China’s demographic trends and implications for business
Takeaways from China’s 7th Census

Economic Insights

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Executive summary

On 11 May 2021, the National Bureau of Statistics released the Communiqué of the Seventh National Population Census (the “7th Census”). The 7th Census, which was carried out from 1 November to 10 December 2020, was aimed at registering China’s population living in the country as of 1 November 2020, as well as all overseas Chinese without foreign permanent residency.

The census is important for a country to understand its population development. To date, China has conducted seven censuses — in 1953, 1964, 1982, 1990, 2000, 2010 and 2020.

Under the current statistics policy, China performs a census every decade, specifically in the years ending with “0”. In other years, the country carries out sampling surveys, including those so-called “small censuses”. These surveys are performed in the years that end with “5” and are based on a 1% sample.

It is worth noting that different statistics collection approaches are adopted for the census and the sampling survey. A census covers the entire population, while a sampling survey is based on sample data. Relatively speaking, censuses are not subject to sampling errors, and they have a lower rate of underreporting and higher accuracy. In addition, censuses are also used as an important basis to re-calibrate previously released population data.

The census provides an important reference point for China’s population and demographic structure and is worth careful studying. According to the 7th Census statistics, China’s population is growing slowly with a low fertility rate and an increasing ageing population.

In order to improve the demographic structure, China announced on 31 May a “three-child” policy and a number of “supportive measures”, covering areas such as marriage, births, parenting and education. It also called for ensuring equal employment rights for women by improving maternity leave and medical insurance systems, as well as introducing tax, housing and other favourable policies to raise China’s fertility rate.

This report analyses the 7th Census statistics from the perspectives of size, age structure, urban and rural composition, regional distribution, and quality of the population. Based on this analysis, we have identified five trends in the development of China’s population and have outlined business implications of these trends and emerging opportunities.
China’s population grew slowly from 2010 to 2020. The 6th Census in 2010 and the 7th Census in 2020 indicate that China’s population increased by 72.06 million, from 1.34 billion to 1.41 billion, during that period.

This growth represented a decrease of 0.04 percentage points in the average annual growth rate to 0.53% from 0.57% in the period of 2000–10 (Figure 1). As the soaring population growth that resulted from the high fertility rate in the decades following the founding of the PRC slows, experts expect the population to contract sometime between 2026 and 2030.

Figure 1: Size and annual growth rate of China’s total population

Source: National Bureau of Statistics, Wind, KPMG analysis

1 Interpretation of the 7th Census Communique, Economic Daily, 12 May 2021
China’s low fertility rate is the major cause of the slow population growth. The country has experienced three “baby booms” in recent history: one immediately after the founding of the PRC, one during the period from 1962 to 1973 and one from 1986 to 1990. However, this “baby boom” cycle was interrupted by the family planning policy, and as a result a fourth “baby boom” did not materialise around 2010 (Figure 2).

According to the 7th Census statistics, China’s total fertility rate in 2020 stood at 1.3, which falls in the “low fertility rate” range of below 1.5. A rate of 2.1 is considered sufficient for replacing the existing population. From a global perspective, low fertility is a common issue in many countries. In 2018, only 37% of upper middle-income countries and high-income countries had rates that exceeded the replacement rate.

However, the so-called “low-fertility trap” is not unescapable. For example, after having a fertility rate below 1.5 for 40 years, Germany successfully increased its rate to 1.5 in 2015, and the country has maintained the rate since then by taking various actions, such as increasing the welfare of parents, promoting work-life balance, improving inclusive childcare services and lowering the immigration threshold.

In conclusion, the adoption of more favourable policies that encourage people to have children, as well as lower the cost of raising children, is very important for the long-term development of China’s population from a practical perspective.

Figure 2: Number of newborns, million person

Source: China Statistics Abstract 2021, Wind, KPMG analysis
According to the 7th Census, China’s working-age population has declined in both proportion and size. The share of the population aged 15 to 64 reached a high of 74.5% in 2010 (Figure 3) and then decreased by 6 percentage points to 68.6% in 2020, while the size of the working-age population declined by 30 million to 970 million. The labour force serves as an important factor for production and economic growth, and therefore a decreasing working-age population will raise the cost of labour and result in various impacts on macro-economic development.

