

**HOW HAVE ELDERLY CHINESE
FARED?: EVIDENCE FROM
CHINA'S 2020 POPULATION
CENSUS**

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Executive Summary

1. China's National Bureau of Statistics published the 2020 population census results in 2022. It included a survey of 10% of mainland Chinese aged 60 and above on their main source of livelihood, self-rated health and living arrangement, shaped largely by important changes in the 2010s—pension coverage extension, healthy ageing agenda and rise of solo living.
2. Indeed, the census data show that the elderly Chinese have enjoyed diversified and enhanced sources of livelihood. The percentage of those whose main source of livelihood depended on pension increased from 24.1% to 34.7% between 2010 and 2020. Consequently, labour income and family support have decreased in importance.
3. Moreover, pension coverage extension had a remarkable equalising effect, benefitting elderly women, rural residents and those in more advanced age groups more than elderly men, urban residents and those in younger age groups.
4. Population census data also substantiate China's progress in healthy ageing. Those who felt "healthy" increased from 43.8% in 2010 to 54.6% in 2020, while those who reported "somewhat healthy", "less healthy with self-care ability" and "loss of self-care ability" decreased in share.
5. The improvement in self-rated health has been broad-based, occurring to men and women, urbanites and rural residents, young-old and old-old. Notably, the improvement has been larger for women than men and for those living in rural areas than their urban counterparts.
6. Living arrangement was first surveyed in the 2020 population census. Overall, living with spouse was the dominant form of living arrangement (43.7%). Living with spouse and child is the remote second (23.1%), followed by living with child (16.6%). In total, over 80% of elderly Chinese live with their spouse or child or both, suggesting a strong norm of family-centred living.

7. Nonetheless, solo living was more prevalent for women than men (13.2% versus 10.2%), in rural areas than in urban areas (13.6% versus 10.3%), particularly so among old-old than young-old (over 20% of those aged 80 and above versus less than 10% of those in the 60s).

8. Solo living is most likely to increase in the coming decades. How it affects the health, living arrangement and livelihood support of elderly Chinese, especially women, rural residents and those in the more advanced age groups, deserves more research and policy attention.

HOW HAVE ELDERLY CHINESE FARED?: EVIDENCE FROM CHINA'S 2020 POPULATION CENSUS

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China's Census Data on the Elderly People

- 1.1 China conducted its seventh population census between November and December 2020. Its National Bureau of Statistics (NBS) released preliminary results in May 2021, revealing profound changes in the size, structure, growth and geographic distribution of the mainland Chinese population.¹
- 1.2 In 2022, *China Population Census Yearbook 2020* was published. It reports two types of data from the 2020 census. The first is based on the short table (短表), a census of the whole population to obtain basic demographic information; the second is based on the long table (长表), a survey of 10% of the mainland Chinese to gather additional information deemed important for policymakers.²
- 1.3 The long table survey has a special section on the “elderly population” (age 60 and above), displaying the health status, main source of livelihood (主要生活来源) and living arrangement of the surveyed Chinese aged 60 and above in 2020. NBS released data aggregated at the national level as well as disaggregated by gender (male and female), area (urban, town and rural) and age. See Table 1 for the number of surveyed Chinese.

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¹ Notable changes include rapid decline in the number of new births (despite the end of the one-child policy in 2016), start of negative population growth in several provinces (the first since the 1959-1961 Great Famine) and unexpectedly strong inter-provincial migration (despite the COVID pandemic in 2020). For a comprehensive overview, see Zhao Litao (2021), “China’s Population Trends from the 2020 Census: Ageing, Mobile and More Educated”, *EAI Background Brief*, No. 1590, East Asian Institute, National University of Singapore, available at <https://research.nus.edu.sg/eai/wp-content/uploads/sites/2/2022/07/EAI-BB-No.-1590-China-2020-census-results-2-1.pdf>, accessed 28 August 2022.

² <http://www.stats.gov.cn/tjsj/pcsj/rkpc/7rp/zk/indexch.htm>, accessed 28 August 2022.

**TABLE 1 A GLANCE AT ELDERLY CHINESE (AGE 60 AND ABOVE)
IN THE 2020 LONG TABLE SURVEY**

Age Group	Number	Urban		Town		Rural	
		Male	Female	Male	Female	Male	Female
60-64	7,212,331	1,312,078	1,364,356	728,783	734,020	1,570,673	1,502,421
65-69	7,261,013	1,152,613	1,260,305	707,032	750,082	1,697,426	1,693,555
70-74	4,813,647	709,144	786,332	463,018	496,165	1,169,730	1,189,258
75-79	2,980,508	416,427	494,233	279,960	313,980	712,807	763,101
80-84	1,897,750	280,897	350,557	166,553	203,850	409,169	486,724
85-89	973,818	140,447	188,974	75,227	109,769	183,233	276,168
90-94	312,846	43,216	62,344	21,811	37,546	50,410	97,519
95-99	63,626	7,225	13,270	3,688	8,658	8,663	22,122
100+	7,562	615	1,552	336	1,158	827	3,074
Total	25,523,101	4,062,662	4,521,923	2,446,408	2,655,228	5,802,938	6,033,942

Data source: Author's compilation based on *China Population Census Yearbook 2020*.

Note: The 2020 long table survey was a survey of 10% of the mainland Chinese in 2020.

1.4 The elderly population first became a subject of long table survey in 2010, a decade after China's transition into an ageing society in 2000. The 2010 long table survey mainly focused on health status and main source of livelihood, while the 2020 survey expanded to include the living arrangement as a third component.

