

Non-technical summary for 'Ageing and Economic Growth in China'

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What did we set out to do?

An ageing population tends to have a negative impact on a country's economic growth. A falling ratio of workers to non-workers can be especially challenging for countries whose traditional comparative advantage is in labour-intensive exports, as has been the case for China in recent decades. China's old-age population ratio has increased significantly over the 2010s and is expected to continue increasing over the coming decades. China's fertility rate has also declined in recent years. This has raised concerns that demographic trends may further reduce China's economic growth rate.

This paper seeks to construct estimates of the effect of the ageing population on growth in China using data on the relationship between population ageing and economic growth in China's provinces between 1990 and 2020. A key difficulty in measuring this relationship is that trends such as internal migration of younger workers between provinces can be correlated with economic growth, as workers may move to provinces with better growth prospects, making it difficult to establish whether the change in economic growth is caused by population ageing. Another example is that economic growth in a province can cause older people to live longer lives, therefore increasing the old-age ratio. To avoid these difficulties, I use a technique from prior research on demographics and growth in the United States to come up with a measure of expected population ageing for China's provinces that should abstract from other factors that might be at play. I also use this technique to examine whether the ageing population might affect the structure of the economy.

What did we learn?

My research reveals two key findings:

1. Population ageing has indeed had a negative effect on economic growth across China's provinces. Applying these estimates to the national level suggests that China's growth has already been negatively affected by the ageing population in the 2010s. The effect of ageing on growth might be expected to be similar or somewhat larger in the 2020s, because growth in the old-age ratio is projected to be similar between the 2010s and 2020s. Although the estimated effect of ageing on growth is significant, it still only explains a relatively small portion of the decline in China's economic growth between the 2000s and 2010s. This suggests that other factors have played a larger role in China's declining growth rate.
2. Population ageing has altered the structure of the economy across China's provinces. Increased population ageing causes a decrease in the contribution of the construction sector to the economy, and an increase in the contribution of the services sector to the economy. This may be expected as a country with an older population will likely have less need for new real estate and infrastructure, and more need for services such as health care.

What was our key takeaway?

Population ageing can indeed be expected to have a negative effect on China's economic growth. This negative effect has already been evident since the 2010s and will likely continue at a similar or somewhat increased rate in the coming decades. However, there are options available for the Chinese authorities to cushion the impact on the economy, including policies that could encourage population growth or increase productivity. The Chinese authorities have so far responded to these challenges by increasing retirement ages and introducing policies such as a nationwide childcare subsidy to support population growth. The structural shift away from construction and towards the services sector due to population ageing could weigh on China's demand for Australia's exports of resources including iron ore, but it could also open new business opportunities for services exports.