Article

Silver Lining in Looming Storm: Examining China's Population Aging Crisis, Expansionary Population Policy, and Alternate Solutions

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Submission Date: 9th April 2022; Acceptance Date: 25th July 2022; Publication Date: 25th August 2022

How to cite

Zhang, T. (2022). Silver Lining in Looming Storm: Examining China's Population Aging Crisis, Expansionary Population Policy, and Alternate Solutions. UCL Journal of Economics, vol. 1 no. 1, pp. 115-121. DOI: 10.14324/111.444.2755-0877.1399

Peer review

This article has been peer-reviewed through the journal's standard double-blind peer review, where both the reviewers and authors are anonymised during review

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Abstract

Home to over 1.4 billion residents, China has been the world's most populous country for centuries. While population growth had been largely natural in China's long history, population policies and controls had become an integral part of Chinese policymaking since the late 19th century. After the Communist Party overtook the regime in 1949, population policies became even more pivotal, if volatile and willful at times. In this essay, I will first show that there is indeed a significant population aging crisis brewing within China, which could mark a fundamental metamorphosis that decimates China's population dividend. I will further state that this belated policy turnaround is already highly unlikely to prepare the Chinese population for the looming population aging crisis, nor is it a promising idea to play this population catch-up game, because it will incur an even heavier burden for the working age population in the next decade. And finally, I will propose alternate solutions to the looming population crisis that look beyond simply boosting birth rates, in the form of a fairer redistribution system and pension system reform that alleviates anxieties and burdens of the working class as well as elderly population.

Keywords: Demographic Crisis, Long-Run Growth, China







Three distinct stages of population policies can be identified in the history of the People's Republic. From the 1950s until his death in 1976, Mao Zedong presided over one of the most significant population explosions in human history, when his expansionary fertility programs added almost 600 million people to China's population. Mao's successor Deng Xiaoping and his cabinet reversed this unsustainable population expansion and adopted the contractionary, if equally controversial, "one-child policy", which mandated the majority of Chinese households to have only one child. Observed as one of the "staunchest attempt[s] of population control" (Lewis, 1987), the one-child policy has been the "fundamental national policy" for over thirty years. However, this fundamental policy to control population growth recently gave way to the third stage of population policy. The first sign of transition came in 2013, when China's National People's Congress broadened the range of exceptions for the one-child policy, before completely replacing the one-child policy with a universal two-children policy in 2015 and expanding again to a three-children policy in 2021. Hence, China's population policy saw another reverse from population control to expansionary policy. It is evident from this rapid U-turn of policy that the Chinese authority had abandoned the "fundamental national policy" amidst growing concerns about an aging society and adopted a new stage of expansionary policy actions to offset downward pressures from a shrinking labor force.

In light of recent policy shifts, what will be China's population outlook? This is a question that concerns not only people in China, but also around the world. Given China's interwoven relations with other global powers, as well as its almost inseverable connections with the global supply chain, any disruption in China's productivity will have considerable ripple effects felt across the globe. China has dominated the global supply chain for the past thirty years with its low labor cost and tremendous population dividend, which is set to diminish as the generation under one-child policy collectively enters the labor market.

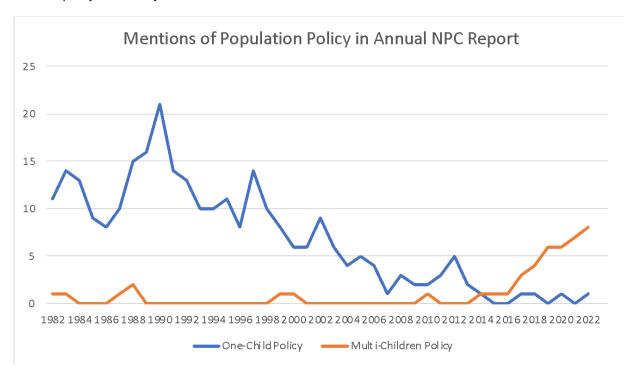


Figure 1: Mentions of population policy in annual NPC reports (People's Central Government, 2022)

The graph above signifies the fundamental shift of attitude toward population control among Chinese policymakers, especially after 2013. The National People's Congress holds its plenum annually, where the Chinese premier delivers annual reports to the legislative body, similar to the State of the Union Address in the United States. Tracking the number of mentions of a particular policy is a reasonable approximation of the current administration's policy priority, and arguably one of the best windows to examine the focus of China's top-tier policymakers. As the figures

The phrase "fundamental national policy", or "基本国策", is a special designation that is only bestowed upon a handful of policies at the core of Communist Party's platform, like socialism, reform and opening up, and one China policy. Putting one-child policy parallel to these core policies indicates the priority of population control.





suggest, Chinese policymakers shifted their focus from a one-child policy to a multi-children one after 2013, when the incumbent president Xi Jinping rose to power. However, contrary to the aims of this new policy, the concerted efforts to expand the Chinese population and boost the fertility rate were met with stony silence from everyday Chinese people, as the fertility rate continues to decline.