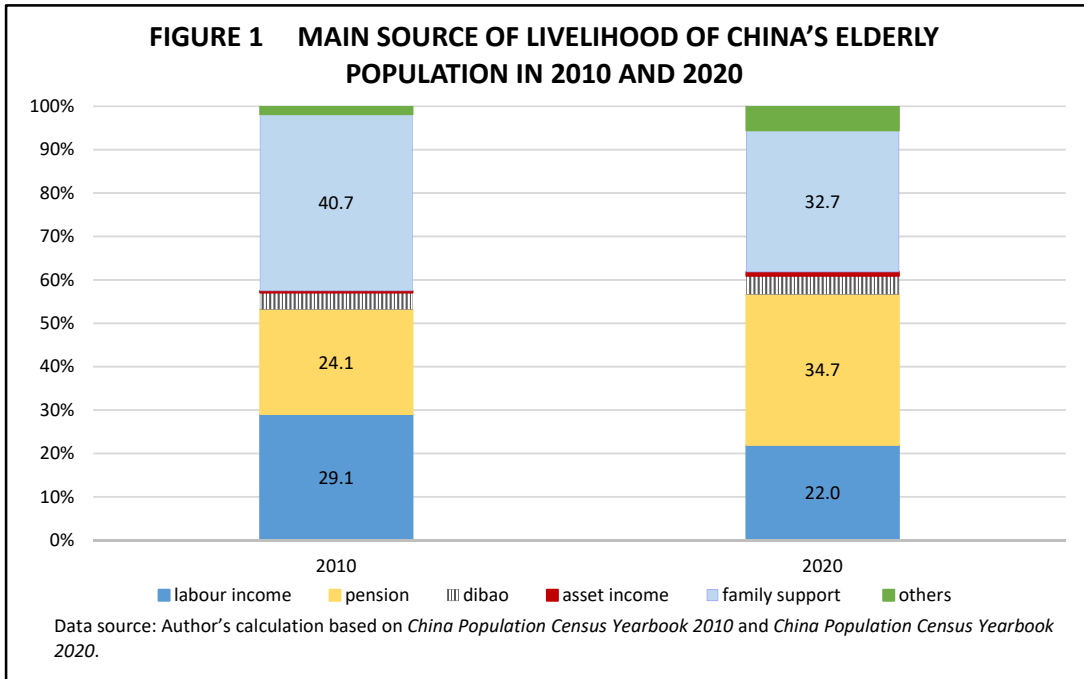
Main Source of Livelihood

2.1 On the elderly's main source of livelihood, the 2010 and 2020 long table surveys listed seven mutually exclusive categories: labour income, pension, unemployment insurance, *dibao* (minimum living standard guarantee programme), asset income, family support and others.

2.2 Figure 1 shows the percentage of each category for years 2010 and 2020. Labour income, pension and family support stood out as the dominant sources of livelihood. Nearly 94% in 2010 and 90% in 2020 chose one of them as their main source. By comparison, *dibao*—China's pivot social assistance programme—was the main source for 3.9% of the elderly Chinese in 2010 and 4.3% in 2020.

2.3 A notable change in the past decade was the growing importance of pension in supporting the livelihood of the elderly Chinese. In 2010, pension was the main source of livelihood for 24.1% of China's elderly population, falling behind family support and labour income; in 2020, it came out top with a 34.7% share.

2.4 This change owes much to China’s remarkable pension coverage extension in the past decade: the roll-out of a pension scheme for rural population in 2009, followed by a similar scheme introduced in 2011 for urban non-working residents and working individuals not covered by the urban employee pension scheme (established in 1997).³



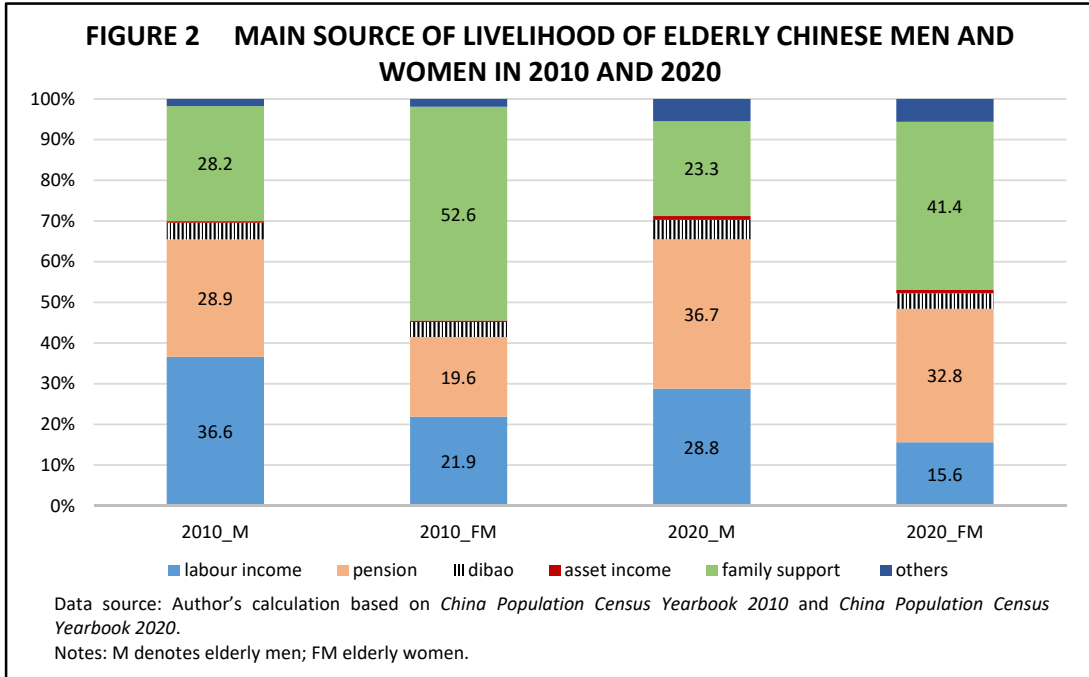
2.5 The 2020 population census has captured the profound impacts of pension coverage extension. With enhanced social security, the elderly Chinese now rely considerably less on family support or labour income as the main source of livelihood.

