



THE SILVER AND WHITE ECONOMY: THE CHINESE DEMOGRAPHIC CHALLENGE

Preliminary version of chapter 6, in forthcoming report
“Fostering resilient economies: demographic transition in local labour markets”

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CHAPTER 6:

THE SILVER AND WHITE ECONOMY: THE CHINESE DEMOGRAPHIC CHALLENGE¹

At present, China is still the most populous country in the world. By the end of 2011, China's population reached 1.35 billion, accounting for 19.2% of the world total population. However China is now experiencing a changing of population structure as a result of falling birth rates and the start of the ageing population. The chapter discusses the current extent to which China is prepared for its population ageing and a case study of Beijing on the current and potential need of the elderly and the supply of old-age people oriented products and services.

¹ This chapter was contributed by Dr. Wenmeng Feng, Director, Research Department II, China Development Research Foundation

6.1 Introduction

At present, China is still the most populous country in the world. By the end of 2011, China's population reached 1.35 billion, accounting for 19.2% of the world total population. Over the past three decades, to curb the excessive population growth has been the priority in the implementation of population related policies. However, the results of the sixth national census conducted in 2010 reveal that China's demographic situation has witnessed fundamental changes over the past three decades: from 2000 to 2010, the average annual growth rate of population was only 0.57%, far lower than the 1.07% in the previous decade. Meanwhile, the population structure has also changed considerably, from the second national census in 1982 to the sixth one in 2010: the proportion of children aged between 0 and 14 in the total population fell from 33.6% to 16.6%; that of elderly people aged above 60 rose from 7.6% to 13.3%; and those aged above 65 increased from 4.9% to 8.9%. The changed population structure indicates that falling birth rate and ageing population that beset developed countries have started to affect China. Population ageing has been and will continue to pose serious challenges to the country's socioeconomic sustainability.

Although China has witnessed the coming of an ageing society since 2000, it is still at the starting point in addressing population ageing related challenges. This chapter aims at exploring the current extent to which China has been prepared for its population ageing in five sections. Section 1 provides an analysis regarding China's recent demographic changes. Section 2 gives an analysis concerning the changing age structure in China's population, Section 3 presents China's preparations for its population ageing, Section 4, based on the case study of Beijing, gives an analysis on the current and potential needs of the elderly and the supply of old-age people oriented products and services. Section 5 provides policy recommendations for China to push forward its preparations in dealing with population ageing.

6.2 Recent demographic changes in china

In the early 1980s, the family planning policy, which centers on the one-child policy, became a basic national policy of China. Over the past three decades since then, this policy has not only changed the course of China's population transition but also had a tremendous impact on China's socioeconomic development. After the change from high fertility rate to low fertility rate, China's population situation is significantly different from what it used to be more than 30 years ago. Major changes happened over the past three decades can be summarised in the following seven aspects (CDRF, 2012).

6.2.1 Towards negative population growth

Although China remains the most populous country in the world, the proportion of its population in the world population has dropped from the peak at 22.7% in 1974 to 19.2% in 2011 (Table13). The current population growth in China is very slow: the Chinese population only increased by 73.9 million between 2000 and 2010, at an annual rate of 0.57%, while the world population grew at more than twice that speed during the same period (CDRF, 2012).

Table 1. China's population and the world population

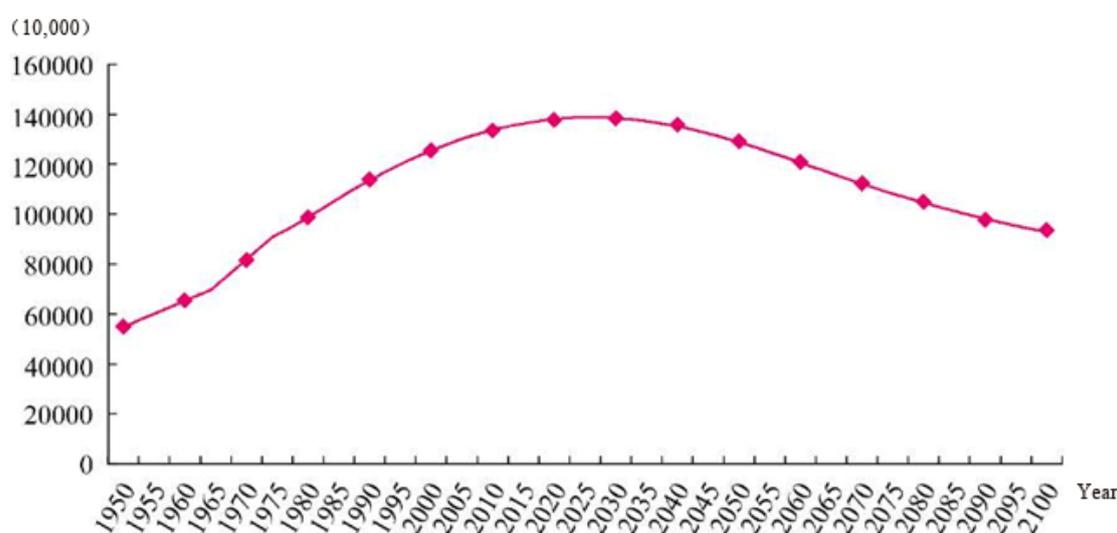
Year	World Population (100 million)	China's Population (100 million)	Proportion of the China's Population (%)
1959	30	6.62	22.07
1974	40	9.09	22.73
1987	50	10.93	21.86
1999	60	12.59	20.98
2011	70	13.47	19.24

Note: The Chinese population reached the numbers at the end of the respective years.

Source : UNFPA (2011); NBS

If the current low fertility rate continues, China's population will turn to negative growth in 2027 and, by the end of the 21st century, it is predicted to decrease to 940 million (United Nations, 2010). Although China's population in 2100 will be as large as it was in 1975, the age structure will be fundamentally different. Of the 920 million Chinese citizens in 1975, people aged 0-14 accounted for 38.9% while those aged over 65 represented only 4.6%; of the 940 million in 2100, the proportion of the former will have dropped to 15.9% while that of the latter will have risen to 28.2%, which means a seriously aged population (Figure 50) (United Nations, 2011).

Figure 1. China's population growth between 1950 and 2100



Source : United Nations (2011)

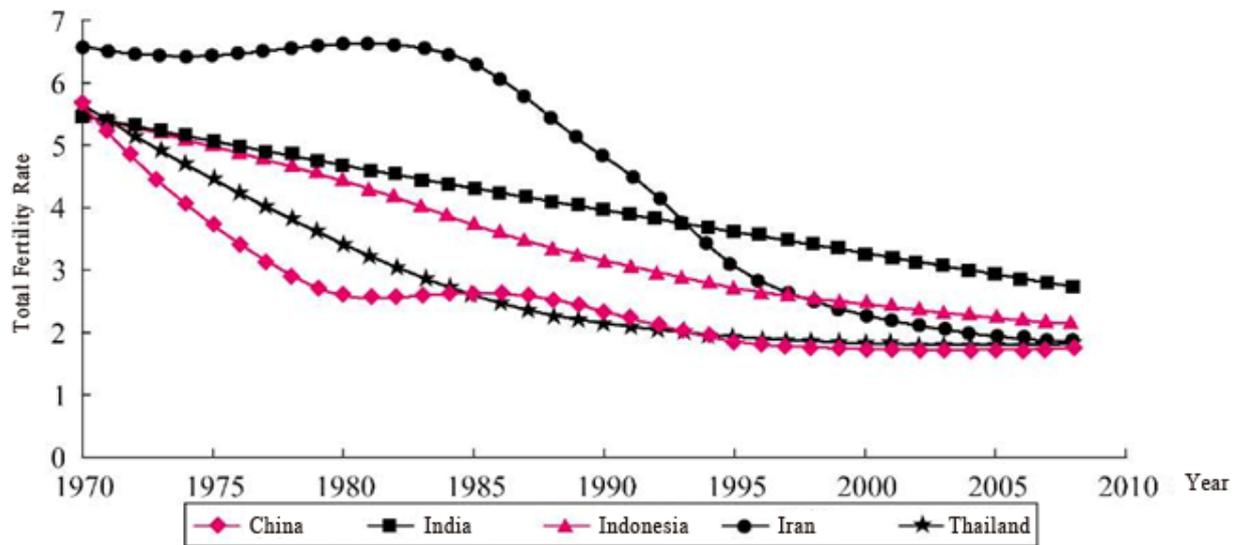
6.2.2 Approaching lowest-low fertility rate

Despite widespread controversy over the quality of birth statistics, the low birth rate in China is already an indisputable fact. An estimation directly based on the data of the sixth national census gives China's total fertility rate (TFR) as 1.18; considering the underreporting of births, the current TFR is probably below 1.5.

In the reports published in the past few years, the United Nations has lowered its estimation of China's birth rate. The data published in World Population Prospects: the 2010 Revision (United Nations, 2011) and World Fertility Policies 2011 (United Nations, 2011) show that the TFR of the world in 2005-2010 was 2.5; the TFR of developed countries was 1.7, that of the developing countries was 2.7, that of the least developed countries was 4.4, and that of China was 1.6 (Figure 51). Some researchers believe that China's actual TFR is even lower (Guo, 2012; Cai, 2012). All these indicate

that China's fertility rate is not only below the average of developed countries, but also approaching lowest-low fertility rate².

Figure 2. Change of fertility rate: comparison between China and other countries, 1970-2010



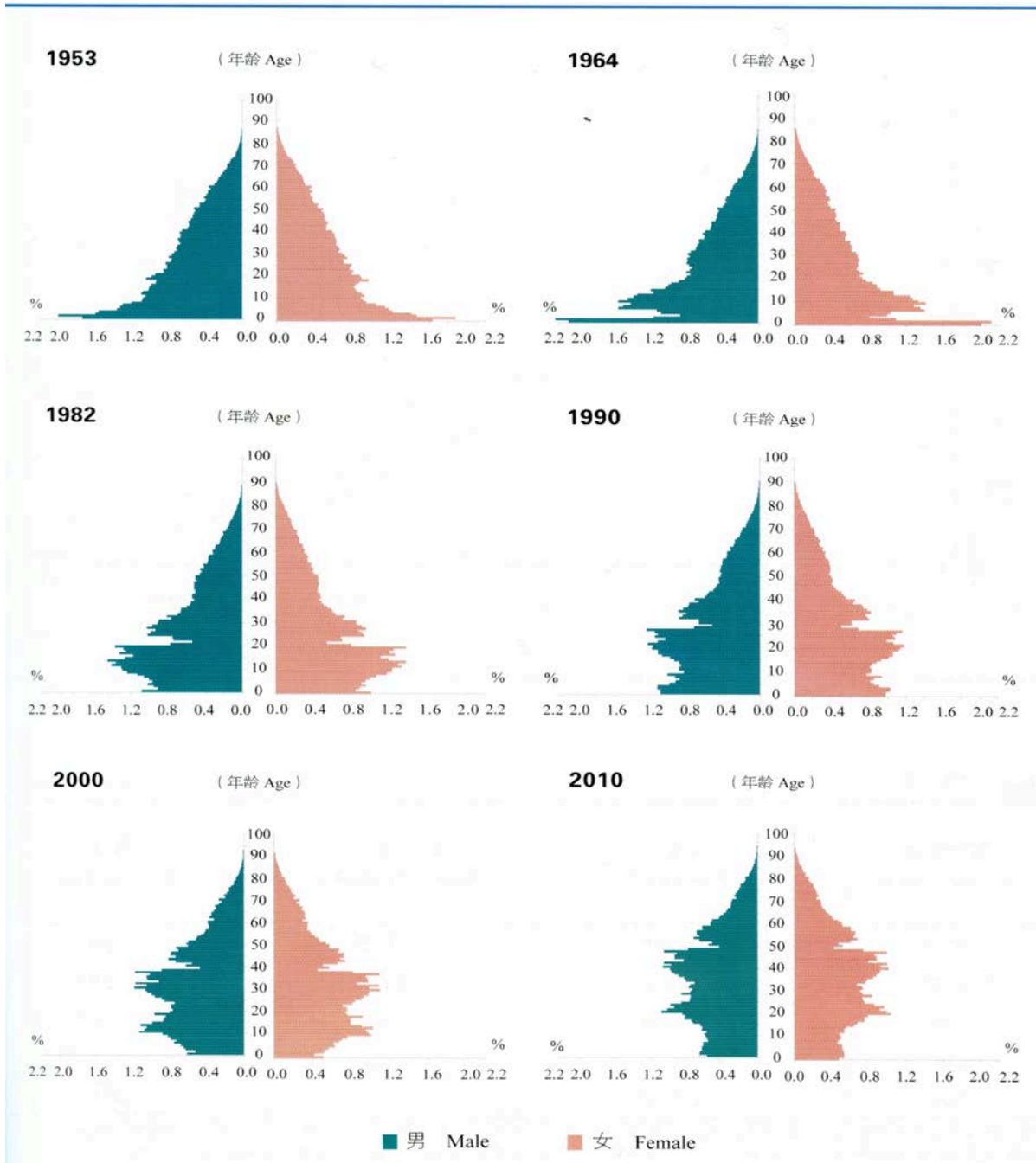
Source : Feng Wang (2011)

