# Don't trust the family planners China's total fertility rate, number of children per woman 3.0 2.5 2.0 NPFPC 1.5 NBS published 1.0 \*Simulated from 2010 Census results Source: NBS, NPFPC, author calculations

Fertility rates fell dramatically in the 1970s, even before the introduction of the one-child policy

# Family-planning policy

# Too few by far

by Guo Zhigang

For thousands of years, Chinese women were expected to raise large families. In the 1950s and 60s, this cultural expectation became national policy: as Mao Zedong called for "more people, more power," China's population surged from around 400m to 700m. Yet that all changed in the 1970s, as tough family-planning policies were introduced to curb excessive population growth. These policies hardened into the biggest demographic experiment of all time: the one-child policy. For the past two decades, China's fertility rate has languished well below the replacement level—a unique situation for a country at China's still-modest level of development. As China's population ages, its dependency ratio will rise to uncomfortable levels. A cursory glance at population statistics suggest that China is sitting on a demographic time bomb.

The bad news is that China's demographics are actually worse than the official data state. For years, family-planning bureaucrats have insisted that China's total fertility rate—the average number of children born to each woman—hovers around the 1.8 mark. This is considerably below the replacement level of 2.1, but high enough to avoid demographic meltdown. Although surveys consistently suggest that China's true fertility rate is 1.5 or below, officials habitually bump up the number to account for the birth of unreported children, especially rural girls. But 2010's census revealed that China's population has grown more slowly than official projections based on an assumed total fertility rate of 1.8. China's population is aging faster than expected, and low fertility rates will begin to place enormous strains on the economy within the next 15 years. Even if China relaxes its restrictive family-planning policies—and there is no sign of this happening—it is too late to reverse this outcome.

### Two children good, one child better

China's transition from a country with a high fertility level to a level associated with far more developed countries began, remarkably, while its society was still largely rural and uneducated. Family planning was introduced nationwide in 1973 with the later-longer-fewer (*wan xi shao*) campaign, which urged couples to marry later, to space the births of their children more widely, and to limit their children to two (in urban areas) or three (in rural areas). This policy was extremely successful: in the decade prior to the introduction of the one-child policy in 1980, the total fertility rate fell from 5.8 to 2.4. Declining birth rates were not, however, solely driven by family planning. Fertility rates in urban areas began to decrease as early as the late 1950s, as people received formal education and found better jobs during the initial years of Communist rule. Official encouragement to postpone marriage and child-bearing also played a role.

Guo Zhigang is professor of sociology at Peking University.

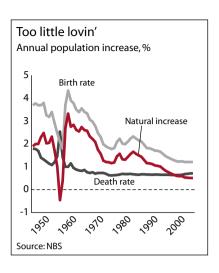
Despite this progress, leaders pressed ahead with the "one couple, one child" policy, which employed a restrictive system of birth quotas to penalize couples for unauthorized births. At first, many farmers refused to follow the new regulations, and the one-child policy had little effect. In the mid-1980s, the government relaxed the policy in rural areas, resulting in widespread confusion among both ordinary people and family-planning officials. Millions of couples rushed to have a second child, forcing policy makers to reinstate restrictive policies. Fluctuations in the birth rate during this period primarily reflected the instability of family-planning policy, but also the population structure. In the late 1980s, family-planning officials formulated rules that differed according to citizens' residence and ethnic status—a system that has basically remained unchanged ever since. As policy stabilized, China experienced a second decline in its birth rate that has continued to the current day.

Under the rules introduced in the late 1980s, China's "one-child" policy is more nuanced than its name suggests. Urban families may have one child, whether a boy or a girl. Compliance in the cities is very high, although a growing number of rich urbanites choose to pay a substantial fine (which varies by city) to have a second child. In most rural areas, families may legally have a second child if their first is a girl, provided they wait four years and the mother is at least 28 years old. But policies differ across provinces: in Jiangsu, Sichuan and Chongqing, for example, a strict one-child policy applies in rural as well as urban areas. Violations in rural communities are widespread, and family-planning officers still occasionally carry out forced abortions (although this practice is much rarer than it once was). Families belonging to "national minorities" follow looser regulations, and there is no family-planning policy at all in sparsely populated Tibet.

