be 0.37%. We have also calculated the corresponding annual increase in absolute terms. For example, for Dongguan to grow its service sector to 60% by 2030, the annual increment in the service sector should be RMB 58.82 billion. This will be equivalent to creating 250,000 jobs in the financial sector, 410,000 jobs in the education sector, or 290,000 jobs in health and social work.

1.3.5 From 2017 to 2021, household deposits as a share of GDP exhibited an upward trend in all cities except Dongguan, indicating that deposits in these cities grew faster than GDP during the period and further implying the rapid expansion of their banking sector.

1.3.6 To realistically promote the development of the service industry in the GBA, in addition to relying on Guangzhou and Shenzhen, Hong Kong can play a leading role by leveraging its advantages in extensive international business network and professional services such as finance and law. *The National 14th Five-Year Plan* sets out Hong Kong's new

positioning as a global or regional centre in eight areas,³ which will not only help accelerate Hong Kong's integration into the overall development of the country but also complement the limitations in the development of mainland cities. Furthermore, to achieve complementarity between Mainland and Hong Kong, it is necessary to introduce more facilitating policies for cross-border talent flow, cross-border capital flow and data flow to attract more enterprises, investors and talents. Additionally, an open and diversified financing environment is indispensable: it is conducive to the attraction of foreign investment and broadening of financing channels, which in turn can help enterprises in the GBA expand their overseas business.

³ International Financial Centre, International Maritime Centre, International Trade Centre, Centre for International Legal and Dispute Resolution Services in the Asia-Pacific Region, International Aviation Hub, International Innovation and Technology Centre, Regional Intellectual Property Trading Centre, and East-meets-West Centre for International Cultural Exchange.
https://www.gov.cn/xinwen/2021-03/13/content_5592681.htm

CHAPTER 2. COMPARISON OF THE GBA WITH OTHER BAY AREAS AND THE YANGTZE RIVER DELTA

Bay Area economies consist of a few coastal cities of comparable size, as opposed to typical landlocked economies characterized by a large city surrounded by smaller satellite cities. It is a regional economic form based on the natural geography of a bay area, featuring open economic structure, efficient resource allocation, strong agglomeration spillover, and a well-developed network of international exchanges. A bay area boosts the economic development of the cities in the region by consolidating their resources. The world-renowned San Francisco Bay Area and Tokyo Bay Area are not only highly developed in service industries and leading in innovation but also known as important global financial centres. Each bay area has its own forte, and they are not competing in a zero-sum game. In this section, the analysis of their features is only to make an objective assessment of the GBA's comparative advantages. More background information of the bay areas and the Yangtze River Delta see in Appendix 1.

2.1 Comparison of the GBA with the Yangtze River Delta and Other Two Global Bay Areas

2.1.1 Table 1 shows the comparison of the GBA with the Yangtze River Delta and other two bay areas.

Table 1: Comparison of the GBA with the YRD and other 2 bay areas⁴

	Tokyo Bay Area	San Francisco Bay Area	GBA	GBA (excluding Hong Kong & Macao)	Yangtze River Delta
Land area (km sq.)	36,898	17,887	56,098	54,951 ⁵	359,000
Population (million) in 2022	44.3*	7.7*	86.62	78.46 ⁶	236*
GDP (Trillion USD, 2022)	1.90*	1.30	1.944	1.557 ⁷	4.33*
Per-capita GDP (Thousand USD, 2022)	42	132	22.59	19.84 ⁸	18
Share of country GDP (2022)	38.6% (2020)	4.3% (2017)	10.8%	8.7% ⁹	24%
Service Share of the GDP (2022)	84.7%*	70.8%*	64.0%	50.31%* ¹⁰	55.7%*
GDP Growth Rate	3.6%*	4.8%*	7.1%*	7.2%* ¹¹	5.1% ¹²
Key Sectors	High-end Manufacturing	Technology, Internet	Finance, Technology, Internet, Logistics	Technology, Internet,	Integrated circuit, Biomedical Science, Automobile
Number of Fortune Top 500 Companies (2023) ¹³	29	38	25	19	25
Examples of Fortune Top 500 Companies Headquartered in the Area (2023)	Fujitsu, Sharp, YKK, Canon	Apple, Google, Meta, Intel, Tesla	China Resources, AIA, Ping An Insurance, Huawei, Tencent, BYD, DJI	Ping An Insurance, Huawei, Tencent, BYD, DJI	SAIC, Alibaba, Hengli Group, Baowu Steel
Number of QS Top 100 Universities (2023)	2	3	5	0 ¹⁴	3
Airport Passenger Traffic (million, 2022)	64.182	60.5	69.625	63.986	95.26
Port Container Throughput (Million TEU, 2022)	8.381	2.337	82.057	65.372	89.73
Number of GFCI Top 10 Financial Centres (September 2023)	0	1	1	0	1
Stock Market Capitalisation (USD trillion, end of 2022)	5.23	14* ¹⁵ ¹⁶	9.21	4.65	6.65
Stock Market Capitalisation to GDP (end of 2022)	275.2%	1,077% ¹⁷	473.8%	293.6%	153.6%

⁴ Sources: <https://research.hktdc.com/sc/article/MzYzMDE5NzQ5>
<https://behriweb5.com/san-francisco-bay-area-remains-top-performing-economy-and-destination-for-eb-5-investment/>
<https://www.bayarea.gov.hk/filemanager/en/share/pdf/gba-symposium-tokyo.pdf>
http://hmo.gd.gov.cn/ygahz/content/post_4077704.html
<https://m.gelonghui.com/p/301775>

⁵ <https://research.hktdc.com/en/article/MzYzMDE5NzQ5>

⁶ <https://research.hktdc.com/en/article/MzYzMDE5NzQ5>

⁷ <https://research.hktdc.com/en/article/MzYzMDE5NzQ5> AND CEIC data

⁸ <https://research.hktdc.com/en/article/MzYzMDE5NzQ5> AND CEIC data

⁹ <https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?locations=CN> AND CEIC data

¹⁰ Computed based on Figure 4a, excluding Hong Kong and Macao

¹¹ <https://research.hktdc.com/en/article/MzYzMDE5NzQ5> AND CEIC data

¹² Nominal growth for 2022 computed by simple averaging.

¹³ <https://new.qq.com/rain/a/20230209A01WAG00>

¹⁴ <https://www.city-data.com/forum/city-vs-city/3423216-2023-fortune-500-companies-metro-atlanta.html>

¹⁵ <https://fortune.com/2023/08/03/fortune-global-500-top-5-cities/>

¹⁶ https://m.thepaper.cn/newsDetail_forward_24097169

¹⁷ https://news.southcn.com/node_54a44f01a2/333c0c261a.shtml

¹⁸ <https://www.topuniversities.com/university-rankings/world-university-rankings/2023?&countries=hk,cn>

¹⁹ <https://jointventure.org/news-and-media/news-releases/2340-2022-silicon-valley-index-top-25-hold-92-of-the-wealth>

²⁰ Although San Francisco Bay Area does not have a stock exchange, many large companies listed in NYSE and NASDAQ are based in the San Francisco Bay Area.

²¹ Calculation uses the capitalization of public companies headquartered in the San Francisco Bay Area.

*Note: * indicates 2021 data;*

Note: The GDP data is slightly different with that on the HKTDC research website because of RMB depreciation

Note: All data of market capitalisations are retrieved from CEIC data

2.1.2 Land and Population:

Table 1 shows that the Yangtze River Delta (Jiangsu, Zhejiang, Anhui and Shanghai) has the largest land area and population among the four regions. The YRD region accounts for the largest population gathering area in China in terms of total population and the total area is 6.4 times that of the GBA. In 2021, the total permanent population of the three provinces and one city in the Yangtze River Delta region was three times that of the GBA. The Tokyo Bay Area is a metropolitan region with a population of 44.3 million and has some of the most comprehensive urban infrastructure in the world.

2.1.3 GDP:

From Table 1, the YRD has the highest GDP but the lowest GDP per capita, while the San Francisco area has the lowest GDP but the highest GDP per capita. The Tokyo Bay area possesses the highest GDP share of the country. The San Francisco Bay Area witnessed an economic growth of 4.8% in 2022, taking the lead among the 50 largest metropolitan areas in the United States.

2.1.4 Share of the Service Sector in the GDP:

The service sector is the backbone of the Tokyo Bay Area's economy, accounting for about 84.7% of its total GDP. In 2022, the service sector of the GBA constituted a share of 64% of the GDP. The service sector share of GDP in the GBA would drop to 50.31% from 64% if Hong Kong and Macao were excluded. In the YRD region, the service sector accounted for 55.7% of the total.

2.1.5 Fortune 500 Companies and QS Top 100 Universities:

The Tokyo Bay Area is home to 29 Fortune 500 companies in 2023, including Toyota Motor Corporation, Mitsubishi, Honda Motor Corporation, Sony, Toshiba, Canon, and other well-known multinational companies. The San Francisco Bay Area has 38 Fortune 500 companies in 2023, with corporate headquarters for Hewlett-Packard, Apple, and Cisco. In the 2023 Fortune Global 500 list, 25 companies are in the GBA and

another 25 are in the YRD, including China Baowu Steel Group (ranked 44th) and Alibaba (ranked 68th). The Hong Kong companies that made it to the list include China Resources, China Merchants Group, Lenovo Group, China Taiping Insurance Group, Jardine Matheson, and CK Hutchison Holdings. The GBA would only have 19 of these companies after excluding Hong Kong (Table 1).

The Tokyo Bay Area is home to several prestigious higher education institutions, including two QS top 100 universities. The San Francisco Bay Area possesses three QS top 100 universities, including some of the world's most prestigious universities, such as Stanford University and the University of California, Berkeley; international colloquiums and conferences are thus frequently organized. The GBA and the YRD have five and three QS top 100 universities, respectively.

2.1.6 Airport Passenger Traffic:

In terms of airport passenger traffic, the Tokyo Bay Area has two international airports, with 64.182 million airport passengers in 2022. The San Francisco Bay Area has three major international airports, namely San Francisco (SFO), San Jose (SJC), and Oakland (OAK), with 60.5 million airport passengers in 2022. The GBA houses aviation hubs with international presence such as Hong Kong, Guangzhou, and Shenzhen. In 2022, the GBA had 69 million airport passengers, while the YRD had 64 million, which was slightly less than that of the GBA.

2.1.7 Port Container Throughput:

In terms of cargo volume, the Tokyo Bay Area has six major ports, namely Tokyo, Yokohama, Chiba, Kawasaki, Yokosuka, and Kisarazu. The Tokyo Bay Area is a hub for global trade, and because of its extensive cluster of ports, goods move through the area frequently. The Tokyo Bay Area handled 8.381 million twenty-foot equivalent units (TEUs) in 2022.

The San Francisco Bay Area handled 2.337 million TEUs in 2022.

The GBA boasts a large cluster of ports, including three world-class container ports located in Hong Kong, Shenzhen and Guangzhou, as well as several local ports such as Humen, Huizhou and Zhuhai. Three of the

world's top ten container ports, namely Shenzhen, Guangzhou, and Hong Kong, are located within the GBA. The GBA ports handled more than 82 million twenty-foot equivalent units (TEUs) in 2022, while the YRD handled 89.73 million TEUs, which is slightly more than that of the GBA. Hong Kong handled 16.69 million TEUs, while Shenzhen and Guangzhou handled 30.04 million and 24.86 million TEUs of containers, respectively. The container throughput of Shanghai Port reached 47.3 million TEUs in 2022, ranked as the world's largest port in terms of container throughput for 13 consecutive years.¹⁸

The ports cluster in the YRD region relies on the Shanghai International Shipping Center, with Shanghai, Ningbo and Lianyungang¹⁹ as the mainstay. In 2022, the YRD region occupied three seats among the top ten ports in the world by cargo throughput, with Ningbo Zhoushan Port, Shanghai Port and Suzhou Port in the first, third and seventh places, respectively.²⁰

2.1.8 Financial Centre and Access to Capital:

Tokyo's ranking as a financial centre in the Asia-Pacific region has declined, dropping from an all-time high third position in the Z/Yen's Global Financial Centres Index (GFCI) in March 2020 to the 20th spot in September 2023.

Being Japan's economic hub and the primary location of foreign investment for the country, the Tokyo Bay Area is crucial in terms of capital flow. Despite the drop in the GFCI ranking, there has been a noticeable trend of capital flow to Japan since 2020. Global foreign direct investment (FDI) flows to Japan in 2021 amounted to USD 1.58 trillion, a significant increase of 64% from the exceptionally low level in 2020. In 2022, inward FDI flows to Japan surged to a record USD 32.53 billion, the highest amount in the last decade. Japan's inward FDI position amounted to USD 225.37 billion, accounting for 5.24 percent of the GDP. The country ranked 4th in the AT Kearney Foreign Direct Investment Confidence Index 2022 on the most attractive economy for foreign

¹⁸<https://www.statista.com/statistics/264171/turnover-volume-of-the-largest-container-ports-worldwide/>

¹⁹ Report on the Investment Analysis and Prospect Forecast of the Port Industry in the Yangtze River Delta 2023-2028 http://www.sohu.com/a/674737546_121649948

²⁰ Global Port Development Report 2022

investment. Compared with the developed traditional financial industry, the venture capital industry in the Tokyo Bay Area lags in development.

San Francisco has been the financial centre of the western United States since the nineteenth century. It ranks 5th in the GFCI (September 2023) and is home to leading banks (such as Wells Fargo) and insurance companies (such as TransAmerica and Fireman's Fund), as well as branches of the Federal Reserve and the United States Mint. The San Francisco Bay Area boasts more than 1,000 venture capital firms. Many investment companies also have offices in the area, such as Franklin Templeton Investments, which is headquartered in nearby San Mateo. Although the San Francisco Bay Area does not have a stock exchange, many large companies listed on NYSE and NASDAQ are based in the San Francisco Bay Area. The San Francisco Bay Area is more closely tied to the NASDAQ than any other region. Most technology companies, such as Apple, Microsoft, Oracle and Cisco, are listed on the NASDAQ.

The GBA is one of the world's most important financial centres, with three major financial cities, including Hong Kong, Shenzhen and Guangzhou, as well as two stock exchanges, namely the Hong Kong Stock Exchange and the Shenzhen Stock Exchange. On top of that, Hong Kong is an international financial centre and the world's largest offshore RMB business centre. According to the 34th edition of the Global Financial Centre Index (GFCI) released in September 2023, Hong Kong ranks fourth as a financial centre, while Shenzhen and Guangzhou rank 12th and 29th globally, respectively. Driven by the influence emanating from Hong Kong's role as an international financial centre, Shenzhen's financial industry grew rapidly. In 2022, Shenzhen's financial industry achieved an added value of RMB 513.798 billion yuan, a year-on-year increase of 8.2%, which was higher than the national (5.6%) and Guangdong Province (7.8%) averages, accounting for 15.9% of its GDP in the same period. At the end of December 2022, there were 405 A-share listed companies coming from Shenzhen, with a total market capitalisation of 7.6 trillion yuan, ranking second among the large and medium-sized cities in China.

The YRD region is also one of the national financial agglomeration areas, possessing great advantages in the number of financial institutions. The

region has formed a comprehensive financial market system comprising currency, foreign exchange, stocks, bonds, gold, derivatives, insurance, and so on, with national financial markets such as the Shanghai Stock Exchange and China Foreign Exchange Trading Center, and local financial markets such as equity trading centers and property rights exchanges. Shanghai ranks 7th in the GFCI (September 2023). From Table 1, at the end of 2022, the market capitalisation of the Shanghai Stock Exchange was USD 6.65 trillion, higher than that of the Shenzhen Stock Exchange (USD 4.65 trillion). The two exchanges are connected to the Hong Kong Stock Exchanges and Clearing Limited through the Shanghai-Hong Kong Stock Connect and Shenzhen-Hong Kong Stock Connect.

2.2 YRD vs GBA

2.2.1 As for the population growth rate, from 2012 to 2021, the population of the GBA grew at a rate of around 35%, faster than that of the YRD region, which was at 12%. As natural birth and death rates will not have substantial differences across regions within China, such a huge difference is mainly attributed to the internal movement of the labour force. Hence, the GBA is in a better position to attract labour. In terms of labour force proportion, 74.7% of the population of the GBA are of working age, as compared to 71.7% in the YRD.

2.2.2 From the perspective of residents' income level, the overall performance of the YRD region is better than that of the nine Mainland cities in the GBA. Except for Shenzhen and Guangzhou, the income of the residents in the GBA is lower than that of the major cities in the YRD region, and there also exists a wider income gap in the GBA. The implication is that the inclusion of Hong Kong as a part of the GBA is important for its overall development and performance.

2.2.3 The manufacturing industry in the YRD region sees the support of three provinces and one municipality with a total population of 236 million, which is beyond the reach of the GBA. With a large population base, the YRD has sufficient labour force to support the manufacturing industry and a larger consumer market for the products produced. In addition, the YRD

has a lead in such areas as pharmaceutical manufacturing, integrated circuit, and automobile industries.

2.2.4 The GBA has advantages in information technology. The listed companies in the GBA concentrate primarily in the electronics and information technology industries. By 2022, among the 719 A-share listed companies, 180 are in the computer, communication, and other electronic equipment manufacturing industries, and 59 are in the software and information technology service industries, accounting for 25.0% and 8.2%, respectively, while the listed companies in corresponding industries in the YRD only constitute a respective share of 9.0% and 6.2%.