6.2.3 Imbalanced population pyramid

As the result of the rapid decline of fertility rate, the sustained low fertility level and the prolonging of lifespan, the rapidity of ageing and the decrease of children have brought about a significant change to the form of China's population pyramid (Figure 52). During the sixth national census in 2010, the proportion of children was 16.6% and that of people aged 65 or over was 8.9%; in contrast, during the third census in 1982, the numbers were 33.6% and 4.9% respectively (NBS, 2011). Such a change in opposite directions has inevitably led to a structural consequence: the decrease of the number of new labour and the increase of the number of elderly people within society. The former will bring about a significant turn in the supply and demand of labour, while the latter will make ageing becoming 'the order of the day in the Chinese society'. Over the past three decades, population changes have created an abundant demographic dividend for China's economic growth. However, with the acceleration of population ageing, the decline of the dependency ratio came to an end in 2011, which means the disappearance of the demographic dividend.

² According to the potential demographic and socioeconomic consequences, low fertility rates can be divided into low fertility (1.5-2.1), very low fertility (1.3-1.5), and lowest-low fertility (below 1.3) (CDRF, 2012).

Figure 3. China's population pyramid



Source : National Bureau of Statistics of China, Results of the 2010 national census

6.2.4 Massive population migration

China is experiencing the largest migration of population in human history. The results of the sixth national census show that China has a floating population³ of 221 million. Report on the Development of China's Floating Population in 2011 released by the National Population and Family

³ This refers to the people whose place of residence differs from their registered residence and who have been away from the latter for more than six months (excluding those who have been so in urban jurisdictions).

Planning Commission reveals that, in the past three years, the floating population has grown by 10 million each year (NPFPC, 2011).

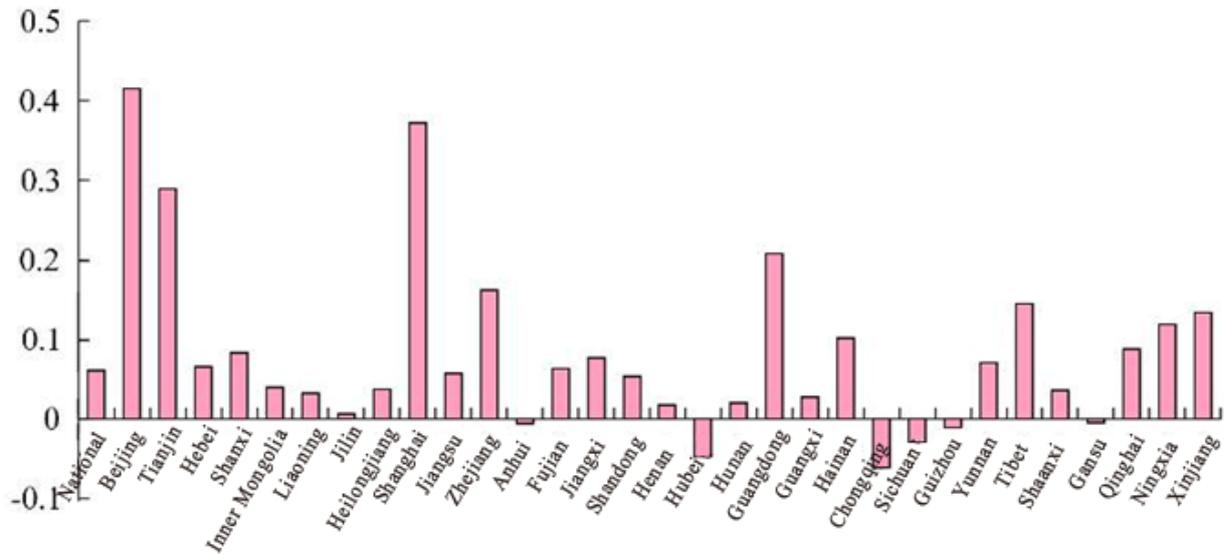
The massive movement of population has become one of the most important population phenomena with an impact on China's socioeconomic development. The predominant trend is for the population to flow from the countryside to cities and from the central and western regions to the eastern region. The highly dynamic population movement is not only changing the distribution of the China's population in rural and urban areas, but also influencing its regional distribution. In particular, since the beginning of the 21st century, a significant change has taken place in China's population map.

China's rural-urban distribution of the population has undergone a historic change. By the end of 2011, China's urban population had accounted for 51.3% in its total population, which means that China is no longer a country with a predominantly rural population. The rate increased by one percentage each year between 1990 and 2000, and has risen by 1.3 percentage points each year in the past decade. By the end of 2012, 52.3% of China's population had been living in urban areas. Given the very low natural growth rate of the urban population, there are three major ways for the Chinese population to be urbanised: 1) the migration of people from rural areas to urban areas; 2) the expansion of cities; and 3) the formation of new towns and cities. Among them, the first is currently the most important factor contributing to the rapid urbanisation. The enormous outflow of young members from villages has accelerated the population structural change in China's rural areas. As a result, the rural areas in China are facing significant challenges in dealing with population ageing.

In addition, there has been a further concentration of population toward the eastern region. In 2010, the people living in the eastern region accounted for 38.0% of the permanent residents across China, up 2.41 percentage points from 2000. Those who lived in the central region represented 26.8% marking a drop of 1.08 percentage points. Those who lived in the western region represented 27.0%, marking a drop of 1.11 percentage points. Those who lived in the northeast represented 8.2%, marking a drop of 0.22 percentage point (NBS, 2011). In the eastern region, the fastest population growth has taken place in Guangdong, Shanghai, Beijing, Zhejiang, and Tianjin. The Pearl River Delta, the Yangtze River Delta, and the Beijing-Tianjin region have become the regions with the highest density of population and cities in China. In contrast, the numbers of permanent residents⁴ in the central and western provinces of Hubei, Sichuan, Guizhou, Anhui and Gansu have decreased (Figure 53).

⁴ Permanent residents refer to those who live in a particular area on a permanent basis. The definition of "permanent residents" for the sixth national census includes the following: people whose *hukou* (registered permanent residence) is in an area and who live there; people whose *hukou* is outside an area but who have lived there for over six months; people who live in an area and whose *hukou* is yet to be established; and people whose *hukou* is in an area but who have been away for less than six months.

Figure 4. Growth of permanent residents in different parts of China between 2000 and 2010



Source : NBS (2011): the sixths national census in 2010

Enormous migration has stimulated the industrial transfer of labour and economic growth, and contributed to China's social change and institutional reform. However, the conflict between the massive flow of population and the current social welfare system based on the household registration system has led to a series of social problems, such as tens of millions of "left-behind children" and "migrant children"⁵, the unfair distribution of public service resources, and troubles with the social security system. Most migrants have yet to enjoy equal rights in comparison with local residents in terms of education, housing, and health care. In this sense, China is in the process of incomplete urbanisation or "semi-urbanisation".

6.2.5 "Hollowing-out" of rural areas

Since the 1990s, while providing cities with abundant labour, the massive outflow of young adults has led to the "hollowing-out" of rural areas⁶. The hollowing-out of rural areas has seriously affected rural productivity, causing the waste of land resources and the ageing of rural labour. China has a total of 640 000 administrative villages and 3.3 million natural ones, with a housing area of 182 sq. m. to each rural person, way beyond the state-prescribed upper limit of 150 sq. m. for per capita land for construction in rural areas. Scholars have estimated that a net increase of about 13% in arable land across the country can be achieved through improving and re-cultivating scattered, abandoned and idle rural land for construction (including homesteads), building residential areas, and providing supporting public service facilities (Yansui Liu et al., 2010).

⁵ "Left-behind Children" and "migrant children" are two special groups emerging during China's rural-to-urban migration. "Left-behind children" refers to those who have stayed in the hometown in spite of the leaving their parents as migrants. In contrast, "migrant children" refers to those who have moved together with their migrant parents.

⁶ The "hollowing-out" of rural areas is an undesirable evolution of the rural areal system during the rural-urban transformation. It includes the "hollowing-out" of rural industry and infrastructure as well as that of rural land and population. In essence, it is the overall degeneration of the socioeconomic functions of rural areas (Liu Yansui et al, 2010).

The massive outflow of young adults has led to the ageing of rural labour and a sharp decline in the dynamism of rural development.

6.2.6 Spreading shortage of migrant workers

Labour surplus has always been an important precondition for Chinese government in the formulation of socioeconomic development policies, and it had always been believed that there would be an infinite supply of surplus rural labour. In the spring of 2004, however, the shortage of migrant workers began to emerge along the southeast coast. In the years that followed, such shortage not only grew worse in the Pearl River Delta and the Yangtze River Delta, but it began to spread to the central and western regions as well. According to the estimation in relevant research, rural labour represented 67.3% of all the employed Chinese citizens; migrant workers accounted for 41.3% of all the employed people in towns and cities, and rural labour accounted for 51.4% of all the non-agricultural employees (CDRF, 2012). Despite the significant disparity in the estimations of the quantity of surplus rural labour, today most Chinese researchers agree on the following three important facts:

1. Transferrable rural labour is declining. Of those who have not yet left their native places to find work, about 30 million, or 40% of the transferrable labour, are still likely to do so.
1. The number of young adults in rural areas is declining, with those aged under thirty representing less than quarter of all the rural labour.
2. The quantity of new rural labour is declining. China's labour is undergoing a historic change in terms of the relationship between supply and demand, and the infinite supply of surplus rural labour is ending.

6.2.7 The one-child generation

In 1980, the one-child policy was introduced in China at the national level. The implementation of one-child policy has given rise to two population groups: the 'one-child group' and the group of their parents. A generation formed by 'one-child' is a unique population phenomenon in China. Since the adoption of the one-child policy in 1980, the total number of 'one-child' has reached 120-130 million, 70% of them having been born in cities. This means that the number of 'one-child' and their parents has reached 360-390 million (CDRF, 2012).

Since the very beginning, the 'one-child' as a special group have had an impact on many aspects of the Chinese society and the present and future of China. Negative impact from indulgence has always drawn universal attention from society and constituted a factor not to be neglected in education and population quality. Since the beginning of the 21st century, those 'one-child', known as "little emperors", have reached working age and marriageable age. As a result, their influence has begun to expand from family and education to wider socioeconomic areas.

