



## SUSTAINABILITY INSIGHTS: CHINA'S ELDERLY

Authors: Tim Wang, William Morris & Richard Brubaker  
Editor: Gabrielle Williams  
Designers: Jacqueline Ren, Joy Li & Erin O'Neil  
Collective Responsibility  
Published: 2016



# INTRODUCTION

Over the last 30 years, China's economy has undergone a period of unprecedented growth, along with large and widespread changes to systems throughout the country's economy, culture, and society.

While not alone in this demographic shift, the growth and impact of China's elderly population is particularly notable, with over 202 million people over the age of 60 as of 2014 (SCMP, 2014).

In part a natural phenomenon faced by other Asian economies like Japan and Singapore, China's implementation of the One-Child Policy accelerated the drop in fertility rates, causing the elderly proportion of the population to more than double over the last 35 years (7.18% to 15.20%).

Figure 1 illustrates China's aging phenomenon, showing the simultaneous decline in the number of youths (0-15 years of age) and increase in the number of elderly people (60+ years) over the recent decades. A critical time is soon approaching, as the number of elderly is predicted to overtake the number of youths by around 2020. This places growing pressure on the working population to shoulder the public burden.

The myriad of social, economic, and political challenges that accompany an aging population will become increasingly pronounced over the coming decades as the elderly population is predicted to rise to 400 million people by 2033 (SCMP, 2014).

The urgency towards action is illustrated by the recent repeal of the One-Child Policy in China's 13th Five-Year Plan, which states that "the change of policy is intended to balance population development and address the challenge of an aging population". With this challenge growing in size and scale, stakeholder collaborations have a range of opportunities for solutions to be brought to the market.

As such, this report looks to 1) quantify the magnitude of the elderly problem; 2) examine associated economic, infrastructural, and social challenges; and 3) provide insights into potential opportunities. It does not serve to identify a definitive outcome, but rather offers a platform of understanding to inform investors and decision-makers within the context of the inevitable need for a sustainable solution.

## DEMOGRAPHIC REVERSAL OF CHINA (1980-2050)

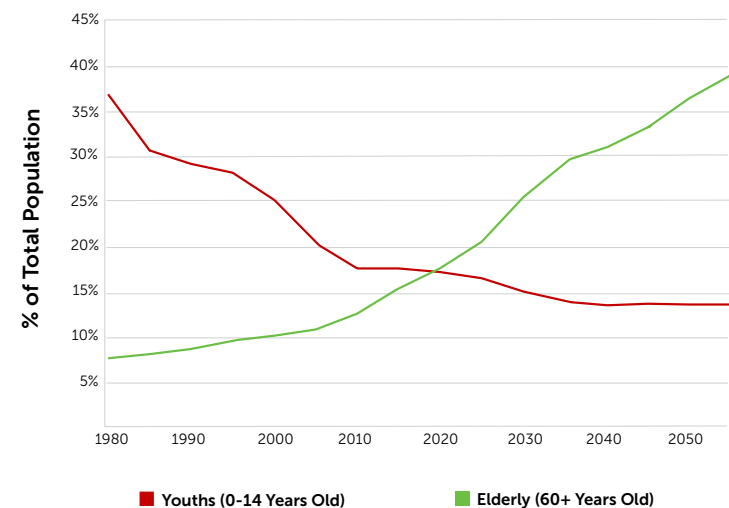


Figure 1: Percentages of youth and elderly within China's total population (1980-2050 projected). Source: UN Population Division, 2015



# CURRENT SITUATION

With the “graying of China” manifesting at the national, provincial, and local levels, this section outlines the trends and developments within each of these realms to offer a holistic understanding of the elderly challenge. To aid this analysis, and to contextualize the growing number of seniors, the old dependency ratio (ODR) quantifies this pressure that the elderly places on the working population, as will be discussed throughout this report.

$$\text{OLD DEPENDENCY RATIO} = \frac{\text{NUMBER OF ELDERLY PEOPLE (60+ YEARS)}}{\text{NUMBER OF WORKING-AGE PEOPLE (15-59 YEARS)}}$$

**National Level:** On the country-wide scale, the national ODR increased by over 70% between 2010 and 2014 (CNBS, 2015). This represents the ever-greater stress on each working individual to support the elderly by either directly sending money to older relatives or indirectly paying taxes. The combination of the aging Chinese population with a below-replacement-level fertility rate (1.55 children per woman in 2014) is likely to cause the ODR to rise considerably over the coming years (BBC, 2015).

Figure 2 shows that the current population bulge of 40-49 year-olds in 2010 will become the bulge of 60+ year-olds by 2050. This will create further challenges and opportunities for both public and private companies to provide service and end-of-life care, which will be expanded upon throughout this report.

**Provincial Level:** The aging of the population is further affected at the provincial level by a steep increase in ODR over the last half decade. Figure 3 illustrates the increase in ODR in each province from 2010 to 2014. Three of China's fastest developing provinces, Sichuan, Jiangxi, and Shaanxi, have had the highest provincial ODR growth (over 65%), which they are unprepared to address with their relatively insufficient infrastructures and resources. In fact, most provinces have seen 30+% increases in ODR between 2010 and 2014. This trend is accentuated by

the eastward migration of younger workers in search of job opportunities, leaving behind the older, non-working generation.