2.2.5 Excluding Hong Kong and Macao, the largest industry in the nine Mainland GBA cities is the electronics industry, accounting for 17.4% of all listed companies, while the largest industry in the YRD is the machinery industry, accounting for 19.7% of all listed companies. In terms of the emerging industry of electronic information, its proportion in the nine Mainland GBA cities is far more than that in the YRD. The proportion of the electronics industry in the nine Mainland GBA cities is 2.91 times that of the YRD. In other words, in terms of industry mix, the nine Mainland GBA cities are more biased towards emerging industries, whereas the industries in the YRD are the more traditional.²¹

2.2.6 In 2019, the ratio of R&D expenditure to GDP in the YRD region was 2.8%, 0.6 percentage points lower than that of the GBA. At the end of 2019, the number of patents granted in the GBA accounted for 21.3% of the country's total, higher than Shanghai, Jiangsu, Zhejiang and Anhui by 17.2, 8.6, 9.8 and 20.0 percentage points, respectively.²²

2.2.7 The YRD region has greater advantages from its educated population. There are 15,819 university degree holders in the GBA and 16,523 in the YRD region for every 100,000 residents, respectively.²³ As

²¹ 粵港澳大灣區長三角地區經濟發展比較研究 - 廣東統計局
<http://stats.gd.gov.cn/attachment/0/429/429654/3344840.pdf>

²² 粵港澳大灣區長三角地區經濟發展比較研究 - 廣東統計局
<http://stats.gd.gov.cn/attachment/0/429/429654/3344840.pdf>

²³ 粵港澳大灣區長三角地區經濟發展比較研究 - 廣東統計局
<http://stats.gd.gov.cn/attachment/0/429/429654/3344840.pdf>

shown in the data presented in Table 2a, the GBA is facing a shortage of highly educated individuals, specifically those with master’s and doctoral degrees when compared with the YRD region. According to the Guangdong-Hong Kong-Macao Greater Bay Area Development Report (2018), in 2015, only 17.47% of permanent residents in the GBA held higher education qualifications (26.18% in Hong Kong, 25.19% in Shenzhen, and 15.74% in Dongguan), which shows that the educational level of the population falls slightly lower than expected.

Table 2a: Comparison of Talents’ Education Level in GBA and YRD (2021.11-2022.10)

	College or below	Bachelor	Master	MBA/EMBA	Doctoral/Post-Doctoral Degree
GBA	22.99%	60.07%		16.15%	0.79%
YRD	19.08%	58.97%		20.90%	1.05%

Source: liepin.com

2.2.8 The share of the financial industry in the GDP of the YRD region is lower than that of the GBA. Hong Kong is ranked the 4th financial centre in the world according to the Global Financial Centre Index report released in March 2023. Influenced by the leading role of Hong Kong as the international financial centre, Shenzhen has also witnessed rapid growth in its financial industry, and accelerated its pace in international financial exchanges and cooperation. In 2022, Shenzhen’s financial industry grew by 8.2%, with 2,743 companies listed on the Shenzhen Stock Exchange. However, if Hong Kong is excluded, the financial industry in the GBA is difficult to compete with the YRD region in terms of scale and the number of financial institutions. In 2019, the value-added of the financial industry in the YRD region reached 1.36 trillion yuan, 2.4 times that of the nine Mainland GBA cities, and the share of the financial industry in the GDP and the value-added of the tertiary industry were also 1.2 percent and 4.0 percent higher than those of the nine Mainland GBA cities, respectively.²⁴

2.2.9 In the banking industry, the average deposits and loans of a single city in the GBA far exceed those of the YRD city cluster. In 2021, the balances of deposits and loans in local and foreign currencies in the GBA were 39.4 and 29.7 trillion yuan, respectively, up by 5.4% and 7.8% year

²⁴ 粵港澳大灣區長三角地區經濟發展比較研究 - 廣東統計局
<http://stats.gd.gov.cn/attachment/0/429/429654/3344840.pdf>

on year. The loan-to-deposit ratio was 0.75, an increase of 0.02 over 2020. The GBA has greater advantages in this regard than the YRD, with average balances of deposits and loans of 3.6 and 2.7 trillion yuan per city, which is 1.75 times and 1.62 times those of the YRD, respectively. Cities with higher GDP tend to have higher household deposits. The level of household deposits is positively correlated with the degree of urbanization and the size of the urban population. Cities with higher deposits will have more capital for investment, which implies a larger potential for long-term growth.²⁵

2.2.10 In the securities industry, the GBA has a larger average market capitalisation of listed enterprises and gains prominent advantages from its science and technology opening up. Hong Kong and Shenzhen have the advantage of a multi-level capital market system and industrialization within the GBA and even the whole country, leading to the clustering of securities, funds, bond rating institutions, and so forth, thereby enriching local financial services.

2.2.11 Listed companies in the GBA have joined the Stock Connect. Among the 719 A-share enterprises, 42 joined through Shanghai-Hong Kong Stock Connect, and 201 joined through Shenzhen-Hong Kong Stock Connect, totalling 33.8%, both of which witness a larger share than their counterparts in the YRD (27.7%).

2.3 How to Leverage Hong Kong's Unique Advantages Under “One Country, Two Systems”

2.3.1 The GBA has the institutional advantage of “One Country, Two Systems”, with three customs territories and three currencies, as well as four leading cities in economic development (Guangzhou, Shenzhen, Hong Kong, and Macao). Under the policy of “One Country, Two Systems”, Hong Kong is the only city in China practicing the common law. It has an independent legislative, law enforcement and judicial system, and frequent cross-border data exchanges with the world, giving it a unique competitive advantage. The legal system of Hong Kong provides the guarantee of sound governance structures and fair transactions. This unique position

²⁵ http://paper.people.com.cn/rmrhwb/html/2022-12/14/content_25954356.htm

allows Hong Kong to help GBA Mainland businesses deal with foreign counterparts in common law jurisdictions. The practice of “One Country, Two Systems” enables Hong Kong to develop into a highly international city where various systems are in line with international standards. HKSAR passport holders enjoy visa-free access in many countries, and Hong Kong’s trilingual population can help mainland companies upgrade and adapt to international business practices.

2.3.2 At the beginning of reform and opening-up, Hong Kong-funded enterprises were the first to enter the market of Mainland China. Over the four decades of reform and opening-up, China has accumulated more than USD 2 trillion in foreign direct investment and nearly USD 1.5 trillion in its stock of outward direct investment, becoming the second-largest foreign capital inflow country and the third-largest foreign investor in the world. After China’s accession to the WTO in 2001, Hong Kong has played an important role in attracting foreign capital to China. Over the past 40 years, Hong Kong has assumed the role of "super-connector" for exchanges and cooperation between China and other countries.

2.3.3 The financial sector remains Hong Kong’s strongest competitive advantage. With excellent financial resources and infrastructure, Hong Kong is a vital market for the simultaneous clearing of multiple currencies in the world. Hong Kong remains a global offshore RMB business hub, as well as a preferred location for asset management, risk management and financing activities. Hong Kong's close links with other cities in the GBA can provide high value-added financial services to enterprises and individuals in the region and become an investment and financing platform for enterprises, especially in high-tech industries. In addition, Hong Kong can make good use of the development of the GBA to bring new impetus to the financial industry, especially green finance and fintech.

2.3.4 Domestic financing channels are insufficient to meet the growing financing needs of private enterprises, making overseas financing channels vital.²⁶ Hong Kong hosts the headquarters and regional offices of many international financial institutions and financing platforms and is an important window for the mainland to access the international capital

²⁶香港交易所研究報告, 香港支持內地民營企業集資的角色, 2019年6月

market. With its unique advantages, Hong Kong has become the largest overseas financing platform for mainland enterprises,²⁷ providing them numerous financing channels to go global and helping them obtain low-cost funds from around the world.

2.3.5 About two-thirds of China's foreign direct investment, outward direct investment and most of the financial investment are initiated and processed by Hong Kong;²⁸ It is also one of the mainland's major trading partners and a transit point for cross-border trade between the mainland and overseas countries, and it plays an indispensable role in the internationalization of the RMB. Looking ahead, Hong Kong could leverage its complementary advantages with other cities of the GBA, increase the support for its multi-currency settlement business and build efficient financial infrastructure to facilitate RMB transactions between the Chinese mainland and offshore markets, thereby consolidating its position as a global offshore RMB centre.

2.3.6 The GBA sees more advantages in the export of professional services than the YRD region. Hong Kong's professional services industry is thriving and world-class. Professional services, such as accountants and lawyers, contributed over 10% of Hong Kong's GDP.²⁹ It can harness the huge growth potential offered by the GBA and export worldwide. Many companies in Mainland China are expanding their business to overseas markets via direct investment, mergers and acquisitions. These activities require the support of Hong Kong's professional services that meet international standards, such as conducting due diligence and risk assessments, drafting legal documents, and providing arbitration and mediation services to resolve possible disputes with foreign business counterparts.

2.3.7 As an international aviation hub, Hong Kong can provide high value-added cargo, aircraft leasing and financing services, and aviation management training to support the development of a world-class airport

²⁷香港交易所研究報告：香港支持內地民營企業集資的角色，2019年6月

²⁸ https://www.hkma.gov.hk/gb_chi/key-functions/international-financial-centre/hong-kong-as-an-international-financial-centre/dominant-gateway-to-china/

²⁹ <https://www.censtatd.gov.hk/tc/scode80.html>

in the GBA.³⁰ In addition, Hong Kong can leverage its strength in financial services to develop advanced maritime services, such as ship management and leasing, ship finance and marine insurance services.

2.3.8 The analysis above shows that under the "One Country, Two Systems" principle, Hong Kong's unique competitive advantages can compensate for the weakness of the nine mainland cities in the GBA, thereby accelerating the integration process and high-quality economic growth of the GBA.

³⁰ <https://www.hkeconomy.gov.hk/tc/pdf/box-19q1-c2-2.pdf>

CHAPTER 3. NEAR-TERM CHALLENGES FOR ECONOMIC GROWTH IN THE GBA

The development of the GBA faces many challenges, especially in the upgrading of its manufacturing and services sectors among the GBA cities. The Guangdong Provincial Government released a guideline on reinforcing its manufacturing sector on June 1, 2023. According to the guideline, Guangdong is planning to develop a new pattern in manufacturing and increase the share of manufacturing and the value-added of manufacturing and service sectors in GDP, targeting at reaching 65 percent by 2027. The Guangdong Provincial Government will strengthen cooperation in the industrial chain and supply chain among the GBA. The guideline proposes that the imposition of reforms to facilitate resource allocation, capital flow, land use, energy use, and finance can overcome the bottleneck in industrial integration in the GBA. It also highlights the significance of boosting manufacturing competitiveness through the focus on innovation, emphasizing talent attraction, international cooperation and technological upgrades in the GBA. The following sections depict the challenges facing the GBA and the lessons from Germany and Japan.

3.1 Uneven Distribution of Service Sector Share in GDP Within the GBA

3.1.1 To predict the development path of the economic structure of the GBA, we can learn from those of the San Francisco Bay Area and the Tokyo Bay Area. As shown in Figure 1, the service sectors in all San Francisco Bay Area cities have exceeded 50% of GDP since 2009. Similarly, Figure 2 shows that the service sector has played a significant role in the cities of the Tokyo Bay Area since 1990 (Figure 2).

3.1.2 The Tokyo Bay Area and the San Francisco Bay Area have transitioned from a manufacturing economy to a service-oriented economy, which was achieved through industrial upgrading, as well as the growth of high-tech and financial industries. In Section 3.3, the case of Germany will be examined, as the country has a service sector that accounts for more than 62% of its GDP (as shown in Figure 3) and is also known for the high quality of its industrial production.

Figure 1: Share of service sector in GDP for all counties in the San Francisco Bay Area

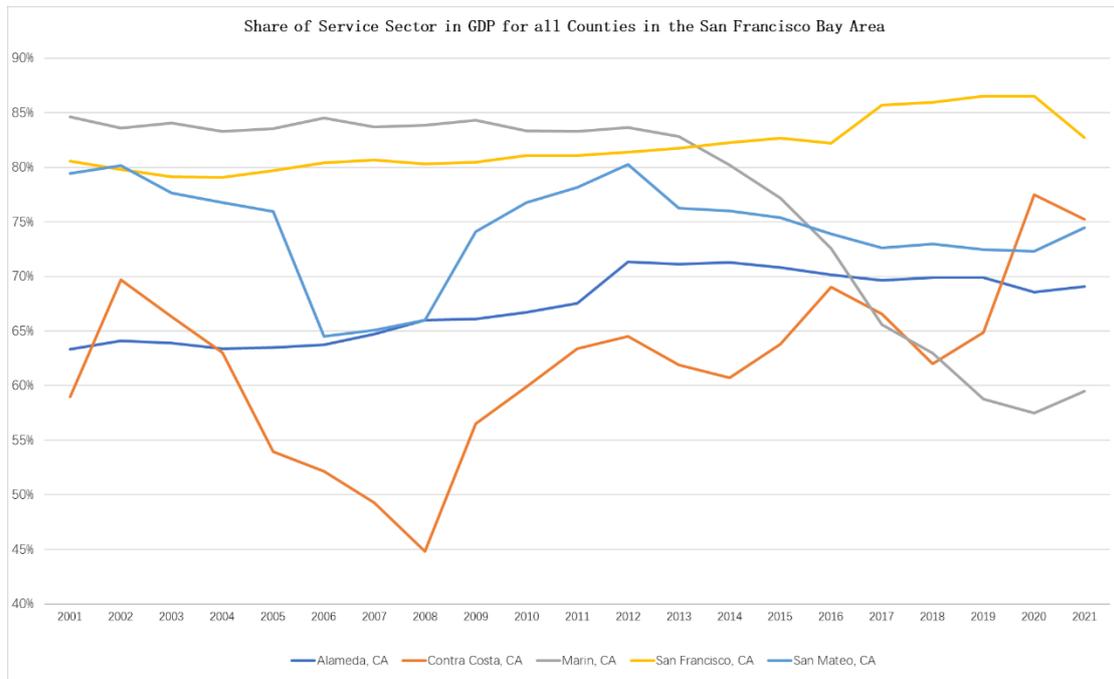


Figure 2: Share of service sector in GDP for all prefectures in the Tokyo Bay Area

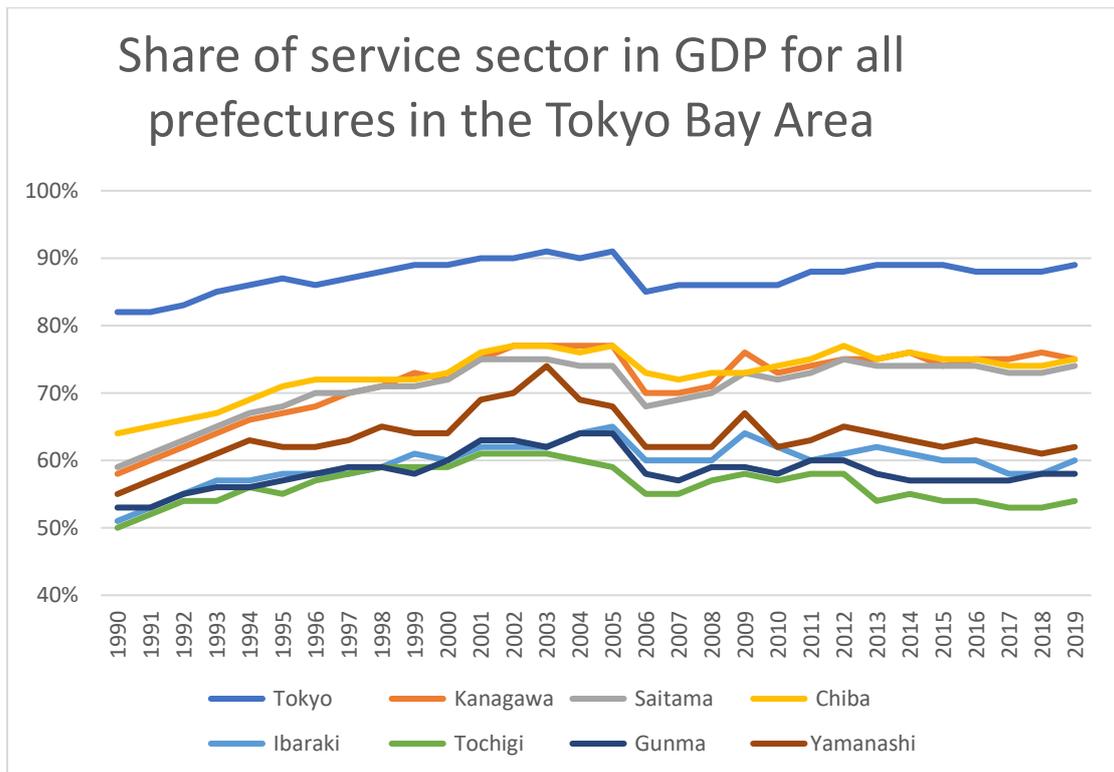
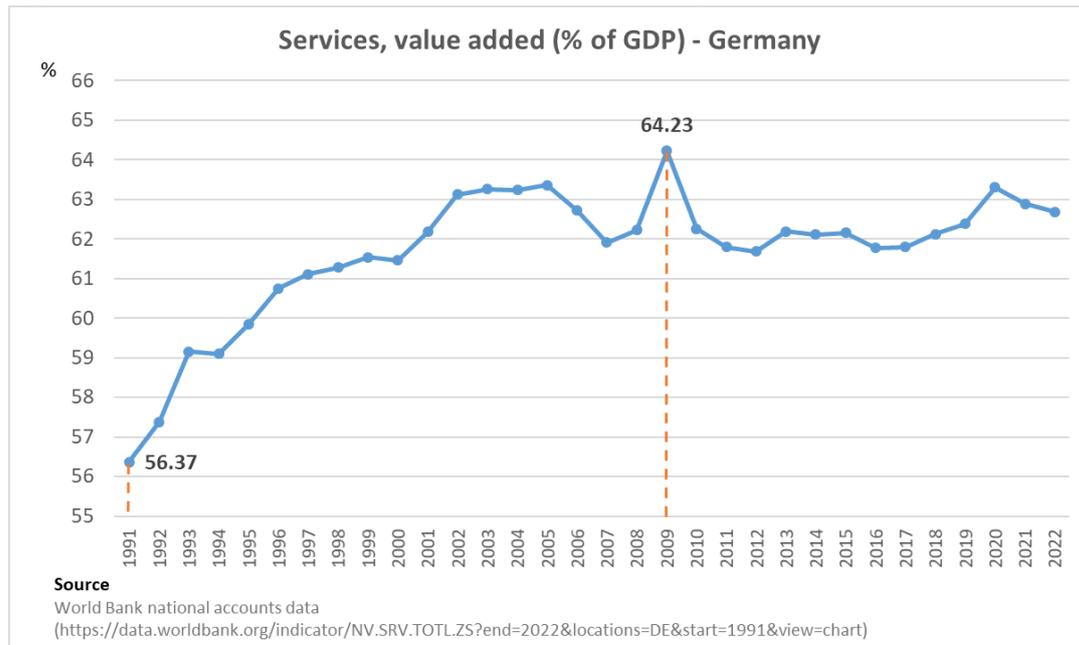


