The Demographic Factors in China’s March Toward a High-income Society

WANG Feng

University of California, Irvine, and Fudan University

fwang@uci.edu

In less than four decades, China has produced one of the most consequential economic miracles in world history. Following its abandonment of a centrally-planned economic system, China since the early 1980s has averaged an economic growth rate of 10 percent a year to date, producing the fastest sustained economic expansion by a major economy in history (World Bank 2016). Between 1978 and 2016, the world economic output as measured by GDP (current U.S. dollars) rose 8.85 times. For China, the increase is nearly 75 times. As a result of such a phenomenal economic boom, the share of China’s economy as the world’s total rose from less than 2 percent in 1978 to roughly 15 percent today (World Bank 2017). China’s economic growth has lifted 800 million people out of poverty in a country with over one billion population. In the process, China has also experienced the largest migration flows, with over 200 million domestic migrants, mostly from rural to urban areas seeking for better lives and economic opportunities. With rapid economic growth, structural transformation, and massive internal migration, China has undergone the largest urbanization boom in the world history, with its share of urban population increasing from merely 18 percent in 1978 to 56 percent in 2015 (World Bank 2017). Four decades of historical economic growth has elevated China from a poor and low-income
country to a country with an upper middle-income status.\textsuperscript{1} The question now is whether and how China can continue its trajectory of rapid economic growth, and to become a high-income society.

Among the many factors that will affect China’s pursuit to become a high-income society in the coming decades is also the one that is the most obvious: China’s demographic profile and its trajectories of change. Demography should not be destiny. But in the case of China, demographic changes have been as dramatic as its economic transformation. At the start of the decade of China’s economic transformation, in 1970, the average Chinese woman was expected to have more than five children in her life time, and China’s population was growing at an annual rate of nearly three percent, a rate that can double the size of the population in less than 30 years (Table 1). By the start of the following decade, in 1980, fertility level was more than halved, and so was the growth rate. In the three and half decades afterwards, the average number of children expected to be born for each woman dropped to around 1.5, a level much below what is required to maintain population size in the long run. The share of the population aged 65 and over, which stood at less than 5 percent of the total population back in 1970, is now more than 10 percent, and is expected to rise precipitously due to China’s prolonged low fertility and continued improvement in health. Within ten years, China is likely to see the beginning of a demographic downturn when its population size starts to shrink, and at the same time to lose a title that it has kept for millennia, namely as the largest national population on the planet of earth. How has China gotten here demographically? What roles, if any, have

\textsuperscript{1} The latest World Bank classification designates countries with GNI per capita of $4,036 to $12,605 as upper middle-income countries, and $12,605 and above as high income societies. China’s GNI per capita in 2016 was $8,260.
demographics played in China’s specular economic take-off? And more importantly, how may China’s new demographics affect its march toward an upper-income society in the coming decades?

This working paper offers a broad review and analysis of the opportunities and challenges resulting from the unprecedented demographic changes in China. The paper has the following four parts. In the first part, it offers a brief outline of the most salient features of China’s monumental demographic shifts. In the second part, it discusses the connections between demographic change and economic growth, both based on past experiences and on the literature in the field. Third, it focuses on a special area of challenges posed by China’s new demographics, challenges to fund public support programs. The last section will discuss a number of policy options that are available for confronting such challenges.