**Major Urban Centers:** Many first-tier Chinese cities are also experiencing an aging of the population. In Beijing, the number of people over the age of 60 approached three million by the end of 2014, constituting 22.3% of the permanent population (Xinhuanet, 2015 A). Likewise, Shanghai had 4.36 million people over the age of 60, or 30.2% of the permanent population, by the end of 2015 (Xinhuanet, 2016). The aging of China's largest urban centers is pressing because first-tier cities often reflect the futures of smaller cities.

The complexity of the issue is reflected at the district level of each urban center. The high density of seniors over the age of 60 and 80 living in Shanghai's central districts are represented in Figures 4 and 5, respectively. These clusters of aging communities gives great urgency to the elderly challenge.

A nuanced understanding of these micro-ratios will allow the government and other stakeholders to best address the issue of the elderly from the local to the national scale.

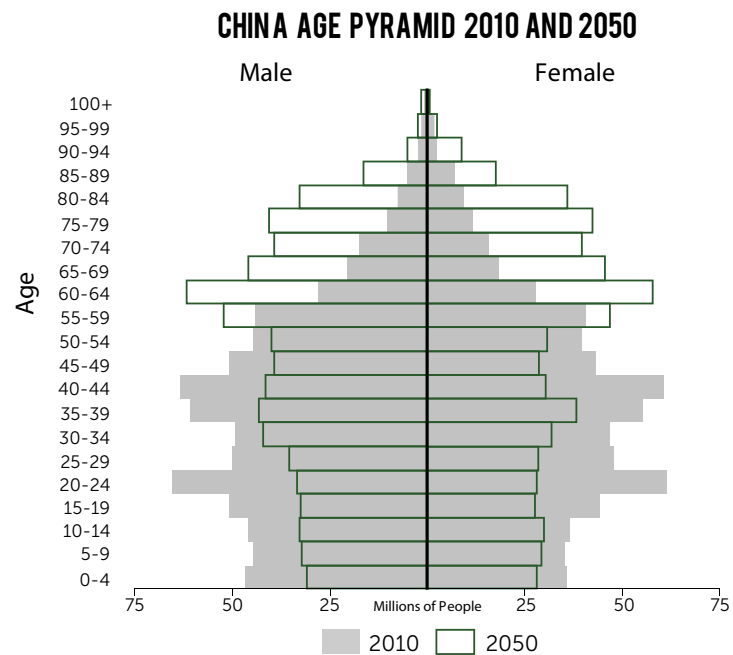


Figure 2: China age and sex population pyramid (2010 and 2050).  
Source: UN Population Division, 2015

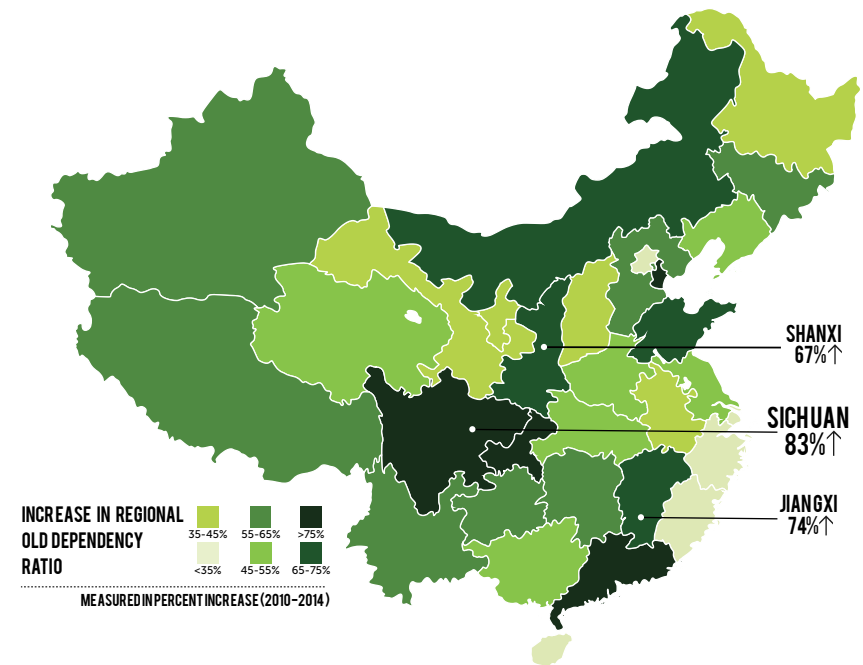


Figure 3: Percentage increase in ODR by province (2010-2014).  
Source: National Bureau of Statistics of China, 2015.

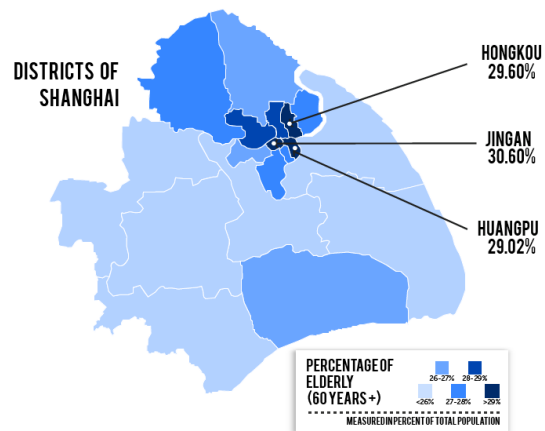


Figure 4: Shanghai population over 60 years old by district (2013).  
Source: Shanghai Statistical Yearbook, 2014