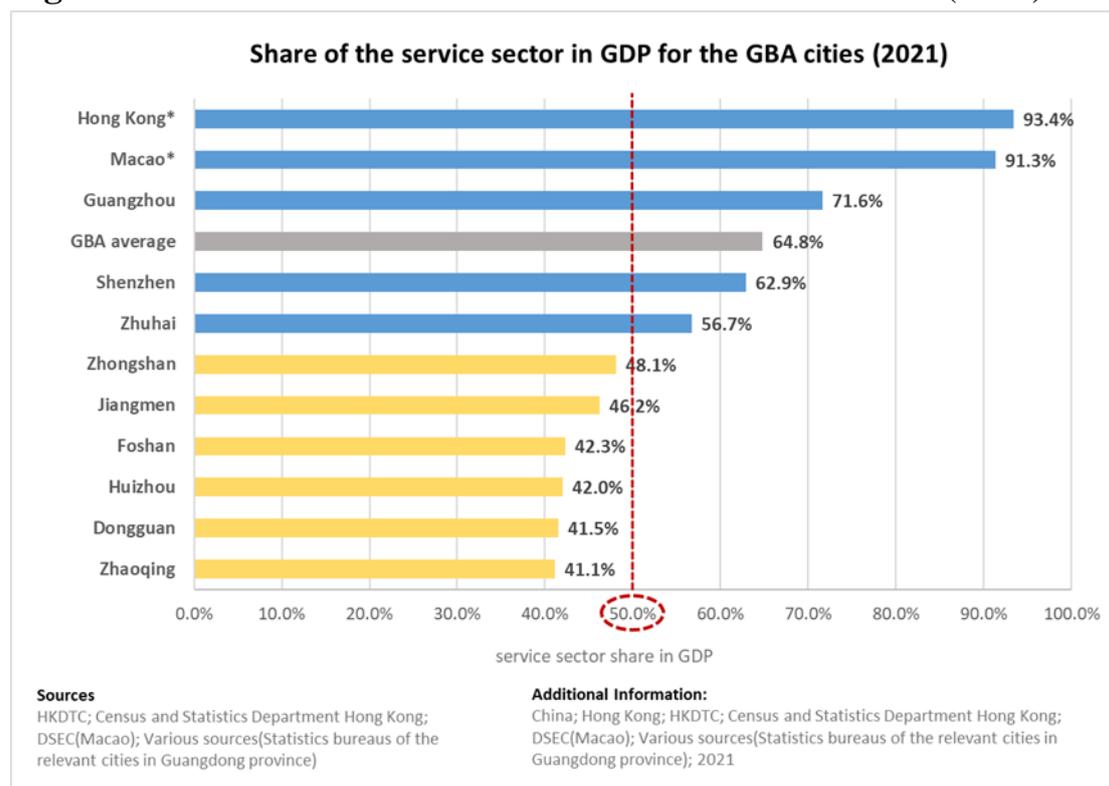
Figure 3: Value-added in the service sector as percent of GDP in Germany



3.1.3 The main industries in the GBA include manufacturing and trade. As shown in Figure 4a, the GBA’s service sector accounted for 64.8 per cent of GDP on average in 2021 and was slightly above the world’s figure (64.4% in 2021, according to The World Bank), indicating that the GBA’s economy was shifting further towards the tertiary industry. However, compared with San Francisco and Tokyo Bay Areas, the GBA’s service sector is less developed. In terms of the high-end service sector, the gap between the GBA and other world-class bay areas is obvious. In 2021, the GBA has the lowest share of the service sector in GDP among the three major bay areas. The two SARs, Hong Kong and Macao, are the two cities with the highest share of the service sector in GDP, reaching 93.4% and 91.3%, respectively. If Hong Kong and Macao were excluded, the share would be 50.31%,³¹ which is lower than that of the YRD (55.7%). A major challenge in the development of the GBA is that, among the remaining nine Mainland GBA cities, apart from Guangzhou, Shenzhen, and Zhuhai, where the share of the service sector is around 60-70% of the GDP, the other six cities have a service sector that accounts for less than 50% of their GDP. There has also been no significant growth over the last two decades, and in some cities, the growth of the service sector has even been negative (Figure 4b).

³¹ Calculated from Figure 4a

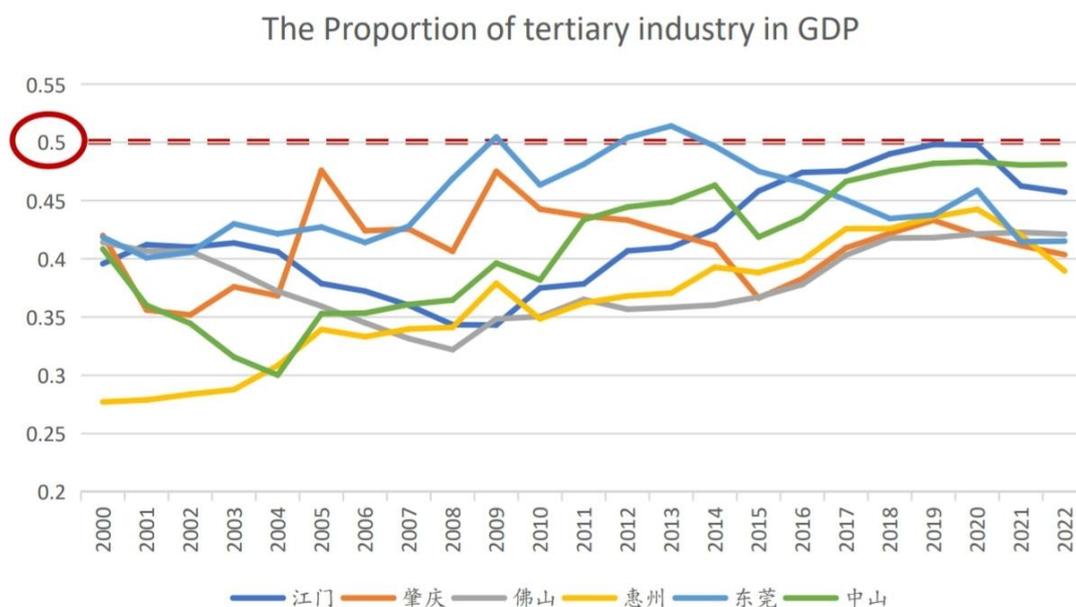
Figure 4a: Share of the service sector in GDP for GBA cities (2021)



3.1.4 Literature shows that regions with higher per capita income will perform better in the development of their service sectors than those with low per capita income, thereby leading to the persistence of regional inequality.³² Sustained inequality among GBA cities is against the national goal of common prosperity. It also undermines the effectiveness of long-term integration and affects the overall growth potential of the GBA. To coordinate the pace of development between different regions, the guideline, “*Opinions of the CPC Central Committee and the State Council on Establishing a New Mechanism for More Effective Balanced Regional Development*”, jointly released by the CPC Central Committee and the State Council in November 2018 called for the establishment of a regional strategic coordination mechanism, improvements in the market integration development mechanism and a deepening of the regional cooperation mechanism.

³² Ma N, Shum WY, Han T, Cheong TS. Global Inequality in Service Sector Development: Trend and Convergence. *Front Psychol.* 2021 Nov 25;12:792950. doi: 10.3389/fpsyg.2021.792950. PMID: 34899547; PMCID: PMC8654734.

Figure 4b: The Proportion of Tertiary Industry in GDP

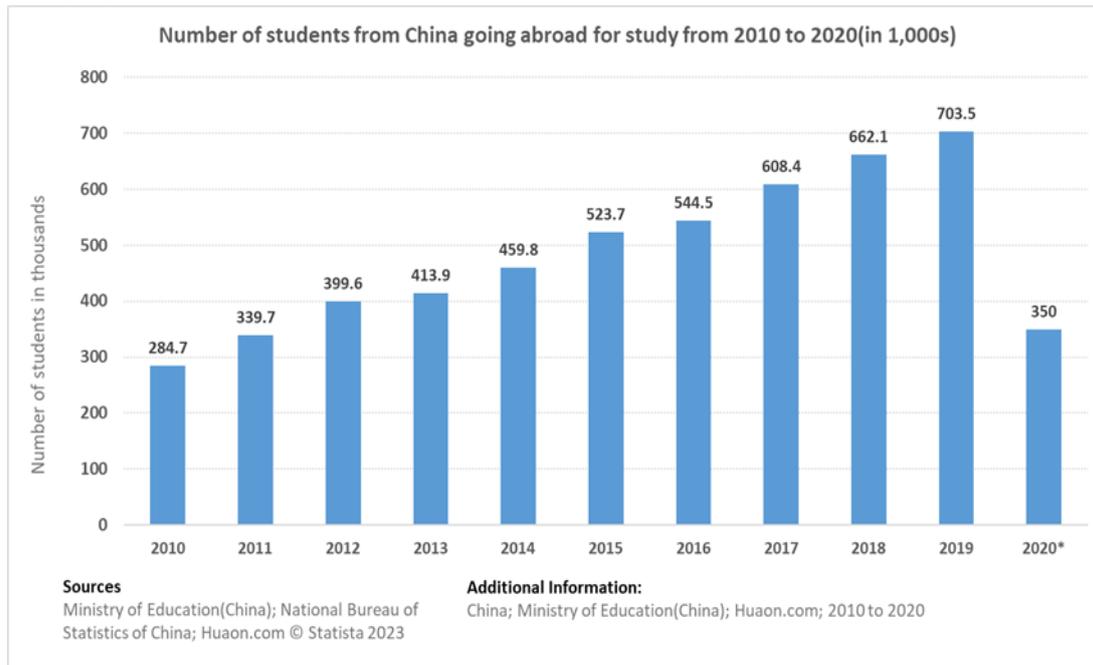


3.1.5 As residents in less-developed cities often do not have enough purchasing power, it is necessary to accelerate the development of exportable service industries in these cities. Currently, China has a trade deficit in service sectors such as tourism and education. Before 2008, China’s tourism service trade, as one of the service industries in surplus, played an important role in increasing foreign exchange income and balancing international payments. After 2009, the deficit in China’s tourism service trade emerged, and the size of the deficit also rapidly grew.³³ The number of Chinese students going abroad for study kept increasing before Covid-19. In 2019, around 703,500 Chinese students left China to pursue overseas studies (Figure 5), making China the largest country of origin for international students in the world.³⁴ Therefore, the service sector needs to be expanded and opened up.

³³ Guo, C. and Liao, C. (2017) Research on the Deficit of China’s Tourism Service Trade and Countermeasures. *American Journal of Industrial and Business Management*, 7, 170-178. doi: 10.4236/ajibm.2017.73013.

³⁴ Source: <https://www.statista.com/statistics/227240/number-of-chinese-students-that-study-abroad/>

Figure 5: Number of students from China going abroad for study (1,000 people)



3.2 Importance of A Balanced Service-Oriented Economic Structure Among GBA Cities

3.2.1. Avoid middle income trap:

Over the past few decades, some mainland cities in the GBA have taken advantage of their relatively cheap labour to form a labor-intensive manufacturing economy. However, as the demographic dividend gradually fades and labour costs rise, investors are poised to gradually shift their supply chains to countries and regions offering even lower costs. In the long run, such misaligned development of the GBA might cause its less-developed cities to fall into the “middle-income trap”, a situation wherein an economy loses its competitive edge in the export of manufactured goods due to rising costs and is unable to transition to a high-income economy. The concept first appeared in the World Bank’s “East Asian Economic Development Report (2006)”, referring to the phenomenon in which a country’s per capita GDP has always hovered in the range of USD 4,000-12,000 but cannot break through the USD 12,000 barrier. Countries that fall into this trap are also often prone to large economic fluctuations or stagnation. Many developing countries, such as Brazil, Mexico, Argentina

and Chile, have had similar experiences.³⁵ Countries that were trapped generally had the following four problems: excessive income disparity leads to insufficient domestic demand, import substitution strategy hinders economic efficiency³⁶, urbanization and industrialization are not synchronized, and technological innovation progress is slow.³⁷

3.2.2 Avoid backwash effect:

There is still a large development gap within the GBA, with a need to strengthen synergy. Resources in some regions and fields need to be optimally allocated to avoid a “backwash effect”, which entails the migration of production factors from less-developed cities to the developed ones and, in turn, exacerbates the development disparity among GBA cities. The developed cities in the GBA should play their role as core engines, enhance their ability in driving the development of the surrounding regions, and expand the interconnection of production factors to narrow the development gap between regions and enhance the overall coordinated development.

3.2.3 Meet the growing demand for high value-added services:

With the continuous enhancement of the overall strength of the GBA, the level, scale and structure of residents' consumption are also constantly upgrading, resulting in an increasing demand for high value-added services, such as education, health, wealth management, insurance and other forms of financial services. To meet the growing demand, the GBA needs to build a modern services sector and accelerate its development.

3.2.4 Support productivity growth:

Building the GBA into an international science and technology innovation centre with global influence is a national strategy. From Figure 6, approximately 366,000 invention patents were registered by entities in the GBA in 2020, up from around 62,000 in 2012. However, the growth has

³⁵ <https://m.jiemian.com/article/5315884.html>

³⁶ Import substitution is a policy adopted by some developing countries to minimize their reliance on developed countries by limiting imports and encouraging domestic manufacturing. When one country seeks to optimize its manufacturing business by eliminating imports, it affects the exports of another country, and other countries may also stop importing products from this country, potentially resulting in a trade war in the long run. In addition, developing an industry that a country does not have comparative advantage is not efficient, according to trade theory.

³⁷ <https://m.jiemian.com/article/5315884.html>

slowed since 2019 (Table 2b). As the number of invention patents is an indicator of the use of technology in production, this implies that the GBA might be facing a bottleneck in productivity growth in the long run.

Figure 6: Number of invention patents registered by entities in the GBA

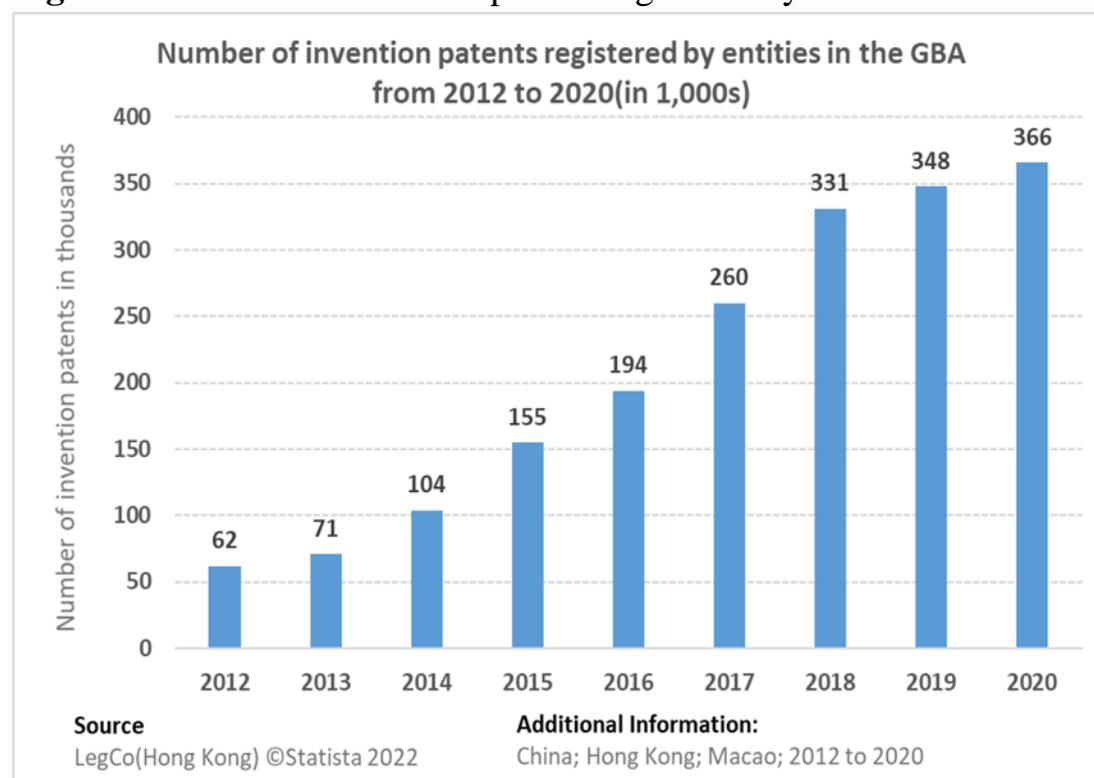


Table 2b: Growth rate of invention patents registered by entities in the GBA

Year	2013	2014	2015	2016	2017	2018	2019	2020
Growth Rate	14.5%	46.5%	49.0%	25.2%	34.0%	27.3%	5.1%	5.2%

As an international financial centre, Hong Kong has higher foreign direct investment than other cities in the GBA (Figure 7a). The reason why Hong Kong enjoys this status is that the concept of "One Country, Two Systems" allows Hong Kong to continue to be open to the world. As can be seen from Figure 7b, FDI in GBA cities, excluding Hong Kong, is generally growing, but in some cities such as Foshan and Dongguan, the FDI was dropping in the past decade, implying that cities that focus on manufacturing may find it difficult to attract FDI in the long term. Manufacturing needs a complete network of production-enhancing services to move up the value chain, especially financial services and legal protection of property rights.

However, as can be seen from the analysis above, the growth in FDI and invention patent registration in the GBA has slowed. To maintain the region's lead in manufacturing, increasing the share of the production-enhancing service sector in the GDP of each GBA city is needed.