In addition, the existence of the 'one-child group' has brought about a series of changes in familial structure, relations, and way of life. Some problems have aroused general concern in society, such as the familial structure, intergenerational relationships, and the impact on familial provision for the elderly and related support reflected in the "four-two-one" structure⁷. Another issue of particular concern is that the disability or death of only child can inflict enormous pain and incurable trauma on their parents.

Of the above seven demographic changes, some are directly related to the family planning policy while others are due to the urban-rural dichotomy resulting from the household registration system. Awareness of these changes is indispensable in an analysis of China's current population situation.

⁷ A "four-two-one" family refers to an inverted pyramidal family structure made up of four grandparents, one couple, and their only child.

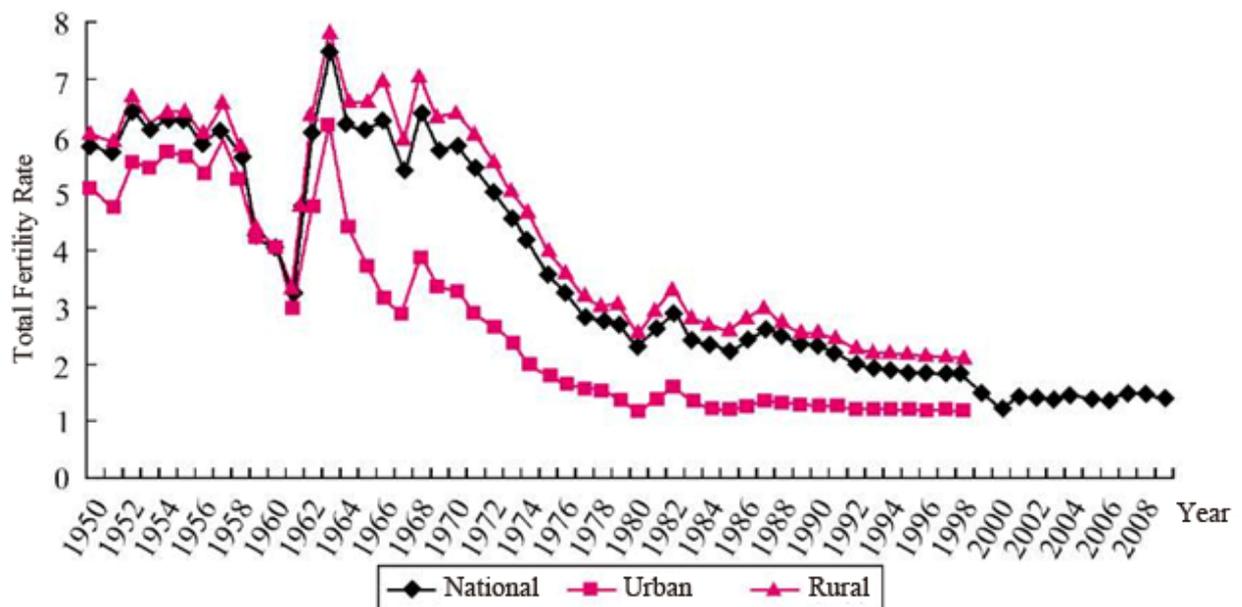
Through the above analysis, it is obvious that there has been a fundamental change in the major challenges confronting China's population. Today, the imbalance of population structure, quality and distribution has replaced the excessive growth as the major population problem. Among the current challenges, population ageing is becoming the most serious one.

6.3 Age structure changes and population ageing in china

6.3.1 The changing age structure in China's population

Since the 1970s, as the family planning policy is gradually implemented, the TFR has seen a significant decrease. It fell from 5.8 in 1970 to 2.3 in 1980, 2.1 and even lower in 1992, 1.8 in 2000 and below 1.5 in 2010 (Figure 54). Along with the declining fertility rate is the prolonged life expectancy which reached 74.8 years in 2010. Today, China has entered the third stage of demographic transition featuring low birth and death rates (CDRF, 2012).

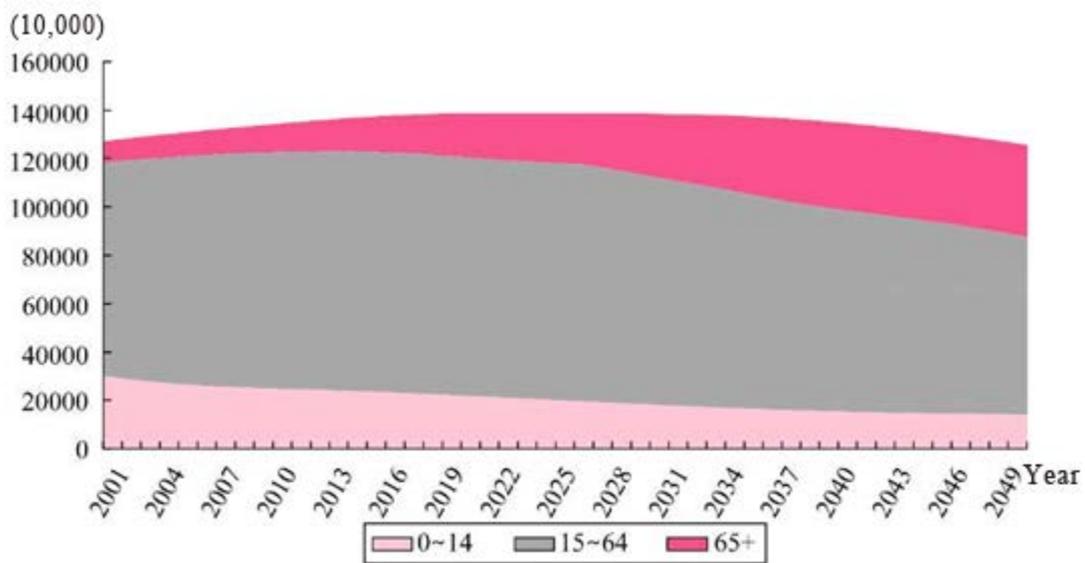
Figure 5. Declining fertility rates in urban and rural China



Source : Calculated according to the database of China Population Information Research Center for years before 1998 and the population sample survey results for years after 1998.

During both the slow and upcoming negative growth of the total population, the number of children (0-14) has been on the decline, working-age population (15-64) has shown a downward trend, and the elderly population (65+) has been growing fast (Figure 55).

Figure 6. China's population and age groups

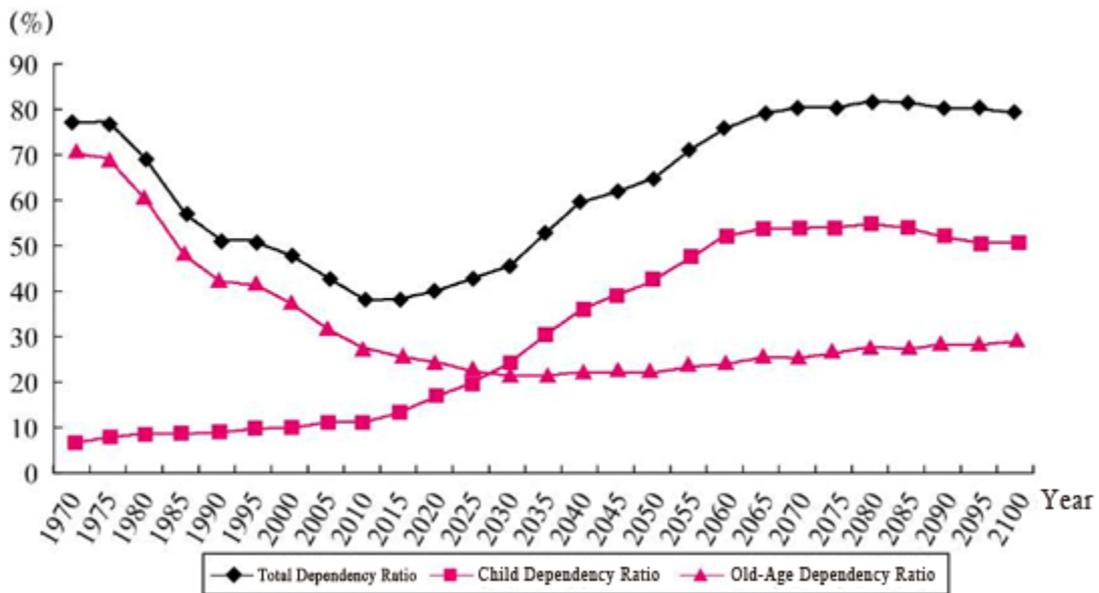


Source : United Nations (2011)

With the acceleration of population ageing and the slowing growth of working-age population, China's total dependency ratio bottomed out at 0.38 in 2011, and began to rise slowly afterwards. It is expected to reach 0.4 in 2020 and exceed 0.5 in 2033 (CDRF, 2012). According to the projection of United Nations (United Nations, 2011), without a substantial rebound in fertility rate, China's dependency ratio will continue to grow even after 2050, and reach up to 0.8 in 2070. That means every four working people will have to support at least two aged people and one child by 2070 (Figure 56).

The changes in the sizes of the three age groups in both absolute and relative terms are leading the age structure of China's to an undesirable direction, and will ultimately inflict negative impact on the sustainability of the country's economic and social development.

Figure 7. China's dependency ratios

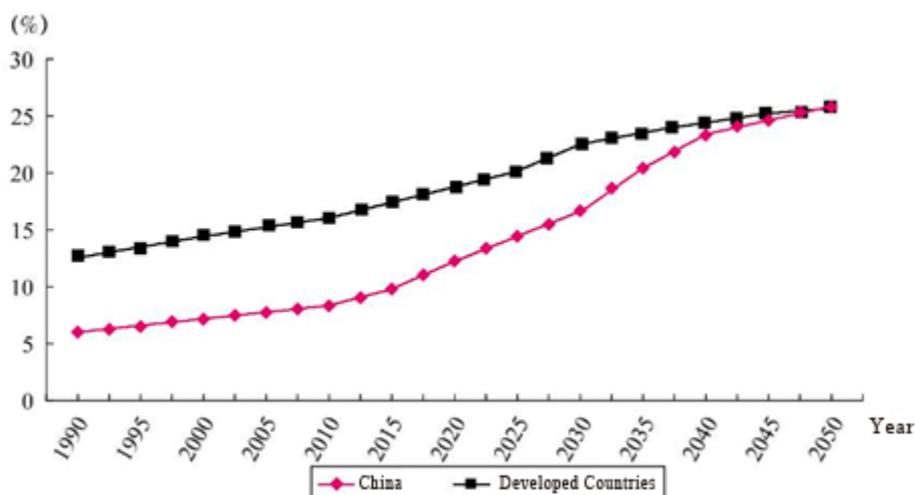


Source : United Nations (2011)

6.3.2 Population ageing in China

China is one of the fastest ageing countries in the world. At the end of 2011, 9.1% of the population in the Chinese mainland were aged 65 or over. Since 2000, two major changes have occurred in population ageing: first, ageing has speeded up; and second, the speed is higher than it is expected. The proportion of population aged 65 or over is likely to exceed 15% in 2027; 20% in 2035; and 25% in 2050, reaching the level in developed countries (Figure 57) (UN,2011).