New Demographic Realities

Roughly a decade before China’s great economic transformation began, China was already on its way for a historical demographic transformation. Beginning in 1970, fertility in China started its sustained decline almost uninterruptedly to this date (Figure 1). The onset of this decline followed a turbulent demographic swing, resulting from the devastating Great Leap Forward Famine that led to a huge plunge in fertility (from more than six children per woman to fewer than three), as many as 30 million premature deaths (Ashton et al. 1984, Cai and Wang 2010), and a wild compensatory rebound in fertility (from less than three to over seven children per woman in 1963, see Figure 1).
Three characteristics of the Chinese fertility decline are worth noticing, as they help inform an understanding of the long-term trend of China’s demographic change. First, whereas national fertility level, driven mostly by fertility level of the vast rural population (80 percent of total population back in the 1970s), began its sustained decline in 1970, among China’s urban population that decline began as soon as the famine compensatory fertility rebound was over, in 1963. By 1967, fertility in urban China was already only three children per woman. Second, national fertility decline, and especially decline among the urban population, took place despite the political and economic turmoil of the longest political campaign in modern Chinese history, the Cultural Revolution (1966-1976) and it took place while Mao was alive and was the supreme leader (Whyte et al. 2015). And third, within a decade time, prior to China’s economic reforms, the majority of China’s fertility decline was completed (Wang 2011, Whyte et al. 2015). Many attribute, mistakenly, China’s rapid fertility decline to its trade mark and extreme birth control policy, the one-child
policy that was launched nationally in 1979-1980 and lasted until 2015. A close look at the
data suggest otherwise, as shown in Figure 1. Immediate following the implementation of
the one-child policy and in the 1980s, fertility level more or less fluctuated at a level
slightly over two children per woman. It was not until in the early 1990s that fertility
decline resumed and with fertility level entering into another territory, namely below the
level that is needed to maintain the size of the population in the long-run.

China’s new demographic realities have four distinctive features: increasing
longevity, very low fertility, massive mobility, and rapid aging (Cai 2013). Following a
period of rapid mortality decline and rising life expectancy in the 1950s and 1960s (with a
serious interruption by the Great Leap Famine), life expectancy has been consistently
extended for the Chinese population. In the last 35 years alone, from 1980 to 2015, ten
years of life were added to the average expected life span (Table 1). Underlying this further
extension in life expectancy is an epidemiological transition, with the causes of death
resulting from the so-called non-communicable diseases (NCDs, cancer, cardiovascular and
cerebrovascular diseases) rising from 48 percent of all deaths to 67 percent in only two
decades, between 1990 and 2011. Such a shift in causes of death bears profound
implications for health care, long-term care, and health expenditures.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0.48</td>
<td>0.59</td>
<td>0.79</td>
<td>1.09</td>
<td>1.39</td>
<td>1.76</td>
<td>2.13</td>
<td>2.50</td>
<td>2.87</td>
<td>3.24</td>
</tr>
<tr>
<td>1.15</td>
<td>1.35</td>
<td>1.64</td>
<td>1.93</td>
<td>2.22</td>
<td>2.51</td>
<td>2.80</td>
<td>3.09</td>
<td>3.38</td>
<td>3.67</td>
</tr>
<tr>
<td>1.74</td>
<td>1.94</td>
<td>2.23</td>
<td>2.52</td>
<td>2.81</td>
<td>3.10</td>
<td>3.39</td>
<td>3.68</td>
<td>3.97</td>
<td>4.26</td>
</tr>
<tr>
<td>3.02</td>
<td>3.22</td>
<td>3.51</td>
<td>3.80</td>
<td>4.09</td>
<td>4.38</td>
<td>4.67</td>
<td>4.96</td>
<td>5.25</td>
<td>5.54</td>
</tr>
<tr>
<td>1.63</td>
<td>1.83</td>
<td>2.03</td>
<td>2.23</td>
<td>2.43</td>
<td>2.63</td>
<td>2.83</td>
<td>3.03</td>
<td>3.23</td>
<td>3.43</td>
</tr>
<tr>
<td>3.31</td>
<td>3.51</td>
<td>3.71</td>
<td>3.91</td>
<td>4.11</td>
<td>4.31</td>
<td>4.51</td>
<td>4.71</td>
<td>4.91</td>
<td>5.11</td>
</tr>
<tr>
<td>1.14</td>
<td>1.34</td>
<td>1.54</td>
<td>1.74</td>
<td>1.94</td>
<td>2.14</td>
<td>2.34</td>
<td>2.54</td>
<td>2.74</td>
<td>2.94</td>
</tr>
<tr>
<td>1.18</td>
<td>1.38</td>
<td>1.58</td>
<td>1.78</td>
<td>1.98</td>
<td>2.18</td>
<td>2.38</td>
<td>2.58</td>
<td>2.78</td>
<td>2.98</td>
</tr>
<tr>
<td>3.35</td>
<td>3.55</td>
<td>3.75</td>
<td>3.95</td>
<td>4.15</td>
<td>4.35</td>
<td>4.55</td>
<td>4.75</td>
<td>4.95</td>
<td>5.15</td>
</tr>
<tr>
<td>0.46</td>
<td>0.57</td>
<td>0.68</td>
<td>0.79</td>
<td>0.90</td>
<td>1.01</td>
<td>1.12</td>
<td>1.23</td>
<td>1.34</td>
<td>1.45</td>
</tr>
<tr>
<td>0.79</td>
<td>0.90</td>
<td>1.12</td>
<td>1.34</td>
<td>1.55</td>
<td>1.77</td>
<td>1.99</td>
<td>2.21</td>
<td>2.43</td>
<td>2.65</td>
</tr>
<tr>
<td>1.00</td>
<td>1.11</td>
<td>1.22</td>
<td>1.33</td>
<td>1.44</td>
<td>1.55</td>
<td>1.66</td>
<td>1.77</td>
<td>1.88</td>
<td>1.99</td>
</tr>
<tr>
<td>1.00</td>
<td>1.11</td>
<td>1.22</td>
<td>1.33</td>
<td>1.44</td>
<td>1.55</td>
<td>1.66</td>
<td>1.77</td>
<td>1.88</td>
<td>1.99</td>
</tr>
</tbody>
</table>
For more than two decades beginning in the early 1990s, fertility level in China has been below two children per couple. Analyses based on recent censuses and surveys all report that the fertility level is only in the neighborhood of 1.5 children per couple. Even the recent relaxation and the total lifting of the one-child policy has not led to a baby boom as expected by some, however temporary that may be (Wang 2017). Whereas the rapid fertility decline in the 1970s is already setting off rapid population aging, sustained low fertility means accelerating aging will continue into the future.