Figure 7a: FDI in GBA cities (in 100 million USD)

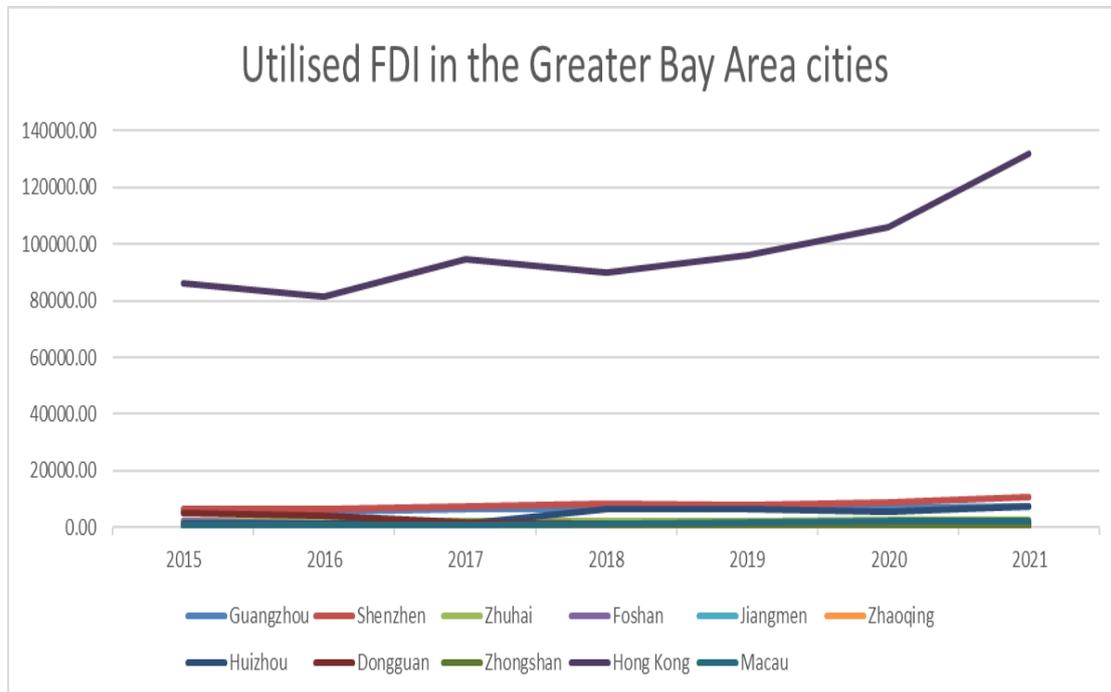
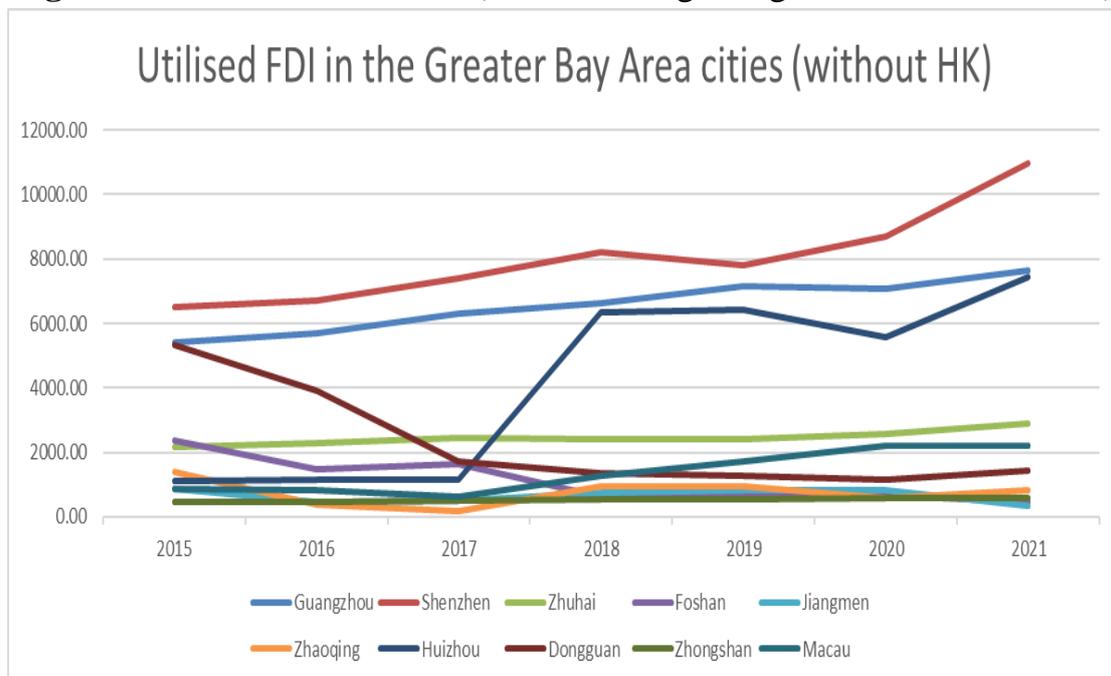


Figure 7b: FDI in GBA cities (exclude Hong Kong, in 100 million USD)



3.3 How to Overcome the Middle-Income Trap: Japan's Experience

3.3.1 Japan has done three things to successfully overcome the middle-income trap. Firstly, increasing residents' income and stimulating the consumption potential of people. As early as the sixties and seventies of the last century, Japan implemented a "national income doubling plan", and the income and living standards of its population were greatly improved. In the 1980s, Japan continued to make efforts to raise the minimum wage of population and increase the proportion of workers' compensation in gross national income, and throughout the 1980s, the growth rate of Japanese wages was much higher than the growth rate of GDP. The Japanese government also focused on promoting tax and fee reductions, reducing the tax burden on the people, thereby improving consumption power. In addition, it also alleviated people's misgivings about spending by improving pension insurance and unemployment insurance schemes.

3.3.2 Secondly, the Japanese government adjusted the country's science and technology development strategy by focusing on the upgrade of the industry structure and tilting the focus of development towards knowledge-intensive industries. As a result, Japan greatly reduced the scale of traditional manufacturing sectors, such as shipbuilding, steel and oil, and supported such industries as electronic communications, computing and services.

3.3.3 Thirdly, the country committed to developing small and medium-sized cities and narrowing regional economic gaps. In the 1980s, the economic development of various regions in Japan showed a clear imbalance. In order to narrow the regional economic gap, the Japanese government delegated part of the functions of the central cities to other parts of the country, effectively driving the rise of small cities and regions. Japan's efforts to support the development of small cities and rural industries mitigated regional imbalances.³⁸

³⁸ <https://m.jiemian.com/article/5315884.html>

3.3.4 Gleaning from Japan's experience, the GBA should increase the weight of the services sector in less-developed cities by accelerating the development of advanced manufacturing and producer services, so as to narrow the income gap between developed cities and less developed ones and avoid falling into the middle-income trap.

3.4 How Does the Development of the Service Sector Promote Industry Upgrade: Germany's Experience

3.4.1 Germany, as a highly developed industrial country with an export-oriented economy, attaches great importance to the development of its service sector, which has advanced rapidly in recent years, especially in trade, finance, insurance, tourism and exhibition.

3.4.2 The industrial sector plays an important role as a driver of growth, prosperity and employment in Germany. For decades, German manufacturers have earned a good reputation for providing innovative and high-quality products. The primary source of Germany's economic comparative advantages is advanced manufacturing products and a strategic focus on an information-based economy. In addition, Germany places emphasis on craftsmanship and vocational education, which resulted in the provision of highly-qualified workers and engineers. German manufacturing remains competitive through product innovation and higher labour productivity.³⁹ The country is a world leader in many fields, such as vehicle manufacturing, mechanical and plant engineering, and chemistry and pharmaceuticals. To maintain its competitiveness in the industrial sector, in 2018, the German government announced the *High-Tech Strategy 2025* (HTS 2025), aiming to promote research and innovation, strengthen Germany's core competitiveness, ensure sustainable development, and achieve the target of 3.5% of GDP expenditure on research by 2025. The German government has integrated all its research, technology, and innovation policy measures into its *High-Tech Strategy 2025*. All federal ministries worked together to develop this strategy and coordinated their respective policies.⁴⁰

³⁹ [https://www.bartleby.com/essay/German-Trade-and-Comparative-Advantage-PKGUJJFPBYRFA \](https://www.bartleby.com/essay/German-Trade-and-Comparative-Advantage-PKGUJJFPBYRFA)

⁴⁰ <https://www.bmwk.de/Redaktion/EN/Dossier/modern-industry-policy.html>

3.4.3 In recent decades, the structure of the German economy has undergone fundamental changes. The share of the manufacturing sector in gross value added was 36.5% in 1970 and has declined for many years; these shifts do not reflect a decline in the importance of the industry but are primarily the result of a fundamental change in the value creation process, in which product-related services are playing an increasing role.⁴¹ Germany gradually transitioned to a service-based economy in the late 1980s. Just like most developed countries, the service sector is an important pillar of the economy in Germany. Knowledge-driven services in particular have a strong impact on the German economy, as they account for around 30% of Germany's total value added.⁴² The creative industries have also become an economic force in the country.

3.4.4 The German service sector has obvious local characteristics. For example, German banks adhere to mixed business operations and various financial services such as commercial banks, investment banks, securities, and insurance, which are readily available. Secondly, the German government takes various measures to protect and promote the development of the country's service sector. On the one hand, the government adopts measures to restrict the import of services; on the other hand, through fiscal, monetary and industrial development policies, it promotes the rapid development of the country's service sector and increases service exports.⁴³

3.4.5 The high qualifications of German service personnel are well known in the international market. Germany ranks second among global service exporters and first in skill-intensive services such as technical, IT, financial, and environmental services,⁴⁴ resulting in a large scale and highly concentrated service sector. For example, in the exhibition industry, six of the world's top ten well-known exhibition companies (by turnover) are from Germany.

3.4.6 The German model is characterized by strong manufacturing capabilities, an export orientation buttressed by first-class products and

⁴¹ <https://www.bmwk.de/Redaktion/EN/Dossier/modern-industry-policy.html>

⁴² <https://www.german-business-portal.info/en/eu-service-market/service-industry>

⁴³ http://intl.ce.cn/main/rd/mo/200707/16/t20070716_12187277.shtml

⁴⁴ <https://www.german-business-portal.info/en/eu-service-market/service-industry>

services, stakeholder-oriented corporate governance, emphasis on the development of small and medium-sized enterprises, a well-educated workforce and solid infrastructure, and comprehensive structural reforms.⁴⁵ The German industry is characterized by a favourable blend of internationally active companies and well-positioned SMEs. SMEs play an important role in the German model, which is also worth learning from by the GBA.

3.4.7 The experience of Germany illustrates that the development of the service sector and high-end manufacturing can be complementary. The upgrading of the traditional OEM manufacturing industry entails the use of advanced technology and brand building, which require the protection from relevant intellectual property laws. The enactment and enforcement of such legislation, and the importance people attach to the law, require the development of a fairly mature service-based economy with a significant number of highly educated people and a mature legal industry. Hong Kong has advantages in financing, market information and intellectual property management and can work with enterprises in the GBA to assist in the regional industrial upgrading.

⁴⁵ Li Daokui and Roland Berger, Future Path for China's Economy Future: The German Model for China

CHAPTER 4. SERVICE SECTOR GROWTH PROJECTIONS

The major potential obstacle to the development of the GBA is the significant disparity in the percentage of GDP attributed to the service sector among its cities, with little indication of convergence in the future. Excluding Hong Kong and Macao, the service sector of the nine Mainland GBA cities only accounts for 50.31% of the GDP in 2021 (Table 1), which is significantly lower than that of the San Francisco Bay Area and the Tokyo Bay Area (each around 75%). At present, the service sector accounts for about 40% to 50% of GDP in six of the nine cities in the GBA, namely Dongguan, Foshan, Huizhou, Jiangmen, Zhaoqing and Zhongshan, and some are even regressing (Figure 4b), which is not conducive to the GBA's long-term sustainable development. Cities in the GBA that fail to transform their service sectors are prone to falling into the middle-income trap in the long run, resulting in a brain drain. Hence, improving the service sector in the six less-developed cities is imperative for the long-term development of the GBA. To determine the benchmark of the service sector share in GDP for the six aforementioned cities, we will consider the following:

1) To build the GBA into a service-based economy, a reasonable target is to have the share of the service sector exceed 50% in all GBA cities. As the GBA needs to play a supporting and leading role in the country's economic development and opening up, the ratio should be above the national average (around 52.8% in 2022 according to National Bureau of Statistics of China);

2) Second, as Guangzhou takes the lead among the Mainland GBA cities in terms of the service sector share in GDP, setting a ratio higher than that of Guangzhou will be unrealistic. Guangzhou's service sector share in GDP was 71.6% in 2021 (Figure 4a);

3) Third, we also take account of Germany's relatively balanced development between high-end manufacturing and services sectors. Germany's service sector share in GDP was around 62% in 2021 (Figure 3).

As a result, setting a benchmark of 60% will be a reasonable and achievable target. For simplicity and illustration purpose, we assume all the six cities

under study have the same target of service sector share in GDP. We perform two simulations with targets of 60% and 70% so that we can estimate the resources each city would need to achieve these goals. (The case for the target of a share of 70% is presented in Appendix 2).

4.1 Methodology

4.1.1 To estimate the resources needed to speed up the increase in the share of the service sector in the GDP of some less-developed cities within the GBA, we conduct a scenario analysis on the assumption that the output of primary and secondary industries is kept at the 2021 level. Four scenarios are considered:

Scenario 1a: Projections for the share of the service sector in GDP with a target of 60% by 2030 under fixed value-added increment;

Scenario 1b: Projections for the share of the service sector in GDP with a target of 60% by 2030 under fixed percentage increment;

Scenario 2a: Projections for the share of the service sector in GDP with a target of 70% by 2030 under fixed value-added increment;

Scenario 2b: Projections for the share of the service sector in GDP with a target of 70% by 2030 under fixed percentage increment.

The moderate growth scenarios 1a and 1b are reported below, whereas the high growth scenarios 2a and 2b are reported in Appendix 2.

4.1.2 For scenarios 1a and 2a, we assume that the primary and secondary sectors have zero growth, and all growth comes from the tertiary sector (the service sector). We set the same target of 60% for GBA cities whose share of the service sector in GDP is below 60% in 2021.

4.1.3 Based on this 60% target, for scenario 1a, we assume that the value added to the service sector grows at a constant amount each year from 2021 to 2030. We calculate the constant amount of value-added needed for the service sector to reach a share of 60% by 2030 and report the result in Table 3a. For scenario 2a, instead of assuming the service sector growth at a constant absolute amount, we assume that the annual growth rate of the share is constant, being one-ninth of the gap between the current share and the 60% target in 10 years. For example, in Table 4b, for Dongguan, the

share of the service sector in GDP was 40.8%; the gap between 40.8% and the 60% target in 2030 is 19.2%, and we divide 19.25 by 9 years, reckoning that each year we need to fill this gap by 2.13%.

4.1.4 We can gauge the implication through the lens of the labour market. For example, the gap between the service sector share of GDP in Dongguan and the 60% target appears to be starkest. It will require an annual increment of RMB 58.82 billion in the service sector in order for Dongguan to attain this target by 2030. Based on the current wage data of Dongguan, this will be equivalent to creating 250,000 jobs in the financial sector, 410,000 jobs in the education sector, or 290,000 jobs in health and social work (in 2021, the average annual wage in the financial industry in Dongguan was RMB 237,061, and those in the education industry and in the health and social work industry were RMB 144,630 and RMB 204,955, respectively).⁴⁶

4.2 Scenario 1a: Projections for the share of the service sector to GDP under fixed value-added increment, with a target of 60% by 2030

For simplicity, scenario 1a assumes a fixed annual increment in the value-added to the service sector in each city. We calculate the annual increment of the service sector output in each city needed to make the city’s service sector grow to 60% by 2030. Table 3a lists the increment needed in different cities. Table 3b projects each city’s resulting share of the service sector for each year.

Table 3a Annual increment of the service sector to make its share of GDP grow to 60% of GDP by 2030 (RMB Billion)

	Dongguan	Foshan	Huizhou	Jiangmen	Zhaoqing	Zhongshan	Zhuhai
Annual value added	58.82	59.86	24.84	13.75	13.89	11.84	3.61

⁴⁶ Statistics Bureau of Dongguan Municipality http://tjj.dg.gov.cn/tjzl/tjgb/content/post_4027407.html

Table 3b Projections for the share of the service sector to grow to 60% of GDP in each city by 2030

	Dongguan	Foshan	Huizhou	Jiangmen	Zhaoqing	Zhongshan	Zhuhai
2021	40.80%	42.27%	42.03%	46.25%	41.13%	48.05%	56.66%
2022	42.91%	44.23%	44.01%	47.79%	43.20%	49.39%	57.03%
2023	45.03%	46.20%	46.01%	49.33%	45.30%	50.74%	57.41%
2024	47.18%	48.19%	48.02%	50.88%	47.41%	52.08%	57.78%
2025	49.34%	50.18%	50.04%	52.42%	49.53%	53.42%	58.15%
2026	51.50%	52.17%	52.06%	53.96%	51.65%	54.75%	58.52%
2027	53.65%	54.15%	54.07%	55.48%	53.76%	56.08%	58.89%
2028	55.79%	56.12%	56.07%	57.00%	55.87%	57.40%	59.26%
2029	57.91%	58.07%	58.05%	58.51%	57.95%	58.70%	59.63%
2030	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%

4.3 Scenario 1b: Projections for the share of the service sector to GDP under fixed percentage increment, with a target of 60% by 2030

Scenario 1b assumes a fixed percentage annual increment in the share of the service sector to GDP in each city. We estimate the annual percentage increment needed in the share of the service sector to GDP in each city to make the city’s service sector grow to 60% by 2030. Table 4a lists the increment needed in different cities. For example, for manufacturing cities, such as Dongguan and Foshan, to achieve the said target by 2030, the annual percentage increment in the service sector should be 2.13% and 1.97% of the GDP, respectively. For non-manufacturing cities, such as Zhuhai, the corresponding annual increment would be 0.37%. Table 4b projects the share of the service sector in each city. Table 4c projects the resulting monetary value of such an increment for each city.

