

## Demographic transition

## Racing towards the precipice

by Wang Feng

China's demographic bullet train is racing into the unknown. Its carriages are already full, but more passengers squeeze in every minute. Most are not young, productive workers, but older travelers who cannot pay for their ride. No one knows where the train will stop, nor whether it will arrive safely.

Profound demographic changes in China are redrawing the parameters of the country's future. These changes include a substantial decline in the supply of young labor, the escalating financial burden of caring for the elderly, and an aging society with Chinese characteristics—namely a severely weakened family support system, caused in large part by China's three-decade one-child policy. These changes have already begun to exert a powerful impact on the Chinese economy, and pose a serious risk to future economic growth, social harmony and political stability.

## Old before its time

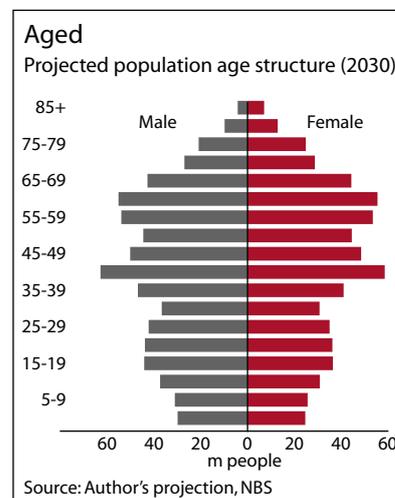
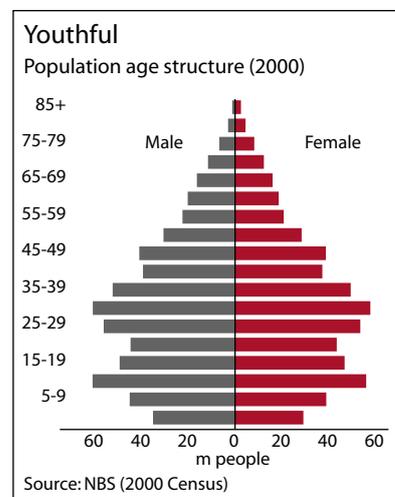
In most countries, demographic changes are easily anticipated. Fertility and mortality, two major factors driving changes in population size and age structure, do not change abruptly (except when altered by pandemic, war or famine). But this is not true for China, where the 2010 census showed that population growth has slowed far more quickly than most observers expected. From 2001-10, China's population inched up at just 0.57% annually—only about half the level of the previous decade, and only one-fifth of the level in 1970, when controlling population growth first became a priority. The census also showed that there are fewer young people and more old people than forecast. By 2010, nearly 14% of Chinese citizens were over 60, and nearly one in 10 were over 65. China is already an aging society.

The driving force of China's slowing population growth rate is its low fertility rate, which has languished well below the replacement level of 2.1 for two decades. The census confirms that China's total fertility rate—the average number of children born to each woman—is among the lowest in the world, at only 1.4. This number puts China below the developed-world average of 1.7. At purchasing power parity, China's per-capita income is just a fifth or less of other large economies'. But China's fertility level is far below that of the United States, the United Kingdom or France (all around 2.0), and is on par with those of Russia, Japan, Germany and Italy—all countries with declining populations.

For more than a decade, China has repeatedly failed to reach population targets supposedly put in place to control growth—undershooting by a

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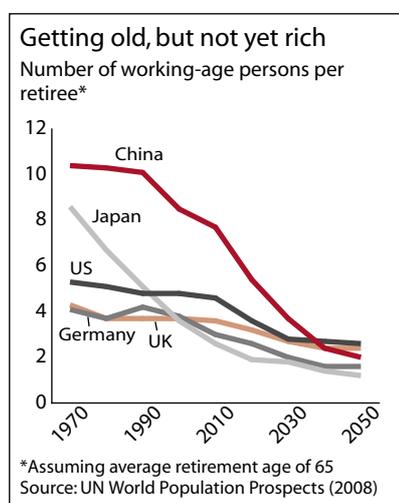
huge margin. For the 10th Five-Year Plan, the National Population and Family Planning Commission (NPFPC) set a population growth target of 62.6m, but China recorded an actual population gain of just 40.1m. For the 11th Five Year Plan, the population gain of 34.2m was far below the 52.4m target. In both cases, the margin of error was greater than 50%! The 12th Five Year Plan (2011-15) projects an annual growth rate of 0.72% and sets a population target of 1.39 bn, way above the forecasts of independent demographers. Unrealistic targets are easily met, and can therefore serve a political function. But inflated numbers also reflect real thinking among some of those in charge of birth control. NPFPC's skewed data have misled the public as well as top policy makers.