Figure 8. Population ageing in China and developed countries

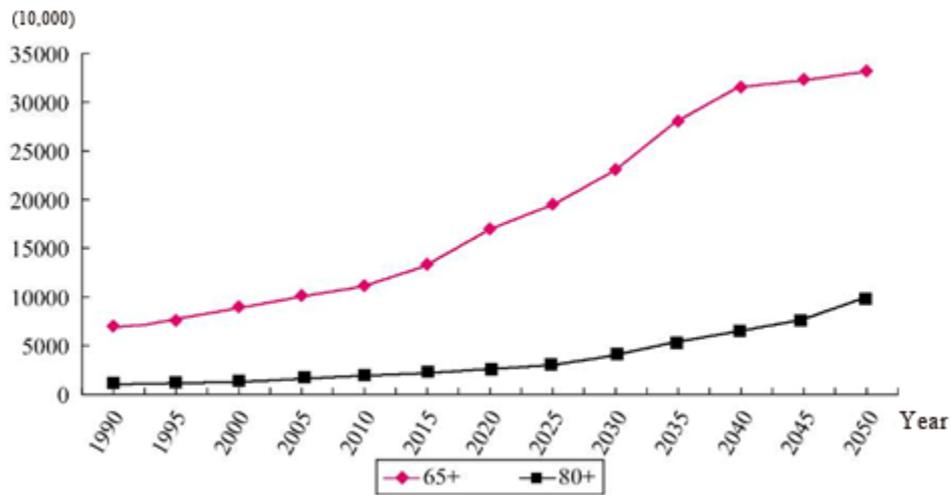


Source : United Nations (2011)

As baby boomers of the 1950-60s gradually come into their old age, China's older population has been experiencing a rapid increase. In 2011, 123 million people in China were aged 65 or over. As

predicted by the United Nations (2011), the figure will exceed 200 million in 2026, 300 million in 2038 and 330 million in 2050, 100 million of whom will be aged 80 or over (Figure 58).

Figure 9. Older population growth in China



Source : United Nations (2011)

Population ageing has become a common threat for most developed countries. However, compared with developed economies, China may face a bigger challenge given the fact that it is getting old before getting rich. From the perspective of economic growth, getting old before rich has some important implications. On the one hand, smaller increase of working-age population and fast economic growth has led to labour shortage, and rising wages. Rising labour cost undermines the comparative advantage of labour-intensive industries, making it imperative to upgrade the industrial structure towards capital- and technology-intensive industries. On the other hand, China's per capita income has just reached the upper-middle level, and it has not yet gained notable advantage in physical capital. In addition, it still lags far behind developed countries in terms of labour quality and the development of science and technology. Therefore, it has little comparative advantage in capital- and technology-intensive industries. To some extent, it is justifiable to summarise the potential negative impacts of population ageing on economic growth as follows:

1. China will lose the opportunity of overtaking developed countries as a late bloomer;
2. China will lose its advantage over other developing countries that still enjoy demographic dividend;
3. China has not yet gained the advantage in technology and innovation as developed countries

In other words, China is losing its advantages over both high-income and low-income countries, which makes it more imperative to change the pattern of China's economic development.

Population ageing affects not only economic growth but also has far-reaching influence on social development. The size of China's older population is growing. Elderly people are living longer and their share in the total population is on the rise. Population ageing increases family's burden of taking care of elderly people. It has been a tradition in China that most old people live with and are looked after by their children. However, with the change of family structure and society development, particularly as the parents of the one-child generation enters old age, more and more families will face the shortage of 'manpower' for taking care of the elderly. According to the 2010 survey on urban and rural older population in China, 22.7% of elderly people in China were unable, or not fully able to,

take care of themselves, and had to rely on other family members. Attending to the elderly constrains the labour participation of the people undertaking the responsibility, especially women. According to a 2005 survey on the factors influencing the health of elderly people, due to respondents, of looking after their parents, they worked 1.4 hours less every week, and the figure was seven hours for females living with their parents (Yi Zeng et al., 2010).

In addition, population ageing changes the intergenerational relationships. With a low fertility rate, the traditional mechanism of family support for the aged has been weakened and a social support system is in place to take the role. The intergenerational transfer of wealth and public resources causes the change of intergenerational relationships. In the context of soaring proportion of one-child families, accelerating population ageing, and social transformation, intergenerational relationships will become more complex in China.

However, China is not yet prepared for the oncoming ageing society:

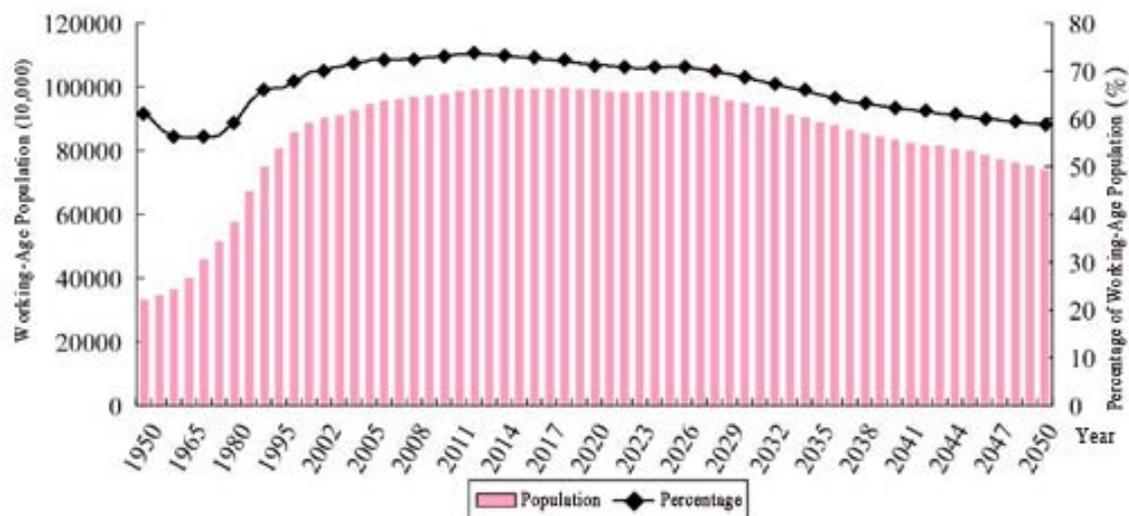
- First, institutional arrangements lag behind. Various systems, including the social pension system, the medical insurance system, the retirement system, the personal income tax system and other related social policies and public service system, are all far from meeting the needs of an ageing society. From this perspective, the tension between ageing and social development can be described as “ageing before adequate development”. In other words, China is under-prepared for an ageing society. However, population ageing will be a hard fact that China has to face, and the building and reform of all systems concerning people’s well-being should be based on this fact.
- Second, China is not prepared financially. On the one hand, public spending on old age support is very limited. Only a small portion of public spending is on old-age pension and the pension system covers only a small population. A considerable proportion of aged people are paid a small pension. In 2011, the pension replacement rate of enterprises was merely 42.9% and the average pension in rural areas was only RMB 55 per month. On the other hand, the current social pension system faces a potential crisis: pension funds in nearly half of the provinces in China cannot make ends meet (Zheng Bingwen, 2012), and the returns on pension investment are low. Staying below 2%, the average annual rate of return is even lower than the inflation rate, which means that pension is actually shrinking. In the meantime, however, the older population is increasing, and the numbers of those covered by the pension system will accelerate. It means that there will be a sharp increase in the number of people qualified for drawing their pensions, which will be a hard blow to China’s social pension system.
- Third, China’s public service system is yet to be developed. Currently, the needs of the elderly are not taken into account in urban planning, infrastructure construction, etc., making the access to public services most limited for elderly people. In rural areas, in particular, as most young people are not at home, and there are almost no facilities for the aged, the old people face greater challenges in their daily life. Therefore, China still has a long way to go to achieve active and healthy ageing that is advocated by the international community, and it may start with building an equitable and sound public service system catering to the needs of an ageing society.

6.3.3 Implications of population ageing on labor market

China’s fertility rate started to plummet in the 1970s and has stayed at a low level for a long time. The low birth rate is sure to exert its impact on the labor market, as evidenced by the declining size of working-age population. China is expected to experience the following changes in working-age population in the future.

First, both the size and the proportion of working-age population have seen the turning point. At the end of 2011, the proportion of working-age population was 74.4%, 0.1 percentage point lower over 2010. At the end of 2012, the number of working-age population was 937 million, 3.5 million fewer than 2011. Those decreases, though minor, are a sign that both the absolute number and the share of working-age population started to and will continue to fall. In 2050, the proportion will be below 60%, the level in 1980. However, in 1980, working-age people were mainly striving to raise children, while after 2035, dependent population will be mainly elderly people. According to the predictions of China Development Research Foundation (CDRF), China's working-age population (aged 15-64) will increase at an average annual rate of 0.23% from 2011 to 2016, reaching the peak of 998 million in 2016, and then decrease, reaching 745 million in 2050, the level at the end of the 1980s (Figure 59) (CDRF, 2012).

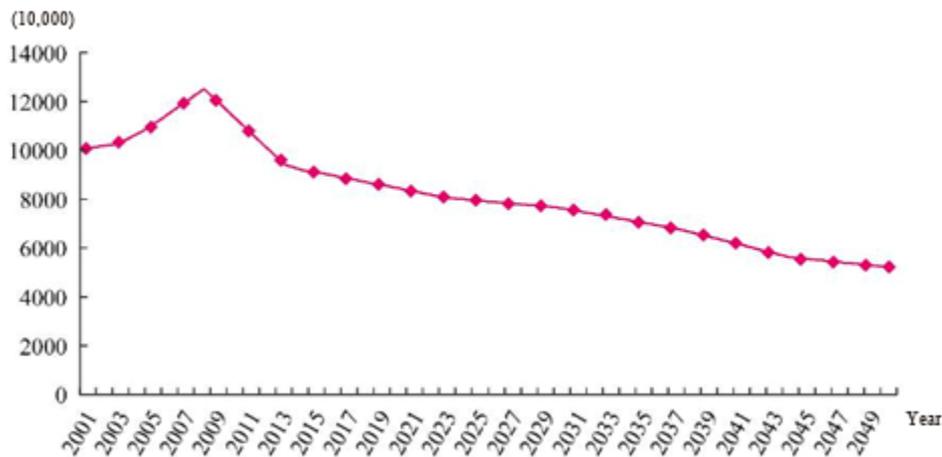
Figure 10. China's working-age population, 1950-2050



Source : CDRF (2012)

Second, the number of newcomers to the labour force will decrease sharply. Due to the rapid decline and low fertility rate, the number of newcomers to the labour force has seen a substantial reduction in China. The population aged 18-22 was 124 million in 2008, fell to 108 million in 2011, and will decrease by 7 million annually in the coming decade. In 2050, there will be only half the current number of newcomers to the labour force (Figure 60) (CDRF, 2012). The change in the number of newcomers to the labour force, the most active part of a country's human resources, has an important influence on the labour supply and demand as well as the country's economic development.