Table 4a Annual increment in the share of the service sector to GDP with a target of 60% by 2030 (%)

	Dongguan	Foshan	Huizhou	Jiangmen	Zhaoqing	Zhongshan	Zhuhai
Percentage Increase	2.13%	1.97%	2.00%	1.53%	2.10%	1.33%	0.37%

Table 4b Projections for the share of the service sector with a target of 60% of GDP by 2030

	Dongguan	Foshan	Huizhou	Jiangmen	Zhaoqing	Zhongshan	Zhuhai
2021	40.80%	42.27%	42.03%	46.25%	41.13%	48.05%	56.66%
2022	42.94%	44.24%	44.03%	47.78%	43.23%	49.38%	57.03%
2023	45.07%	46.21%	46.02%	49.31%	45.33%	50.71%	57.40%
2024	47.20%	48.18%	48.02%	50.84%	47.42%	52.03%	57.77%
2025	49.34%	50.15%	50.02%	52.36%	49.52%	53.36%	58.14%
2026	51.47%	52.12%	52.01%	53.89%	51.62%	54.69%	58.51%
2027	53.60%	54.09%	54.01%	55.42%	53.71%	56.02%	58.89%
2028	55.73%	56.06%	56.01%	56.95%	55.81%	57.34%	59.26%
2029	57.87%	58.03%	58.00%	58.47%	57.90%	58.67%	59.63%
2030	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%

Table 4c Annual increment of the service sector with a target of 60% of GDP by 2030 (RMB Billion)

	Dongguan	Foshan	Huizhou	Jiangmen	Zhaoqing	Zhongshan	Zhuhai
2022	41.23	42.94	17.75	10.53	9.79	9.35	3.36
2023	44.43	46.09	19.07	11.17	10.54	9.86	3.41
2024	48.02	49.59	20.53	11.86	11.38	10.40	3.47
2025	52.07	53.51	22.17	12.62	12.32	10.99	3.54
2026	56.64	57.91	24.02	13.46	13.39	11.64	3.60
2027	61.85	62.88	26.10	14.38	14.60	12.34	3.66
2028	67.81	68.52	28.47	15.40	15.99	13.11	3.73
2029	74.67	74.95	31.18	16.53	17.58	13.95	3.80
2030	82.64	82.33	34.29	17.80	19.42	14.88	3.87

4.4 Service Industries with Growth Potential in Each GBA City

4.4.1 To achieve convergence of the share of the service sector in GDP in the GBA, we have to determine which service industries in each of the GBA cities have the highest growth potential. Different parts of the GBA have dissimilar resources and advantages, so cities can take different responsibilities in the development of the service sector.

4.4.2 *The Outline Development Plan for the Guangdong-Hong Kong-Macao Greater Bay Area* proposes to build an international financial hub and vigorously develop characteristic financial industries. Hong Kong, Macao, Guangzhou and Shenzhen can join hands to build a regional financial network to serve other sectors in GBA.

4.4.3 Taking account of a variety of factors, such as the industrial complementarity of the GBA as a whole, the current state of industry development in each city, together with their own planning and positioning, as well as synergies and healthy competition among cities, we believe that cities in the GBA have growth potential in the following service categories:

-Guangzhou: According to the city's *14th Five-Year Plan*, Guangzhou has the potential to develop itself into an international commercial and trade centre and an integrated transport hub while enhancing its function as a technological, educational and cultural centre, and developing into a global metropolis. Guangzhou is the transportation hub of the GBA and has the potential to develop financial and exhibition industries.

-Shenzhen: Shenzhen has the potential to develop its high-end technology service sector and financial sector.

-Zhuhai: Tourism, exhibition, and finance. *The "14th Five-Year Plan for Zhuhai's Financial Reform and Development"* proposes that during the "14th Five-Year Plan" period, Zhuhai will adhere to the goal of being a financial centre with regional characteristics. Zhuhai has the potential to develop financial services. In 2020, the added value of Zhuhai's financial industry reached RMB 40.27 billion, accounting for 11.6% of GDP and contributing 30.2% of GDP growth.⁴⁷

-Foshan: Potential industries include modern logistics, business exhibition, industrial design, service outsourcing and other productive service industries.

-Dongguan: Potential industries include e-commerce, first-store economy,⁴⁸ night-time economy.⁴⁹

-Zhongshan: Potential industries include those in the science and technology service sector, information service sector, health service sector and business service sector.

⁴⁷ http://gdjr.gd.gov.cn/gdjr/jrzx/dfjr/content/post_3719511.html

⁴⁸ The first-store economy refers to an economic form in which a region uses its unique resource advantages to attract domestic and foreign brands to open stores for the first time in the region, so that the brand value and regional resources can be optimally coupled together and thus have a positive impact on the economic development of the region.

⁴⁹ The Office of Dongguan Municipal People's Government issued a notice on the implementation plan of Dongguan to accelerate the development of a regional consumption center city. (2022, November 28). https://www.dg.gov.cn/gkmlpt/content/3/3918/post_3918432.html#684

-Huizhou: Relying on the science and technology town,⁵⁰ it hosts headquarters of small and medium-sized enterprises as well as R&D offices and provides comprehensive services such as pilot production, achievement transformation, innovation and entrepreneurship, and scientific and technological consulting.⁵¹

-Jiangmen: Introduce an ESG scoring system to manage local manufacturing enterprises and support related brand management service industries.⁵² In addition, Jiangmen is the filming location for many popular TV series, which can develop the film and television industry.

-Zhaoqing: Potential industries include business services and tourism.⁵³

⁵⁰ Xie Dixiang, Wang Zhe..Research on the development mechanism of science and technology towns under the background of Industry-city integration -- A case study of Tonghu Science and Technology Town in Huizhou. *Urban Development Studies*,2020,27(09):25-29.

⁵¹ Zhongshang Industrial Research Institute. (2022, February 23) Analysis of Huizhou's industrial layout and industrial investment map.

<https://www.askci.com/news/chanye/20220223/1410511745366.shtml>

⁵² Zhang Xiao. The influence of green credit on the industrial structure of Jiangmen -- An empirical study based on grey relation model. *Shanxi Agricultural Economy*,2021(12):187-189.DOI:10.16675/j.cnki.cn14-1065/f.2021.12.085.

⁵³ www.askci.com. (2022, March 31). Analysis of industrial layout and industrial investment map of Zhaoqing in 2022.

<https://m.163.com/dy/article/H30F17GR051481OF.html>

CHAPTER 5. THE IMPORTANCE OF FINANCIAL SERVICES DEVELOPMENT TO THE ECONOMY OF THE GBA

Wei Jianguo, former Vice Minister of Commerce of China, mentioned that the weakness of the GBA, as compared to other bay areas in the world, is the development of its service sector.⁵⁴ Drawing on the experience of other advanced economies with strengths in science and technology and advanced manufacturing, it is imperative for the GBA to grow the service sector, which will serve as a keystone of the entire development strategy. Finance and professional services, in particular, are essential for propping up productivity in the real economy, as they can lower the cost of capital, draw and retain high-quality talent, and provide legal and intellectual property protection. Financial services have powered industrialisation and innovation in the real economy through the years since the reform and opening-up of China in 1978. The milestones in the financial sector reform and the evolving landscape of the sector are reported in Appendix 3. It is important to accelerate financial service development in the GBA for the following reasons:

1. Support the growth of the new economy and advanced manufacturing industries.
2. Expand the funding channels available to SMEs.
3. Enhance wealth management capabilities in the GBA.

5.1 Financial Services Support Advanced Manufacturing and the New Economy Sector

5.1.1 Scientific and technological innovation is a high-risk, trial-and-error process, and the support from direct financing systems such as capital markets is crucial. The development of the financial industry is indispensable for transforming the GBA into an international hub of scientific and technological innovation.

5.1.2 In many Mainland GBA cities, the majority of industrial operations still need upgrading, and a rich ecosystem of high-value-added and high-tech enterprises is yet to be formed. Industrial upgrading requires upfront

⁵⁴ Wei Jianguo: The Guangdong-Hong Kong-Macao Greater Bay Area should lead the development of the global Bay Areas in three steps. Chinese Economists 50 Forum the Official Paper No.2023-03-18.https://m.thepaper.cn/newsDetail_forward_22364755

investment and has a long payback period. The development of the financial sector can provide financing channels for upgrading small and medium-sized enterprises, effectively alleviating their financing pressures, and thus aiding their development and growth. Financial development drives technological innovations through facilitating capital mobilization and risk sharing.⁵⁵ Through the guidance of the financial market during the GBA's construction, industries in various regions can further achieve transformation and upgrading.

5.1.3 From an industrial structure perspective, the development of emerging industries and high-tech sectors in GBA requires the support of a larger variety of financial services and higher liquidity. Take Shenzhen as an example: the growth of its financial industry is positively correlated to the growth of the real economy. As of the end of December 2022, the city's manufacturing loan balance was RMB 821.72 billion, representing a year-on-year increase of 15.9%, which was 7.9 percentage points higher than the growth rate of various loans. The balance of loans to science and technology enterprises was RMB 835.47 billion, with a year-on-year increase at 31.9%. The balance of inclusive small and micro loans was RMB 1.5 trillion, with a year-on-year increase at 23.8%, which was 15.8 percentage points higher than the growth rate of various loans.⁵⁶

5.1.4 However, the GBA's appeal for technological start-ups should not be taken for granted as they generally need to expand their overseas business in order to achieve a scale sufficient for sustaining operation. Overseas expansion creates demand for cross-border financing from enterprises. To attract entrepreneurial talents and technology start-ups to mainland GBA cities, the priorities would include strengthening connection with Hong Kong's capital market and diversifying direct financing channels from Hong Kong available to start-ups.

5.1.5 Furthermore, the financial industry is a high-value-added and capital-intensive industry. Improving the financial sector is an extremely efficient way to increase the share of the service sector in the GBA through

⁵⁵ Tadesse, Solomon A., Financial Development and Technology, William Davidson Institute Working Paper Number 749, February 2005.

Available at SSRN: <https://ssrn.com/abstract=681562> or <http://dx.doi.org/10.2139/ssrn.681562>

⁵⁶ http://www.sz.gov.cn/szst2010/sjfb/sjjd/content/post_10520141.html

its effects per se and potential spillover. We can draw upon the development experiences of major bay areas, such as the San Francisco Bay Area which is led by venture capital, supplemented by credit support from commercial banks and vigorously develops business incubators. The Tokyo Bay Area, on the other hand, has policy-based financial institutions at its core, supporting the development of modern service industries with multi-level credit guarantees and insurance mechanisms. These experiences provide valuable references for the construction of the modern financial services industry in the GBA.

5.2 Expanding Fund Supply for SMEs

5.2.1 There are approximately 2.5 million micro-enterprises, 270,000 small enterprises and 27,000 medium-sized enterprises in the nine Mainland cities in the GBA. In 2021, the balance of loans to SMEs in the GBA reached RMB 3.5 trillion (about USD 500 billion).⁵⁷

5.2.2 SMEs in the Mainland GBA cities need loans to meet their domestic financing needs, but they encounter difficulties in the application process, and some SMEs are unable to obtain sufficient funds. Many SMEs are concerned about their ability to obtain loans in the GBA because they fear that they do not have collateral or will not be able to provide the vast amount of information requested by banks. SMEs in the GBA still have a large unmet or even untapped financial services need, and Hong Kong financial institutions can encourage cross-border lending while improving service standards by helping SMEs meet relevant lending requirements.

5.2.3 According to a 2023 study published by Bain & Company,⁵⁸ about 60% of mainland enterprises need to obtain a large amount of capital, and more than 40% will be used for domestic investment and operation. About half of mainland SMEs indicated that they were likely to expand their operations to Hong Kong or Macao. More than one-third of mainland SMEs are interested in obtaining or have acquired Hong Kong insurance

⁵⁷ Frankie Leung, Herbert Lee and Wenting Zhao (2023), Greater Bay Area SME Report: A Story of Resilience and Opportunity. Bain & Company, and Hang Seng Bank, 10th January, 2023.

⁵⁸ Frankie Leung, Herbert Lee and Wenting Zhao (2023), Greater Bay Area SME Report: A Story of Resilience and Opportunity. Bain & Company, and Hang Seng Bank, 10th January, 2023.

and loan products, and nearly half (48%) of mainland SMEs are interested in using Hong Kong's wealth management services. Hong Kong's wealth management products are attractive to mainland SMEs mainly because they have better liquidity, easier access to foreign exchange and risk diversification.

5.2.4 Mainland enterprises can use Hong Kong for cross-border financing and fund management. Hong Kong's convenient lending services, professional wealth management services, flexible insurance policies and comprehensive cash and liquidity management can benefit Mainland SMEs and conglomerates, accelerate their development and expand their business scale.

5.3 Enhance Wealth Management Capabilities in the GBA

5.3.1 The development of the financial services sector helps the GBA retain wealth within the region. According to "Hurun Report China High Net Worth Family Succession 2022", there are 2.06 million high-net-worth families in China. Three of the top five cities with the largest number of wealthy households are in the GBA, including Hong Kong (211,000), Shenzhen (78,000) and Guangzhou (71,000), accounting for nearly 17% of the country's total, with Shenzhen seeing the fastest growth.

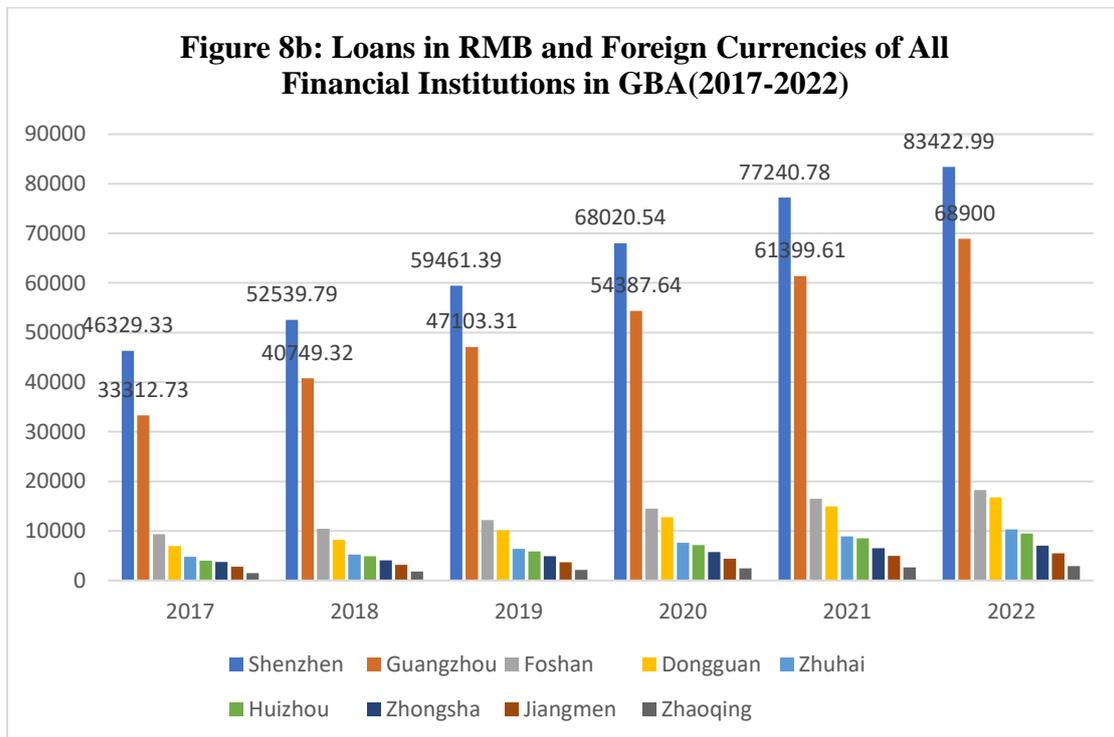
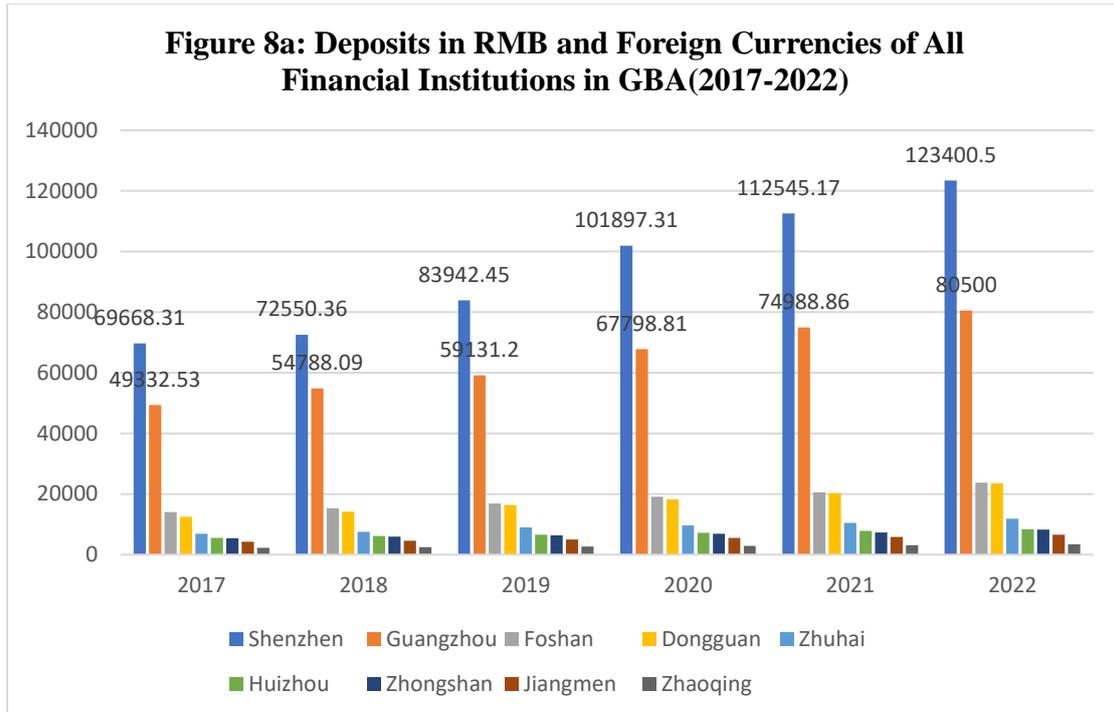
As displayed in Table 5, there was a consistent upward trend in household deposits in all cities from 2017 to 2021, and the annualized growth rate of the per capita household deposit was higher than that of the per capita GDP in all cities except Dongguan, suggesting that the demand for wealth management in the region was expanding rapidly.

Table 5: Annualized growth rates of household deposit, permanent population and GDP (2017-2021)

Cities\Annualized Growth Rate	Deposits of Households	Permanent Population	Per Capita Household Deposits	Per Capita GDP
Guangzhou	12.17%	1.88%	10.09%	6.69%
Shenzhen	16.89%	2.73%	13.78%	3.61%
Zhuhai	12.81%	4.48%	7.98%	1.96%
Foshan	9.59%	1.66%	7.79%	4.72%
Huizhou	10.68%	1.47%	9.12%	5.61%
Dongguan	10.36%	6.01%	4.1%	7.07%
Jiangmen	8.52%	0.95%	6.94%	5.99%
Zhongshan	9.96%	1.67%	8.13%	3.02%
Zhaoqing	9.45%	0.56%	8.85%	7.14%

5.3.2 As of 2022, Shenzhen, Guangzhou and Foshan are the top three cities in the GBA with the highest deposit balances of financial institutions in both domestic and foreign currencies. Shenzhen leads the way with a total balance of RMB 12.34 trillion, followed by Guangzhou (RMB 8.05 trillion), and Foshan (RMB 2.38 trillion). As shown in Figure 8a, the ranking of cities in the GBA in terms of deposit balances is relatively stable from 2017 to 2022, with Shenzhen, Guangzhou and Foshan remaining in the top three. Thus, it is reasonable to assume that Shenzhen will remain in first place in the GBA in terms of various deposit balances in the next decade. A high level of deposit balance of a city is a reflection of its economic size and pace of urbanization,⁵⁹ therefore Shenzhen is expected to maintain its lead among the mainland GBA cities in terms of GDP and city development.