2.6 Figure 2 analyses the gender pattern in livelihood support. In 2010 and 2020, labour income and pension were more important for men, while family support was far more important for women.

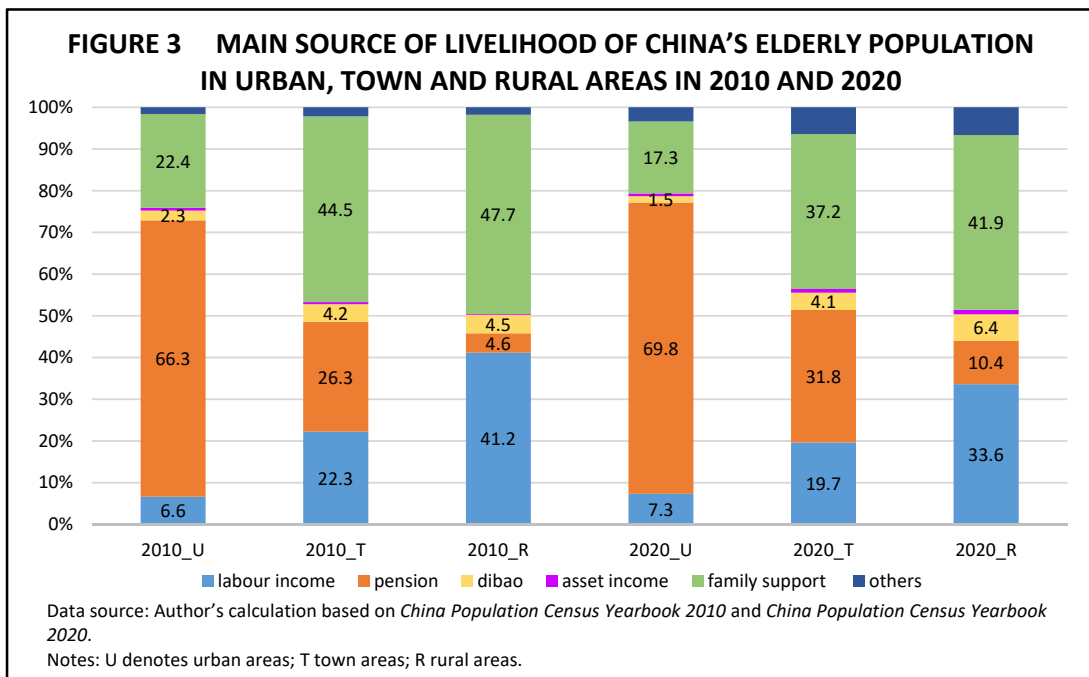
2.7 Evidently, gender differences have become smaller between 2010 and 2020. Elderly women have benefitted more from pension coverage extension than elderly men. Consequently, women have experienced a faster rise in pension as the main source of livelihood and a more rapid decrease in reliance on family support. Nonetheless,

³ Zhao Litao and He Xiaobin (2021), “Lessons from China on Different Approaches to Pension Coverage Extension”, *International Social Security Review*, 74(1): 5-34.

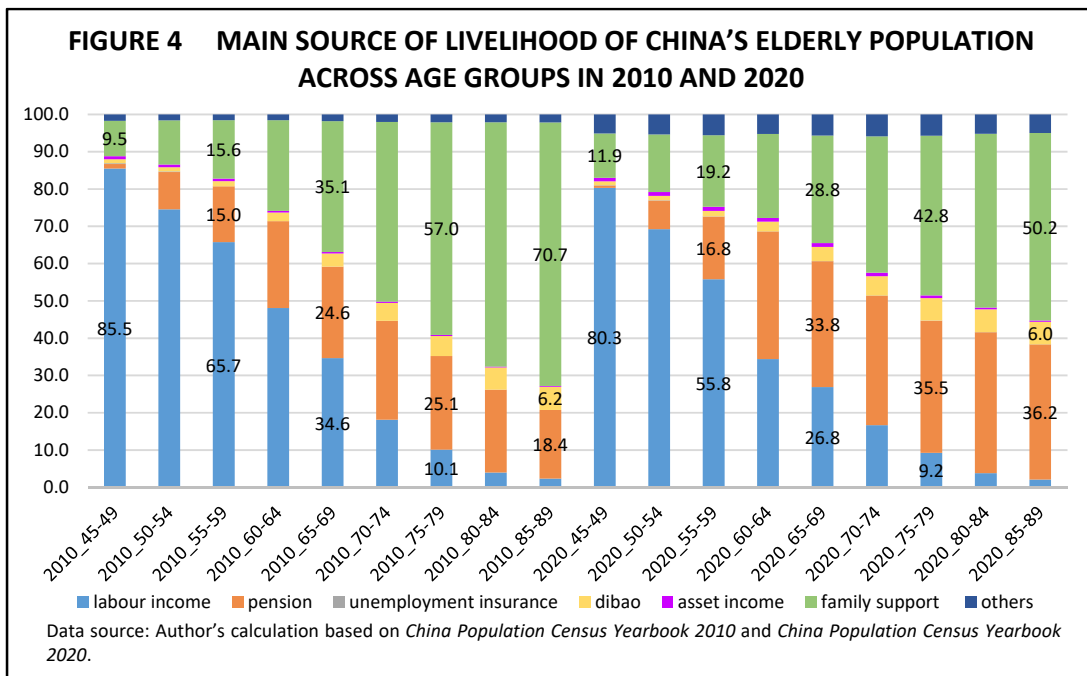
pension coverage extension has benefitted elderly men as well, as their reliance on labour income decreased faster than that of elderly women.



2.8 Figure 3 presents large rural-urban differences in livelihood support. Pension is the dominant source for elderly Chinese living in urban areas, while family support and labour income are the dominant sources for their rural counterparts.