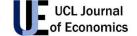
It is unmistakable that China does face serious, if not immediate, concerns from population aging. The fertility rate has continued to stall to as low as 1.3 in 2021 (Fu, 2022), which is among the lowest rates for developing countries. In the same year, the nationwide birth rate for China reached a record low (Gao et al., 2022). Two years ago, an investigative report predicted that China could see its first net decline in population in 2027 if birth rate continues its falling trend in the 2010s (Zhang and Cai, 2020), inciting widespread public anxiety. One year later, at the conclusion of China's seventh national population census, that prediction proved to be erring on the cautious side. In the latest press conference by China's Bureau of Statistics, it is estimated now that China may have to witness net population decline - the first since the Great Famine back in the 1960s - as early as this year (Ning, 2022).

As shown in table 2, the working age population (from 15 to 59 years of age) accounted for 63.35% of China's entire population in 2020, which was already 7% less than that reported in the 2010 census. If the fertility rate continues to decrease, the estimated percentage of the population that is of working age will decline to 56.86% by 2035. In other words, in merely 25 years, every working man and woman in China will have gone from supporting 0.43 dependencies to approximately 0.76 on average. In comparison, Japan, the most notable victim of the population aging crisis, reported in 2020 that each Japanese worker is expected to support 0.69 dependents (World Bank, 2022). Simply put, in just 15 years, China will inevitably face the worst population challenges ever in the modern world.

普查年份 Census Years	各年龄段人口比重 Proportion of Population by Age Group to National Population			
	0-14	15-59	60+	#65+
1953	36.28	56.40	7.32	4.41
1964	40.69	53.18	6.13	3.56
1982	33.59	58.79	7.62	4.91
1990	27.69	63.74	8.57	5.57
2000	22.89	66.78	10.33	6.96
2010	16.60	70.14	13.26	8.87
2020	17.95	63.35	18.70	13.50

Table 1: Proportion of Population by Age Group to National Population (Chinese National Census, 2021)

It is henceforward clear that Chinese policymakers have every incentive to reverse this concerning trend. However, the multi-children policy bundle will not mitigate the looming crisis, but rather exacerbate population overdependence.







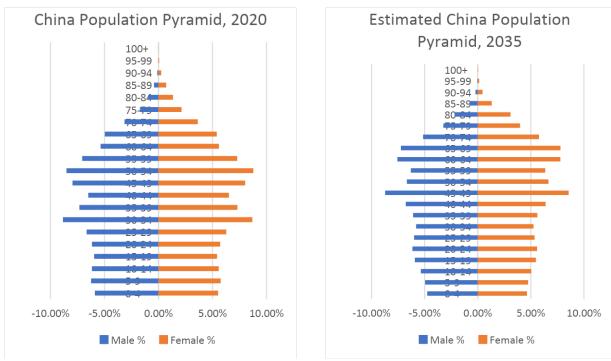


Figure 2: Comparison of China Population Pyramids in 2020 (Chinese National Census, 2021) and 2035 (PopulationPyramid.net, 2022)

It is clear from the population pyramids that the most concentrated age groups are people born between 1960 and 1975 - at the height of the Great Leap Forward and Cultural Revolution when China adopted ultra-expansionary population policies. Members of these age cohorts will enter retirement en masse within the next fifteen years, culminating in the imbalanced age-dependency ratio above-mentioned. However, this fifteen-year timeframe is already too narrow for the expansionary population policy to take its effects. Even if we assume, against all odds, that the progressive "three-children" policy adopted in mid-2021 would substantially increase the birth rate, these newly added age cohorts will not wean from parental support by 2035. Simply put, only the population born before 2017 would alleviate population overdependence and support China's elderly population. Those born after 2017 would not reach adulthood and become productive population elements by 2035, when the population crisis culminates, thereby putting pressure on both ends for the working age cohort. It is a great irony that the progressive population policies will lead to an even greater age-dependency ratio and exacerbate the population crisis.

In this prospect, by 2035 one typical Chinese household will have at most two breadwinners, who will have to support three children in middle school or college and invest heavily on their education due to extreme competitiveness in China's infamous Gaokao system; three to four retired parents who earn very limited pension due to flaws in China's pension system; possibly a grandparent born in the 1950s, with constant medical needs but bare minimum insurance; and often must pay for a disproportionately high mortgage or rent, significantly limiting household liquidity or potential for consumption. Indeed, for the vast majority of China's working-class families, having multiple children is simply too luxurious.