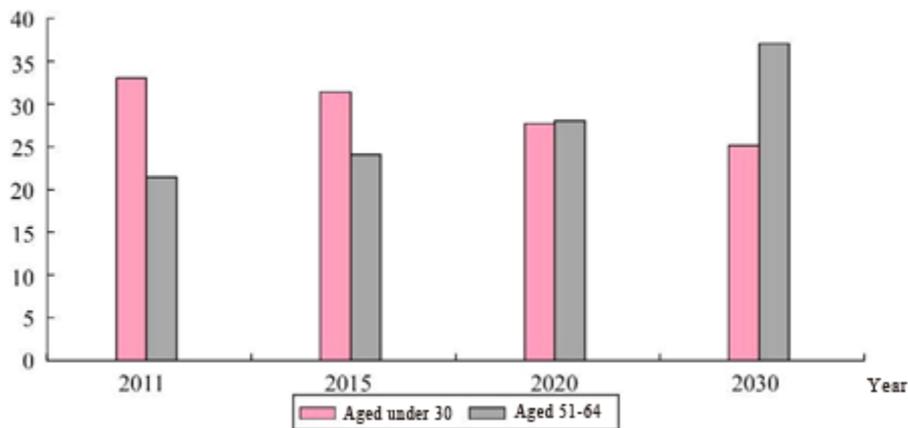
Figure 11. Newcomers to the labour force in China



Source : CDRF (2012)

Third, the labour force is ageing rapidly. Comparing the youngest population group aged under 30 and the oldest group aged 51-64, there is a clear the ageing trend. The proportion of the youngest group is likely to keep decreasing in the next 40 years, while that of the oldest group will increase. In 2020, the oldest group will have a larger proportion than the youngest group. In 2050, the proportion of the youngest group in the total working-age population will less than one fourth, while that of the oldest group will come near 40% (Figure 61) (CDRF, 2012).

Figure 12. Labour force ageing in China



Source : CDRF (2012)

For a long time policy maker focus has been on the size of the labour force, while the sharp decrease in the number of newcomers to the labour force and the fast ageing have drawn less attention than they deserve. Such new trends in the labour market herald new challenges for labor market policy and system security.

6.4 China's preparations for its population ageing

Along with population ageing is the huge demand for the development of the elderly care industry or what is called “silver industry and white economy”⁸. Accordingly to the 2005 Survey on Health Influencing Factors of the National Elderly Population, nearly 18% of the elderly need external assistance in daily life and most of these in need do not have an independent source of income to support themselves. Sixty-four percent of them depend completely on external services for care (Yun et al, 2010). If the living capabilities of the elderly population continued to improve at an annual rate of 1% as they had done between 1992 and 2002 (Danan and Yi, 2006)⁹ it was estimated that the number of those requiring daily care would reach 15-20 million in 2005. Due to the differences between urban and rural areas, in terms of the disability adjusted life year¹⁰ the medical care level, and the social welfare level, the urban elderly population need to pay a considerably higher expense than their rural counterparts for the daily care during the rest of their lives. Based on transition probability calculation of care costs, mortality and self-care capability of the elderly population at different ages in 2005, an elderly person living in urban areas needs to pay a direct expense of CNY 9 200 every year for daily care for the rest of his life, while for an elderly person living in the countryside, the figure is CNY 4 200 (Cheng et al, 2010). The demands of the Chinese elderly population for social care, medical care, services and daily necessities call for a more rapid development of the silver industry and the implementation of relevant policies.

6.4.1 The current status of silver and white industries

China has enacted a series of policies to strengthen community construction, provide better services to the elderly, and improve their living environment. Such efforts have also been applied to rural areas. During the 11th Five-Year (2006-2010) Plan period, the number of community service centers nationwide reached 175 000 and that of urban convenience outlets reached 693 000. Nearly half of the urban communities and 80% of towns and villages launched aged service facilities. There was a significant increase in the number of beds for the elderly in nursing homes. There were 38 060 nursing homes nationwide, providing a total of 2.662 million beds for 2.109 million elderly people. The number of beds and that of the elderly people served had risen by 62% and 71%, respectively over the end of the Tenth Five-Year Plan period. Of all the nursing homes, 4 141 were formally registered and privately operated, accounting for 10.6% of the national total. Such private nursing homes provided 412 000 beds, or 15% of the national total for 238 000 elderly people, or 11% of all that were cared in nursing homes. The bed utilisation rate of such private nursing homes was 57.8%¹¹. China has issued a series of policies to promote the development of national nursing homes, including Recommendations on Accelerating Socialisation of Social Welfare, Recommendations on Accelerating the Development of Old-age Services, Assessment Standards on State-level Nursing

⁸ The term ‘silver economy’ has been frequently used by European scholars in recent years. At the ‘Silver Economy in Europe’ Conference in Bonn, Germany, in February 2005, a declaration was drafted, which describes the ‘silver economy’ ‘...as an opportunity for quality of life, economic growth and competitiveness in Europe’ (Silver Economy in Europe 2005: web document). The declaration argues that ‘an appropriate innovative drive [in this sector] results in growth and new jobs, and in a global context increases Europe’s competitiveness and that of the companies operating here.’ (Silver Economy in Europe 2005: web document). In this research, silver industry (or silver economy) is defined as the industry/sector focusing on producing/providing the aged population oriented products/services. “White economy” refers to those products, services, and activities related to health care and care including dependent, disabled and the elderly.

⁹ Gu Danan and Zeng Yi (2006), “Study on the Changing Self-care Capability of the Chinese Elderly Population, 1992-2002,” *Population and Economy*, 4.

¹⁰ Disability adjusted life year (DALY) refers to the total number of years lost due to ill-health, disability or early death. It includes the two parts of years of life lost (YLL) due to early death and years lived with disability (YLD) caused by diseases (WHO, 2004).

¹¹ China National Committee on Aging (2011), *Development of the Cause of Chinese Seniors during the Eleventh Five-Year Plan Period*.

Homes, and Code of Conduct for Social Welfare Institutions. The professional and standard development of elderly care services has been further advanced by the efforts of full-time social workers and volunteers.

In spite of the above efforts, the rapid growth of the ageing population, the seriousness of senility, the lack of effective elderly care, and the underdeveloped material conditions pose many challenges to the general cause of providing for the elderly. Those challenges can be summarized in the following aspects.

- Firstly, the large gap between different regions and between rural and urban areas in terms of social and economic development leads to apparently imbalanced development of the old-age service system. Some basic social security programs have quite a narrow coverage in rural and less-developed areas.
- Secondly, the increase of “empty nests” grows more serious for the elderly population and the traditional family support mode faces challenges. The present mode of elderly care, medical care, and services for the elderly falls short in terms of economic support, daily care and mental solace.
- Thirdly, the continuing growth of life expectancy brings up the number of the oldest old (80+), who are more likely to develop disabilities. This brings new conditions and issues to the content and development pattern of the old-age service system, with the high expenditure on daily care being a very prominent issue.

The accelerated development of the cause of seniors not only requires stronger governmental and social support but also needs to draw support from the market. The creation of a second demographic dividend period after the first one comes to an end calls for rapid development of the cause of seniors and therefore, provides tremendous business opportunities.

6.4.2 Prospects of the silver and white industries

Population ageing combined with an increasing number of “empty nest” families caused by a low birth rate creates a tremendous market demand for elderly care services. The demand has multiple layers and covers many different aspects. Apparently, the traditional cooking and cleaning services cannot fully meet the needs of the elderly, who now expect mental solace, emotional exchanges, interactive entertainment as well as financial and medical consultation. The comparatively lower self-care capability and worse health conditions of the oldest old provide another huge business opportunity for the health care industry.

Many studies show that besides such common health issues as caused by cognitive disorders and organ diseases during the ageing process, the elderly people also suffer from a much higher two-week prevalence rate and chronic disease prevalence rate than people of other age groups. This will first lead to a substantial increase in their consumption of health products and drugs, including anticancer drugs, cardiovascular drugs, as well as anti-obesity drugs, which are the three most needed types of drugs for the elderly. Secondly, the serious shortage of nursing personnel at present makes it difficult to fulfill the care needs of the elderly. Thirdly, medical equipment and devices that can improve the self-care capability and quality of life of the elderly will become increasingly popular, such as those that can monitor the physical condition of the elderly or make emergency calls.

The comparatively high mortality risks of the elderly also provide development opportunities for the matchmaking, marriage counseling, legal advice and other related industries. The well-educated, high-income elderly group calls for the development of the elderly entertainment and financial and insurance consulting industries. During recently years, China’s elderly tourist industry has seen promising growth but still cannot fully meet the needs of the elderly for leisure tours. There are very

few entertainment centers or clubs specially designed for the elderly, which also holds market prospects.

Among the many industries related to population ageing, the daily necessities (products for daily use) industry sees a steady increase in its market capacity. Apart from the traditional necessities, such as clothes, crutches, reading glasses, tooth sockets, hearing aids, urinals, and diapers, cleverly designed products are also much favoured on the market, which can significantly improve the self-care capability and quality of life of the elderly. Such products include cell phones with a big screen and a big keyboard which suitable for the elderly population with poor eyesight, shaking hands, and lower educational attainment, and crutches that are attached to a stool and easy to fold, making it easy for the elderly to sit down and to stand up. Even in the traditional old-age service industry, special shopping malls and e-commerce also represent significant business opportunities.

Because of the many one-child and childless families, the number of “empty nests” families and elderly people living alone has increased year by year. This is further reflected by the more urgent demand for self-care products for the elderly. According to data provided by China National Committee on Ageing, while the market of the elderly had a CNY 10 trillion demand in 2010, less than 10% was met.

Statistics of the 2005 Health Survey of the Elderly Population of the Four Municipalities Directly under the Central Government show that there have been significant changes in the elderly population’s choice of support mode. Although 58.3% of the urban elderly population still prefer to live with their children, quite a number of the elderly choose to live alone, accounting for 39%¹² of the total. With an increasing number of elderly people choosing not to live with their children, the huge market demand for high-grade residence has been created thanks to the significant increase in the income and savings of the elderly population and the lack of elderly housing projects in the market.

6.4.3 Policy requirement for the development of the silver and white industries

Misconceptions have always existed in the approach of governments, enterprises, and families to the old-age service system. Due to the difficulty in grasping the tendency and long-term influences of the ageing process in the first place, relevant government departments started to pay attention to the issue at a rather late stage and many local governments even considered it a burden or a marginal issue instead of an industry with huge potentials. Enterprises habitually associate the old-age service business with long cycle of investment return, low profit and high risk, see no business opportunities, and are reluctant in developing products and exploring market potentials. Traditionally, a large proportion of the elderly population tends to refrain from adding burden to their children, which is typically reflected in their reluctance to seek medical treatment when ill. The lack of consumption desires has greatly reduced the market potential. Therefore, the government needs to properly handle the relation between the profit-making nature and the public nature of the elderly care industry and create greater market incentives through institutional measures (Jiehua et al, 2008).

Besides fragmented policies for the elderly, China lacks a policy system that provides support for investment and consumption in this area from the many aspects of venues, loans, taxation, and subsidies and encourages the inflow of private capital. The comparatively long cycle in obtaining returns on the investment, and the unsatisfactory returns at the early and medium stages add to the difficulty in developing the industry, where the reluctance of manufacturers to produce and traders to sell is coupled by the inability of the consumers to buy such products. Take the reluctance of real estate developers to develop housing projects for the elderly for example. There are no specific policies regarding such crucial issues as whether the land used is operational or not and whether land should be transferred through negotiation or bidding. Besides, some systems related to the elderly population still need improvement, such as the elderly care system, the medical care system, and the

¹² “The Elderly Care Industry Sees Trillion Business Opportunities as China Enters Aging Society,” *Shanghai Securities News*, May 30, 2011

long-term care insurance system, etc, which makes it difficult for the elderly to consume without any worries for the future. This poses another challenge to the development of the old-age service industry in China.

Another hampering factor is in the lack of uniform industry standards, as well as product and service standards, and an industry access system in the market for the elderly. Constraints are apparent in two aspects. Firstly, the inability to effectively protect their rights and meet their varied consumption demands hurt the elderly population's enthusiasm to consume. Secondly, although the ageing process has created considerable business opportunities, the lack of industrial standards and clear policy directions can easily lead to high business risks and market disorder and therefore, has undermined the confidence of private companies to do business in this field.