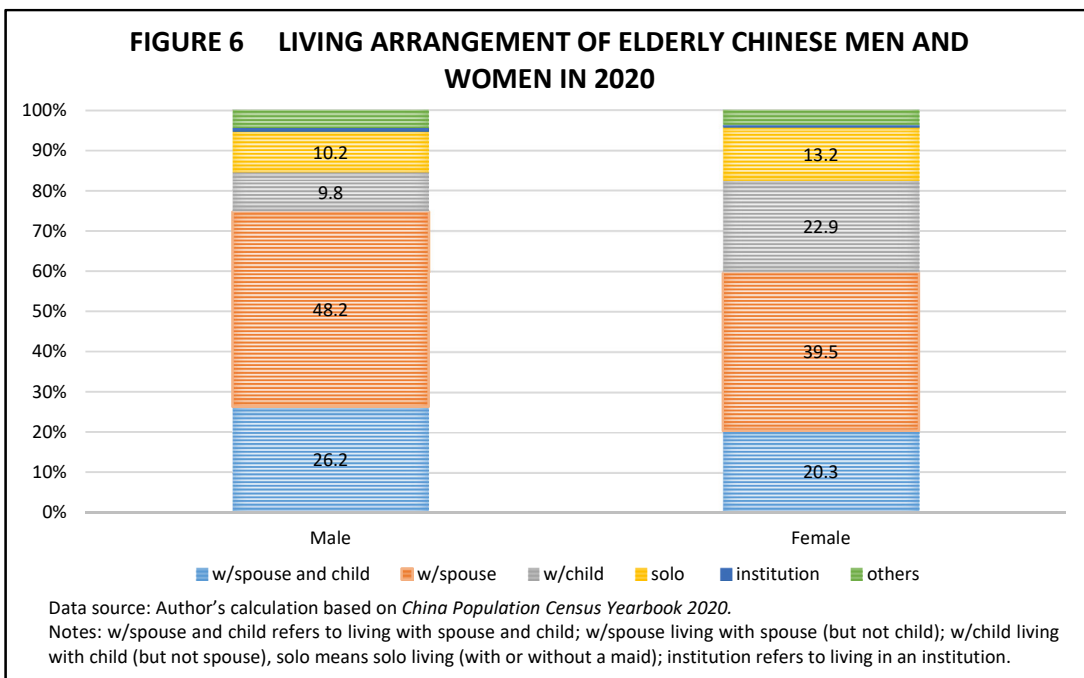
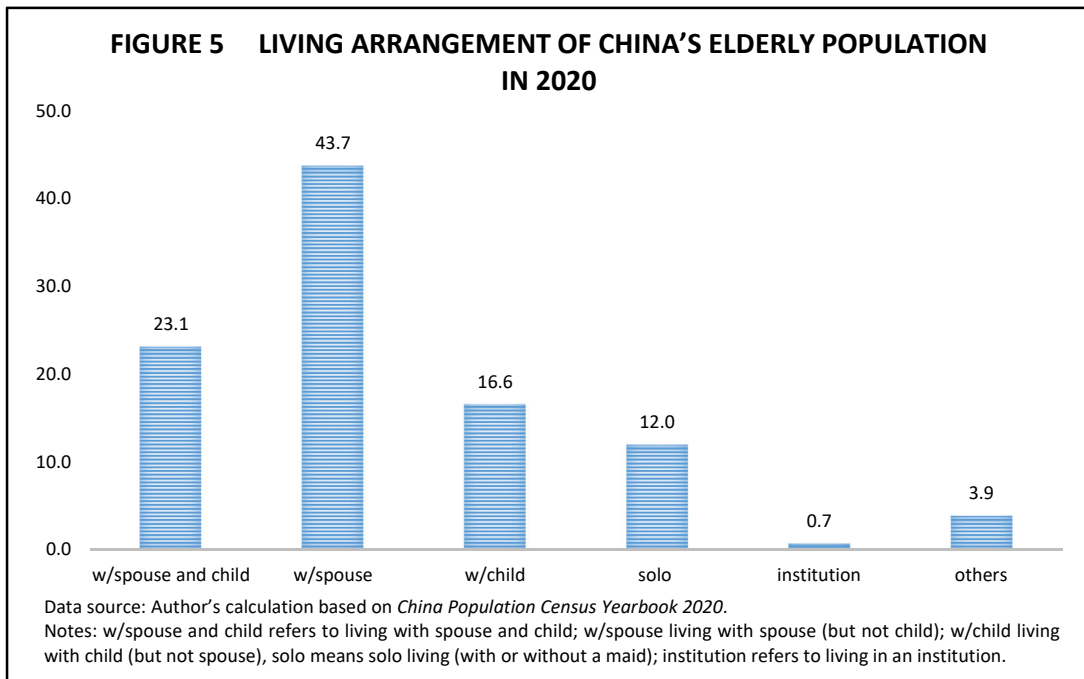
- 2.9 The relative importance of pension, labour income and family support has changed over time. Pension has gained in importance for all three groups, but more so for those living in rural areas. Labour income as a main source has slightly increased for elderly Chinese living in urban areas, but has declined in importance for the other two groups, particularly those living in rural areas.
- 2.10 Reliance on family support has decreased for all three groups. *Dibao*, a social assistance programme to those living below the poverty line, has become more important for the rural elderly, as 6.4% of those living in rural areas relied on *dibao* as their main source of livelihood in 2020, compared with 4.5% in 2010. In contrast, *dibao* has declined in relative importance for the urban elderly.
- 2.11 Figure 4 shows how main sources of livelihood change with age. Labour income, the predominant source for younger age groups (below 60), declines rapidly in importance, down to a trivial source for the oldest old (80 and above). Family support, the second most important source for younger age groups (but far less important than labour income), becomes the most important source for older age groups (65 and above). Pension, the main source for 15.0%-16.8% of those in the age group 55-59, overtakes labour income to become the second most important source for people aged 70 and above.