⁵⁹ http://www.news.cn/fortune/2022-12/14/c_1129206444.htm



5.3.3 In 2022, the top three cities in the GBA in terms of loan balances of financial institutions in both domestic and foreign currencies are Shenzhen, Guangzhou, and Foshan, with amounts of RMB 8.34 trillion, RMB 6.89 trillion, and RMB 1.82 trillion, respectively. Figure 8b shows that the ranking of cities in the GBA in terms of loan balances is also relatively constant from 2017 to 2022, with Shenzhen, Guangzhou, and

Foshan remaining in the top three. Thus, it is likely that Shenzhen will remain in first place in the GBA in terms of various loan balances for the foreseeable future. Given the leading status of Shenzhen in the financial sector, the central government could grant more autonomy to the region for further sectoral development.

5.3.4 According to Table 8a-8i in Appendix 4, Guangzhou had the highest household deposits per capita in the GBA in 2021, with RMB 123,000, followed by Shenzhen with RMB 118,000, and Foshan with RMB 61,000. From 2017 to 2021, the top three cities in terms of per capita household deposits were Guangzhou, Shenzhen, and Foshan, with Guangzhou retaining the top position in the GBA in terms of per capita household deposits over the past five years.

5.3.5 Launched in 2021, the Cross-boundary Wealth Management Connect Scheme (WMC) allows mainland investors in the GBA to open personal investment accounts with banks in Hong Kong and purchase investment products distributed by the relevant banks across borders. The policy was intended to provide more asset allocation tools for retail investors in the GBA. However, due to the product range tending towards low-risk and low-return products, the subscription level is lower than expectations. As the scheme becomes well developed, both the range of wealth management products and the individual investor quota are expected to be expanded in the future to meet the wealth management needs of the public more effectively.

5.4 How Foreign Banks Can Help the Development of the Financial Service Sector in the GBA

5.4.1 Hong Kong is an international financial centre with a high degree of autonomy under the Basic Law of Hong Kong and is recognized worldwide as a free and open economy. Upon entering the mainland GBA market, banks from Hong Kong could help accelerate the development of mainland's financial industry through experience sharing and connecting China's capital markets with global finance.

5.4.2 The presence of foreign banks from Hong Kong in China's banking industry is not only a complement to the diversification of the industry but

also one of the driving forces for its reform. Chinese banks still have weaknesses compared with foreign banks in terms of bank management, risk control and operating efficiency when competing with their counterparts. The foreign banks' access to China also facilitates the reform and innovation of Chinese banks and injects impetus for healthy competition in the market.

5.4.3 The advantages of a global business network allow foreign banks to play a significant role in the internationalization of the RMB and the development of Chinese companies in overseas markets. For instance, the Bank of Santander in Spain has a well-developed business in South America, which enables it to effectively cater to the financial needs of the Chinese mining companies expanding in South America. This is something that Chinese banks, which only have around 5% of assets in overseas institutions, cannot do.⁶⁰

5.4.4 The rise of green and sustainable finance makes it a mainstream investment concept in China's financial markets. Foreign banks can introduce internationally advanced sustainable investment concepts and products to the Chinese market, thereby promoting the development of domestic green finance.

5.4.5 The contribution of foreign banks to China lies not only in promoting the development of the Chinese banking industry but also in assisting China in attracting foreign direct investment (FDI) and facilitating its economic development at a higher level. Foreign banks themselves are the targets of China's domestic investment attraction and have directly contributed to the growth of domestic FDI. Technology brought by the FDI spills over into domestic firms, thereby increasing the productivity of the domestic sector and driving China's economic development.⁶¹

⁶⁰ 浙江大學《2020中資銀行國際化報告》

⁶¹ 楊紅麗(2020). FDI 影響中國經濟增長的內在機制. 上海對外經貿大學學報,(6),30-36.

5.5 Opportunities for Foreign Banks

5.5.1 From Section 5.3, we found that the banking sector in the nine cities of the GBA is growing faster than the per capita GDP growth, reflecting the strong demand for banking services in the Mainland GBA cities, which implies great business opportunities for foreign banks. Foreign banks have a long history of development in China (see Appendix 3), and the existence of foreign banks is also of great help to the development of the domestic banking industry and domestic economic growth.

5.5.2 According to a 2023 study conducted by Bain & Company, only one-third of mainland SMEs have ever used wealth management products from foreign institutions, mainly due to the high purchase threshold and the solid relationship having been established with mainland institutions. For mainland SMEs, foreign financial institutions can provide professional and customized financial advice.

5.5.3 On February 23, 2023, the People's Bank of China, together with the China Banking and Insurance Regulatory Commission, the China Securities Regulatory Commission, the State Administration of Foreign Exchange, and the Guangdong Provincial People's Government, jointly issued the *“Opinion on Providing Financial Support for the Comprehensive Deepening Reform and Opening Up of the Qianhai Shenzhen-Hong Kong Modern Service Industry Cooperation Zone”*. It proposed 30 financial reform and innovation measures, bringing business opportunities to foreign banks in the GBA.

5.5.4 RMB internationalization has entered a new stage and provides new business opportunities for foreign banks to carry out differentiated operations in China. Foreign banks have an overseas network and product advantages in trade finance and cross-border investment. The RMB clearing opportunities brought by the growth of trade settlement volume will therefore greatly enhance the RMB risk management business of foreign banks in China.

CHAPTER 6. MACRO POLICY RECOMMENDATIONS

The core objective of GBA's development is to create more effective and efficient corridors to link onshore and offshore talent and capital pools. With the synergy drawn from "One Country, Two Systems", governments of the GBA cities have the prospect of creating a larger playing field for business and new career opportunities for individuals. This study has the following findings:

(a) The GBA has the lowest share of service sector in GDP as compared with the San Francisco Bay Area and the Tokyo Bay Area.

(b) Among the nine Mainland GBA cities, apart from Guangzhou, Shenzhen, and Zhuhai, the remaining six cities have a service sector that accounts for less than 50% of their GDP. There has also been no significant growth over the last two decades, and the growth of the service sector has even been negative in some cities. This unbalanced development of service sector might cause "backwash effect", which entails the migration of production factors from less-developed cities to the developed ones, thereby exacerbating the development disparity among GBA cities.

(c) Our projections show that for manufacturing cities, such as Dongguan and Foshan, to grow their service sectors to 60% by 2030, the annual percentage increment in the service sector should be 2.13% and 1.97% of the GDP, respectively. For non-manufacturing cities, such as Zhuhai, the corresponding annual increment would be 0.37%.

(d) Except for Dongguan, the banking sector is growing faster than the GDP in all Mainland GBA cities, implying great potential for the development of the financial sector in the GBA.

(e) From Japan's experience, the GBA should narrow the income gap between developed and less-developed cities by upgrading manufacturing and increasing the weight of service industries in less-developed cities, so that these cities will not fall into the middle-income trap. From Germany's experience, the development of the service sector and high-end manufacturing can be complementary.

The GBA still need to make improvements in terms of cross-border capital flow, cross-border data flow, and attracting high-end global talents. The policy of opening up the market is the driving force behind the cross-border flow of talent, capital and data. The section below outlines the policy recommendation on how to improve the flow of talent, capital and data.

6.1 Attract Talents

6.1.1 Talent recruitment is a hindrance in the development of high-end technology and service sectors in the GBA. Most enterprises in the GBA plan to apply more AI technology to quality inspection, production and assembly, product inspection, inventory management, and other parts of the value chain. However, many enterprises are facing a shortage of hardware and software talents to maintain the operation of production lines, especially in second-and third-tier cities in the GBA. Only 11% of digital talents in the GBA work in the manufacturing sector, and cities other than Shenzhen, Guangzhou, and Hong Kong employs very few of these talents. To move towards Industry 4.0, the GBA cities can cooperate in talent recruitment, joint R&D activities, corporate competitiveness and start-up support.

6.1.2 Article 30 of the “*Opinion on Providing Financial Support for the Comprehensive Deepening Reform and Opening Up of the Qianhai Shenzhen-Hong Kong Modern Service Industry Cooperation Zone*” encourages domestic-funded securities and futures operators in the region to increase the proportion of Hong Kong employees and expand the scope of professional competence of Hong Kong professionals. This initiative will help Qianhai enlist Hong Kong professional services and foster closer ties between the talent pools of both places. To promote talent mobility and attract high-caliber professionals around the world, it is essential to establish a system of mutual recognition of talent qualifications within the GBA.

6.1.3 If the GBA is to become a world-class city cluster, its talent resources must be internationalized. There is intense competition for top talents all over the world. The GBA has a comprehensive industry chain, together with medical, educational, and other amenities in place.

Nevertheless, the long-term economic development prospects and the degree of openness within the GBA are key determinants when it comes to attracting talents to this region.

6.1.4 To attract foreign talents to work in the GBA, it is necessary to increase the use of English in the GBA. It is recommended that the GBA should be taken as a pilot region to promote the internationalization of public services. All government, public facilities, subway stations, shopping malls and banks should be equipped with English counters and signage; translation devices powered by artificial intelligence can also be installed in major locations. The internationalization of the GBA can help gather foreign communities and then generate economies of scale which enable more institutions, such as international schools, to flourish. It will also attract more foreign direct investment to the GBA.

6.1.5 For the purpose of attaining a more globalized composition of talents in the GBA, foreign students studying in China and Chinese students studying overseas are recruitment targets. It is recommended to relax the restrictions on internship and employment in the GBA for foreign students graduating from China; outstanding foreign graduates hired by Chinese companies should be allowed to work legally in the GBA. At the same time, internship opportunities should be offered to outstanding students from all over the world to expand the pool of talents in the GBA.

6.1.6 Mainland GBA cities need to address the concerns of the foreign talents about the education and health care issues of their family members. We suggest that the governments of Mainland GBA cities to reduce Children's tuition fees (non-company subsidy) and family medical expenses (non-insurance) paid by foreign talents (including those from Hong Kong and Macao) to address their concerns about coming to work in the GBA.

6.2 Expand Cross-Border Capital Flows

6.2.1 The “*Opinions Concerning Financial Support for the Establishment of the GBA*” (hereafter referred to as the Opinions), issued on May 14, 2020, provides specific measures in five areas, including facilitating cross-border trade, investment and financing, expanding the opening-up of the financial sector to the outside world, promoting the connectivity of financial markets and infrastructure, enhancing innovation in financial services, and effectively preventing cross-border financial risks. Specifically, Article 11 of the Opinions proposes supporting banks in expanding their cross-border lending operations.

6.2.2 Financial services play a crucial role in the development of the GBA. Building an international financial hub is a vital task in promoting the GBA’s development. The governments of Mainland China, Hong Kong and Macao recognise the need to actively encourage foreign banks, brokerage firms, insurance companies, venture capital, fund management companies, and investment consultancies to set up branches and conduct business in the GBA. It is also recommended that fund, insurance, trust, auto finance, and consumer finance products should be enriched in the GBA, and the pilot cross-border business of securities and futures institutions should develop exclusive insurance products in the GBA and promote enhanced cooperation and competition between Chinese and foreign institutions.

The “*Opinion on Providing Financial Support for the Comprehensive Deepening Reform and Opening Up of the Qianhai Shenzhen-Hong Kong Modern Service Industry Cooperation Zone*” issued on February 23, 2023 also aims to promote the interconnection of financial markets, the development of the modern financial industry, and the facilitation of cross-border trade, investment and financing.

However, it takes time for policies to be implemented, and the process needs to take account of factors including risk control, priority and urgency, as well as the conditions of the real economy. Even though the optimal model of efficient communication and co-ordination among the industry departments of governments, regulators and the industry within the GBA

has yet to be found, all parties should collaborate in a goal-oriented manner and pragmatically address the needs of residents and enterprises in the course of promoting cross-border capital flows.

6.2.3 The report shows that the wealth management demand from surplus income and high-net-worth individuals in the GBA are becoming mature, and new economy enterprises need more and easier access to cross-border financial services for overseas business expansion. The high-level opening up of the financial industry should be based on the need to retain wealth and eliminate obstacles to cross-border financing. Specifically, recommended measures include simplifying the settlement of financial transactions, improving the interconnection of financial infrastructure in the GBA, supporting direct financing and debt financing for enterprises in mainland GBA cities, and reducing restrictions on cross-border financial advisory services.

6.3 Enable Cross-Border Data Sharing

6.3.1 Insufficient data integration in the GBA has posed many obstacles and challenges to the operation of enterprises in the GBA and increased their compliance costs. According to the Hong Kong Institute of Bankers' Talent Development Survey 2021, 82% of respondents in the financial sector identified technology and data skills as the most significant skills gap in the banking industry.

6.3.2 Cross-border data transfer encompasses any activity in which data is transferred to another jurisdiction or is intended to be transferred after being transmitted to another jurisdiction. Cross-border financial data activities refer to one-time or continuous activities in which financial data collected or generated within the territory of the People's Republic of China is provided to overseas institutions through network transmission. The export of financial data mainly includes two forms. The first involves the flow of data across national borders, territorial frontiers, or political boundaries. The second refers to the scenario wherein the data can still be controlled or accessed by foreign entities without geographical transfer.

6.3.3 The WTO’s General Agreement on Trade in Services and the Financial Services Understanding regulate the cross-border flow of financial data needed to conduct day-to-day business. In 2019, the G20 launched the Osaka Track, a “Data Free Flow with Trust” initiative aiming at establishing a harmonized framework for international data flows.

6.3.4 As far as data export requirements are concerned, allowing the free flow of data across borders in the financial sector is mainstream. The US-led North American Free Trade Agreement (NAFTA), the US-Mexico-Canada Agreement (USMCA), the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), and the Korea-US Free Trade Agreement (KORUS) focus more on ensuring that financial sector data can flow freely across borders. The EU-Japan Economic Partnership (EPA) and the EU-Vietnam Free Trade Agreement (EVFTA) place greater emphasis on the free movement of personal data based on the security and privacy of personal data. The Regional Comprehensive Economic Partnership (RCEP) also regulates the cross-border flow of financial sector data.

6.3.5 Cross-border data flow has been incorporated into several legal provisions in China. At the national level, there are three main data laws: the Data Security Law (implemented on September 1, 2021), the Personal Information Protection Law (implemented in November 2021), and the Cybersecurity Law (effective on June 1, 2017).

6.3.6 Financial data were clearly defined for the first time in the “Cross-border Security Requirements for Financial Data (Draft for Comments)” issued in January 2021 and the “Financial Data Security—Guides of Data Security Classification (Draft for Comments)” issued in April 2021. Specifically, financial data refer to all types of data required or generated by financial institutions to carry out financial business, provide financial services, and manage daily operations. It can be further divided into four categories: customers, business, operational management, and regulatory data.

6.3.7 To strike a balance between security and development in the financial sector, it’s crucial to avoid implementing “one-size-fits-all”

regulations on the cross-border flow of data. Such regulations may not be conducive to the healthy and stable development of the industry. Given that China is a major data economy, it is in the country's economic interest to allow for the free flow of data, which is an important factor of production, while ensuring privacy and security. Such flow of data is particularly crucial for promoting financial integration in the GBA.

6.3.8 Although some regulatory authorities stipulate that financial data can be provided overseas “due to business needs”, they do not specify the scope of data that can be provided, and what constitutes “important data” and “sensitive data” remains somewhat vague, resulting in a lack of clear and effective guidance for financial institutions.

6.3.9 To facilitate the financial development and research collaboration in the GBA, it is recommended that data governance and policy coordination in the GBA be strengthened and that the regulations governing cross-border data flows be clearly stipulated. The establishment of a third-party certification body in Hong Kong to conduct a fair and standardized assessment of cross-border data transmission in the GBA is also recommended.

6.3.10 On June 29, 2023, the Cyberspace Administration of China and the Innovation, Technology and Industry Bureau of the HKSAR Government signed the “*Memorandum of Understanding on Facilitating Cross-boundary Data Flow within the Guangdong-Hong Kong-Macao Greater Bay Area*” (hereafter referred to as the “Memorandum of Cooperation”). The announcement mentioned that all parties will establish security rules for cross-border data flows in the Guangdong-Hong Kong-Macao Greater Bay Area under the framework of the national data cross-border security management system. The Memorandum of Cooperation is the commencement of bilateral and multilateral agreements on cross-border data. It is a balance between the free flow of data and the safe flow of data from the development perspective. For the GBA, the Memorandum of Cooperation is a partial breakthrough in cross-border data flow. It is conducive to establishing the circulation of data and promoting the high-quality development of the GBA.

6.3.11 In the long run, Hong Kong should strive to become a safe harbour for cross-border data sharing and offshore data storage. Under the “One Country, Two Systems” principle, Hong Kong is well-positioned to become a destination for the green corridor for Mainland data. Financial institutions in Hong Kong are already under the aegis of high standards of data protection provided by financial regulators and are capable of properly handling southbound mainland data flows to Hong Kong.

Appendix 1. Further Background Information About Bay Areas and the Yangtze River Delta

A1.1 San Francisco Bay Area

A1.1.1 The San Francisco Bay Area is a driving force in the development of the information technology industry and a key player in global technology innovation activities as well as the development of high-tech industries due to its innovative resources, including top universities and the Silicon Valley.

A1.1.2 The San Francisco Bay Area has leading industries in the information, professional, and business services sectors, as well as other high-end service sectors.

A1.1.3 In terms of information flow, the San Francisco Bay Area is the birthplace of global information technology and is home to some of the world's leading high-tech companies in electronic information, the internet, and software. The information, professional, and business services sector in the San Francisco Bay Area accounted for around 30% of the total Bay Area-wide GDP and 7% of the nation's value-added in information, professional, and business services.

A1.2 Tokyo Bay Area

A1.2.1 The Tokyo Bay Area has a well-developed railroad and highway network, attracting a large number of industries to the area. With only a third of Japan's population, the Tokyo Bay Area has generated two-thirds of the country's total economic output and three-quarters of its industrial output.