Along with China’s economic transformations, massive migration and urbanization have also taken place with historical proportions not just for China but also the world. The number of domestic migrants, mostly migrants from rural to urban China, rose more than ten-fold, from about 15 million in 1987 to 253 million in 2011, accounting for nearly one in five of all Chinese. Massive migration, combined with low fertility, have already began reshaping the Chinese geography. For the first time in decades if not longer, six of China’s 30 plus provinces lost population between 2000 and 2010 (Cai 2013). In three and half decades after 1980, the share of China’s population classified as urban more than doubled, rising from below 20 percent to more than 55 percent (Table 1). China today is not only a country with an income level that is in the ranks of upper middle-income countries, it is also a country that has a healthy population, and a population that is largely urban.

Increasing longevity and declining fertility are leading to a fundamental change in the age structure of the Chinese population. Between the two factors, rapid fertility decline and the very low fertility in the last two decades are the main drivers of China’s demographic profile to date. While continued improvement in health as shown in life
expectancy will have increasingly a more important effect on population aging, it is the rapid pace of fertility decline and its very low level that has led the population growth rate to drop from over 2.5 percent to about half of a percent today. And it is the rapid decline in fertility that has led to a rapid increase in the share of the elderly in the population. Between 1980 and 2015, the share of the elderly population aged 65 and over increased at a rate far exceeding the growth rate of the overall population. Whereas the size of China’s population rose from 981 million to 1.37 billion between 1980 and 2015, an increase of 40 percent, the share of the elderly more than doubled, from 4.7 to 9.7 percent of the total population (Table 1).