- 2.12 Between 2010 and 2020, pension gained in importance, more so for older age groups. Meanwhile, family support decreased in importance (except for age groups below 60), more so among the more advanced age groups.
- 2.13 Overall, pension coverage extension in the past decade has diversified sources of livelihood for the elderly Chinese. With pension becoming a main source for a growing number of elderly Chinese, the reliance on labour income or family members for livelihood support has lessened. Moreover, pension coverage extension has a remarkable equalising effect, benefitting elderly women, rural residents and old-old than elderly men, urban residents and young-old.

Living Arrangement

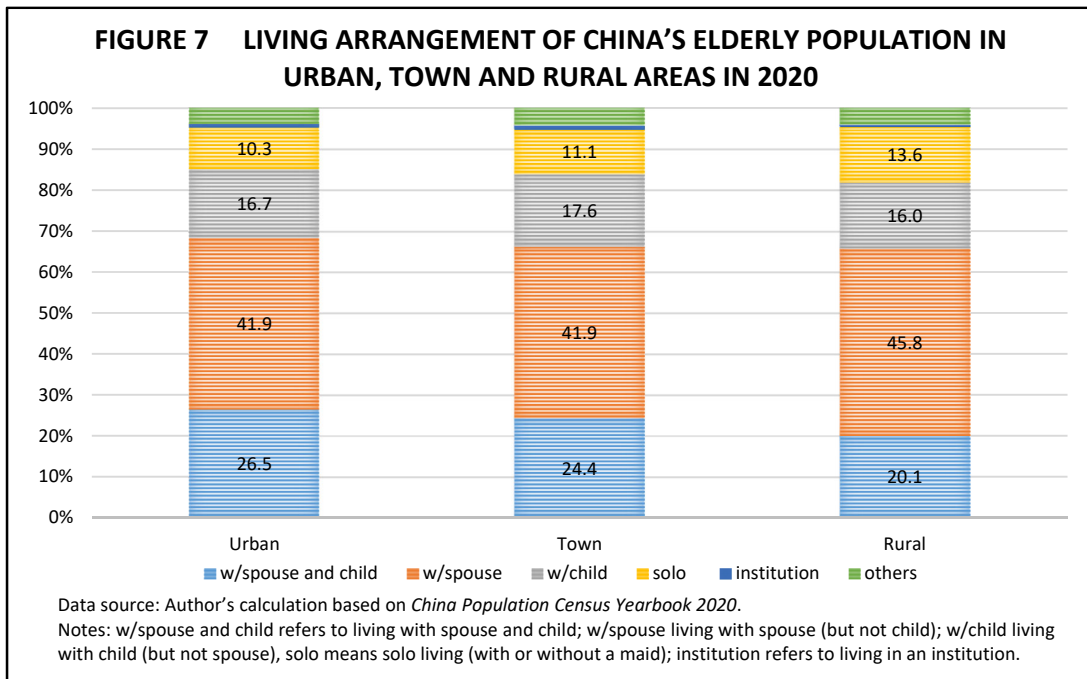
- 3.1 Living arrangement entered the long table survey for the first time in the 2020 population census. The survey listed seven mutually exclusive categories: living with spouse and child; living with spouse; living with child; solo living with maid; solo living without maid; institutional living; and others.
- 3.2 Figure 5 provides a snapshot of elderly Chinese's living arrangement in 2020. Since solo living with a maid was rare (about 1.8 per thousand elderly Chinese), Figures 5 to 8 combine solo living with or without a maid as solo living.
- 3.3 According to the 2020 census data, living with spouse is currently the dominant form of living arrangement. Living with spouse and child is the remote second, followed by living with child. In total, 83.4% of elderly Chinese (age 60 and above) live with their spouse or child or both. Solo living accounts for another 12%. Institutional living constitutes a very small share of 0.7%, far below the target of 3% that has long been set by the Chinese government.
- 3.4 Figure 6 shows how living arrangement differs between elderly men and women. For both men and women, living with a family member—spouse, or child, or both—is normal, accounting for 84.2% for men and 82.7% for women.



3.5 There are some gender differences in specific forms of living arrangement. A higher percentage of men live with spouse and child or live with spouse only. In contrast, a higher percentage of women live with child or live alone. An underlying factor is that women tend to outlive men.⁴

⁴ Based on the 2020 population census data, China's NBS reported that Chinese women's average life expectancy reached 80.9. See http://www.stats.gov.cn/tjsj/zxfb/202112/t20211221_1825520.html, accessed

3.6 Figure 7 compares living arrangement across areas. Whether in urban areas, towns or rural areas, over 80% of elderly Chinese live with their spouse or child or both, indicating a strong norm of family-centred living nationwide (85.1% in urban areas, 83.9% in towns and 81.9% in rural areas).