A1.2.2 The Tokyo Bay Area is home to a number of embassies from around the world and international organizations including the Asian Development Bank (ADB). In 2019, the Tokyo Bay Area hosted 988 international conferences, accounting for 27% of the total number of international conferences in Japan.

A1.2.3 With leading automobile manufacturing, precision machinery, electronics, high-tech, and chemical industries, the Tokyo Bay Area is one of the world's most advanced manufacturing regions. The manufacturing industry focuses on equipping and processing key materials and mechanical components at the upstream end of the global value chain, pioneering the field on a global scale.

A1.2.4 Compared with the counterparts in the San Francisco Bay Area, industries such as semiconductor and modern communications in the Tokyo Bay Area have been relatively slow in terms of growth. In addition, the ageing population has slowed down the acceptance of new products in the Japanese domestic market.

A1.2.5 In terms of information flow, the Tokyo Bay Area serves as the information hub of the Japanese economy, with a high concentration of knowledge- and technology-intensive industries, particularly in information services and business services sectors.

A1.3 The Greater Bay Area

A1.3.1 Compared with the Tokyo and the San Francisco Bay Areas, the Greater Bay Area has a well-balanced economic structure. Hong Kong's strengths in the financial and professional services sectors continue to serve as an intermediary between Mainland China and international markets. Shenzhen has developed high-tech industries, Guangzhou is a key trade hub, and Foshan and Dongguan have a strong manufacturing presence.

A1.3.2 In July 2020, the National Development and Reform Commission gave the green light to the gradual launch of inter-city rail projects in the GBA. The approval document stated that by 2025, the railway network in the GBA will have 4,700 km in operation and under construction, covering the area's core cities, node cities and major metropolitan circles such as Guangzhou and Shenzhen. By 2035, the railway network in operation and under construction in the GBA will reach 5,700 km, covering all cities above county level. On the development of transportation and logistics in the GBA, according to the 14th Five Year Plan, steps will be taken to “expedite the construction of inter-city railways, co-ordinate planning for

the positioning of ports and airports, and optimise the allocation of maritime and aviation resources”, and “deepen the customs clearance reforms to facilitate the effective and convenient flow of people, goods and vehicles”.⁶²

A1.3.3 Logistics Advantages of the GBA: The GBA is one of the world's leading air cargo and port container hubs. The volume of air freight in the GBA is higher than the total volume of the Tokyo Bay Area and the San Francisco Bay Area combined. In particular, the Hong Kong International Airport has been, on numerous occasions, the world's busiest cargo airport. The “Implementation Opinions from the Civil Aviation Administration on Supporting the Coordinated Development of Civil Aviation in the Guangdong-Hong Kong-Macao Greater Bay Area” issued in 2020 proposed that by 2025, a world-class airport cluster in the Guangdong-Hong Kong-Macao Greater Bay Area will be basically built, and a new pattern of coordinated regional development driven by the international aviation hubs of Hong Kong, Guangzhou and Shenzhen and multi-point linkage of airports such as Macao and Zhuhai will be built. Guangzhou will open a new airport by 2026/27. The airport can handle 60 million passengers and 2.2 million tonnes of cargo and mail by 2050.⁶³ In addition, the formation of a world-class port cluster in the GBA is accelerating. The container throughputs of Guangzhou Port and Shenzhen Port rank among the top in the world, and the routes cover major ports in various countries around the world.⁶⁴

A1.3.4 As for policy support for technology innovation, in order to promote the development of the GBA into a world-leading technology and innovation hub, Guangdong Province released the Guangzhou-Shenzhen Technology and Innovation Corridor Planning in 2017, with the ultimate goal of establishing a globally influential science and technology innovation corridor by 2050.⁶⁵ On September 20, 2018, the Hong Kong SAR Government and the Ministry of Science and Technology (MOST) signed the “Arrangement on Enhancing Innovation and Technology (I&T) Cooperation between the Mainland and Hong Kong”. The two parties also

⁶² <https://research.hktdc.com/tc/article/Nzk5NDQ0OTA0>

⁶³ <https://www.wenweipo.com/a/202305/10/AP645aed14e4b0590fc57a7ad6.html>

⁶⁴ https://www.gov.cn/xinwen/2021-01/14/content_5580063.htm

⁶⁵ <https://research.hktdc.com/tc/article/NDMyMjc0MTMx>

signed agreements on the Mainland-Hong Kong Joint Funding Scheme to encourage scientific research cooperation between Hong Kong and different provinces. On March 15, 2023, the HKSAR Government and the MOST signed the “Mainland and Hong Kong Arrangement on Accelerating the Development of Hong Kong into International Innovation and Technology Centre.”⁶⁶ On August 29, 2023, the State Council released a plan for the Shenzhen Park of the Hetao Shenzhen-Hong Kong Science and Technology Innovation Cooperation Zone (HTCZ), amid efforts to further implement the outline development plan for the Guangdong-Hong Kong-Macao Greater Bay Area. According to the plan, the Shenzhen section of the Hetao Shenzhen-Hong Kong Science and Technology Innovation Cooperation Zone will seek coordinated development with the section in the HKSAR, with the two complementing each other with their respective strengths, thereby making the cooperation zone a key engine for the high-quality development of the GBA.

A1.3.5 In terms of information flow, the number of 5G base stations and patents in the GBA, as well as the number of national industrial Internet cross-industry platforms, ranks first in China,⁶⁷ and the GBA has leading advantages in 5G, artificial intelligence and other fields. Under the CEPA framework, Hong Kong and Macao telecommunications providers can enter into joint ventures with mainland telecommunications companies, covering business areas such as data centres, storage and Internet content services. In 2022, Hong Kong jumped to the second rank among the most attractive data centre locations in the Asia-Pacific region.⁶⁸

A1.4 The Yangtze River Delta

A1.4.1 In 1982, the idea of “establishing the Yangtze River Delta Economic Circle with Shanghai as the centre” was officially proposed. In 2016, the executive meeting of the State Council adopted the Yangtze River Delta Urban Cluster Development Plan. In 2019, the “Outline of the Yangtze River Delta Regional Integration Development Plan” was issued.

⁶⁶ https://www.itc.gov.hk/en/collaboration/collabo_most.html

⁶⁷ https://m.thepaper.cn/newsDetail_forward_23357739

⁶⁸ Global Data Center Market Comparison 2022, A Publication of Cushman & Wakefield’s Data Center Advisory Group

A1.4.2 The Yangtze River Delta region (Jiangsu Province, Zhejiang Province, Anhui Province and Shanghai Municipality) is one of the regions with the most complete industrial system and the best urbanization foundation in China. Major cities in this region include Shanghai, Suzhou, Hangzhou and Nanjing. Shanghai's advantage lies in its advanced service sector, and Suzhou boasts a strong manufacturing foundation as it is close to Shanghai. Hangzhou gives rise to the active development of the private economy, which accounts for 61% of its GDP in 2022,⁶⁹ and possesses a well-developed digital economy. Nanjing stands out in the production of automobiles, steel, electronics and petrochemicals.

A1.4.3 The YRD has formed advantageous clusters in strategic industries such as integrated circuits, artificial intelligence, and new energy vehicles. In 2021, the integrated circuit industry in the YRD accounted for 58.3% of the country's total, both biomedicine and artificial intelligence industries had a share of about 1/3, and the output of new energy vehicles constituted 38% of the country's total.

A1.4.4 In the process of Yangtze River Delta integration, transportation is an important engine of interconnection. On the development of transportation and logistics in the YRD, the 14th Five-Year Plan states that steps will be taken to “accelerate infrastructure connectivity, build a high-speed rail network that covers all cities at or above the prefecture level in the YRD, and promote the integrated governance of port clusters”. The Yangtze River Delta Higher Quality Transportation Integrated Development Plan and the Yangtze River Delta Region Multi-level Rail Transit System Plan were officially issued in 2020 and on June 7, 2021 respectively.

A1.4.5 The urban agglomeration in the YRD region has a well-developed transportation network, and in terms of intercity rail transit, many passenger flow belts are formed along the Shanghai-Hangzhou Line, Nanjing-Hangzhou Line and Shanghai-Nanjing Line. By the end of 2022, the operating mileage of the YRD Railway exceeded 14,000 kilometers, of which 6,668 kilometers were high-speed railways, accounting for about

⁶⁹ Source: http://tjj.hangzhou.gov.cn/art/2023/3/20/art_1229279682_4149703.html

one-sixth of the country.⁷⁰ On June 24, 2023, Suzhou Rail Transit Line 11 was put into operation. This is the first line connected to the Shanghai rail transit line network and the first fully automatic urban rail transit line in China.

A1.4.6 In terms of information flow, the YRD is planning to improve the network and reduce the fees to facilitate information flow. The YRD urban agglomeration development plan proposes enhancing the service capabilities of telecommunication companies, achieving universal coverage of high-speed networks and all optical fiber access of urban fixed-line broadband, improving regional network layout and network quality, and achieving reasonable reduction of telecom tariffs.⁷¹

⁷⁰<http://hk.crntt.com/doc/1067/0/7/2/106707293.html?coluid=4&kindid=16&docid=106707293>

⁷¹ 長江三角洲城市群發展規劃，2016年6月

Appendix 2. Projections for the share of the service sector to GDP, with a target of 70% by 2030

A2.1 Scenario 2a: Projections for the share of the service sector to GDP under fixed value-added increment, with a target of 70% by 2030

Scenario 2a assumes a fixed annual increment in the value-added of the service sector in each city. We estimate the annual increment of the service sector output in each city needed to make the city's service sector grow to 70% by 2030. Table 6a lists the increment needed in different cities. For example, for Dongguan to grow its service sector to 70% by 2030, the annual increment in the service sector should be RMB 119.28 billion. Table 6b projects each city's resulting share of the service sector in each year.

Table 6a Annual increment of the service sector to make its share of GDP to grow to 70% of GDP by 2030 (RMB Billion)

	Dongguan	Foshan	Huizhou	Jiangmen	Zhaoqing	Zhongshan	Zhuhai
Expenditure Increase	119.28	124.83	51.56	31.67	28.33	28.99	19.18

Table 6b Projections for the share of the service sector with a target of 70% of GDP by 2030 (RMB Billion)

	Dongguan	Foshan	Huizhou	Jiangmen	Zhaoqing	Zhongshan	Zhuhai
2021	40.80%	42.27%	42.03%	46.25%	41.13%	48.05%	56.66%
2022	46.58%	47.65%	47.47%	50.60%	46.82%	51.96%	58.70%
2023	51.33%	52.11%	51.98%	54.29%	51.50%	55.32%	60.56%
2024	55.30%	55.87%	55.77%	57.47%	55.43%	58.24%	62.25%
2025	58.68%	59.08%	59.01%	60.24%	58.77%	60.80%	63.81%
2026	61.58%	61.86%	61.81%	62.67%	61.64%	63.06%	65.24%
2027	64.10%	64.28%	64.25%	64.82%	64.14%	65.08%	66.57%
2028	66.31%	66.42%	66.40%	66.73%	66.33%	66.89%	67.80%
2029	68.26%	68.31%	68.30%	68.45%	68.27%	68.52%	68.94%
2030	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%

A2.2 Scenario 2b: Projections for the share of the service sector to GDP under fixed percentage increment with a target of 70% by 2030

Scenario 2b assumes a fixed annual increment in the share of the service sector to GDP in each city. We estimate the annual increment needed in the share of the service sector to GDP in each city to make the city's service sector grow to 70% by 2030. Table 7a lists the increment needed in different cities. For example, for Dongguan to grow its service sector to 70% by 2030, the annual increment in the service sector should be 3.24% of the GDP. For manufacturing cities such as Dongguan and Foshan to grow their service sectors to 70% by 2030, the annual percentage increment in the service sector should be 3.24% and 3.08% of the GDP, respectively. For non-manufacturing cities such as Zhuhai, the corresponding annual increment would be 1.48%. Table 7b projects the share of the service sector for each city. Table 7c projects the resulting monetary value of such an increment for each city.

Table 7a Annual increment in the share of the service sector to GDP with a target of 70% by 2030 (%)

	Dongguan	Foshan	Huizhou	Jiangmen	Zhaoqing	Zhongshan	Zhuhai
Percentage Increase	3.24%	3.08%	3.11%	2.64%	3.21%	2.44%	1.48%

Table 7b Projections for the share of the service sector with a target of 70% of GDP by 2030

	Dongguan	Foshan	Huizhou	Jiangmen	Zhaoqing	Zhongshan	Zhuhai
2021	40.80%	42.27%	42.03%	46.25%	41.13%	48.05%	56.66%
2022	44.05%	45.35%	45.14%	48.89%	44.34%	50.49%	58.14%
2023	47.29%	48.44%	48.25%	51.53%	47.55%	52.93%	59.62%
2024	50.54%	51.52%	51.35%	54.17%	50.76%	55.37%	61.10%
2025	53.78%	54.60%	54.46%	56.81%	53.96%	57.81%	62.59%
2026	57.02%	57.68%	57.57%	59.45%	57.17%	60.24%	64.07%
2027	60.27%	60.76%	60.68%	62.08%	60.38%	62.68%	65.55%
2028	63.51%	63.84%	63.78%	64.72%	63.59%	65.12%	67.03%
2029	66.76%	66.92%	66.89%	67.36%	66.79%	67.56%	68.52%
2030	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%

Table 7c Annual increment of the service sector with a target of 70% of GDP by 2030 (RMB Billion)

	Dongguan	Foshan	Huizhou	Jiangmen	Zhaoqing	Zhongshan	Zhuhai
2022	63.96	68.53	28.19	18.59	15.27	17.57	13.75
2023	71.83	76.72	31.58	20.62	17.14	19.39	14.76
2024	81.25	86.47	35.62	22.99	19.37	21.51	15.88
2025	92.65	98.21	40.48	25.80	22.07	23.99	17.14
2026	106.64	112.50	46.41	29.16	25.38	26.93	18.56
2027	124.06	130.17	53.74	33.21	29.48	30.46	20.15
2028	146.11	152.35	62.96	38.18	34.68	34.71	21.97
2029	174.63	180.72	74.78	44.35	41.38	39.93	24.04
2030	212.40	217.84	90.27	52.16	50.22	46.43	26.41

Appendix 3. Milestones in the Financial Sector Reform and the Evolving Landscape

A3.1 Milestones in China's Financial Sector Reform

A3.1.1 In 1978, the Chinese government began implementing the policy of reform and opening-up, approving and selectively encouraging FDI to enter China. In 1992, after Deng Xiaoping's southern tour, FDI experienced its first upsurge. A large number of foreign enterprises entered the eastern coastal areas of China, bringing high-quality capital, technology, and overseas markets to China.

A3.1.2 Since 1978, China has undertaken significant reforms in its financial system and promoted its opening up to the outside world. In 1980, China resumed membership in the World Bank and returned to the International Monetary Fund. In 1984, China established business contacts with the Bank for International Settlements. In the following year, China formally joined the African Development Bank and later became an official member of the Asian Development Bank in 1986.

A3.1.3 China's banking reform was initiated in 1994. During that year, the Industrial and Commercial Bank of China, the Bank of China, the Agricultural Bank of China, and the China Construction Bank were transformed into state-owned commercial banks. Three policy-related banks were founded: the Agricultural Development Bank of China, the China Development Bank, and the China Import and Export Bank. The Commercial Banking Law took effect in July 1995, providing the conditions for the formation of the commercial bank system and organizational structure and offering a legal basis for converting specialized state banks into state-owned commercial banks. These actions aimed to strengthen the role of the People's Bank of China and allow for the establishment of private banks.

A3.1.4 In early 1994, the reform of the RMB exchange rate began, and China began to implement a managed floating exchange rate mechanism, as well as the free convertibility of the RMB under the current account. In 1994, China enacted its first law to regulate foreign financial institutions, namely the Regulations on the Administration of Foreign Financial

Institutions in China. In 1999, foreign securities, fund management, and insurance companies were allowed to participate in China's interbank market.

A3.1.5 China joined WTO in December 2001, with foreign banks actively entering the country. In 2002, China increased the number of cities that allowed foreign banks to conduct RMB business. In April 2003, the China Banking Regulatory Commission was formally established.

A3.1.6 After 40 years of reform and development, China has established a sound financial system, forming a landscape in which state-owned commercial banks coexist and complement other commercial banks, policy banks, non-bank financial institutions and foreign financial institutions.

A3.1.7 In April 2022, President Xi Jinping announced at the Boao Forum that China would significantly ease market access, including to the financial sector. The then Governor of the People's Bank of China, Yi Gang, also announced 12 major measures for expanding financial opening-up to the world. On February 23, 2023, the People's Bank of China, together with the China Banking and Insurance Regulatory Commission, the China Securities Regulatory Commission, the State Administration of Foreign Exchange, and the Guangdong Provincial People's Government jointly issued the "Opinion on Providing Financial Support for the Comprehensive Deepening Reform and Opening Up of the Qianhai Shenzhen-Hong Kong Modern Service Industry Cooperation Zone", proposing 30 measures to facilitate financial market opening-up and innovation adoption.

A3.2 Development of Foreign Banks in China and in the GBA

A3.2.1 After the reform and opening-up, the Export-Import Bank of Japan (now the Japan Bank for International Cooperation) became the first foreign banking institution to establish a representative office in Beijing in 1979. Since then, foreign banks have entered the Chinese market through four main modes: foreign bank representative offices, foreign bank branches, Sino-foreign joint venture banks, and wholly foreign-owned banks. In 1982, Nanyang Commercial Bank set up a branch in Shenzhen;

in 1984, it established the first wholly-owned foreign bank, Nantong Bank (Macao), and the first Sino-foreign joint venture bank, known as Xiamen International Bank, founded in 1985.

A3.2.2 Since China acceded to the WTO in 2001, the opening up of the banking sector has accelerated, leading to the active entry of foreign banks into the Chinese market by adopting two strategies: expanding their institutions and investing in Chinese banks. In 2004, HSBC strategically invested 19.9% in the Bank of Communications. Since then, many foreign banks have successively invested in Chinese banks as strategic investors. The development of foreign banks' self-established institutions in China has been characterized by four main features: a fluctuating increase in their asset size, a steady growth in the number of institutions, a relatively low proportion of their assets to the total of the banking sector and increasing competition among foreign banks.