The main targets of the three-children policy are people within the ideal reproductive age, namely between 23 and 38 years, who are born between 1980 and 1995. However, it's noteworthy that these age cohorts are coincidentally the first generation born under one-child policy, who are distinctively more independent and self-interested than any previous Chinese generation. Burdened by heightened costs of living, financial insecurity, and a pessimistic outlook for the country's economic future, the new parents-to-be can hardly be persuaded to swallow significant marginal costs just for having another child. Their self-reflection and defiance to the new population policy is embodied by the top trending comment online when China announced the three-children policy: "Having another child is a service to the nation, but a disservice to myself and my kids."2

² This comment was trending and gained significant public attention, before being censored by Chinese authority. The original comment is no longer retraceable.







However, all hopes are not lost. Although the current approach can only increase burdens on China's shrinking working population, there are nevertheless other measures that will mitigate the impact of the aging population on everyday households that do not require boosting the fertility rate.

It is noteworthy that although age cohorts born between 1960 and 1975 are the largest cohorts and gradually retiring, they are also the first generation to thrive under China's economic liberalization campaign. They participated in China's primitive accumulation of capital, while acquiring wealth in unprecedented scales in China's history. Of the top 100 richest persons in China, 54 fall within those age cohorts (Hurun Research Institute, 2021). While some scholars characterized China's looming population crisis as "[becoming] old before getting rich" (Wang et al., 2016), citing China's relatively low income per capita, it is imperative to see that this retiring cohort overall is the wealthiest of all generations in China's history (Cai, Garnaut, and Song, 2018). Perhaps a more prominent issue is severe inequality. China's Gini coefficient is estimated at 46.7, ranking as the 26th least egalitarian country in the world (World Bank, 2020). Hence, circumstances call for a more progressive redistribution system, with additional transfer payments in forms of public welfare programs, state-afforded health insurance, and affordable housing. These measures will significantly ease the pressure on China's vast middle-class and working-class families, while creating a reservoir of funding in the national budget that would mitigate the impact of population aging in the coming decade (Zhang, 2017).

A significant part of this comprehensive reform of the redistribution system should be China's pension reform. A modern pension system typically consists of three pillars: government transfer payments, retirement pension from employers, and personal retirement savings and investments. In 2020, China's pension system could provide only 45% of pre-retirement income, whereas the average replacement rate in the U.S. in the same year was 8.

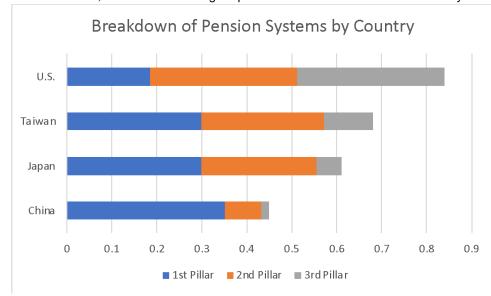
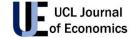


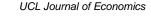
Figure 3: Breakdown of Pension Systems (OECD, 2021)

It is evident that China's pension system is lopsided, with government spending accounting for the majority of total pension. It creates the heaviest burden on public finance among the four countries considered, while providing the least coverage for its retired workers. Even compared to Taiwan and Japan, two other East Asian countries with similar culture and even more urgent population crises, China's significant lack of corporate pensions still leaves its retired workers earning 25% less than their Taiwanese or Japanese counterparts. Thus, the necessity and urgency for China to reform its pension system and introduce greater obligations for corporations and employers becomes self-evident.

For centuries, East Asian cultures have put great emphasis on the working-age population's obligation to provide for their retired parents. Modernized East Asian countries like Japan and South Korea had successfully transitioned







to more granularized household units. With a secure pension system that takes the burden off from the working-age population, Chinese society may also embark on similar household "granularization" (You and Niño-Zarazúa, 2019), further stimulating consumption and social productivity. A steady stream of income after retirement significantly contributes to the financial security and sustainability of average Chinese households, which in turn stimulates household consumptions that fuel economic growth and alleviate the impact of population aging.

Boosting productivity and supporting China's increasingly broad base of retired workers are the two main objectives for China to adopt expansionary population policies. While I have argued that the time has passed for such policies to take effect, a progressive redistributive system and improved pension scheme accomplishes the same goals. By mandating corporations and businesses who made significant profits from China's economic liberalization to shoulder their proportional responsibility, the population aging crisis can be ameliorated without having to play the "catch-up" game.

All in all, it's beyond doubt that there do exist systemic challenges from the broad base of the rapidly aging population in China. However, instead of pursuing belated expansionary population policies, Chinese policymakers should consider indirect approaches including a more progressive redistribution system and pension reform, which takes full advantage of the immense wealth the country had aggregated over the past few decades to ameliorate the aging crisis. So that, despite the inevitability of China's entrance into an aging society, the retired workers who dedicated their entire career to one of the most staggering economic miracles the world has seen, may sleep a bit sounder at night, knowing that their retired lives are secure and well-supported.







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