To address the above-mentioned problems, China needs to accelerate strategic planning and promote the sound and rapid development of the silver industry systematically. Pillar sectors should be identified based on the objective needs of the elderly population and the maturity of the market. Priority should be given to the development of pillar sectors, through which the industry may be advanced as a whole. Relevant public policies should be improved to further regulate market practices and enhance self-discipline of the industry so that a shared prosperity may be achieved for all sections of the industry. The government should dutifully fulfill its responsibilities in providing basic public services by establishing a stable support system for the elderly. Such as:

- managing the difficulties in caring for the elderly in urban areas who have no ability to work, no source of income, and no legal support; and those with a disability and no family;
- greatly increasing the number of nursing homes, beds, and caregivers and ultimately developing an elderly care and service system that is supported by enhanced investment and services and
- focus on strengthening family support, expanding community support, nursing home support, and promoting the development of the industry of old-age service.

6.5 The Beijing challenge

Facing with the increasing ageing population in the society, it is urgent for the Chinese government to take prompt actions. Before that, it is necessary to grasp the current needs of the elderly and identify what are the particular issues to be managed. This section, based on the survey result of Beijing¹³ in 2012, aims at providing an analysis regarding the current and potential needs of the aged population in China.

6.5.1 Profile of Beijing

Beijing, the capital of China, is located in the north part of China. It consists of 14 districts and 2 counties, with an area of 16411 sq. kilometres (Figure 63). In 2011, Beijing's GDP per capita is 81 658 RMB or 12 643 USD, belonging to economically advanced areas in China¹⁴.

¹³ This survey was conducted during the period from August 2012 to November 2012. In this survey, three types of respondents were interviewed: residents aged 50 or over, leaders of enterprises engaging in silver and white industries and officials working in senior related sectors.

¹⁴ In 2011, China' per capita GDP is 35083, or 5432 USD.

Figure 13. Beijing



Source : extracted from Daniel Dalet/d.maps.com

Given the existence of the household registration system, Beijing's residents are divided into two categories: permanent registered residents and nonpermanent registered residents. Nonpermanent registered residents are also called migrants or floating population and refer to those living in Beijing for more than 6 months and without Beijing's local household registration. By the end of 2011, Beijing's total population was 20.2 million. Among them, permanent registered population amounted to 12.8 million.

In 1990, people aged 60 years or over in Beijing reached 1.1 million, accounting for 10% of Beijing's total population, indicating Beijing's entrance into an ageing society. The past two decades have witnessed the rapid population ageing in Beijing. The population aged 60 or over reached 1.7 million in 2000 and 2.5 million in 2010, and it is expected this figure will amount to 4 million in 2020 and 5 million in 2030. Accordingly, the proportion of the elderly in the total population has also increased rapidly. In 2010, the proportion of the population aged 60 or over among Beijing's total population is 12.5%, and this proportion is expected to reach 20% in 2020 and 30% in 2030 (Beijing Civil Affairs Bureau, 2012).

From 2000 to 2010, although the number of the elderly in Beijing has increased by more than 50%, its proportion has remained at the 12.5% level due to a large number of migrants that slowed the oncoming speed of population ageing in Beijing. By the end of 2011, migrants in Beijing had amounted to more than 7.4 million. Among them, most are young workers. As a result, compared to the total population, population ageing in Beijing's permanent registered population is more serious. By the end of 2011, persons aged 60 or over amounted to 2.5 million, accounting for 19.4% of the total permanent registered population. Among them, persons aged 65 or over amounted to 1.8 million, accounting for 13.9% of the total permanent registered population; persons aged 80 or over

amounted to 386 thousand, accounting for 3.0% of the total permanent registered population (Beijing Civil Affairs Bureau, 2012).

Table 14 outlines the current composition of the permanent registered population aged 60 or over in Beijing. By the end of 2011, Beijing's aged dependency ratio (for the permanent registered population aged 60 or over) was 27.6%.

Table 2. Composition of the permanent registered population aged 60 or over in Beijing

		Number (thousand)	Proportion (%)
Gender	Male	1190	48.0
	Female	1289	52.0
Age	60-69	1187	47.9
	70-79	906	36.6
	80-89	360	14.5
	90 or over	26	1.0

6.5.2 Beijing's measures in addressing population ageing

In 1984, Beijing established the Committee for Aged People. In 1996, the Leadership Group for Aged People consisting of 16 member units was established. The Aged People Association is its administrative part. In 2000, the Leadership Group for Aged People has changed its name into The Committee of Service for the Aged People. Its member added to 34 units and in 2011 increased to 44. The districts and counties belong to Beijing also established the Committee accordingly.

In recent years, facing with the increasing aged people, the Beijing government established the "9064" mode to provide support to its aged population. Under this mode, 90% of the aged people are expected to get support from their own family, 6% of the aged people are expected to get support from community, and the left 4% are expected to live in nursing homes and seek support from the staff there. In addition, Beijing has taken the following measures to deal with its population ageing.

Expand social security to all urban and rural residents

Firstly, the old-age security system for all urban and rural residents was established. This system consists of basic retirement pension for the employees old-age pension for urban and rural residents, preference pension for the aged without retirement pension. The retirement pension for 2 037 000 company workers has increased from 1 086 CNY in 2006 to 2 510 CNY in 2012.

Secondly, the urban and rural healthcare security system supported by the basic healthcare insurance for urban workers, healthcare insurance for urban residents and new-type rural cooperative healthcare system is formed, which benefits 2 328 000 retired workers, 191 000 aged people without healthcare security and 645 000 rural aged people. The per-capita life expectancy has improved from 80.09 years old in 2005 to 80.81 in 2010.

Thirdly, the overall urban and rural social assistance system for aged people was established. In 2012, 38 000 aged people are provided with the subsistence allowance. The rewarding and supporting system has been established for those rural parents who are above 60 and have followed the one-child policy. The healthcare assistance for the urban and rural low-income aged people, rural household enjoying Five Guarantees and "Three Non-personnel" (People without income, working ability and raising persons) will be carried out. The urban and rural impoverished aged people have priority to apply the low-rent housing.

Fourthly, the social welfare system for aged people has established in an initial way. Moreover, the systems of the home-based care for the aged or disabled, high-age subsidy and healthcare assistance for people in 95 years old or above are also established.

Push forward home-based care for the aged people

The Beijing government strives to develop a home-based, community-supportive, policy-guarantee, and socialised-operation service model for the aged people. From 2010, the government delivered each aged people above 80 a coupon equal to 100 CNY every month to offer the aged six kinds of service in all including daily care, housekeeping, recovery care, mental support, education and some other related services. During 2010 to 2011, the government developed 15 000 service-offering companies and founded 4 585 places to provide old-age oriented food to the aged people. In addition, the government established 5 305 nursing homes covering 30 000 beds. All these measures are helpful in alleviating the difficulties that the aged people are experiencing in dealing with their daily lives. Furthermore, to encourage the virtue of respecting the elderly, the government started to elect and appraise ten thousand persons and one thousand companies excelled at doing service for the aged in 2010. From 2011, the healthcare assistance for the aged above 100 has expanded to those who is 95 or above. 4 400 people are employed to work for home-based care of the aged, which further expand the grass-root human resources supporting the old-age security. Meanwhile, the government equipped all the urban and rural districts with barrier-free service cars and offered 40 000 aged families with the barrier-free facilities. Besides, the government tried to give the spiritual care for the aged. There are 35 designated companies making contract with the government and offer psychological consultancy. The hotline, 96156, is set up to offer free service on the psychological consultancy for the aged people. 200 000 electronic machines called “helper” have been delivered to the aged.

Implement the preferential policy for the elderly

According to the Measures of Preferential Treatment for the Beijing Aged People, the aged people will enjoy 11 types of preferential treatment including daily life, transportation, entertainment, medical and healthcare, right-protection and many more. The related government department has transacted preferential cards for 1 750 000 aged people above 65. With such card, the aged people can enjoy the free inner-city transportation, free or privileged price for the entrance and service of over 500 parks, scenic spots, museums, public gyms, and cultural centers. There are 26 000 aged people above 90 enjoying the high-age subsidy. Social institutes related to laws will offer free or favourable price service on law consultancy or assistance to strengthen the protection of the aged people’s rights. The government organised many community cultural and sports activities to enrich the aged people’s spiritual life and lead them to take an active participation in social activities.

Establish specialised organisations to provide service for the aged people

The Beijing government has speeded up the construction of the organisation for the old-age service in the past decade. As a result, the old-aged beds have increased from 30 000 in 2005 to 82 000 in 2011, and the number of beds owned by each one hundred aged people has added from 1.53 to 3.3. During 2006-2010, the beds for nursing aged people increased by 41 000, which equals nearly 1.4 times of the total number from 1949 to 2005. Among the increments, the numbers in 2009 and 2010 are up to 15 000 respectively. At the same time, the government actively delivered a supporting policy that during the construction process, 8 000 CNY to 16 000 CNY will be subsidised for each bed and during the operation period, 200 CNY to 300 CNY for each aged people will be subsidised to the organisations. By these efforts, the Beijing government is trying to improve the standards of the organisations for old-age service (Beijing Civil Affairs Bureau, 2012).

Table 3. Beijing's index of the service for the aged people: 2011-2015

	Index	2010	2015
Social Security system	Participation rate of urban worker's pension (%)	96	98
	Participation rate of urban worker's medical insurance (%)	95.7	98
	Participation rate of urban and rural residents pension (%)	92	95
	Participation rate of urban and rural residents medical insurance (%)	90	95

	Subsidy for the older-age (CNY/month)	80-89	...	100
		90-99	100	200
		100 and above	200	300
	Subsidy for the disabled aged person (CNY/month)		...	200
	Life expectancy (year)		80.8	81.8
Service for the Aged People	Number of nursing beds for the elderly (10 thousand)		7.2	12
	Number of nursing beds per one-hundred aged people		2.8	3.8
	Number of beds for mid and long-term nursery		...	5000
	Rate of nursery beds (%)		...	50
	Number of beds for daytime nursery per one-hundred aged people		1	2
	Number of attendants per ten-thousand aged people		15	50
	Number of home-based attendants for aged or disabled people	2000		10000
	Number of psychologists per 10-thousand aged people	15		20
	Coverage of the aged association in community or village (%)	90		98
	Rate of aged people attending schools/colleges (%)	13		18
Worker	Number of affiliated workers in public sector per 10-thousand aged people		10	30

Source : Beijing Civil Affairs Bureau (2012)

6.5.3 Current economic conditions of the aged people in Beijing

As the country's capital, Beijing's proportion of the population working in public sector is comparatively higher. At present, people working in public sector are usually entitled to better social security system than those working in private sector. However, an analysis of the current economic conditions of the respondents shows that even in Beijing the elderly are usually placed in an economically bad condition. The yearly income of the elderly in Beijing's urban area and rural area is 59.8% of the average income for urban workers and 95.6% of per capita net income of rural residents respectively in 2011. A further analysis reveals the big income gap existing between rural elderly and urban elderly. In 2011, the income of rural respondents is only 42.0% of that of the urban respondents (Feng et al, 2012).

The current urban-rural income gap can be partly explained by the difference in the elderly's income composition. Usually, after retreating from the job market, pension constitutes the principal income source of the elderly. Currently, the proportion of pension among the elderly's total income in Beijing's urban area and rural area is 81.9% and 37.3% respectively. There are dramatic differences in the coverage ratio and supporting level of pension in rural area and urban area. In Beijing's rural area, in addition to pension, working income and government subsidy constitute the other two main sources of income. The proportion of the former is 30.8%, and the proportion of the latter is 25.4% (Feng et al, 2012).

