## Could Demography Be China's Achilles Heel in Becoming a High-Income Society?

## Hans Groth & Wang Feng

In the era of Brexit and Trump and the rise of global trade protectionism, China, currently the second largest and a still fast expanding economy in the world, seems positioned to become the leader in a new global order. The story of China's economic miracle is already well known: 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. China's economy as the world's total accordingly rose from less than 2 percent in 1978 to over 15 percent today. By lifting 800 million people in a country of over 1 billion out of poverty, China's economic growth improved the wellbeing of one-fifth of humanity and transformed the global landscape of wealth and inequality. At an annual growth rate of nearly 7 percent, though substantially lower than it was in the past decades, it is still the fastest growing large economy in the world.

Generations of future historians will look back at this chapter of human history to fathom how this miracle happened. Their story will range from straightforwardly simple to perplexingly complex. One factor however will not be missed. This is the role of China's vast population. Immediately preceding China's economic take-off, a historical demographic transformation occurred in China. Life expectancy of the Chinese population increased by almost 30 years, from the 40s to close to 70, in a matter of two decades between the 1950s and 1970s. Following such a drastic improvement in health and facilitated by other factors as well, a rapid fertility decline took place in the 1970s, when in a short decade time the number of children born by each mother more than halved.

China's historical economic transformation benefited handsomely from a substantial demographic dividend as a result of such a demographic transition. Improved population health and drastically reduced fertility created a unique time window, preparing a large share of young and productive labor in the population whose need to support their children is much less than their parents due to fertility decline, and who did not need to support their parents as they were still relatively young. Reduced fertility and anticipated longevity also lead to increased savings and more investment in children's education and health. This "demographic dividend", which derives from a favorable change in the dependency ratio of the population, contributed as much as 15 to 25 percent of per capita income growth during the closing decades of the twentieth century.

Some future scholars however may mistake the co-existence of the rapid economic growth and the most stringent birth control policy in human history, the one-child policy launched in the late 1970s, and attribute China's economic boom after the 1980s to this unprecedented policy. A closer look at China's fertility trend (see figure 1) will tell otherwise. At the time when the one-child policy was launched, most of China' fertility decline had already been completed. In the decade of the 1970s, fertility level in China was halved, from over 5 children per woman to slightly higher than 2. Such a drastic decline was built on the foundations of rapid improvements in health and in women's education and employment in the 1950s and 1960s, and under a government birth control program launched in the early 1970s characterized as "later marriage, longer birth intervals, and fewer births." Though by no means voluntary, Chinese government's birth control policy during the 1970s, which was much less draconian in comparison to the one-child policy to follow, served to meet the need for many Chinese who no longer needed to have as many births as in the past in light of the improvement in health, especially reduction in infant and child mortality. During the first decade when the one-child policy was enforced, there was no clear sign of further fertility decline. The next phase of fertility decline, when it dropped to below the replacement level of two children per couple, arrived in the 1990s, when China's economy, propelled in part by the massive migration and urbanization, was well on its way. The number of domestic migrants, mostly from rural to urban areas, rose from 30 million in 1990 to 120 million in 2000 and further to 250 million by 2010. Today, over 60 percent of all Chinese live in urban areas, compared with only 20 percent back in 1980. When the one-child policy was first partially lifted, in 2013, and then completely lifted, in 2015, the much-anticipated baby failed to materialize. The onechild policy forced many couples, mostly urban Chinese, to have only one-child, and may have helped to create a one-child norm in the Chinese society, but its overall effect on controlling China's population growth was often misunderstood and exaggerated.

China now faces a completely different demographic picture as it prepares to advance to become a high-income society. 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. Its 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. 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, the age group when young people enter the labor market.

China may not have the same fortune as its East Asian neighbors, which advanced to high-income societies after their reaching the middle-income status. One crucial difference between China and the success stories of other East Asian economies is their demography. When Japan, South Korea, and Taiwan reached their middle-income society status, their level of population 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. 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. After reaching high-income status, all three East Asian economies in recent decades have been experiencing very low economic growth rate. 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.

China new demographic landscape offers unprecedented opportunities. While the size of its young labor force will continue to shrink, the level of educational attainment among the new labor market entrants is also the highest in Chinese history. Two and half decades ago, only less than 10 percent of young urban Chinese had a college education. Today, the share is four times as high, at around 40 percent, a rise similar to what happened in Japan in the 1970s and in South Korea in the 1980s. Decades of continued improvement in health also means that the current and future labor force is the healthiest in Chinese history. Future Chinese labor force can work longer and be productive. Decades of unprecedented economic growth, income increase, and wealth accumulation have 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. In part driven by the demand of an older population, e-commerce has been witnessing tremendous growth, and a growth is only going to accelerate. At 23 percent in 2017, China's share of e-commerce as share of retail sales was nearly three times that in Europe on average (8.8) and Switzerland (7.5), more than 50 percent higher than Germany (15.1 percent), and more than twice that in the United State, at 9

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percent.<sup>1</sup> Similar potential for on-line based technology can be expected in health care, home care, and in other services related to an aging society.

The challenges posed by China's huge demographics changes to its aspiration to become a high-income society are also real and immense. Such challenges are economic as well as political. Unlike any other aging societies in the world, China's aging society comes with a more than a third of its families with only one-child, a legacy of its ill-conceived one-child policy. The Chinese government, which has assumed a role of a paternalistic state, can ill afford not providing minimum social welfare to its population. Government spending on education, health care, and pension has been increasing at a rate faster than its military spending. Population aging will further push up such spending, which in turn will constrain China's domestic investment as well as overseas ambitions such as its One Road and One Belt Initiative. China at the moment is still on an upward trajectory of economic expansion and income growth. Its long-term demographic prospects, however, will impose hard and irreversible constraints.

## About the authors:

Dr. med. Hans Groth is the Chairman of the Board of the World Demographic & Ageing Forum (WDA Forum). The Forum's vision is: "Population dynamics as well as ageing and generational issues are among the key challenges of the 21st century but also an untapped source of unprecedented opportunities". The WDA Forum (see also <a href="www.wdaforum.org">www.wdaforum.org</a>) was established in 2002 and is based in St. Gallen, Switzerland.

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<sup>&</sup>lt;sup>1</sup> https://www.statista.com/statistics/255083/online-sales-as-share-of-total-retail-sales-in-selected-countries/

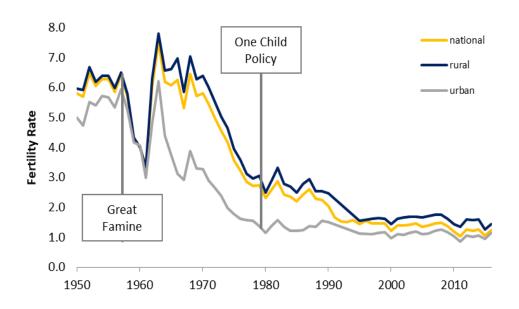


Figure 1: Fertility Rate Decline in China, 1950-2015

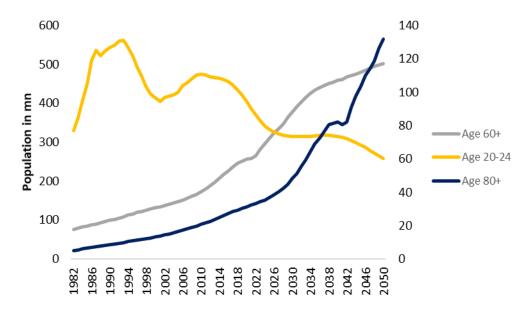


Figure 2: Changes in Different Population Age Groups, China, 1982 to 2050