### Lost youth

As society ages faster than expected, China's future demographics need to be reassessed. Sustained low fertility means that the number of young workers will decline more sharply than projected. In 2010, there were 116m people aged 20 to 24; by 2020, the number will fall by 20% to 94m. But the actual number of workers will be considerably lower than 94m, thanks to rising participation in higher education. Annual higher-education enrollments tripled from 2.2m to 6.6m in 2001-10, while the number of college students (mostly aged 18 to 21) rose from 5.6m to 22.3m. Declining fertility levels reduced the availability of young workers, but this was exacerbated by the expansion of higher education. Sustained low fertility and rising college enrollments mean that the supply of young workers will continue to decline beyond 2020. The size of the young population aged 20-24 will only be 67m by 2030, less than 60% of the figure in 2010.

As the share of young people falls and the share of elderly people rises, Chinese society will age rapidly. China already has 180m people aged over 60, and this is set to reach around 240m by 2020 and 360m by 2030. These are minimum numbers, which will only increase with rising life expectancy. Less certain are how fertility rates will affect the population age structure. Should China's currently low fertility of 1.4 children per couple be sustained, the population share of people aged over 60 could reach 20% by 2020 and 27% by 2030. Using the more conservative international definition of elderly—people aged 65 plus—one in five Chinese citizens will be elderly by 2030.

China's aging process is happening far more quickly than in most other countries, largely thanks to the speed of its demographic transition from high death and birth rates to low death and birth rates. It took China only 50 years to increase life expectancy from 40 to 70 years, compared to 100 years in Western industrialized countries. China reduced its fertility level from five to two children per couple in just 25 years, just one-third of the time taken in the West. The impact on China's future age structure is clear: it will take less than 30 years for the share of the population aged over 65 to rise from the current 9% to 25%. In other aging countries like Italy, Germany, and Russia, it will take the best part of a century.



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This compression of demographic change into such a short period of time means that China will be the first major economy to grow old before it grows rich. At China's current level of population aging, with 9% of the total population over the age of 65, other societies had already achieved a much higher level of standard of living. Measured by per-capita purchasing power parity, income levels in Japan were twice as high, and those in South Korea nearly three times higher. Moreover, China's social infrastructure—especially its pension and health care system—is much weaker than those in most other aging societies. And no other countries must cope with such a large share of families supported by single children.

### Slower, lower, weaker

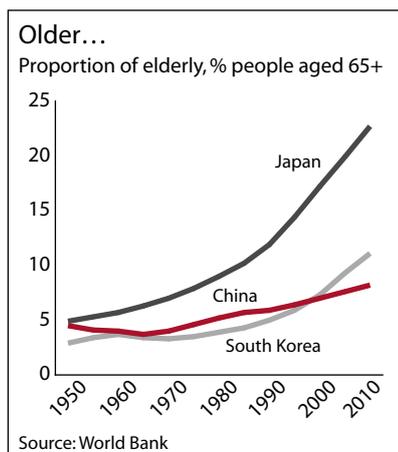
China's rapidly aging population will have enormous economic and social implications. The demographic dividend China enjoyed over the past 30 years—especially in 1980-2000—is now largely exhausted. In 1980-2010, the effect of a favorable population age structure accounted for between 15% and 25% of per-capita GDP growth. As China's demographic fortunes reverse, the economy will slow down regardless of other factors driving growth. Since China's economic and political governance model is premised on near double-digit growth, this will require substantial policy change.