Driven mostly by the very low fertility level, the divergent trends in China’s demographic profile, namely a shrinking share of the young and the rising share of the old, will accelerate. As shown in Figure 2, which is based on population projections carried out with the assumption of current fertility rate, the number of young people entering into the labor force (aged 20 to 24, top line of Figure 2) has already peaked in 2010, with a size of 110.5 million and started decline. In the next 15 years or so, the size of this group will shrink quite substantially, to below 75 million, a reduction of about one third. Such a substantial reduction in the size of young labor market entrants not only has implications for labor but also for consumption, ranging from electronics, cars, clothing, cosmetics, to housing. With sustained low fertility, moreover, the downsize of young labors will not cease before the middle of the twenty-first century.
In contrast to the downward trend of young labor supply, the number of elderly people in China will rise precipitously. As also shown in Figure 2, the number of people aged 60 and over will more than double in 20 years, from 173 million in 2010 to 377 million in 2030, reaching for over a quarter of the total population by the end of this period. The number of people aged 65 and over, who accounted for only about 10 percent of the total population in 2015, will also nearly double, to close to 20 percent of the total population. The oldest old, those aged 80 and above, will double in 15 years between 2015 and 2030, from 25 to 50 million (Figure 2). Twenty years from now, by 2037, there will be more people aged 80 and over than those aged 20 to 24 in China.
Reversal of Demographic Fortunes

When China’s post-Mao leadership embarked on a route of economic reforms and development around 1980, it was also a time that the large cohorts born in the early 1960s in the aftermath of the Great Leap Forward famine started to leave schools and to enter the labor market. This large number of young people, under a centrally planned socialist economy at the time, certainly posed a serious concern for policy makers, as the government at the time was still expected to provide classrooms, jobs, housing, and food. Such a concern clearly played into the decision to launch the ill-conceived and unnecessary extreme birth control policy, the one-child policy, a policy that will haunt China with its negative consequences for decades to come.

With de-collectivization in China’s vast rural areas in the early 1980s and relaxation of migration control into urban areas, and with reforms in the urban sector that followed, an enormous amount of vitality and energy was released in the Chinese society. For roughly two decades between 1980 and 2000, China not only saw the rising number of young people entering the labor market (see Figure 1 for those aged 20 to 24), but a large number of young people who could productively participate in the labor market. Their presence, combined with the right institutional conditions, formed what is known now as the “demographic dividend,” a contribution by favorable demographic conditions to economic growth. Studies have estimated that between 15 to 25 percent of China’s economic growth in the last two decades of the twentieth century, as measured by the increase in per capita income, can be attributed to such a dividend (Wang and Mason 2008). In this aspect, China is not unlike other East Asian economies that benefitted from the
demographic dividend during their economic take-offs: Japan, South Korea, and Taiwan (Mason 2001).

As a result of the rapid declining fertility in the 1970s and the earlier large birth cohorts born in the 1950s entering into old ages, China has exhausted its demographic dividend. One study estimated that the contribution of the demographic dividend to economic growth was the largest in the closing decades of the twentieth century, it began to diminish in the first decade of the twenty-first century, and by 2013, that dividend was exhausted. In the years to come, the demographic profile is imposing a constraint on its economic growth, as shown by a faster rate of increase of effective consumers than that for effective producers (Wang and Mason 2008).

Economic growth depends on many factors, and demography is only one of them. Rapid fertility decline and accelerating population aging however are experiences that are unprecedented in human history. Their impact on economic growth is yet to be well understood. A comprehensive study by the U.S. National Academy of Sciences on population aging and economic growth, for instance, concludes that at least for the U.S., a country that will encounter only moderate aging by international standards, the overall impact of aging on economic growth is likely to be modest. Yet, even for a country like the United States, the report concludes that population aging can exert major impact on costs of supporting the elderly and hence increase the fiscal burden of the government (NRC 2012, 29).