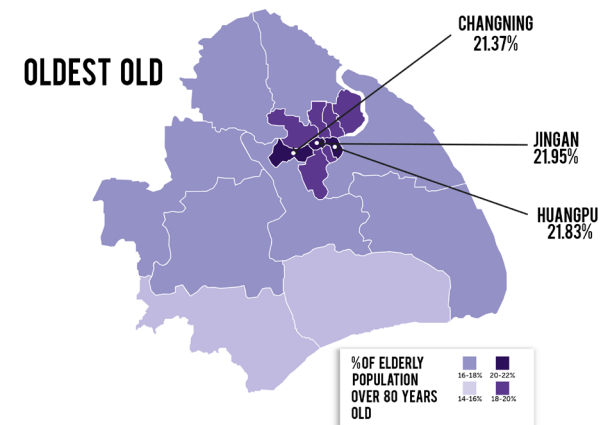


Figure 5: Percentage of 80-year-olds within Shanghai elderly population by district (2013).  
Source: Shanghai Statistical Yearbook, 2014



# WHAT'S THE CHALLENGE?

China's aging population is creating serious economic, social, and political challenges, many of which have already started to manifest in key areas of society.

## **Burden on Public Services**

The aging population has already started to strain the current system of social services. Public infrastructure shared by the population of all ages, such as hospitals and parks, will continue to deteriorate in effectiveness due to overcapacity and overuse. If unaddressed, there will be growing social discontent and an undermining of the current political administration.

However, as the government inevitably diverts funds from other social services to ramp up the capacity of elderly services, they will need considerable outside assistance. Furthermore, there will be a growing imbalance in China's social security funds as more retired individuals receive pensions and fewer working individuals contribute money into the system.

## **Underdeveloped Elderly Care Infrastructure**

Current affordable and dependable facilities for the elderly, such as community centers and nursing homes, lack the capacity to handle the growing number of retirees. China offers approximately half as many beds per 1,000 seniors as other developed countries. While 4% to 8% of elderly in Western nations live in residential care facilities, only 1.5% to 2.0% of Chinese elderly (65+ years) do the same (Feng et al., 2012). Due to overcrowding and demand, beds have filled up extremely quickly. For instance, the Beijing No. 1 Social Welfare Home currently has over 10,000 applications for only 1,100 beds (NY Times, 2012 A). The only

desirable alternatives are high-end facilities like Yanda Golden Age Health Nursing Center in Beijing, which costs from 5,000 to 13,700 RMB/month, far beyond the means of a majority of Chinese elderly.

Along with limited access to geriatric care, the services of many governmental elderly facilities are ineffective due to a lack of basic equipment and well-trained personnel. Since the public does not perceive geriatrics as a respectable profession, few vocational training programs are available. As a result, China's geriatric nurses earn low wages and are under-prepared to provide adequate care.

Therefore, the majority of the population is left with few options for assisted living services.

## **Overload on Medical Care Facilities**

In addition to an overburdened assisted living infrastructure, China's elderly population faces a lack of access to affordable medical care for physical illnesses and chronic diseases inevitable in an aging population (see Figure 6). Recent reforms expanding health insurance coverage to a majority of the elderly are hindered by a mediocre reimbursement rate and ever-rising treatment costs. As a result, China ranked in the bottom 10 of 80 countries in provision end-of-life care because of the high costs and lack of access to care (EIU, 2015). Along with these systematic shortcomings, China's existing medical facilities lack the capacity to provide specialized long-term care for seniors suffering from chronic diseases like dementia.

In fact, Zhongshan Hospital in Shanghai once held 32 elderly individuals who resorted to staying in the emergency department for months on end





for their chronic diseases (Shanghai Daily, 2015). This obstructed the functionality of the emergency services of the hospital and illustrates a potential consequence of leaving the medical needs of the elderly unresolved.

Moreover, rampant distrust of doctors among the Chinese population has negative implications for elderly services. In 2010, there were 17,000 incidents of patient violence towards doctors, a 70% increase from the 10,000 incidents in 2005 (Economist). The public suspicion of the medical system prevents nursing homes and end-of-life services from gaining widespread acceptance from families.

Family Tensions

The aging population has challenged the traditional Chinese family model and placed an extraordinary amount of pressure on the younger generations to support their older family members. Traditionally, up to three generations of a Chinese family would live under a single roof, where the younger generations would take care of the elderly. It was considered a violation of filial piety for a family to send their elderly relatives to a nursing home. However, the traditional model of three generations living together is becoming less feasible due to a lack of space, financial difficulties, and changing personal preferences (see Figure 7).

CHINESE ADULTS' PREFERRED LIVING CONDITIONS FOR PARENTS

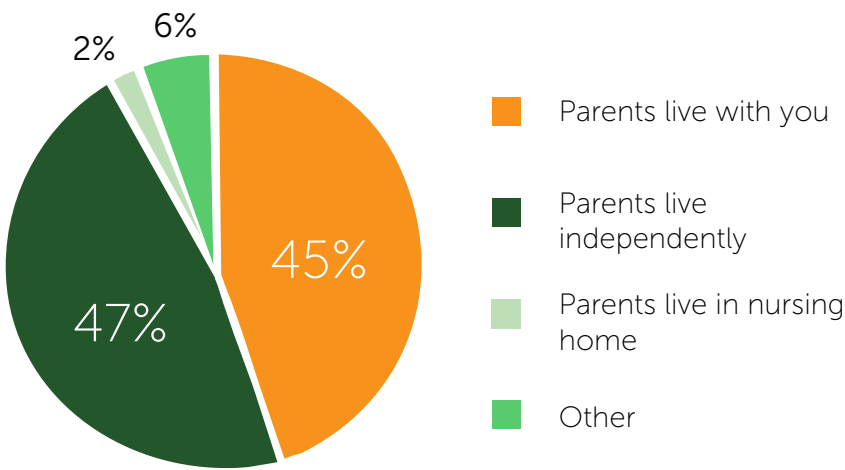


Figure 7: WeChat survey of working-age Chinese adults' preferred living conditions for their parents. Source: Collective Responsibility, 2016