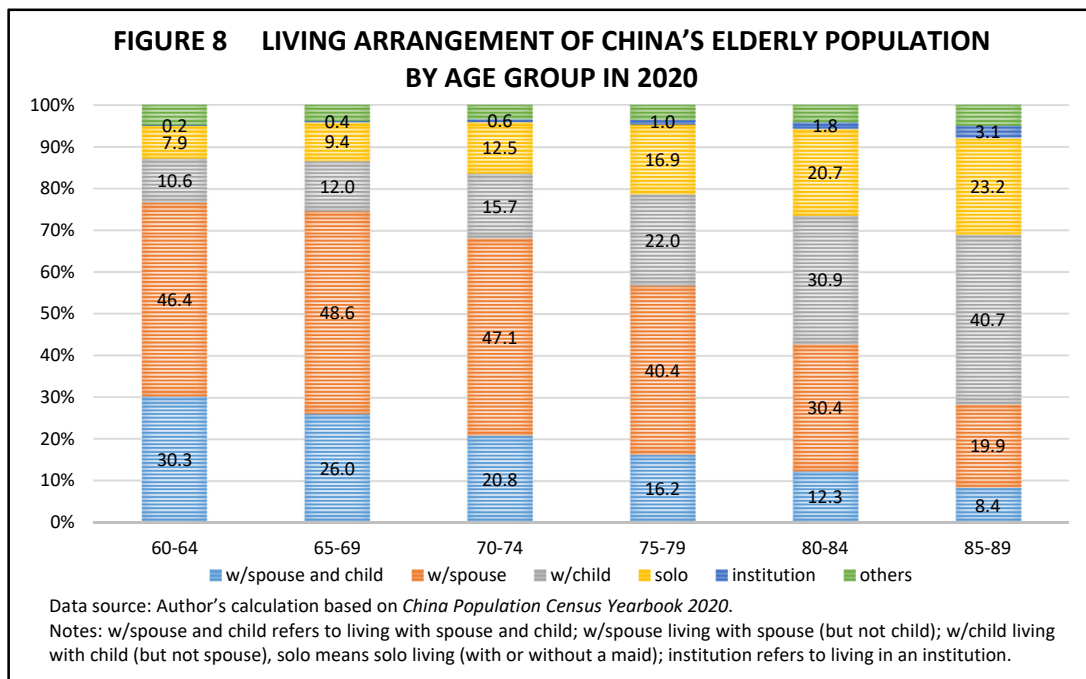
3.7 A somewhat surprising finding is that rural areas are less “traditional” in terms of living arrangement. The traditional norm of filial piety prescribes co-residence with an adult child (and his family) as an ideal form of living arrangement for aged parents. Surprisingly, it is the rural areas that are less able to preserve this traditional norm where elderly people are more likely to live alone (13.6%, higher than 11.1% in towns and 10.3% in urban areas), and less likely to live with their child or with spouse and child.

3.8 As Figure 7 shows, 36.1% of rural elderly live with their child (including those living with spouse and child), lower than 42% in towns and 43.2% in urban areas. A major driver of this co-residence difference is the migration of young people from villages to towns and cities. The migration of grandparents to cities to take care of

29 August 2022. The comparable figure for Chinese men is not available yet, but China's National Health Commission stated in a document that China's average life expectancy in 2020, also based on the 2020 population census data, reached 77.9. See http://www.gov.cn/zhengce/zhengceku/2022-03/01/content_5676342.htm, accessed 29 August 2022.

their young grandchildren, known as “*laopiao*” (老漂 or elderly migrants), may also play a part in boosting co-residence in urban areas.

3.9 Figure 8 shows how living arrangement changes with age. Co-residence with spouse and child or with spouse only declines steadily with age. Solo living becomes more prevalent, from 7.9% of those aged 60-64 to over 20% for those aged 80 and above. Institutional living also increases with age, surpassing 3% in the age group of 85-89.



3.10 Evidently, Chinese families are adjusting to life changes. Some of the widowed move to live with their adult children. Consequently, those in the more advanced age groups are more likely to live with child.⁵

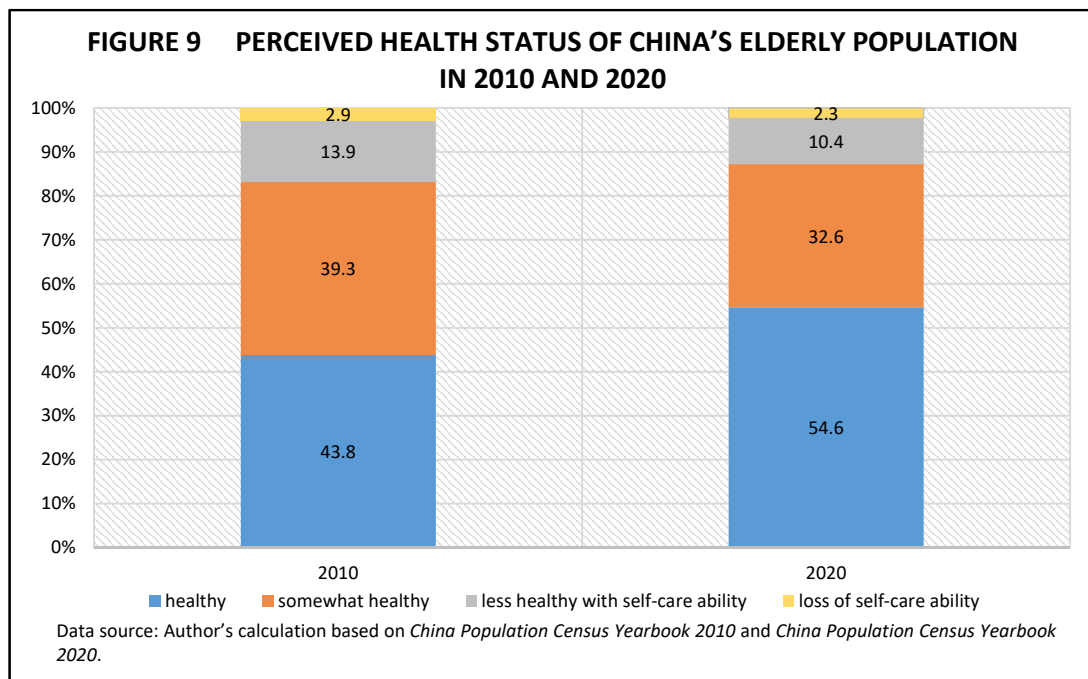
3.11 In sum, over 80% of elderly Chinese live with their spouse or child or both. This general pattern holds for both men and women, residents in rural areas, towns or urban areas, and for those younger than 80. About 12% of elderly Chinese live alone, with the percentage higher in women than men, in rural areas than in towns or urban

⁵ The 85-89 age group has the highest rate of living with child at 40.7%, followed by 30.9% in the 80-84 age group, higher than other age groups. The higher percentages in old-old are partially due to family reconfiguration whereby the widowed move to live with their child, and partially due to the death of spouse, which changes family living arrangement from living with spouse and child to living with child.