In spite of the big gap in income, there is no obvious difference in personal expenditures between the rural elderly and the urban elderly. The yearly expenditure for the urban elderly in 2011 is 7 099 CNY, and the yearly expenditure for the rural elderly in 2011 is 7 611 CNY. In addition, analysis also shows high similarity in the composition of expenditure. For both the urban elderly and the rural elderly, medical expenses, clothing and communication expenses constitute the most important three items in their expenditure. However, the particular proportions of the three items are different for the rural elderly and the urban elderly. For the urban elderly, expenses used in the above three items are 61.0%, 15.1% and 11.3% respectively, whilst they are 81.5%, 6.6% and 6.1% respectively for the rural elderly (Feng et al, 2012).

In addition to income, wealth constitutes another important part of the elderly's economic conditions. The survey shows 80.2% of the elderly in Beijing have their own houses/apartments. On average, every aged person has 1.16 apartments. In the urban area, the average space of one typical apartment for the elderly is 79.4 square meters, while in rural area the average space of one typical house is 137.4 square meters. Given the current high housing price in Beijing, owning one typical

apartment in urban area equals the possession of 300 thousand USD to 400 thousand USD. Thus, from the perspective of wealth, the economic conditions of the elderly in Beijing cannot be regarded as bad. The problem is how to obtain financial support from their possessed real estate.

6.5.4 Current and potential usage of old-age products and services in Beijing

In 2012, the most often mentioned 'needs' among the aged people in Beijing include the following seven aspects: health check, nutrition-supplemental products, nursing products, education/training, travelling, financial products and nursing services.

Health check

As age increases, the elderly are more likely to experience physical problems. Therefore, health check is of great importance in the elderly's life. In recent years, more and more aged people in China have begun to pay attention to their physical conditions. As a result, the need for health-check among the elderly, especially in urban areas, is continuously growing. In 2011, 60.3% of the elderly in Beijing received health check. This proportion is expected to increase to 84.6% in the coming years. On the other hand, those having not received any check-up in the past five years still accounted for 20.4% of the aged population in Beijing (Feng et al, 2012). How to enlarge the coverage of health check-up to every aged person is still a big challenge in China.

The public hospital is the primary choice for the elderly in contemporary China to receive a health check-up. Among those having received health check, those who have selected public hospital accounted for 76.9% of the total aged population in Beijing. In contrast, those who have selected specialised private health-check institution as the place to receive health-check only made up 13.6%. Recently, private specialised health check-up centers have been developing very quickly. However, most of these centers have focused on the working-age population. Aged people oriented centers are quite few. In addition, the charges of these private specialised centers are much higher than that of public hospitals. Given the fact that most aged people in China are with much lower income, public hospitals are expected to play a more important role in providing health check-up services to the elderly. Differences exist between rural and urban areas, in Beijing's urban area, up to half of the elderly get this service through the help of formerly worked organisation. Whilst in rural area, 80% of the elderly get this service through the help of village.

Health check expenditure will experience rapid growth in the coming years. In 2011, the average expense on one health-check in Beijing is 948 CNY, among which personal expense is 453 CNY. When asked the particular budget for health-check in the future, the elderly provided an average expense of 641 CNY, a 41.7% increase to the current expenditure. The above expenditure increase, combined with the rapid increase of health check participation rate, is expected to bring a dramatic growth in the elderly's health check market in the future. It is expected that in the year 2020, Beijing's health check market for the population aged 50 or over is anticipated to grow up to 9.1 billion CNY (Feng et al, 2012).

An analysis concerning the characteristics of the elderly having received health-check shows the difference between different groups among the elderly. Generally speaking, the participation rate of health check of the urban elderly is much higher than the rural elderly; those with higher educational attainment, and those who are with higher income are more likely to participate health check than those with lower educational attainment and those who are economically poor respectively.

Nutritional supplement products

In 2012, consumption of nutritional supplement products among Beijing's aged people is at a comparatively low level. At present, those who are using nutritional supplement only account for 19.9% of the total aged population in Beijing. In other areas of China, this proportion is expected to be even much lower. This low proportion results from the dissatisfaction with the effects of the

current nutritional supplement products in the market. When asked the effects of the nutritional supplement, those who answer “useful”, “useless” and “adverse effects” account for 17.3%, 45.6% and 6.4% respectively in Beijing. However, among those who are using nutritional supplement, the average yearly expenditure is 4 323 CNY (about 700 USD) (Feng et al, 2012), a comparatively high expenditure in terms of the annual income of the elderly. This seemingly contradictory result indicates the coexistence of strong need for nutritional supplement products among the elderly and the high dissatisfaction with the current products provided at the market. How to provide satisfactory nutritional supplement products to the elderly in the coming years has become another challenge for China.

Resulting from the comparatively negative evaluation on the quality of current products, the elderly demand for nutritional supplement is to experience a slowdown in the coming years. As shown in Beijing’s 2012 survey, those who plan to buy nutritional supplement will fall to 17.9% of the total respondents, a two% decrease from the current level. Furthermore, the average expenditure on nutritional supplement will also experience a downturn in the coming years. As the survey shows, on average, the expenditure for one aged person on nutritional supplement will decrease from the current 4 323 CNY to 4 127 CNY in the future.

In Beijing, 55.2% of the aged population regard “effect” as the most concerned aspect with regard to choosing nutritional supplement products. In contrast, those who have select “price” as the most important factor only account for 4.6% of the aged population. This result shows the possible way to establishing a well-functioned mechanism in providing nutritional supplement to the elderly: it is effect/quality, not the price that decides the possibility of one product’s success in the nutritional supplement sector for the elderly in contemporary China.

Nursing products

In the past decade nursing products (personal care products) have been widely used in China. At present, 93.8% of the aged people in Beijing are using nursing products. A further analysis concerning the similarities and differences between different groups reveals the disparity existing among the elderly. As for as the personal yearly expenditure is concerned, the maximum amount in 2011 is more than 60 thousand CNY; whilst the minimum amount is only 1 CNY. On average, the elderly are spending 2 545 CNY on nursing products in each year.

The elderly’s demand for nursing products will continue its growth in the future. This growth is resulted from two contributing factors: the increase of market share and the increase of individual’s personal yearly expenditure. Currently, those who have the plan to purchase nursing products in the future account for 96.5% of the total respondents, a nearly three% increase from the current level. Meanwhile, the anticipated individual yearly expenditure on nursing products will see a rapid increase. It will increase drastically to 9 394 CNY in the coming years, a 269% increase from the current expenditure level. Both the above increases will lead to the rapid development in the usage of nursing products in the future.

A further analysis regarding the characteristics of the population using nursing products shows that great disparity exists between different groups of the elderly. In age, the group aged less than 60 years old will see the fastest growth in the future. In occupation, the group of professional/technician will see the fastest growth in the coming years. In income, the lower group with a yearly income of less than 10 800 CNY and the upper group with a yearly income of above 38 400 CNY will see the fastest growth in the future.

Table 4. Consumption of nursing products among the elderly in Beijing

Residence		Current Consumption		Future consumption		Change of Percentage
		No.	Percentage	No.	Percentage	
Urban area		84	23.10	77	21.20	-1.90
	Rural area	13	10.70	10	8.20	-2.50

Age	Total	97	20.00	87	17.90	-2.10
	Less than 60	28	18.90	28	18.90	0.00
	60 – 69	29	16.30	22	12.40	-3.90
	70 – 79	28	23.70	26	22.00	-1.70
	80 or over	11	28.90	9	23.70	-5.30
Gender	Total	96	19.90	85	17.60	-2.30
	Male	31	14.70	29	13.70	-0.95
	Female	66	24.40	58	21.50	-2.96
Educational attainment	Total	97	20.20	87	18.10	-2.08
	Primary school	14	12.40	15	13.30	0.88
	Middle school	23	16.20	19	13.40	-2.82
	High school	32	21.90	28	19.20	-2.74
	College or above	28	32.60	25	29.10	-3.49
Occupation	Total	97	19.90	87	17.90	-2.05
	Government official	47	26.40	42	23.60	-2.81
	Business leaders	25	21.19	26	22.03	0.85
	Professional/ technician	8	16.67	4	8.33	-8.33
	Clerks	5	6.49	5	6.49	0.00
	Worker in manufacturing/ transportation sector	10	21.74	8	17.39	-4.35
	Other	2	11.76	1	5.88	-5.88
Personal yearly income	Total	97	20.04%	86	17.77	-2.27
	10,800 CNY or under	7	7.14	5	5.10	-2.04
	10,801-24,000 CNY	14	12.84	15	13.76	0.92
	24,001-30,000 CNY	21	21.43	21	21.43	0.00
	30,001-38,400 CNY	24	28.92	21	25.30	-3.61
	38,400 CNY or over	30	31.25	25	26.04	-5.21
	Total	96	19.83	87	17.98	-1.86

Source : Wenmeng Feng et al. (2012)

Travelling

After retirement from the job market, more and more elderly are realising the importance to find opportunities to engage in social activities. Among them, travelling has become one important way for the elderly to seek emotional support. In 2011, those who travelled amount for 40.2% of the elderly. This share is expected to increase to 58.8% in the coming years (Feng et al, 2012). Currently, there are three categories in the elderly's travelling: short-distance travelling in neighbouring areas, long-distance domestic travelling and overseas travelling. Among them, short-distance travelling is the most popular one among the elderly.

As for the particular travelling style is concerned, most of the elderly travelled with friends/family members or make the arrangements by themselves. The proportion of this style accounts for 45.4% among the travellers. In addition, 21.1% of the elderly travelling with the help of their formerly worked organizations, and 11.9% of the elderly travelled with the help of their community/village. In contrast, those travelled with the help of a specialized travel agency only account for 18.1% (Feng et al, 2012).

As for as the effect of travelling is concerned, 58.7% of the elderly regard travelling as a way to seek leisure/happiness, 25.5% of the elderly regard travelling as a way to obtain new knowledge. In addition, those who regard travelling as a way to improve family members' relation or improve their own physical conditions account for 6.1% and 6.6% respectively (Feng et al, 2012).

In addition to the enlargement of market share, the elderly's individual expenditure on travelling is also expected to see rapid increase in the coming years. At present, the elderly yearly individual expenditure on travelling is 5 708 CNY in Beijing. This number is expected to reach 7 170 CNY in the coming years, a 25.6% increase from the current level (Feng et al, 2012).

An analysis concerning the characteristics of the travellers among the elderly reveals the difference between different groups in growth potential. In residence, the urban area is higher. In age, the younger group's is higher. In educational attainment, the group of high school is the fastest one. In occupation, the group of professional/technician is the fastest. In income, the middle class with personal income from 24 001 CNY to 30 000 CNY is the fastest one.