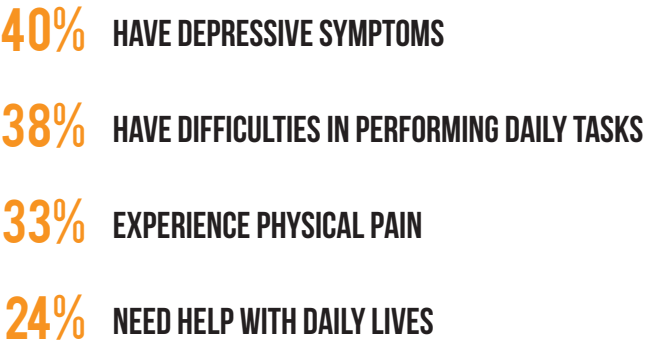
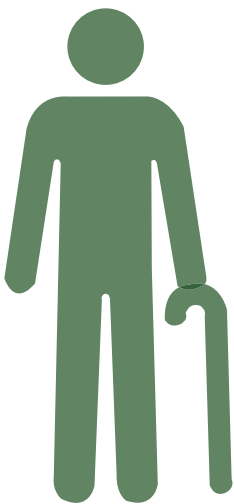


Figure 6: Physical struggles of Chinese elderly. Source: China Health and Retirement Longitudinal Study, 2013

The rise in internal migration among young adults since the relaxation of the *Hukou* system in the mid-1980s has also disrupted traditional familial setups. This trend is especially prevalent among rural residents, with 145 million rural-urban migrants in 2009, more than 60% of which were being born after 1980 (MPI, 2012). Meanwhile, parents are still restricted by the *Hukou* system from moving with their children to the cities because they cannot access public services outside their home provinces, thereby augmenting the “empty-nest” phenomenon. As a result of this difference in internal migration, many elderly people are left without caretakers.

Finally, the burden of taking care of the elderly is amplified by the “4-2-1” dilemma, a side effect of China’s 1978 One-Child Policy. The large number of only-children currently in China will be responsible for taking care of up to four grandparents and two parents in the near future, which places heavy financial and emotional pressure on the youngest generation (YN Daily, 2008). The recent repeal of the One-Child Policy cannot fix this imbalance in the short-term.

**Economic Shifts**

As China’s aging population grows, one of the greatest uncertainties that China will face is the potential impact of its greying population on its economy.

The trend of the graying workforce highlighted by Figure 8, which illustrates the simultaneous drop in the number of young workers and rise in the number of elderly in the next decade, will continue to challenge China's reliance on labor to power its economic engine. In other words, the young and inexpensive workforce that powered the Chinese economic boom of the past few decades will soon disappear. As a result, firms will be forced to look outside of China to reshore their investments, which may catalyze the investment into automation.

Furthermore, the higher the proportion of elderly in society, the greater the pressure on the younger working population to care for it through services, taxes, and family care commitments. These factors all make negative impacts on the country’s economy as more elderly take resources out of the system and rely on the shrinking (as a portion of the total) workforce to feel the strain.

In China's cities, this trend will likely manifest differently as a generation of single children are forced to support their parents and grandparents, and the government is forced to do more with fewer resources. These changes could potentially impact China's burgeoning consumer market as savings are depleted, disposable incomes are more closely managed, and spending habits are altered as a result.

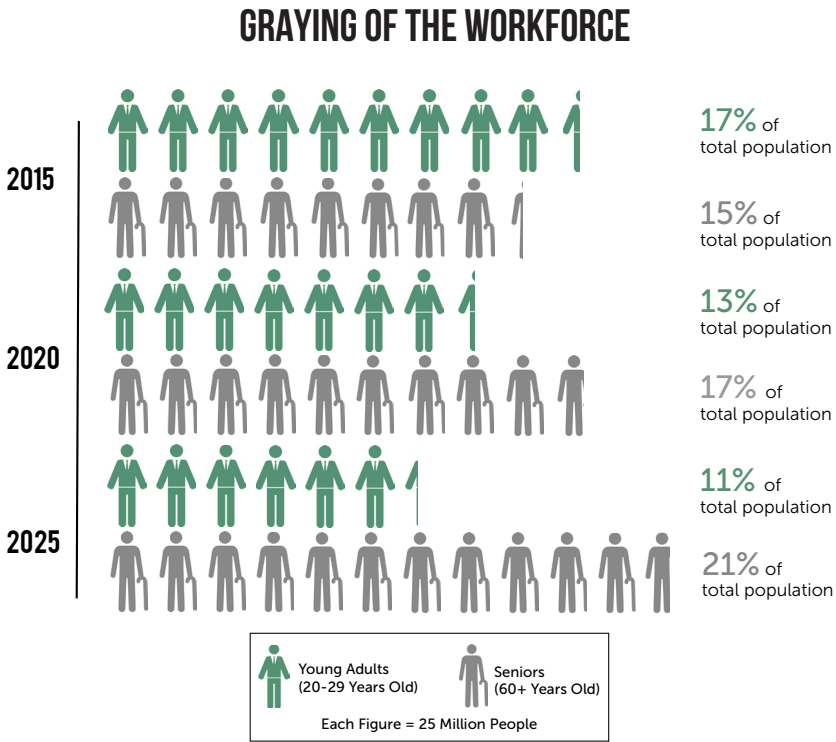


Figure 8: Shifting proportions of young adults and seniors. Source: UN Population Division 2015



# MEETING THE BASICS

Both in response to current issues, and in anticipation of future problems surrounding the elderly, the Chinese government reaffirmed its commitment to address the elderly challenge in its 13th Five-Year Plan, released in late 2015.