For decades, China's economy has been driven by high inputs of cheap capital and labor. This cannot continue. First, private savings—the most important source of capital for investment—will decline as a share of GDP over the coming decades. Currently, China has many more net savers than net consumers. But the population share of people aged 30 to 50—typically the highest savers—will drop from 50% in 2010 to around 46% in 2020, and fall to 40% by 2030. As the current cohort of high savers move towards retirement, the national rate of savings growth should decline and spending accelerate. This is the experience both in Japan, where the savings rate declined from 34% in 1990 to 28% in 2007, and in South Korea, where the savings rate dropped from 39% in 1988 to 31% in 2008.

Second, cheap labor will no longer be as plentiful as it was over the past 20 years. As the supply of young workers shrinks—a process that has already begun—increased labor mobility will be essential to create a more efficient labor market. Mitigating the negative impact of this will require reforming China's *hukou* system, which links social security and public welfare entitlements to citizens' place of registration. China's "floating population" of rural migrants now stands in excess of 220m, but the *hukou* system remains a significant barrier to migration. If rural migrants were given access to urban education, health care and other welfare services, more rural residents would move to the cities on a permanent basis.

The shrinking labor force will also require education reforms to boost productivity. Indigenous innovation is not just an empty slogan; it is a necessity to ensure that the Chinese economy gets more bang for its

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**China faces the challenge of creating a fiscally sustainable health care system**

buck. The “Made in China” model will not provide sufficient economic returns to support an aging society. China’s labor force must become better educated, more skilled, and produce graduates with a greater ability to innovate. The current higher education system, which focuses on training technicians rather than nurturing individual thinkers, suffocates creativity. It is better at producing bureaucrats than managers. Greater investment must also be directed at the nursery and primary level, especially in poor areas where basic nutrition and educational facilities are still lacking.

### The benefits of age

China’s demographic transition will create opportunities as well as challenges. Population aging and the growing pile of pension funds are already forcing changes in the capital market and financial services sector. For example, Guangdong recently entrusted Rmb100 bn of its largely unmanaged provincial pension funds to the National Council for Social Security Fund, which may invest some of the capital in the stock market. Without well-functioning capital markets, savings cannot be put to productive use and may even lose their value. An aging society will require a more sophisticated investment sector, thereby presenting new opportunities for financial managers and investment services.

Another big growth area will be health care. Establishing better long-term insurance plans will be critical in a country with few young family members to care and provide for the old. Currently over 40% of all middle-aged Chinese couples have only one child, a figure that rises to two-thirds in cities. A sound social safety net needs to be put in place before the economy feels the full force of deteriorating demographics. That means extending and improving the fledgling national pension scheme, and creating a universal medical insurance program that is portable across regions.

Reforming the health care system is a daunting challenge. Over the past decade China made important strides to extend health care coverage across the population—yet serious challenges remain. For individuals, the two big issues are lack of access to decent treatment and paying for its often exorbitant cost. For the government, the major challenge is creating a fiscally sustainable public health care system. Funding remains a significant issue, but the system also suffers from the inefficiencies of bureaucratic control and price distortions, which set the cost of labor artificially low. As a consequence, hospitals routinely attempt to profit by over-prescribing medicine. Since elderly people account for the largest share of health care costs, getting these reforms right has important economic implications.

### Preventing a train crash

Fiscal imperatives brought about by demographic changes are also set to change the political landscape. Over the next 20 years, the ratio of workers to retirees (presuming workers continue to retire at 60) will drop precipitously from roughly 5:1 today to just 2:1. Such a drastic change

implies that the tax burden for each working-age person must rise by more than 150%, assuming that the government maintains its current level of tax income. During the past decade, tax receipts grew at twice the rate of GDP—but the happy days are set to end. In addition, mounting expenditure on social entitlements—especially pensions and health care—will put leaders in a difficult position. If the government demands that taxpayers pay more, the public will demand better scrutiny of how their dollars are collected and spent. The government will have no choice but to cut corruption and waste, and to deliver public services more efficiently. The alternative is a crisis of governance.

In many respects, China's demographic transition is a reason for celebration: it reflects an unprecedented decline in mortality and enormous economic development. It has allowed women to slough off their traditional status as breeding machines and helped millions of students to gain a proper education. But the rapid decline in fertility rates has gone too far, and China will have to make major structural reforms to offset the impact. After years of demographically powered high-speed growth, the Chinese bullet train is racing towards a demographic precipice. The challenge for policy makers is to prevent it from careering over the edge.