## The trouble with counting babies

Calculating China's total fertility rate is a tricky business. Everyone agrees that, since the early 1990s, fertility has declined below the replacement level. If current family-planning policy was followed to the letter, 60% of couples would only have one child and China's total fertility rate would be 1.47. But the National Population and Family Planning Commission (NPFPC)—the government body responsible for formulating and implementing national family-planning policy—puts the figure at 1.8, even though national surveys and censuses indicate the figure is significantly lower. NPFPC argues that out-of-plan births are systematically underreported and that true fertility levels are much higher than those captured by recorded births in surveys. Yet analysis of data from the 2000 census and the 2005 mini-census (which measured 1% of the population) suggest the real figure is below 1.5. After adjusting the 2000 census data to account for unreported births, the National Bureau of Statistics (NBS) came up with an internal estimate of 1.4.

Yet NPFPC, which employs 500,000 or so full-time staff and a further 6m part-time workers, has stuck to its guns. In 2006, it released a national population survey suggesting that the total fertility rate rebounded from



Fertility rates fell below the replacement level 20 years ago

# The big idea Changing demographics

a low of 1.3 in 2003 to nearly 1.9 in 2006. It used the higher number to support its contention that the average fertility rate remained at around 1.8. Yet NPFPC's survey was seriously marred by sample bias. The survey over-counted married women on the farm (who tend to have plenty of babies) and under-counted migrant workers (who are too busy earning a crust to concern themselves with motherhood). The vested interests of the commission, which collects millions of dollars every year from family-planning violations, mean that official birth-rate estimates cannot be trusted. Indeed, NPFPC used the results of its 2006 survey to press for stronger administration of family planning. All government surveys suggest that the true total fertility rate over the past decade was in the region of 1.5, or even lower.

Official data almost certainly overstate China's true fertility rate

# Sad breeding

There are several reasons for this dramatic decline in fertility. First, fewer women want to have large families. When asked how many children they would have if they were free of family-planning restrictions, women say they would have 1.7 children on average. China's one-child policy has clearly helped to lower expectations of family size, but there are "natural" factors at work, too. Wealthier, better educated women the world over have fewer children than poorer women, who have little control over their fertility and must produce offspring to look after them in their old age. In addition, significantly more women aged 20-30—the peak age of reproduction—live in China's cities than in the countryside. The expense of bringing up children in the city is a further factor pushing down the desire to have more than one or two children.

Second, China's total fertility rate has been lowered by sex-selective abortions. The traditional preference for male children allied to easy access to ultrasounds means that aborting female fetuses is commonplace. Because sex-selective abortions are illegal, there is little reliable data; but China's male/female sex ratio at birth has hovered around 120:100 since 1995. This skewed sex ratio has improved slightly since 2007, but a significant proportion of abortions are still clearly sex selective. By 2020, 24m single young men may struggle to find a wife. By effectively forcing parents to choose the sex of their only child, China's one-child policy has further pushed down the total fertility rate.

Infertility is rapidly becoming a major public health issue

Third, infertility is a growing problem in China, just as it is in many developed countries. About one in five women in Europe struggle to become pregnant, and data from the 2001 National Population and Reproductive Health Survey suggest that China is catching up. Possible causes for infertility include postponed child birth, as more women work before starting a family, as well as the stress and pollution associated with urban life. The Chinese media is awash with advertisements promising to cure infertility, but very few infertility surveys have been carried out. Infertility is not yet considered a public health issue, but is rapidly becoming one.

Finally, as more rural residents become migrant workers in China's cities, the mean child-bearing age is rising. China's massive "floating popula-

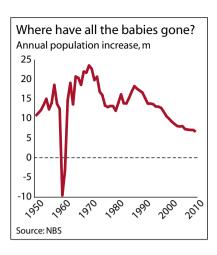
tion" of rural migrants, which numbers in the region of 220m, used to be blamed for adding to the number of out-of-plan births. But analysis of the data from 2005's mini-census suggested that the total fertility rate for female migrant workers was just 1.2, compared to more than 1.6 for women who stayed at home on the farm. Migrant workers are far more inclined to postpone marriage and child-bearing. As the number of rural migrants in China's cities balloons, average fertility rates are likely to sink even lower—exacerbated by the fact that it is more expensive for migrant workers, who lack access to urban social insurance and public services, to raise children in the city than for urban natives.