## Nine-Seven-Three Policy

The national government currently operates under the Nine-Seven-Three Plan to manage the elderly, which plans for:

- 90%** TO STAY IN OWN HOME OR WITH CHILDREN
- 7%** TO STAY IN GOVERNMENT ELDERLY CARE
- 3%** TO STAY IN PRIVATE ELDERLY CARE

The national policy has directed action at the local level. For example, a 2016 Shanghai legislation gave elderly people a right to sue their children for neglect, with the punishment taking the form of the lowering of the children's credit scores (BBC, 2016).

Likewise, Beijing pledged in 2013 to raise the elderly bed count to 40 beds per every 1000 seniors, invested 24.5 million RMB to boost the pensions and healthcare of dependent elderly people, and vowed to provide all communities with elderly service centers by 2020 (China Daily, 2013).

Other major urban centers with aging populations, such as Chengdu, Tianjin, and Hangzhou, are taking similar actions.

## Promoting Elderly Financial Independence

Currently, with the pension system only covering 55% of the elderly population, a significant portion of the elderly live without a steady source of post-retirement income (Guardian, 2012). Even those who do receive pensions are often unable to achieve total financial independence, and at times these retired individuals end up living below the poverty line, despite the increased government spending on pensions (Figure 9).

This particular challenge will likely increase the financial, physical, and emotional pressure placed on the working population.

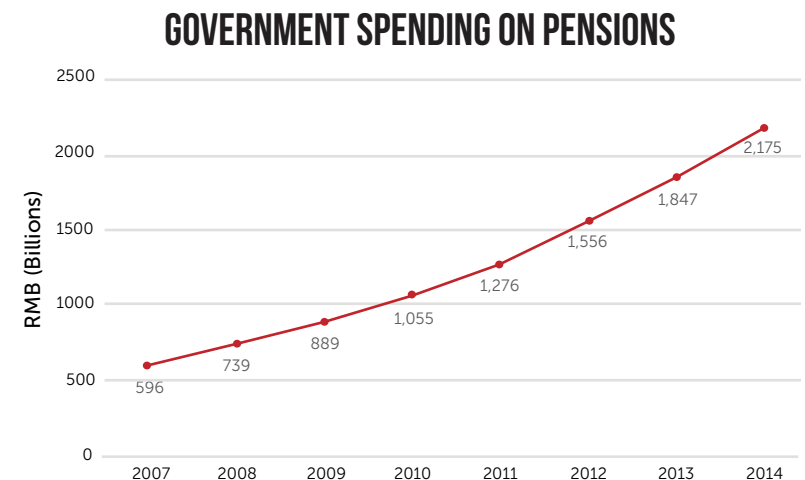


Figure 9: Chinese governmental spending on elderly pensions (2007-2014).  
Source: National Bureau Statistics of China, 2015.

## GOVERNMENT SPENDING ON HEALTHCARE

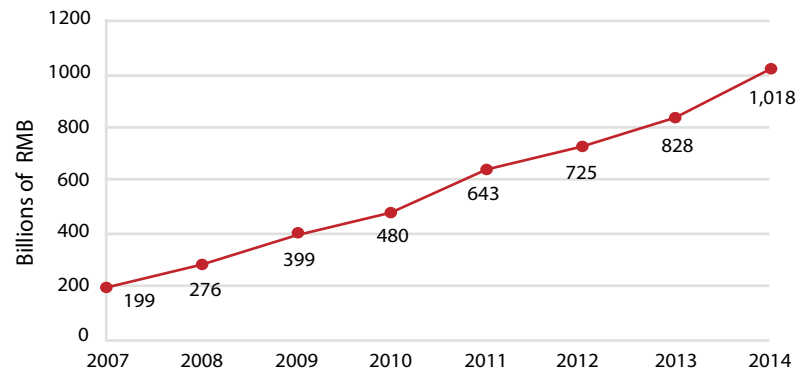


Figure 10: Chinese government spending on healthcare (2007-2014).  
Source: National Bureau of Statistics of China, 2015

### Expansion of Elderly Care

Largely due to demands from the elderly, the government has quadrupled healthcare spending over the last decade (Figure 10). This spending has largely been focused on building hospitals, clinics, community centers, and elderly care facilities that will support the needs of retirees throughout their retirement. Despite all these efforts, there is still a lot of work to do for the government to meet their self-proclaimed baseline national goal of 40 beds per 1000 seniors.

With the recognition that the elderly require more than the basics, significant investment have been made to increase the labor supply and quality of geriatric nursing, the government has created university programs for elderly care professionals aimed to improve the average skill base and quality of service within the industry.

## NUMBER OF GOVERNMENT-PROVIDED BEDS PER 1000 SENIORS



Figure 11: Number of beds provided by the Chinese government per 1000 seniors.  
Source: National Bureau of Statistics of China, 2015

Separate from the network of investments into physical infrastructure and service quality within government-managed facilities, additional investments support building infrastructure in neighborhoods that will extend services into the home in support of the elderly who live independently. Less focused on supporting the health needs of residents, these services are focused on delivering basic healthcare services, food delivery, and house cleaning.