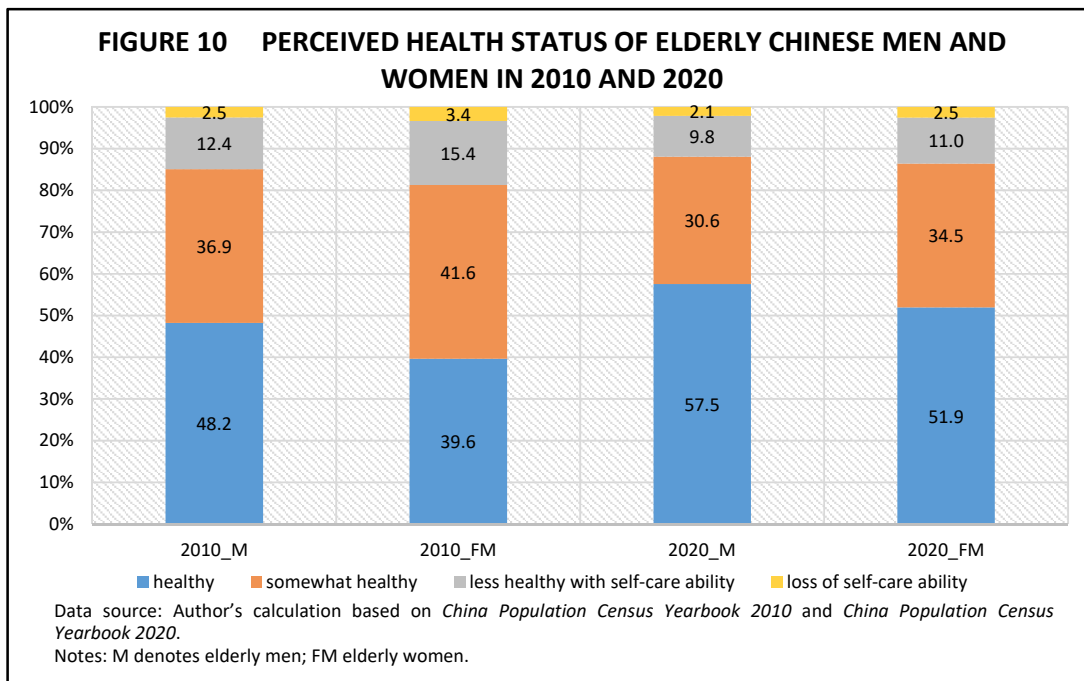
areas, and in old-old than young-old. Meanwhile, institutional living is below 1%, which increases with age, from 0.2% of those aged 60-64 to 3.1% of those aged 85-89.

Health Status

- 4.1 Both the 2010 and 2020 population censuses required a declaration on the elderly’s health status. The self-reported health status has four categories: healthy, somewhat healthy, less healthy with self-care ability and loss of self-care ability.
- 4.2 Figure 9 presents the distribution of perceived health status in 2010 and 2020. Over 80% were positive—either healthy or somewhat healthy—about their health. Notably, self-rated health has improved in the past decade. Those who reported “healthy” increased from 43.8% in 2010 to 54.6% in 2020, while those who were “less healthy with self-care ability” or “loss of self-care ability” decreased. China’s progress in healthy ageing is therefore substantiated by the census results.



- 4.3 Figure 10 compares self-rated health by gender. In general, men were more positive about their health than women. They were more likely to report “healthy” and less likely to report “less healthy with self-care ability” or “loss of self-care ability”.



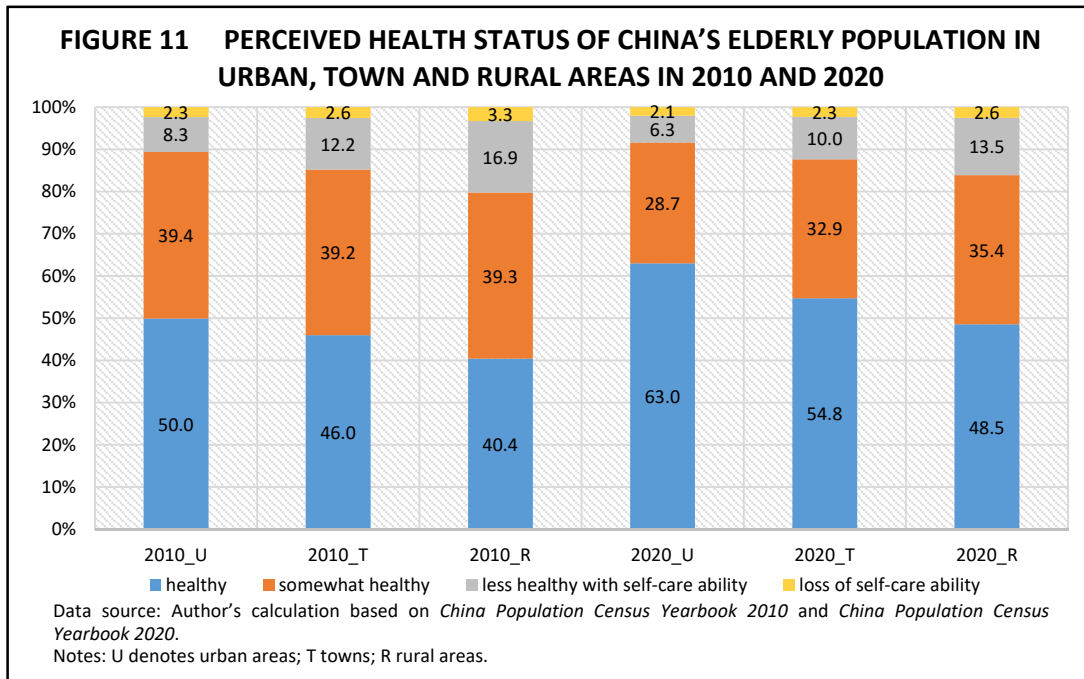
4.4 Self-rated health has improved for both men and women in the past decade. Notably, women have improved more than men, resulting in growing gender parity in health. As Figure 10 shows, the gender difference in “healthy” status narrowed from 8.6 percentage points in 2010 to 5.6 percentage points in 2020. While men without self-care ability decreased from 2.5% to 2.1%, that for women witnessed a more rapid decline from 3.4% to 2.5%.