### The official data do lie

There are good reasons, then, why China's fertility rate should be falling—and China's 2010 census provides conclusive evidence for this fact. China's population at the end of 2010 was 1.34 bn, 20m lower than the government's projected figure, which was skewed upwards by NPFPC's unrealistically high estimated total fertility rate. If China's total fertility rate really was 1.8 as NPFPC maintains, the national population at the end of 2010 would have been 1.376 bn—36m higher than the actual total. One corollary of NPFPC's over-counting is that China is aging faster than expected. The census showed that nearly 9% of the population are aged over 65, about one percentage point higher than projected. At the same time, the proportion of children aged 14 or under shrunk from 23% in 2000 to under 17% in 2010, far lower than expected.

The 2010 census results confirm that national fertility has fallen to extremely low levels by international standards, and that China's aging population will become a problem more quickly than anyone expected. China's total fertility rate of around 1.5 is far lower than the world average of 2.5, and significantly lower than any other large developing countries. By comparison, India has a total fertility rate of around 2.6, and the United States just over 2. Yet skepticism about the accuracy of China's census data, together with fears that any relaxation of the current family-planning policies would result in an immediate baby boom, mean that any dramatic change in government policy is unlikely. Instead, China's leaders recently restated their faith in the one-child policy.

This mistake will only make the huge demographic challenges that China faces worse. China's elderly population will experience unprecedented growth over the next 40 years, as the large generations born in 1950 and 1990 enter old age. By mid-century, roughly one in every three Chinese citizens will be aged over 60, the current age of male retirement. That compares to 23% in Japan in 2010, when Japan was 10 times richer than China on a per-capita basis. China's population is aging so quickly that even an unexpected policy reversal would only have a limited impact. Raising the total fertility rate from 1.5 to the replacement level of 2.1 would cut the peak proportion of elderly people aged over 60 from 40% to 30%, and raise China's projected peak population from 1.4 bn to 1.5 bn by around 2030.



China's aging population will become a problem more quickly than anyone expected

# The big idea Changing demographics

### Tick-tock, tick-tock...

After that, China's population will begin to shrink. How quickly this happens, and how quickly China ages, will largely depend on the national fertility level. If birth rates are too low, the dependency ratio could be crippling by 2050. If no changes are made to current policy, 100 workers will be left supporting 115 dependents (children and people aged over 60). And if fertility rates remain low, there will be fewer women in the next generations to breed China out of its downward trajectory. At China's current total fertility rate, the country's population will shrink to just 800m by the end of this century. Even if China adopts a pro-birth policy, experience from other developed countries suggests that reversing the downward spiral is very difficult. Total fertility rates in much of Europe hover below 1.5, while rates in Japan, South Korea and Taiwan are even lower.

For the past 20 years, China's total fertility rate has been well below replacement level. Some provinces have relaxed policy at the margin, notably by allowing couples comprised of two single children to have a second child. The first generation of single children are now having children themselves, but this has yet to produce an uptick in the total fertility rate. Family-planning policy remains restrictive: the government's most recent policy statement restated that "stabilizing low fertility" remains the prime aim. For many officials, the shrinking fertility rate is widely viewed as an achievement rather than a cause for concern.

China faces immense demographic upheavals that will have serious social and economic consequences China's leaders remain adamant that they must reduce the nation's population size at all costs. But they have ignored, whether intentionally or not, the high risks that come from rapid demographic shifts. As a consequence, China will have to face immense structural upheavals that will have serious consequences for its future social and economic development. Abandoning the one-child policy immediately will help to reduce the impact of these demographic convulsions, but any policy changes will arrive too late to make much difference. China's demographic time bomb continues to tick—and nothing will defuse it.