Largely driven through neighborhood communities, and at times, in partnership with elderly centers, the expansion of elderly care is an area where private investments have recently been made.

# RIISING EXPECTATIONS

*The Chinese elderly of tomorrow will be different than the elderly of today.*

China's economic development over the last few decades has caused the general population to become steadily wealthier with more disposable income, as shown by Figure 12, and has thereby increased levels of public consumption.

This growth in consumption corresponds to a rise in quality of life, which is reflected by a sharp rise in demand for luxury goods and international tourism. Thus, when the current late middle-aged generation joins the ranks of the elderly, their greater wealth and higher expectations will lead them to demand higher-quality lifestyles beyond the satisfaction of basic needs.

In essence, the Chinese elderly of tomorrow will be different than the elderly of today. While the government has invested significantly into supporting the basic needs of the elderly, particularly for those with limited financial resources, the rising expectations of current and future aging populations require the intervention of additional stakeholders to meet their needs.

This is a golden opportunity for private actors to enter the elderly care market and bridge the gap in services for the Chinese elderly.

## DISPOSABLE INCOME OF URBAN HOUSEHOLDS PER CAPITA (2006-2014)

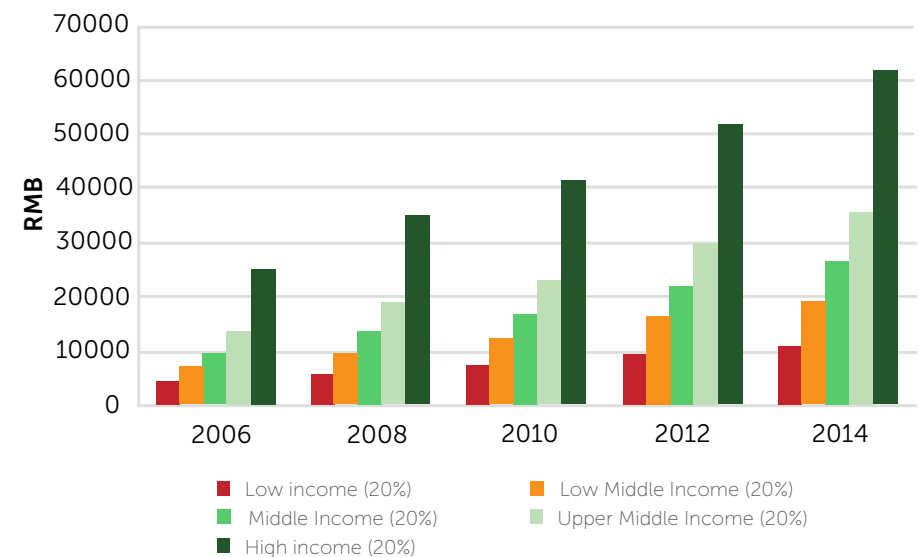


Figure 12: Disposable Income of Chinese urban households per capita (2006-2014).  
Source: National Bureau of Statistics of China, 2015





The Chinese elderly challenge offers tremendous social and economic opportunities. In fact, elderly care services are predicted to overtake real estate as China's largest industry by 2030 (China Briefing, 2016). With the increase in disposable income and consumption, this will further drive demand for high-quality elderly products and services.

Given that the Chinese government alone cannot satisfy the needs of the growing elderly population, other actors such as service providers, technology firms, non-profit organizations, and private investors will have numerous opportunities provide solutions.

In addition to catering services directly to consumers, selling to the government to provide basic services for the dependent, lower-income segmentation is already proving to be a viable market with scalability as well.

Moreover, the rising trend of the younger generation leaving the home offers new opportunities for private enterprises to aid in providing elderly services.

To welcome the contributions of additional actors to tackling the elderly challenge, the Chinese government is encouraging foreign investment in the elderly care market. Beginning in 2014, the government no longer requires foreign companies to find a local partner to establish elderly facilities. The resulting freedom has encouraged foreign companies from the US, Japan, South Korea, and Germany to invest in high-end elderly facilities (GLO, 2016).

With the mounting need to address the elderly challenge and the expanding options for market entry, we see three major windows of opportunity for stakeholders:

- 1 Asset-Based Opportunities** These address the essential physical needs of the elderly. They involve brick-and-mortar institutions like nursing homes and elderly clinics, thereby, they commonly require greater initial capital investment.
- 2 Service-Based Opportunities** These cater to the rising expectations of the elderly through services such as traveling and leisure. Though more adaptable than their asset-based counterparts, they are more vulnerable to market competition.
- 3 Technological Opportunities** While these somewhat overlap with the previous two categories, they are distinguished by their potential to revolutionize the elderly lifestyle through unprecedented solutions in areas ranging from core needs to leisure wants.

While each of these opportunities represents great individual potential for market entry, those aiming to provide truly sustainable and innovative solutions will need to incorporate elements from all three areas.



# 1 ASSET-BASED OPPORTUNITIES

## Nursing Homes

Most foreign and private investors have zoned in on luxury elderly institutions. Private, high-end facilities like the CASCADE Healthcare Center in Shanghai offer medical, rehabilitation, and nursing services, charging monthly rates that equate to many times the average senior's pension. As China's first "fully-licensed, foreign-invested, senior-care company", CASCADE Healthcare is an example of how foreign enterprises can capitalize on the ready market for high-end elderly care. Without the limitations of affordability, investors can guarantee luxurious and comprehensive services and facilities for their clients.