A3.2.3 In 2007, the CBRC published the Report on the Opening-Up of the Chinese Banking Sector to encourage foreign banks to set up or convert their existing branches into China-registered legal entities. As a result, a large number of foreign-funded branches began to convert into wholly foreign-funded legal entities. The Central Government further widened market access for and relaxed geographical restrictions on foreign banks, allowing foreign banks to enter the national interbank lending market to promote the RMB business of foreign banks. The number of operating institutions of foreign banks in China (excluding sub-branches) increased from 271 in 2007 to 929 in 2021, with 41 foreign corporate banks, 117 foreign bank branches, and 135 representative offices in 69 cities, including 41 head offices, 458 branches, and 430 sub-branches. In 2021, 11 new foreign banks were established in China, witnessing the total assets of foreign banks in China exceeding RMB 3.7 trillion.

A3.2.4 From 2003 to 2021, the assets of foreign banks in China rose from RMB 415.9 billion to RMB 3.79 trillion, a more than nine-fold increase from 2001 when China acceded to the WTO. Even though there has been a rise in the number and asset size of foreign banks operating in China, they saw a relatively low share in the overall assets of all commercial banks in China (only 1.31% in 2021), which can be mainly

attributed to the rapid expansion of the asset size of Chinese-funded small- and medium-sized banks.

A3.2.5 The GBA has been at the forefront of the financial sector in the country. As of the end of 2018, the total asset size of domestic and foreign banks in the GBA was approximately RMB 146 trillion, with their total liabilities amounting to about RMB 127 trillion, representing an annual growth rate of 2.2% and 1.3%, respectively. These figures were much lower than the average growth rate of commercial banks in China in 2018, whereas the capital adequacy ratio of the GBA was as high as around 58.8%, which was much higher than the average 18.4% of foreign banks in China in 2018.

A3.2.6 To comply with the requirements set forth in the Outline Development Plan for the GBA, the People's Bank of China, the China Banking Regulatory Commission, the Securities and Futures Commission (SFC), and the Foreign Exchange Bureau issued the "Opinions Concerning Financial Support for the Establishment of the GBA" on May 14, 2020, in which Article 17 proposes to expand the liberalization of the banking sector and support Hong Kong and Macao banks and other financial institutions in setting up branches and sub-branches concurrently in the mainland of the GBA. The implementation of these measures affords a new opportunity for foreign banks to enter the GBA.

A3.2.7 There are currently 35 foreign banks operating in Mainland GBA cities, and with the gradual implementation of the GBA development plan, the market has seen an influx of foreign banks from Hong Kong, Macao, and Taiwan. From 2016 to 2018, 13 foreign banks were incorporated across the GBA, including six from Taiwan, two from Thailand, and one each from the US, Hong Kong, Singapore, Portugal, and Macao.

A3.2.8 Foreign commercial banks in the GBA are characterized by relatively small asset sizes, adequate capital, stable business, and varying levels of profitability. There has been a significant change in the client base over the years, from a large share of Hong Kong clients in the early days to increasing clients from the Chinese Mainland in recent years. In addition, a substantial change can be seen in the composition of the workforce. In

the past, most of the senior staff were posted from the parent banks in Hong Kong, while nowadays local staff have taken charge.

Appendix 4. Growth Rates of Deposits and Growth Rates of GDP in the Nine Mainland GBA Cities

A4.1 To understand the scale, development, and trends of the financial industry in Mainland GBA cities, we will examine the key indicators of financial institutions and deposits per capita in nine Mainland GBA cities in this section. We compare the financial indicators of different cities to identify cities with growth potential as well as disadvantaged cities, so that foreign banks and the GBA governments can formulate relevant business development strategies and supporting policies.

A4.2 From 2017 to 2022, there has been a steady growth trend in both deposits and loans in Guangzhou. By the end of 2022, the balance of various deposits had reached RMB 8.05 trillion, reflecting an increase of 7.3% as compared to the same period in the previous year. Domestic deposits accounted for approximately 97% of the total. Household deposits and deposits from non-financial enterprises were the main constituents of domestic deposits, accounting for 30.87% and 32.74% of the total, respectively. The balance of various loans had reached RMB 6.89 trillion by the end of the year, indicating a 12.3% increase from the same period in the previous year. Domestic loans made up almost 98% of the total. The domestic loans are mainly enterprise (institution) loans, accounting for about 61%. Table 8a shows the per capita household deposits of Guangzhou for the period 2017-2021. It is worth noting that the annualized growth rate of the per capita household deposits is higher than that of the per capita GDP, implying that the banking sector in Guangzhou is expanding rapidly.

Table 8a: Per capita household deposits of Guangzhou (2017-2021)

	Deposits of Households (100 million yuan)	Permanent Population ⁷² (thousands)	Per Capita Household Deposits (10,000 yuan)	Per Capita GDP (10,000 yuan)
2017	14625.63	1746.27	8.38	11.61
2018	16456.56	1798.13	9.15	11.85
2019	18383.44	1831.21	10.04	13.14
2020	21177.97	1867.66	11.34	13.53
2021	23151.08	1881.06	12.31	15.04
Annualized Growth Rate (2017-2021)	12.17%	1.88%	10.09%	6.69%

A4.3 There has been a consistent upward trend in both deposits and loans in Shenzhen from 2017 to 2022. By the end of 2022, the balance of various deposits in Shenzhen had grown to RMB 12.3 trillion, an increase of 9.7% as compared to the same period last year, and the balance of loans had reached RMB 8.3 trillion, representing an increase of 8% as compared to the same period last year. Manufacturing loans, loans to technology-based enterprises, inclusive loans for small and micro enterprises, and green loans increased by 15.9%, 31.9%, 23.8%, and 43.9%, respectively, all exceeding the average growth rate of various loans. Shenzhen ranks first in the GBA in terms of various deposit and loan balances. Table 8b shows the per capita household deposits of Shenzhen for the period 2017-2021. Note that the annualized growth rate of the per capita household deposits is higher than that of the per capita GDP, implying that the banking sector in Shenzhen is expanding rapidly.

⁷² Source: 廣州統計局 http://tjj.gz.gov.cn/stats_newtjyw/tjsj/tjgb/qtgb/content/post_8540232.html

Table 8b: Per capita household deposits of Shenzhen from 2017 to 2021

	Deposits of Households (100 million yuan)	Permanent Population ⁷³ (thousands)	Per Capita Household Deposits (10,000 yuan)	Per Capita GDP (10,000 yuan)
2017	11,159.78	1587.31	7.03	15.07
2018	13,810.06	1 666.12	8.29	15.53
2019	16,327.05	1 710.40	9.55	15.99
2020	19,031.88	1 763.38	10.79	15.93
2021	20,834.08	1768.16	11.78	17.37
Annualized Growth Rate (2017-2021)	16.89%	2.73%	13.78%	3.61%

A4.4 There has been a consistent upward trend in both deposits and loans in Zhuhai from 2017 to 2022. By the end of 2022, the balance of various deposits in Zhuhai had reached RMB 1.18 trillion, an increase of 12.4% as compared with the same period last year, with domestic deposits accounting for about 92.7%. As for various loans, the balance has reached RMB 1.03 trillion, a 15.8% increase as compared to the same period last year, with domestic loans accounting for nearly 97%, which are mainly composed of household loans and loans to non-financial enterprises, institutions and groups (they account for 37.5% and 59.1%, respectively). Table 8c shows the per capita household deposits of Zhuhai for the period 2017-2021. The annualized growth rate of the per capita household deposits exceeds that of the per capita GDP, implying that the banking sector in Zhuhai is expanding rapidly.

⁷³ Source: 深圳統計年鑒 2021 (54 頁) <http://tjj.sz.gov.cn/attachment/0/950/950362/9491388.pdf>

Table 8c: Per capita household deposits of Zhuhai (2017-2021)

	Deposits of Households (100 million yuan)	Permanent Population ⁷⁴ (thousands)	Per Capita Household Deposits (10,000 yuan)	Per Capita GDP (10,000 yuan)
2017	1,542.24	207.02	7.45	14.61
2018	1,772.01	220.90	8.02	15.03
2019	1,985.20	233.18	8.51	15.17
2020	2,243.02	244.96	9.16	14.72
2021	2,498.01	246.67	10.13	15.79
Annualized Growth Rate (2017-2021)	12.81%	4.48%	7.98%	1.96%

A4.5 From 2017 to 2022, there is a steady growth trend in all deposits and loans in Foshan. By the end of 2022, the balance of various deposits in Foshan had reached RMB 2.38 trillion, an increase of 15.44% as compared to the same period last year; the balance of various loans had reached RMB 1.82 trillion, an increase of 10.69% as compared to the same period last year. From 2012 to 2021, the contribution of the value-added of Foshan's financial industry to the regional GDP increased from 3.82% to 5.86%. By the end of the third quarter of 2022, the total assets of the banking industry in Foshan were valued at RMB 2.76 trillion, which is 2.4 times the figure ten years ago. This accounts for nearly 1/8 of the province's total (excluding Shenzhen). From 2017 to 2021, the asset size of Foshan's insurance industry also increased steadily. By the end of the third quarter of 2022, the total assets of the insurance industry in Foshan had grown to RMB 195.795 billion, which is 4.65 times the figure ten years ago. Similarly, the premium income had increased to RMB 50.614 billion, which is 3.22 times the value ten years ago. Insurance penetration rate rose from 2.38% to 4.88%; the premium income per capita rose from RMB 2,166 per person to RMB 6,169 per person. Table 8d shows the per capita household deposits of Foshan from 2017 through 2021. The annualized growth rate of the per capita household deposits is higher than that of the per capita GDP, implying that the banking sector in Foshan is expanding rapidly.

⁷⁴ Source: 2022 珠海市統計年鑒 <http://www.zhuhai.gov.cn/attachment/0/320/320836/3449182.pdf>

Table 8d: Per capita household deposits of Foshan (2017-2021)⁷⁵

	Deposits of Households (100 million yuan)	Permanent Population (thousands)	Per Capita Household Deposits (10,000 yuan)	Per Capita GDP (10,000 yuan)
2017	7,019.38	899.99	7.80	10.57
2018	7,577.5	926.04	8.18	10.93
2019	8,383.03	943.14	8.89	11.49
2020	9,259.24	951.88	9.73	11.35
2021	10,124.60	961.26	10.53	12.71
Annualized Growth Rate (2017-2021)	9.59%	1.66%	7.79%	4.72%

Table 8e: Per capita household deposits of Huizhou (2017-2021)

	Deposits of Household ⁷⁶ (100 million yuan)	Permanent Population (thousands) ⁷⁷	Per Capita Household Deposits (10,000 yuan)	Per Capita GDP (10,000 yuan)
2017	2153.04	572.22	3.76	6.60
2018	2361.19	584.72	4.04	6.92
2019	2600.70	597.23	4.35	7.09
2020	2896.88	605.72	4.78	7.12
2021	3231.19	606.60	5.33	8.21
Annualized Growth Rate (2017-2021)	10.68%	1.47%	9.12%	5.61%

A4.6 Huizhou had a consistent upward trend in both deposits and loans from 2017 to 2022. By the end of 2022, the balance of various deposits in Huizhou had reached RMB 839.66 billion, representing an increase of 7.5% as compared to the same period last year. Similarly, the balance of loans had reached RMB 947.9 billion, representing an 11.8% increase from the same period in the previous year. In 2021, the non-performing loan rate of Huizhou banks was 0.44%, which was lower than the average non-performing loan rate of the banking industry in the province. Table 8e shows the per capita household deposits of Huizhou between 2017 and 2021. The annualized growth rate of the per capita household deposits is

⁷⁵ Source: 佛山統計年鑒 2021 (綜合人口-1-10 城市社會經濟基本情況表)

http://www.foshan.gov.cn/gzjg/stjj/tjnj_1110962/index.html

⁷⁶ Source: 2022 惠州統計年鑒 (63 頁) <http://www.huizhou.gov.cn/attachment/0/184/184617/4852024.pdf>

⁷⁷ Source: 2022 惠州統計年鑒 (134 頁)

<http://www.huizhou.gov.cn/attachment/0/184/184617/4852024.pdf>

higher than that of the per capita GDP, implying that the banking sector in Huizhou is expanding rapidly.

A4.7 There has been a consistent upward trend in both deposits and loans in Dongguan from 2017 to 2022. By the end of 2022, the balance of various deposits in Dongguan had reached RMB 2.35 trillion, an increase of 15.7% as compared to the same period last year, whereas the balance of various loans had reached RMB 1.68 trillion, increasing by 12.4% as compared to the same period last year. Table 8f shows the per capita household deposits of Dongguan from 2017 to 2021. Note that the annualized growth rate of the per capita household deposits is lower than that of the per capita GDP, while the total deposits are growing, implying that the banking sector in Dongguan is growing slower than expected.

Table 8f: Per capita household deposits of Dongguan (2017-2021)

	Deposits of Households (100 million yuan) ⁷⁸	Permanent Population (thousands) ⁷⁹	Per Capita Household Deposits (10,000 yuan)	Per Capita GDP (10,000 yuan)
2017	5,160.71	834.25	6.19	7.86
2018	5,656.01	839.22	6.74	8.47
2019	6,365.7	846.45	7.52	9.07
2020	6,998.52	1,048.36	6.68	9.32
2021	7,655.09	1,053.68	7.27	10.33
Annualized Growth Rate (2017-2021)	10.36%	6.01%	4.1%	7.07%

A4.8 As of the end of 2022, the balance of various deposits in Zhongshan had reached RMB 826.72 billion, reflecting a 12.7% increase from the same period in the previous year. Similarly, the balance of various loans had grown to RMB 705.52 billion, indicating an 8.8% increase from the same period in the previous year. Table 8g shows the per capita household deposits of Zhongshan for the period 2017-2021. The annualized growth rate of the per capita household deposits is higher than that of the per capita GDP, implying that the banking sector in Zhongshan is expanding rapidly.

⁷⁸ Source: 東莞統計年鑒 2022 (246 頁) <http://tjj.dg.gov.cn/dgtjnj-pdf/2022.pdf>

⁷⁹ Source: 東莞統計年鑒 2022 (38 頁) <http://tjj.dg.gov.cn/dgtjnj-pdf/2022.pdf>

Table 8g: Per capita household deposits of Zhongshan (2017-2021)

	Deposits of Households (100 million yuan) ⁸⁰	Permanent Population (thousands) ⁸¹	Per Capita Household Deposits (10,000 yuan)	Per Capita GDP (10,000 yuan)
2017	2,435.73	418.04	5.83	7.12
2018	2,642.90	428.82	6.16	7.21
2019	2,896.31	438.73	6.60	7.20
2020	3,246.66	443.11	7.33	7.23
2021	3,560.37	446.69	7.97	8.02
Annualized Growth Rate (2017-2021)	9.96%	1.67%	8.13%	3.02%

A4.9 There has been a consistent upward trend in both deposits and loans in Jiangmen from 2017 to 2022. By the end of 2022, the balance of various deposits in Jiangmen had reached RMB 657.07 billion, indicating an increase of 12% as compared to the same period last year. Similarly, the balance of various loans had reached RMB 549.78 billion, indicating an increase of 10.6% as compared to the same period last year. Table 8h shows the per capita household deposits of Jiangmen for the period 2017-2021. The annualized growth rate of the per capita household deposits is higher than that of the per capita GDP, implying that the banking sector in Jiangmen is expanding rapidly.

Table 8h: Per capita household deposits of Jiangmen (2017-2021)

	Deposits of Household ⁸² (100 million yuan)	Permanent Population (Million) ⁸³	Per Capita Household Deposits (10,000 yuan) ⁸⁴	Per Capita GDP (10,000 yuan)
2017	2383.75	4.65	5.23	5.92
2018	2475.88	4.70	5.38	6.42
2019	2662.11	4.75	5.75	6.66
2020	2986.74	4.80	6.22	6.70
2021	3305.62	4.83	6.84	7.47
Annualized Growth Rate (2017-2021)	8.52%	0.95%	6.94%	5.99%

⁸⁰ Source: 中山市歷年統計年鑒

⁸¹ Source: 2022 年中山市統計年鑒 http://stats.zs.gov.cn/zwgk/tjxx/tjnj/content/post_2184419.html

⁸² Source: 2022 江門市統計年鑒 <https://www.jiangmen.gov.cn/attachment/0/251/251072/2742922.pdf>

⁸³ Source: 2022 江門市統計年鑒 <https://www.jiangmen.gov.cn/attachment/0/252/252603/2742922.pdf>

⁸⁴ Source: 2019 江門市歷年統計年鑒

Table 8i: Per capita household deposits of Zhaoqing (2017-2021)

	Deposits of Households (100 million yuan) ⁸⁵	Permanent Population (thousands) ⁸⁶	Per Capita Household Deposits (10,000 yuan)	Per Capita GDP (10,000 yuan)
2017	1,388.91	403.88	3.44	4.88
2018	1,532.75	406.58	3.77	5.19
2019	1,645.21	409.24	4.02	5.52
2020	1,787.68	411.69	4.34	5.64
2021	1,992.83	412.97	4.83	6.43
Annualized Growth Rate (2017-2021)	9.45%	0.56%	8.85%	7.14%

A4.10 There has been a consistent upward trend in both deposits and loans in Zhaoqing from 2017 to 2022. By the end of 2022, the balance of various deposits in Zhaoqing had reached RMB 343 billion, indicating an increase of 12.4% as compared to the same period last year. Similarly, the balance of various loans had reached RMB 293.97 billion, indicating an increase of 11.4% as compared to the same period last year. By the end of June 2022, the total assets of the banking industry in Zhaoqing were valued at RMB 410.165 billion, an increase of 7.24% as compared to last year. From the industry's perspective, manufacturing loans have increased by RMB 4.635 billion since the beginning of the year, which is 1.72 times the increase in the same period last year. The insurance industry's total assets increased by 18.49%, amounting to RMB 22.005 billion. Premium income increased by 5.73%, amounting to RMB 5.122 billion. Table 8i shows the per capita household deposits of Zhaoqing from 2017 to 2021. The annualized growth rate of the per capita household deposits is higher than that of the per capita GDP, implying that the banking sector in Zhaoqing is expanding rapidly.

⁸⁵ Source: 2022 肇慶市統計年鑒

http://www.zhaoqing.gov.cn/zqtjj/gkmlpt/content/2/2794/post_2794991.html#4470

⁸⁶Source: 2022 肇慶市統計年鑒-03 人口-sheet3-1