In countries that are experiencing much more rapid population aging, however, the demographic impacts on economic growth can be more concerning. Rapid population aging
certainly changes the support ratio in a population, resulting not only a shrinking proportion of the young and an enlarging share of the old, but also shifting resources away from investment to consumption, such as in the forms of health care cost and in pensions. While increased longevity encourages and prolongs knowledge accumulation and productivity well into the old age, it is not clear to what extent such extended productivity can offset the rising cost associated with population aging.

A brief review of the experiences of China’s neighboring economies may help shed some light on China’s likely future. Three East Asian economies, Japan, South Korea, and Taiwan, are all considered miracles of rapid economic growth in recent history. After reaching the middle-income society status, all three continued their economic growth for two decades or so, and joined the ranks of high-income societies. Based on the successes of these economies in reaching high-income status, there seems to be an easy case made that China can follow the same path, and to become a high-income society in the next decade or two.

One crucial difference between China and the three success stories of East Asian economy, however, is their demography. Specifically, it is the level of population aging. The three successful East Asian economies under comparison with China are also among the fastest aging societies in the world. If one uses the 9 percent of the population aged 65 and above as the cut-off point for an aging society, and look at the time between a society reaching 9 percent and reaching 25 percent of the population aged 65 and above, it took Japan 36 years, South Korea and Taiwan 30 years, in contrast to between 70 and 90 years.

---

2 There are different definitions of mid-income status. The one used here is to have 1/5 of the per capita income level of the United States.
in Germany, Italy, Russia, and France. The difference between China and the three East Asian success stories is that when China reached the middle-income society status, its level of population aging, at around 9 percent, is the level of aging in these three comparison economies at the end of their two decades of continued economic growth.

At the time when the three comparison economies reached their mid-income status, their level of aging only ranged between 4 and 6 percent, and it is by the end of 20 years of continued economic growth that their level of aging reached the level China reached recently, which is 8 percent (see Figure 3). China, in other words, begins its march toward a high-income society with a level of population aging that is at the end of the other societies’ extended economic growth. Moreover, China aging is also faster than the East Asian comparisons. It will take China only 28 years for its share of aging population to increase from 9 to 25 percent.

Will a high and increasing level of population aging hinder China’s march toward a high-income society? While demography is only one of the many factors that affect economic growth, the more recent experiences of the three East Asian success stories can offer some hints. After reaching high-income status, all three East Asian economies in recent decades have been experiencing very low economic growth rate. Such slow growth, again, is the outcome of many domestic and international factors and may to some degree be governed by the inherent pattern that fast growth has to slow down (Eichengreen et al. 2012, 2013). But in the case of East Asia, slow growth has also followed a relatively high level of population aging. After reaching the 8 percent of population aging level, in 36 years since 1976 Japan’s average annual rate of economic growth is only 1.95 percent, for South
Korea it is only 3.1 percent in 9 years since 2002, and for Taiwan only 3.2 percent in 11 years after 1997. It may be more than a coincidence that China’s economic growth substantially slowed down since the early 2010s, from double digit to now the 6 to 7 percent range, after its demographic dividend was exhausted.

**Fiscal Burdens to Support an Aging Population**

Regardless of its full impact on future trajectory of economic growth, rapid population aging will sharply increase the need of government spending associated with an expanding aging population. As summarized earlier in this paper, in the next twenty years, China will see its population size aged 60 and over more than double, with its share in the total population reaching 25 percent, namely one in four will be a person 60 years of age or older.