However, these high-end facilities leave the majority of the market – the middle class – underserved, creating an opportunity to capitalize on the provision of affordable and dependable elderly homes. To gain traction, institutions must convey legitimacy and dependability in order to overcome the negative public perceptions of affordable senior living facilities (refer to Figure 7). Facilities will have to prioritize functionality over luxury to offer an affordable price range for the masses.

## Elderly Clinics

As the population ages, there will be increased demand for long-term care for elderly suffering from chronic mental and physical diseases. While healthcare services can often be incorporated into high-end nursing facilities, there is still a need for specialized elderly clinics. Private investors and healthcare professionals have opportunities to redesign systems for the elderly through specialized services and treatments. Like nursing homes, clinics face a similarly pervasive barrier of public mistrust. However, by fostering open dialogue and improving diagnostic transparency, affordable and reliable elderly health clinics can potentially garner widespread adoption.

## Community Recreation Centers

While the government has already invested in widespread community centers for the elderly throughout many major cities like Shanghai, there is ample opportunity to build community centers to serve seniors from all income brackets.

Currently, many middle- to low-income seniors spend their days at public spaces like IKEA, while others exercise and dance on the sidewalks of busy roads. While this phenomenon does not necessarily represent a critical issue, it does illustrate the potential for accessible venues specialized for elderly activities.

For the upper and middle classes, private facilities can offer high-end organized activities and services, such as dancing competitions, art classes, and comedy shows. The provision of comfortable spaces for leisurely activities can further enhance community-building and quality of life for the elderly. Likewise, investors can work with the Chinese government to develop subsidized community centers in urban districts with the highest concentration of low-income senior residents.



## 2 SERVICE-BASED OPPORTUNITIES

### Home Assistance

Many Chinese seniors prefer to live independently in their own homes. This attitude will likely persist as they age, so there will be an increased need for assistance with daily tasks, such as buying groceries, cleaning the house, and doing laundry.

While home assistance programs are offered by the Chinese government to special needs and disabled elderly, these programs can be expanded upon by private actors to the broader elderly community.

Currently, informal home assistance programs for the middle and upper classes often involve hiring family members, due to trust and privacy concerns. Therefore, there is a need for more cost-efficient and trustworthy home assistance programs and resources to support the lifestyles of the elderly people in the near future, especially for those whose live far from their children.

### Travel Services

As China has continued to globalize, many elderly have caught the travel bug, becoming increasingly keen on exploring the outside world. The rise in wealth and expectations of the elderly has driven an explosion in demand for travel agencies, such as the Shanghai Xiehe Tourism Agency, which specializes in elderly travel on the Yangtze River.

International travel services are seeing similar trends. For example, China-based travel agency Ctrip, which offers special "Parent" packages for seniors interested in vacationing both domestically and abroad, saw a drastic increase in the number of

elderly traveling during the 2015 autumn season (Ctrip, 2015). This trend is unlikely to slow in the near future, so travel services can and should be designed to cater to the specific needs and interests of senior consumers.

### Cultural Enrichment

With many of its basic needs satisfied, a wealthier elderly population will shift its attention towards achieving healthy and fulfilling lifestyles. Seniors of the upper-middle class will pursue new hobbies and engage in greater cultural exploration.

Infrastructure supporting personal refinement, such as art classes and music lessons, has lagged behind the recent rise in demand for such activities. Players interested in capitalizing on this need can collaborate with physical institutions, or they can vertically integrate brick-and-mortar development with the provision of services themselves. Eventually, these initiatives can even be extended to lower-income groups through joint ventures between private actors and the Chinese government.

### Education

With an increase in average level of education and attainment of white-collar careers, the newly-retired elderly population will have a increased affinity for skills-focused intellectual stimulation that go beyond leisurely endeavors.

Currently, a network of 50,000 elderly education institutions, including the Shanghai University for the Elderly (Financial Times, 2014), offer a wide range of courses for seniors to enroll in.

However, there is room for expansion of these services to increase remote accessibility through classes delivered online, through home or community based tutoring, and through APP-delivered microcontent.





### 3 TECHNOLOGICAL OPPORTUNITIES

Technology plays a prominent role in the lives of most Chinese individuals, and the elderly are no exception. While active uptake of technological innovation is slower among seniors than among younger generations, well-designed technology has the potential to connect asset and service-based initiatives to transform the daily lives of the elderly. This endeavor will be increasingly effective and important with the aging of the current working population, which is more willing and capable to embrace new technological services than the seniors of today. In fact, our recent survey on the elderly usage of smartphones revealed potential for technology to serve a more prominent role in their lives (see Figure 13).

To cater to the unique needs of the Chinese elderly, some technology companies will simply need to optimize their preexisting software, while others may have to redesign their hardware. Though potentially extensive in nature, these efforts constitute the tremendous opportunity for innovators to bridge the elderly service gap in novel ways.

Currently, the market offers seniors modifications to technology, like alternative smartphone interfaces geared towards the elderly. However, several obstacles still hinder most senior citizens' adoption of technology for daily use.

For those in poor health, wearable bracelets and patches can relay real-time diagnostic data to healthcare providers. For those living far from their families, virtual reality and other connectivity apps will bring them closer than ever before to their loved ones. Other potential avenues include, but are not limited to, online shopping and e-payments.

