

# How Does the Ageing Population Affect China's Household Savings Rate? Empirical Study Based on China's Micro Household Data

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## Abstract

The impact of the ageing population on China's economy and society is multifaceted, with the impact on household savings rates being particularly important. This study investigates the influence of population ageing on household savings rates, utilizing data obtained from the China Household Finance Survey (CHFS) spanning the period from 2015 to 2019. The study found that ageing has a significant negative effect on household savings rates. This finding suggests that there is a significant life-cycle effect on changes in household savings rates in China, which is not conducive to the formation of a second demographic dividend. From the perspective of mediating variables, population ageing growth reduces household income, thereby further decreasing the household savings rate, with income reduction being the main factor causing the decline in the household savings rate. Additionally, it has been found that the impact of population ageing on the household savings rate exhibits significant heterogeneity between urban and rural areas. The increasing proportion of the elderly population in rural areas has a stronger negative effect on the household savings rate.

**Keywords:** Savings Rate, Ageing, CHFS

## 1. Introduction

A consistently growing labour force and declining dependency ratio have been important drivers of China's rapid economic growth since the reform and opening up. This economic growth, which is brought about by socio-demographic changes, is known as the demographic dividend (Yang and Cai, 2016). However, in recent years, China has witnessed a rapid trend of population ageing. By 2021, China's population totalled 1.412 billion, with 14.2% of the total population aged 65 and over. The rapid growth of the elderly population has also brought about a rapid increase in the population dependency ratio, which was 8.3% in 1990 and was 20.8% by the year 2021. In addition, the total working age population peaked in 2013. With the demographic shift, the demographic dividend is becoming less of a driver for the economy. Yang (2018) measured the contribution of the demographic dividend to economic growth from 1990 to 2013, showing that the contribution averaged above 20% before 2001 and began to decline gradually after 2001, with the contribution falling to negative values in 2011. However, in contrast, some developed East Asian countries have not experienced economic problems at the end of the demographic dividend period but have achieved high quality growth through a second demographic dividend period (Mason & Kinugasa, 2008). The second demographic dividend demonstrates that the reduction in household size due to increased life expectancy and lower fertility creates an incentive for older people to save for emergencies. This saving incentive can contribute to capital deepening and national economic growth (Lee & Mason, 2011).

High levels of investment have played a crucial role in driving China's previous period of rapid economic growth, with such investment being primarily fuelled by elevated levels of savings (Hu & Xu, 2014). The shift in the age structure of the population is an important factor influencing household savings. Therefore, the mechanism and empirical study of the impact of ageing on household savings rates are of great practical importance for China's economic growth.

This study adopts a micro-level household decision-making perspective and utilizes the CHFS data from 2015 to 2019, comprising three rounds of nationwide micro-level household surveys. It empirically investigates the impact of population ageing on household savings rates. The utilization of high-quality household survey data allows the model to closely capture real-world scenarios, enabling a better exploration of causal mechanisms and heterogeneity effects.

## 2. Literature Review

The family is the most basic organisational structure in socio-economic activity. The original theory of asset portfolios did not involve intertemporal choices and the investor's objective was to maximise the utility of wealth at the end of the period. In practice, however, decisions in household finance tend to be longer term. The earliest theory to introduce the age factor into the consumption function was the life cycle theory. Traditional life-cycle theory suggests that consumers smooth out their income and consumption in order to maximise utility over their lifetime (Modigliani & Brumberg, 1954). Marginal savings rates are higher in middle age and lower in both youth and old age. Older people experience an increase in daily living