China’s social welfare system, specifically pension and health care, has undergone rapid changes in recent years. With a rapid expansion of government coffer thanks to the economic boom, China has launched or extended a number of social welfare programs in the last decade and has drastically increased government spending. Social spending increased at a rate that surpassed the growth rate of the economy as a whole. For instance, in the period between 2007 and 2015, government education spending as a percentage of GDP rose from 2.7% to 3.8%, health expenditure more than doubled to reach 3.1% of GDP,³

³ Public expenditure in health care here includes not only direct expenditure in health facilities and care as reported in government fiscal expenditure reports but also reimbursement through public health care system. See fuller explanation in text under the Data and Methodology section.
and pension spending increased from 2.2% to 4.1%. As a comparison, both government expenditures in national defense and public security stabilized at 1.3% of GDP over the same period. Despite intensive public investment, China’s emerging social welfare system is still rather rudimentary and at the same time highly fragmented. While coverage has been extended to cover almost everyone now, benefit level is still extremely low for the large segments of the population and enormous inequalities remain. For instance, when China’s New Rural Pension Scheme was introduced in 2009, rural elders aged over 60 without prior contributions were only entitled to a flat basic pension of 55 RMB or about 8 USD per month.\footnote{The basic pension payout is mainly financed by central government. In some provinces, the monthly basic pension could be higher than 55 RMB if local government provides higher subsidies. For example, the monthly basic pension in Beijing was 280 RMB in its first year (Cheng \textit{et al.}, 2015b).} The amount was half of China’s poverty threshold set in 2010, and about 15% of the per capita consumption level for rural population.\footnote{2010 poverty threshold was set at 1,274 RMB per year. Monthly average per capita consumption of rural household was 365 RMB in 2010 (China Statistical Yearbook 2011).} By contrast, the average pension benefit for Urban Enterprise Pension Scheme pensioners reached 1,349 RMB, or about 200 USD per month in 2010.\footnote{The annual outlay of Urban Enterprise Pension Scheme in 2010 reached 941 billion RMB and the number of retirees covered by this pension scheme was 58.1 million(China Labor Statistical Year Book 2014). It is therefore estimated that the average monthly pension benefit was 1,349 RMB per retiree.} Public spending has also retained its regressive features. In particular, public expenditures in both health care at senior ages and in pension programs favor the more prestigious groups, those in higher income groups and those in urban areas (Shen \textit{et al.} 2016).

The fiscal impact of population aging can be assessed by combining the effects of population age structure change with assumptions of future changes in benefit level by age
in the population. Even with recent rapid increase in social spending, benefit level in China still lags behind countries with higher incomes, and in some cases, does not compare favorably with mid- and mid-high income countries, such as those in Latin America. Health care spending is the least favorable comparison for China. With a population age structure roughly in the middle of comparison countries in Latin America, China ranks among the lowest in spending. In pension, China by 2014 is not too far behind the OECD average in spending level, but far below most Latin America countries, which tend to have very generous (but highly unequal) pension schemes. With an assumption of that China will increase its social benefit level in the next decade and more, and to reach by 2030 the benefit level of OECD countries observed in 2009, an assumption that is in line with expected income growth in China, we can offer some estimates of the potential fiscal impact (Wang et al. 2017).

Rapid population alone, without raising the benefit level, will have a profound impact on government social spending, as one would expect. These projected impacts are shown in Figures 3 and 4, for public health care and public pension spending respectively. As shown in Figure 3, with no change in benefit generosity ratio, public health spending will more than double between now and 2050 under the medium fertility change scenario, moving up from 2.8 to around 4.9 percent of the GDP. Increasing benefit generosity ratio to the average of OECD countries will further move up the share of health care spending to 5.5 percent by 2050 (Figure 3). Population change, therefore, accounts for over 80% of the rise of public health spending in 2050 from the level of 2014, while institutional change only makes up for the rest less than 20%.
The impact of population aging on pension is even more pronounced than that for public health care spending. With benefit generosity ratio staying at the 2014 level, pension spending in China will rise rapidly in the coming decades, from 3.6 percent of the GDP now to 6 percent by the mid 2030s, and to over 10 percent by 2050. Assuming a gradual increase in benefit generosity ratio from the current level to the 2009 average of the OECD countries, pension spending could reach 8.4 percent of the GDP by the mid 2030s and about 17.6 percent by 2050, more than double the level of OECD average pension spending in 2009 (8 percent of the GDP).
Combined, public health care spending and pension spending as the share of the GDP will increase from the current 6.4 percent to 10.1 percent by 2030, and to 15 percent by 2050, assuming no increase in per capita benefit spending level. Such an assumption, however, is hardly conceivable, as it would be hard to imagine 15 or 35 years down the road public health care and pension spending generosity level in China stays at the 2014 level, which is highly inadequate. Even to increase the benefit level to the OECD level of 2009 is only a modest assumption, if China aspires to be a high-income country by 2030. Taking increasing benefit level into consideration, however, will result in almost a doubling in public spending in health care and pension, from 6.4 percent in 2015 to 12.3 percent by 2030 and to 23.1 percent of the GDP by 2050. Should benefit level increase faster than assumed here, the increase in public spending in health and pension as the share of the GDP will also be higher.