#### CURRENT ELDERLY USAGE AND FUTURE DESIRES FOR TECHNOLOGY

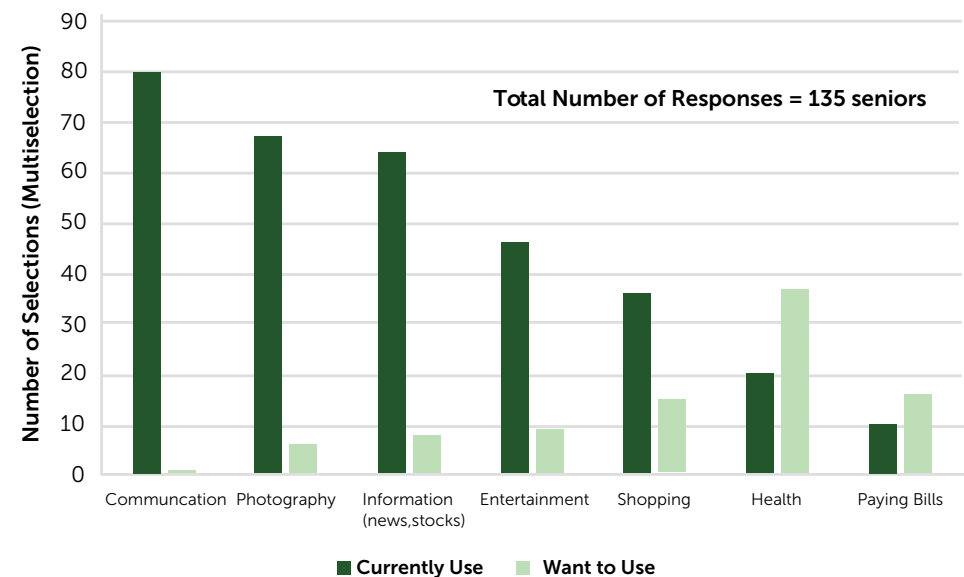


Figure 13: Survey of Chinese seniors' current usage and future desires for technological features via the smartphone platform. Source: Collective Responsibility, 2016



# CONCLUSIONS

As China's elderly challenge moves toward the forefront of public attention, the aging population will have a growing influence on the future of the country.

Economically, the aging population will catalyze an explosion in demand for elderly goods and services. Socially, the elderly's attitudes towards nursing homes will challenge traditional Chinese family values and set a precedent for future generations. Politically, inadequately addressed elderly needs have the potential to spark social unrest and undermine the authority of the Chinese government.

While the Chinese government has recognized and made valiant efforts to address the elderly situation, there remains a lot of work to be done. Though the numbers are daunting, they represent a wide range of opportunities for social and economic stakeholders to capitalize on meeting elderly demands.

As we move towards the globalized world of 2025, private investors can enter the conversation in asset-based, service-based, and technological arenas. Whether by constructing affordable nursing home facilities, or by offering luxury cultural enrichment classes, external actors can ultimately revolutionize the elderly experience for individuals from all walks of life.

To learn more about Collective Responsibility's insight portfolio and to stay updated on our subsequent report focusing on elderly adoption of technology, please reach out to us.

**Contact us at:**  
[insights@coresponsibility.com](mailto:insights@coresponsibility.com)

# REFERENCES

- BBC. (2015). China to end one-child policy and allow two.
- BBC. (2016). Enforcing family care by law in Shanghai.
- Feng, Z., Liu, Chang., Guan, Xi., & Mor, V. (2012). China's rapidly aging population creates policy challenges in shaping a viable long-term care system.
- China Briefing. (2016). China investment roadmap: the elderly care industry.
- China Daily. (2013). Beijing offers assistance to elderly couples.
- Chinese National Bureau of Statistics. (2016). Various Years. China Statistical Yearbooks.
- Ctrip. (2015). Chinese senior travelers: children do not accompany parents for 70% of trips. (In Chinese).
- Economist Intelligence Unit (EIU). (2015) Quality of death survey. Via BBC (2015).
- Financial Times . (2014). China's elderly flock back to university.
- Global Law Office (GLO). (2016). China encourages foreign investors to provide elderly care services.
- Guardian. (2012). China's rocketing elderly population prompts a rethink on pensions.
- Migration Policy Institute (MPI). (2012). China's young rural-to-urban migrants: In search of fortune, happiness, and independence.
- NY Times. (2012 A). Rise in China's Aging Poses Challenge to Beijing.
- Peking University National School of Development. (2013). China Health and Retirement Longitudinal Study.
- Shanghai Daily. (2015). Health care plan for elderly 'long overdue.'
- South China Morning Post (SCMP). (2014). Beijing mulls treating elderly in neighbouring cities.
- UN Population Division. (2015). World Population Prospects: The 2015 Revision.
- Xinhuanet. (2015 A). Beijing reports increasing elderly population.
- Xinhuanet. (2016). Shanghai sees increasing aging population in 2015.
- Xinhuanet. (2015 B). Xinhua insight: challenges, opportunities seen in China's aging population.
- Yunan Daily (YN Daily). (2008). 4-2-1 Family, what should we do now? (In Chinese).





# COLLECTIVE RESPONSIBILITY



@beyondbau



/CollectiveResponsibility



CollectiveResponsibility



/collective-responsibility



## COLLECTIVE RESPONSIBILITY

121 Jiangsu Road, Suite 18/F  
Shanghai, P.R.C. 200050

[www.coresponsibility.com](http://www.coresponsibility.com)

[insights@coresponsibility.com](mailto:insights@coresponsibility.com)