Figure 3: Share of population aged 15 to 64 and GDP growth in China, %

Source: China Statistics Abstract 2021, Wind, KPMG Analysis
The 7th Census statistics show that China’s ageing population is accelerating and features the following three characteristics:

- First, the share of senior population aged 65 and above has increased by 4.6 percentage points over the last decade, to 13.5% in 2020 (Figure 4). From a global perspective, China has a significant senior population, exceeding the combined total of that in the United States, Japan, Germany, France, the United Kingdom and South Korea (Figure 5).

- However, the country’s per capita GDP is only USD 10,504, less than that of Japan or South Korea at the same level of ageing population. For this reason, China is not financially prepared for an ageing population.

Figure 4: Age structure in each census, %

![Age structure in each census, %](image1)

Source: National Bureau of Statistics, Wind, KPMG analysis

Figure 5: Size and share of population aged 65 and above by country

![Size and share of population aged 65 and above by country](image2)

Source: National Bureau of Statistics, World Bank, KPMG analysis

Note: The figure is based on the data for China as of 2020 from the 7th Census statistics, and the data for the other countries as of 2019 from the World Bank.
• Second, China’s population is ageing at a fast pace. According to the World Bank, the ageing rate has accelerated significantly since 2008, and surpassed Japan’s in 2017. As of 2019, China ranked second among major economies in terms of the speed of population ageing, with South Korea topping the list (Figure 6).

Figure 6: Annual change in the share of population aged 65 and above, percentage point

Source: World Bank, KPMG analysis

• Third, the dependency ratio of senior population (Figure 7) has increased, which has raised the demand for senior care services. Specifically, the 7th Census statistics indicate that the dependency ratio of senior population increased by 7.8 percentage points over the last decade, from 11.9% in 2010 to 19.7% in 2020. Additionally, the size of the average family declined by 0.5 from 3.1 in 2010 to 2.6 in 2020, putting stress on families that are providing home-based care for their elders.

Figure 7: Dependency ratios, %

Source: China Statistics Abstract 2021, Wind, KPMG analysis
It is worth noting that rural areas in China are more seriously affected by the ageing population issue, and the extent varies across provinces and cities as well. On one hand, a large number of working-age people are migrating from rural areas to cities as the urbanisation process accelerates, worsening the ageing population in their hometowns (Figure 8). As education, health and other public services in urban areas are accessible only to the household-registered population there, it is harder for seniors or children to move to these areas, and this situation places an increasing burden on services related to senior care, healthcare and education in the places where their family members are left behind.

Figure 8: Share of population aged 60 and above in rural and urban areas, %

![Graph showing the share of population aged 60 and above in rural and urban areas](source)

On the other hand, population migration has resulted in differences among regions in terms of age structure. For example, a significant number of working-age people have migrated from north-eastern China, raising the proportion of people aged 65 and above in the area to 16.4%, which is 7.3 percentage points higher than that of 2010 (Figure 9), and higher than the national average. Conversely, as the destination of many migrants, Guangdong province has a much lower proportion of senior population at 8.7%, which ranked third after Tibet at 5.7% and Xinjiang at 7.8%.

Figure 9: Share of population aged 65 and above by province in 2020, %

![Graph showing the share of population aged 65 and above by province in 2020](source)
Generally, urbanisation occurs in conjunction with industrialisation, as workers move from agricultural sectors in rural areas to non-agricultural sectors in urban areas, where productivity is higher. As a result, the shift in labour and other resources generates greater economic benefits.

According to the 7th Census statistics, the level of urbanisation in China increased significantly from 50% in 2010 to 63.9% in 2020, representing an annual rate of 1.4%.

Besides that, China’s reform and opening up accelerated its urbanisation, and the gap between the country’s urbanisation and that in other countries has narrowed. China’s urbanisation ratio was 28.3 percentage points lower than the average rate of the upper middle-income countries in 1980, and this gap had been reduced to less than 2 percentage points by 2019. China has reached the average rate for upper middle-income countries (Figure 10). According to China’s “new urbanisation” strategy, there is still room for improvement of the country’s urbanisation. However, as the ageing population issue is getting worse in rural areas, the pace at which working-age people are migrating from rural areas to cities may slow down in the future.

In the period of 2016–20, the urbanisation ratio of residents with household registration accelerated with an increase over 1% each year (Figure 11). During the 14th Five-Year Plan period, China will continue to promote the reform of the household registration system, so as to boost the labour supply and drive consumption.