What does 12.3 (by 2030) or 23.1 percent (by 2050) of the GDP mean for the Chinese economy and society? To answer this question one can look at the current
government revenue as a share of the GDP. In the last few years, the total revenue of the Chinese government has moved up from 18.4 percent of China’s total GDP in 2007, to 21.8 percent in 2010, and 25.6 percent in 2015. These numbers, however, do not include contributions for pension and health care, which have been accounting for up to one quarter the size of the government revenue. Adding the two sources together make up around 30 percent of the GDP. If China continues to elevate benefit levels along the lines of the OECD countries average achieved in 2009, these social spending could take up about half of all government revenue and contributions in 2030, assuming no increase in the share of government in the overall economic output in the society. The challenge is especially daunting for pension, which alone can rise to 10 percent of the GDP by 2050 with no change in benefit level, and close to 18 percent with increase in benefit. The latter implies that pension burden alone by 2050 can consume nearly all government revenue. This is hardly an acceptable scenario for the Chinese government, given other obligations in public spending.

**Confronting Challenges**

China’s pursuit to become a high-income society will no doubt be affected by its demography. The forces that have led to these demographic changes in China, while posing challenges, also present new opportunities. Even though the size of the young labors will continue to shrink, the level of educational attainment among the new labor market entrants is also the highest in Chinese history (see Table 1 on statistics of educational improvement). Such an improvement in education, especially in tertiary education, is
certain to continue. Decades of continued improvement in health also means that the current and future labor force is also the healthiest in Chinese history. These new features of the Chinese labor force suggest that they can work longer and be productive. In addition, decades of unprecedented economic growth, income increase, and wealth accumulation have also created an enormous amount of capital in the society. As in other aging societies, low interest rate and low inflation have already emerged as the defining characteristics of this new economy. These new characteristics of China’s demography and society all serve as crucial factors for China’s economic change in the coming decades.

The challenges posed by China’s huge demographics changes to its march toward a high-income society are also real and immense. In the coming decades, rapid population aging is likely to impose new constraints on China’s economic growth, and will for certain increase the need of more public spending. In the short- and long-run, the following five key policy options are among those that should be entertained, ranging from the easiest and most immediate to the more complex and longer term:

1) Raising retirement age. An immediate policy tool, which China has already began to implement, is to postpone legal retirement age, or more accurately, age of receiving pension benefits. This is the most obvious policy option to reduce pension burden. At 60 for males and 55 for females, China’s current retirement ages or ages to draw pension benefits are still too early in comparison to the life expectancy levels and by international standards. Raising retirement age can have the immediate effect of both increasing pension contribution and reducing pension payout. The effect of such a measure, however, can only be gradual and is limited in the long term as well.
2) Reforms in public health care sector. With population aging, health care cost can rise rapidly and account for an increasing share of the public spending, as is already the case in many developed countries around the world. China’s health care sector, still largely under the government monopoly, is highly unequal in providing access to services, costly, and highly inefficient. Even with all the efforts to date, reform in the Chinese health care sector was announced failed not too long ago. A study of health care systems in the world by the WHO at the turn of the century ranked China 144th among 191 countries, below that of Ghana, Kenya, and Haiti. While enormous progress has been made in the last decade and half, China still has a long way to go. Reforming this sector and to make health care equally accessible, high quality, and low cost, can play an extremely important role not only for population health but also for containing rising fiscal burden.