4.5 Figure 11 compares self-rated health across areas. The rural-urban disparity is amply clear. In 2010 and 2020, a higher percentage of elderly Chinese living in urban areas felt “healthy”, while a higher percentage in rural areas reported “less healthy with self-care ability” and “loss of self-care ability”. Those living in towns were healthier than their rural counterparts, but less so than urban residents.

4.6 Self-reported health status has improved in all three areas. In particular, urban areas have seen a larger increase in those with the “healthy” status—a growth of 13 percentage points from 50.0% in 2010 to 63.0% in 2020, higher than the increase of 8.8 and 8.1 percentage points in towns and rural areas respectively.

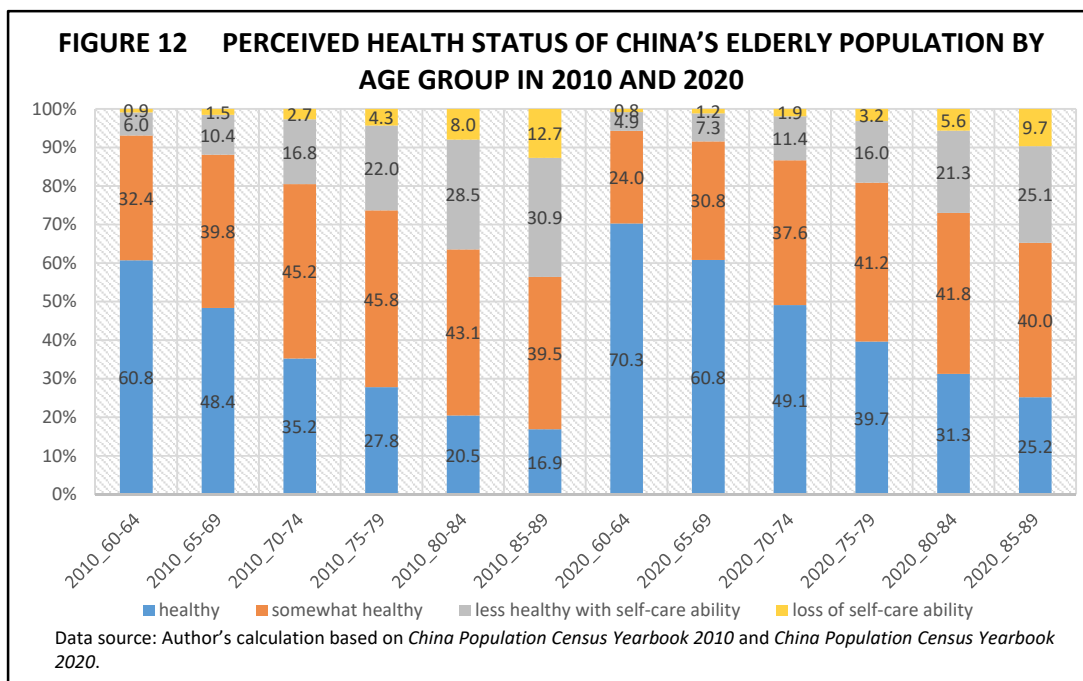
4.7 On the other hand, rural areas have experienced a larger reduction in the percentage of “less healthy with self-care ability” and “loss of self-care ability”. As it is more

challenging and costly to provide health care and social care to less healthy older adults, especially those with disabilities, the narrowing rural-urban health disparity is good news for China’s healthy ageing agenda.



4.8 Figure 12 shows how self-rated health changes with age. As expected, the more advanced age groups are less healthy. In 2010 and 2020, over 90% of those aged 60-64 were positive about their health, feeling either “healthy” or “somewhat healthy”. The percentage of people in the “healthy” category dropped steadily with age, while the percentage of those in the “somewhat healthy” category remained robust. By comparison, the percentage of those “less healthy” (with or without self-care ability) increased rapidly with age, over 40% in 2010 and nearly 35% in 2020.

4.9 The good news is that for every age group, elderly Chinese were healthier in 2020 than in 2010. Remarkably, people who felt “healthy” increased by 10 percentage points or more for age groups from 60-64 to 80-84. The 85-89 age group followed closely with an increase of 8.3 percentage points. Compared with 2010, the percentage of those in the category of “less healthy with self-care ability” or “loss of self-care ability” was evidently lower in 2020 for every age group, suggesting that the onset of morbidity has been postponed to an older age.



4.10 Taken together, self-rated health has notably improved for elderly Chinese in the past decade. The improvement has been broad-based, encompassing men and women, urbanites and rural residents, young-old and old-old. Moreover, the improvement has been larger for women than men and for rural residents than their urban counterparts.

4.11 Similarly, the elderly Chinese have enjoyed diversified and enhanced sources of livelihood. Pension has gained in importance in the past decade. Consequently, elderly Chinese now rely less on labour income or family support than before. Echoing the equalising trend of improved health, pension coverage extension to a greater extent benefitted woman than men, rural residents more than urban residents, and those in the more advanced age groups.

4.12 The 2010 population census did not include living arrangement in the long table survey. Nonetheless, the snapshot provided by the 2020 census data shows a strong norm of family-centred living, with over 80% of elderly Chinese living with their spouse or child or both.

4.13 Notably, over 10% of elderly Chinese are living alone. The rate of solo living is higher for women than men (13.2% versus 10.2%) and more prevalent in rural areas

than in urban areas (13.6% versus 10.3%). Solo living is most likely to increase in the coming decades. How it affects the health, living arrangement and livelihood support of the elderly Chinese, especially women, rural residents and those in the more advanced age groups, deserves more research and policy attention.

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