Figure 10: Urbanisation ratio, %

Figure 11: Urbanisation ratio by residency and by hukou, %

Source: China Statistics Abstract 2021, World Bank, KPMG analysis
Note: The figure is based on the data for China as of 2020 and the data for upper middle-income countries as of 2019.
China’s rapid economic development is driving the migration of its population. The 7th Census statistics show that China had 376 million migrants in 2020 (Figure 12), an increase of 69.7% from 2010 when the 6th Census was conducted. The figure in 2020 accounted for one-fourth of the country’s entire population. Notably, intra-provincial migration has outpaced inter-provincial migration, with roughly two out of three migrants choosing to relocate within their respective provinces. This trend aligns with the country’s efforts to coordinate regional development in recent years.

In addition, some major cities in central and western China have introduced favourable policies to encourage certain enterprises from eastern China and overseas to relocate in order to develop advanced manufacturing bases and foster special industries, thereby offering more job opportunities for residents in their provinces.

Figure 12: Number of migrants, million person

Source: National Bureau of Statistics, KPMG analysis
The migration of workers across regions is closely related to regional differences in economic growth, job opportunities, natural environment, health and education, public services, etc. Over the past decade, China has witnessed a significant decline in the working-age population in the north-eastern region. Conversely, significant increases have been seen in Guangdong, Zhejiang, Xinjiang, Guizhou, Chongqing and Hainan (Figure 13). The robust economies, higher levels of urbanisation and better inter-municipal connections in the Yangtze River Delta and Pearl River Delta attract working-age people.

After investing significantly in their reform and opening-up efforts, Guizhou and Chongqing have made strides in industrial transformation and upgrading, and have developed competitive advantages, which have attracted a significant proportion of the working-age population. Meanwhile, the launch of the strategy to develop the Hainan Free Trade Port has begun to drive the island’s development, drawing professionals from across the country.

Figure 13: Changes in population aged 15–59 population by province, million person

Source: National Bureau of Statistics, KPMG analysis
Trend 5

Accelerating improvement in education

According to the 7th Census statistics, the average years of basic education for Chinese aged 15 and above increased from 9.1 years in 2010 to 9.9 years in 2020.

As a result of rapid improvement in higher education, the share of population with college and above education increased the most among different categories — from 8.9% in 2010 to 15.5% in 2020 (Figure 14). The increase in the education level of the working-age population will boost productivity and drive technological innovation and development. Talent dividend is expected to be released gradually.

As China continues to increase college education access to more students, the Ministry of Education expects the country to have over 10 million college graduates in 2022 (Figure 15). Therefore, generating enough job opportunities for the college graduates has become an urgent goal.

China is driving pushing for scientific innovation and promoting industrial upscaling, upgrading, which also requires the education system to be adjusted accordingly. Collaborations between universities and corporates are currently still limited and some students may not necessarily be equipped with the skills required by corporates, causing structural shortages in the job market. This calls for stronger collaborations between the academic and business communities and developing a talent pool talents that supports China’s innovation goals.

Figure 14: Changes in population aged 15–59 population by province, million person

Source: National Bureau of Statistics, KPMG analysis

Figure 15: Number of college graduates, million person

Source: China Statistics Abstract 2021, Wind, KPMG analysis
Demographic, both its size and structure, is of great importance to economic development. China’s demographic trends have significant implications for business, and we expect the following opportunities to emerge.

**Changing consumption patterns, especially for young and senior populations**

According to the United Nations’ population prospects from 2020 to 2030, China will see the fastest population increases in the age ranges of 35 to 44, 55 to 64, and 65 and above. These changes in the population structure will reshape the consumption pattern and generate remarkable market demand for young and senior populations (Figure 16).

**Figure 16: Chinese population by age structure, million person**

Source: UNWPP 2019, KPMG analysis
First, although China’s fertility rate has decreased slightly in recent years, it still had 12 million newborns in 2020, which is 1.8 times the combined total of newborns in the United States, Japan, Germany, France, the United Kingdom and South Korea during the year (Figure 17). Moreover, young people born in the 1990s and 2000s are becoming the major consumers in the baby care market, and they pay close attention to evidence-based child rearing and demand for higher quality products and services. As a result, business opportunities will emerge in sectors such as inclusive childcare, intelligent toys and nursing.