Table 5. Travelling rate among the elderly in Beijing

		Current consumption		Future consumption		Percentage change
		No.	Percentage	No.	Percentage	
Residence	Urban area	155	42.6	230	63.2	20.6
	Rural area	41	33.6	56	45.9	12.3
	Total	196	40.3	286	58.8	18.5
Age	Less than 60	72	48.6	115	77.7	29.1
	60 – 69	69	38.8	102	57.3	18.5
	70 – 79	41	34.7	56	47.5	12.7
	80 or over	12	31.6	11	28.9	-2.6
	Total	194	40.2	284	58.9	18.7
Gender	Male	80	37.9	123	58.3	20.4
	Female	116	43.0	163	60.4	17.4
	Total	196	40.7	286	59.5	18.7
Educational attainment	Primary school	27	23.9	38	33.6	9.7
	Middle school	54	38.0	81	57.0	19.0
	High school	64	43.8	104	71.2	27.4
	College or above	51	59.3	64	74.4	15.1
	Total	196	40.2	287	58.9	18.7
Occupation	Government official	80	44.9	114	64.0	19.1
	Business leader	53	44.9	80	67.8	22.9
	Professional/technician	12	25.0	30	62.5	37.5
	Clerk	24	31.2	28	36.4	5.2
	Worker in manufacturing /transportation sector	19	41.3	24	52.2	10.9
	Other	7	41.2	9	52.9	11.8
	Total	195	40.3	285	58.9	18.6
Personal yearly income	10,800 CNY or under	30	30.6	46	46.9	16.3
	10,801-24,000 CNY	39	35.8	61	56.0	20.2
	24,001-30,000 CNY	33	33.7	61	62.2	28.6
	30,001-38,400 CNY	39	47.0	50	60.2	13.3
	38,400 CNY or over	53	55.2	67	69.8	14.6
	Total	194	40.1	285	58.9	18.8

Source : Wenmeng Feng et al. (2012)

In spite of the rapidly increased need on travelling among the elderly, the supply of aged people oriented travelling courses is far from enough. At present, most of the travelling courses are designed based on the assumption that the participants are healthy young members. Special consideration to the comparatively poor mobility and food preference of the aged participants is usually neglected. In the coming years, the designing of aged people oriented travelling courses is urgently needed.

Education/training

Given the social context of the current elderly's childhood period, the educational attainments of the current elderly are comparatively low. Even in Beijing, the educational attainments of the current elderly are as follows: primary school 23.2%, middle school 29.1%, high school 30.0%, college or above 17.7%. For them, to receive education/training after retirement enables their life more comfortable and more colourful. Currently, 33.1% of the elderly in Beijing are participating in various types of training/education after retirement. Most of these training are offered freely by communities or villages. Among those who have paid for training, the average expenditure is 104 CNY (Feng et al, 2012).

In contrast with the current low participation rate and expenditures, the training/education sector for the elderly will see an extremely rapid growth in the coming years. On one hand, the market share

of those who participate training is expected to reach 62.4% in the coming years; on the other hand, the personal yearly expenditure is expected to increase to 854 CNY, a 724.4% increase from the current level. As for the training contents are concerned, health-keeping related knowledge and habit-forming activities are the most interested courses among the elderly.

In spite of the bright future of the training sector for the elderly, the current supply is far from enough. Although the number of training schools/colleges for the elderly in China had increased to 48 116 by the end of 2011, a large amount of aged people still cannot find a suitable place to receive training/education after their retirement. In addition, more and more aged people have begun to pay more attention to the quality of training. In the coming years, how to establish a well-functioned training system for the elderly is also becoming an urgent issue.

A further analysis concerning the characteristics of the training participants shows the differences between different groups in the growth potential of training participating. In residence, rural area is higher. In age, the younger groups are higher. In occupation, the group of government officials is the fastest. In educational attainment, the group of high school is the fastest one.

Financial products

For most aged people in China, financial products are newly emerged things and most of the products are too complicated for them. Thus, the proportion of those who possess financial market is comparatively low. As shown in the survey, currently, 22.8% of the elderly possess financial products. The individual possession of financial products on average is 70 832 CNY. As for as the particular financial products are concerned, securities, fund, and commercial insurance constitute the main parts.

Currently, most of the elderly obtained financial products related information from the friends/family members, TV commercial advertising, and the propaganda of financial institutions, the proportions from these sources account for 7.8%, 6.0%, 5.3% and 4.5% respectively (Feng et al, 2012). This composition shows most of the elderly do not have enough information concerning financial products. When asked about the difficulties in purchasing financial products, most of the elderly point out the complexity of the current products has impeded their practical purchase. In addition, the shortage of the suitable products in the financial market constitutes another barrier for the elderly's participation in the financial market.

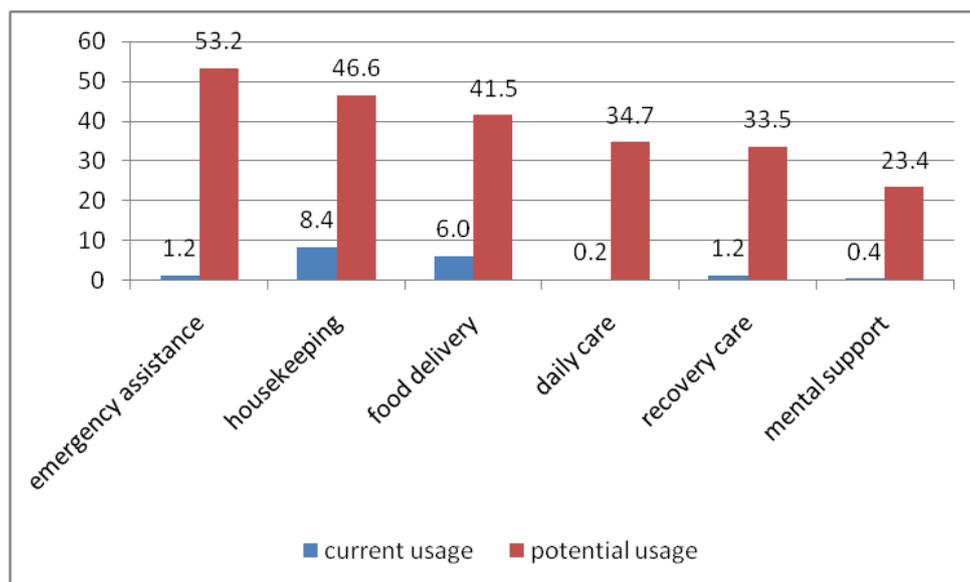
Given the comparatively poor overall performance of financial market in recent years, most of the elderly shows the intention to withdraw or lessen the purchase of financial products in the future. Among the respondents, those who have the plan to purchase financial products in the future fall from the current 22.8% to 18.7%, a 4.1% decrease from the current level (Feng et al, 2012). However, not every product will see the decline in this market. In spite of the obvious downturning will to hold securities and stocks, foreign currencies and valuable metals such as gold are attracting more attention from the elderly. In addition to the performance, the more fundamental reason for the downturning purchase will is the shortage supplying of suitable products. Compared with younger people, the elderly are less risk tolerant. Thus, when purchasing financial products, most of them are seeking low-risk products.

A further analysis concerning the characteristics of the elderly engaging in financial market shows the differences existing among different groups. In age, the group aged 59 years or under shows the fastest downturn; whilst the group aged 70 to 79 shows the increasing will to purchase financial products. In educational attainment, the group of middle school shows the fastest downturn. In occupation, the group of professional/technician showed the fastest downturn. In income, the middle class with a yearly income from 24 001 to 30 000 CNY shows the fastest downturn. In coming years, to design suitable financial products based on the above characteristics is needed.

Caring services

In 2012, 12.9% of the aged population in Beijing are using caring services. Those services include six aspects: housekeeping, food-delivery, daily care, recovery care, emergency assistance and mental support. Figure 63 presents the current and future usage of these six kinds of services. Among the current usage, housing keeping is the most popular one with the highest usage proportion of 8.4%. In the coming years, the need of caring services will experience rapid increase and its proportion is expected to amount to 65.4%. Among the future usage, emergency assistance will become the most needed one; its proportion is expected to increase to 53.2% of the aged population (Feng et al, 2012).

Figure 14. Current and future usage of care services among the elderly in Beijing



Source : Wengmeng Feng et al. (2012)

Facing with the increasing need for caring services, the current provision is not satisfactory. Currently, channels for the aged people to obtain caring service related information are mainly three types: relatives/friends (22.2%), TV (19.3) and community/village (17.7). In contrast, 38.8% of the aged people complain that there is no place for them to get information regarding caring services (Feng et al, 2012). It is obvious that to establish a well-functioned channel to provide related information will be the first step in push forward the development of caring services.

At present, the average yearly expenditure on caring services among the elderly in Beijing is 5 232 CNY. Whilst the potential average expenditure is expected to reach 9 102 CNY in the coming years, an increase of 77.4%, a closer look at the particular factors in using the caring services shows that effect is most concerned aspect among the elderly. Among the aged population in Beijing, 61.4% regard “effect” as the most important concern. In addition, those who regard “attitude” as the most important concern account for 24% of the aged population. In contrast, people who regard “price” as the most important concern only account for 13% of the aged people.

6.5.5 Current development of the silver and white industries in Beijing

Through the above analysis concerning the current and potential usages in seven particular sectors of the silver industry, it is obvious that the needs of the elderly are very strong and the silver industry as a whole is expected to experience rapid growth in the future. However, the big gap between the current and the future usages also reveals the slow development of the silver industry in Beijing at present. Currently, the supply of aged people oriented products and services are far from

meeting the needs of the elderly. The current development of silver industry in Beijing demonstrates the following characteristics:

High attention with key unsolved issues - Policy makers, business leaders and non-government organisations have realised the importance to develop the silver industry. However, with respect to key points such as how to define silver industry, what are the respective roles of public and private sectors in pushing forward the development of silver industry, what are the suitable model(s) in producing/providing products/services in China's current context, an agreement has yet to be reached.

Mainly focusing on high-income group - The current products/services provided in Beijing's market are focusing on the high-income aged people that only account for a small share of the total aged population. As for the middle or low-income aged people, there are few products/services available at present.

Different problems in each particular sector - At present, problems existing in each sector of the silver industry are different:

1. In healthcare sector, the private sector has been involved to some extent. However, the currently existing hospitals and facilities as a whole are far from meeting the elderly's healthcare needs.
2. In old-age people oriented nursing products sector, although development has been seen in recent years, high-quality, individualised and diversified products are not available at present.
3. In old-age people housing sector, although many enterprises have started business, most of them are focusing on high-income aged people. Provision of housing aiming at low or middle-income aged people is not available.
4. In old-age people oriented travelling sector, some travel agencies have prepared specialised courses for the elderly. However, special consideration to the quality and safety is needed.
5. In caring sector, the sector as a whole has achieved good results. However, the working conditions are comparatively poor. Therefore, how to retain enough workers is still a big challenge for this sector.

6.6 Policy recommendations on pushing forward china's preparations for its population ageing

To push forward the development of silver industry can only be regarded as one part of the overall efforts in making adequate preparations for China in dealing with its increasingly population ageing. To stimulate the development vitality of an ageing society in China, key policy recommendations include the follows five aspects:

- Urban planning - Due consideration should be given to the elderly population and their support in urban planning and suitability for the elderly to live shall be taken as an important measurement for urban planning in the future, which is particularly true for community construction, urban function layout, urban transport, living facilities, etc.
- Community construction - To build communities into the main force for supporting the aged, city planners should improve relevant community capacities in terms of community planning, personnel allocation, and system construction. Specifically, facilities and sites for the aged should be considered in community planning; a team of social workers should be recruited to satisfy the needs of the aged in a community; a cooperation mechanism between communities and relevant service institutions such as hospitals, restaurants, and shops should be established to form a comprehensive community-based elderly care system.

- Social supporting system - A social supporting system for the elderly is required. On the one hand, The Chinese government will gradually establish financial reserves to pay for the elderly care services through many new systems like the nursing insurance. On the other hand, guided by uniform standards, relevant authorities will carry out nurse training and vocational certification, to accelerate the recruitment of elderly care nurses.
- Health and social involvement - In order to actively address population ageing, local health institutions are required to intensify their guidance and services for the aged against chronic diseases, shift the focus of the services from treatment to prevention. Besides, relevant authorities will take measures to enrich the life of the elderly and attract their participation in more social activities, in an attempt to significantly improve their health and social involvement.
- Silver industry - To develop more products for the elderly and foster the elderly care industry, policy makers should make surveys on the living needs of the elderly and make more efforts to develop designated services and products. Meanwhile, apart from stratifying the increasing needs of the aged, the elderly care industry will be built into a new economic growth point.

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