3) Reforms in the financial sector. With the ending of the first demographic dividend, a dividend resulting from fertility decline and age structure changes, scholars have raised the possibility of a second demographic dividend, a dividend arising from population aging (Mason and Lee 2006). They key idea of this concept is that if the massive savings created by a large number of people in preparation for their old life can be used productively, namely as capital, then per labor productivity can be increased, holding other factors constant. To do so, however, necessary institutional conditions need to present, and of which, an efficient and stable financial system is required. China’s economic reforms have already fundamentally changed the economic order over the last three decades and more, but reforms in the financial sector has far from being complete. Further reforms are needed in this area to turn
savings in the society into productive capital and to benefit not only the elderly population but also the general economy.

4) Gradually raising government revenue. To meet rising fiscal demand for health care and pension, the government can either increase revenue or reduce benefit level. Given the generally low level of benefit generosity currently in China, it is politically and socially unacceptable and unlikely that the benefit levels can be lowered. To the contrary, the public will expect continued and substantive increase in benefit level. So the true option resides more with the revenue side of the equation. On the one hand, China already has a high contribution level, with a combined contribution of 28% (20% from employer and 8% from employee) for pension among urban employees, a contribute rate that is believed by many too burdensome for employers and employees as well. On the other hand, the share of government revenue as GDP in China is still quite low, especially in comparison to OECD countries, at only around 30%, compared with Nordic countries and France, which are at 50% or higher. So it is possible that China in the coming decades can increase the share of government revenue as the share of the GDP. To do so, however, is not without its costs and constraints. Rising taxation level used for social spending, while necessary and perhaps unavoidable, can have negative consequences for investment and consumption, which in turn can affect overall economic growth.

5) Creating a family friendly environment. Globally, postponement or even forgoing marriage and childbearing have emerged as the new demographic features of the twenty-first century. China is not only not an exception but in fact a country that makes up one of the three regions in the world with the lowest level of fertility, East
Asia (the other two regions are Southern Europe and Eastern Europe). China’s recent ending of its one-child policy, while creating a compensatory rebound in births, has not shown to be sufficient to reverse the long-term declining trend (Wang 2017). Stopping further slippage in birth rate or even to raise fertility involve complex factors and fundamental social changes, including gender equality, work-life balance, labor market flexibility, public child care facilities, and even cultural orientations. It will not be simple or easy to create the conditions for a family friendly society. But in the absence of these and other changes, more serious and prolonged population aging will not be able to be ameliorated.

These policy options are only a selectively few among a long list of possible ones that the policy makers in China can consider, but they are all among the most relevant in confronting by China’s new and unique demographic challenges and they all are the most pressing. Successes in implementing these policy options can help both in the short- and the long-run to lessen the pressure resulting from unprecedented population aging and labor force decline, and better yet, can even seize the new opportunities brought about by the demographic changes in China. Failing to addressing them, at the same time, can easily lead to a different trajectory for China, a scenario in which the shrinking of young labors and consumers, coupled with rapidly increasing need to support the elderly population, result in slow economic growth and mounting government debt, as seen in Japan in the past two decades. The ramifications of such a scenario are by no means limited to the economic arena. Failing to sustain a decent rate of economic growth, government revenue increase, and social welfare benefits provision could all pose real threats to the legitimacy of the government.
China’s economic ascendance to a mid-income society has already changed world, but it did not happen without heavy costs, social, demographic, and environmental. China’s success in realizing the aspiration to become a high-income society will depend largely on how it can manage the challenges of rapid population aging and continued economic changes. As in its success in the historical economic transformation that made China a middle-income society, the demographic factor will be crucial in China’s pursuit to become a high-income society.
References