![Figure 17: Number of newborns in 2020, thousand person](image)

Second, the ageing population is also boosting consumption in the elderly care market, posing a great potential for the silver economy. Apart from driving the growth of medical care, health care and other related sectors, senior people are also exhibiting an increasing demand for entertainment and travel services. In addition, some seniors are enrolling in universities for the elderly and other educational institutions in order to learn about new topics and hobbies, resulting in the development of related business sectors.

In addition, the decline in the size of the average family in China — from 3.1 people in 2010 to 2.6 people in 2020 — has given rise to the “single economy”, such as solo dining, pets and other new types of business.
Rise of Chinese brands

In recent years, Chinese brands have been increasingly drawing attention from domestic consumers, especially those born in the 1980s and 1990s who grew up amid the country’s rapid economic development and digitalisation, and therefore possess a stronger sense of national identity and pride. Additionally, the younger generation, who are early adopters and eager to demonstrate their personalities, are the main followers of these rising Chinese brands. In the next 10 years, the younger generation will join one of the most rapidly growing age ranges in China — 35 to 44 years — creating market potential for Chinese brands.

To meet the demand for better products and services, Chinese brands are improving their quality gradually. Thanks to the rapid development of digital economy, domestic companies are able to identify consumer demands timely, tailor their products accordingly and enhance brand value. Nowadays, Chinese brands are associated with phrases like “trendy” and “high quality” instead of “boring” or “cheap”. We believe that Chinese brands will expand their brand value and continue to gain competitive advantages in the future.

A growing market for community-based senior care and commercial retirement insurance

China may ease the accumulating pressure from its ageing population through the following approaches.

First, home-based senior care is becoming a heavier burden for families as the generation of people born under the family planning policy become the country’s societal pillar. In the past, 90% of senior people in China were taken care of by their family members at home, while 7% were through elderly care community programmes and 3% in nursing homes. The provision of more senior care through community programmes or nursing homes can help reduce the burden on families.

Second, China’s three-pillar pension system has not achieved a proper balance. According to statistics as of 2019, the first pillar accounted for 70% of the total contribution; the second pillar, which consists of enterprise annuities and occupational annuities, accounted for less than 30%; and the third pillar, which comprised individual savings retirement insurance and commercial retirement insurance, accounted for almost nothing. Comparatively, pension systems in developed countries such as the United States have been commercialised, with the second and third pillars offering major pension support (Figure 18). In China, the second and third pillars should be further developed to make the system more balanced and sustainable.

Figure 18: Share of the three pillars in total retirement savings (2019), %

![Figure 18: Share of the three pillars in total retirement savings (2019), %](image)

Source: MOHRSS, CASS, KPMG analysis

Note: The first pillar of China’s pension system includes the basic pension fund for urban workers, urban and rural residents, and the national pension reserve fund.

Accelerating automation and intelligent transformation

According to the 7th Census statistics, China’s working-age population is decreasing in both size and proportion, and its low fertility rate is undermining the future growth of its working-age population. As an essential production factor, a decline in the labour force will increase labour costs and will encourage enterprises to accelerate automation transformation. The market demand for automation equipment is expected to surge in the future.

China is currently entering a critical stage of economic transformation and upgrading, and it is undergoing a digital transformation driven by a new revolution of cutting-edge technologies and industries. Meanwhile, it is facing a diminishing demographic dividend. Against this background, the traditional sectors will seek to improve their global competitiveness by adopting intelligent technologies.

Enterprises can leverage cloud computing, artificial intelligence and other cutting-edge technologies to facilitate product and service innovation as well as explore new business opportunities and models. In addition, the intelligence transformation could help enterprises adapt more flexibly to rapid changes and technological upgrades in the global market, thereby improving their operational capabilities and efficiencies.

Talent-driven innovations

China’s demographic dividend will be replaced by a talent dividend as its population structure changes. The 14th Five-Year Plan has identified innovation as the core driver for future development, and talent is a critical source of innovation.

Over the past decade, higher education has developed quickly in China. Enterprises should view talent as their primary resource and increase related investments to gain an edge over their competitors in the future. Companies can recruit high-level talent to enhance their technological innovation capabilities and global competitiveness. Meanwhile, they can work more closely with universities and research institutes on major national scientific and technological programmes, as well as participate in industrial innovation centres to explore basic sciences, critical technologies and frontier fields.

These efforts will align industries, universities and research institutes with each other more closely and encourage talented individuals to pursue technological innovation. In addition, it will help enterprises commercialise technological achievements rapidly and help China develop proprietary technologies that are crucial to the nation.
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