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Pension financing in China: Is there a looming crisis?

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ABSTRACT

Contemporary pension systems face a major fiscal challenge. In China, whose population has been aging rapidly, such a challenge is of extreme importance. This article finds that, in China, the cumulative funding gap in pensions should be 2022.34 billion Yuan until 2020, and 71 731.94 billion Yuan until 2050; however, based on the fiscal capacity of the Chinese state, the fiscal burden created by pensions is not expected to create a financial crisis between 2013 and 2020. Furthermore, a fiscal crisis can be avoided between 2021 and 2050 if fiscal revenue increases by at least 6.18% a year on average during that period. This absence of predictable financial crisis does not mean that there are no significant demographic and fiscal issues ahead. This means that China should promote pension reform to prepare for an increasingly heavy financial burden in the future. The article concludes with policy recommendations about how to improve the long-term fiscal situation of China's growing pension system.

1. Introduction

What is known in China as 'getting old before getting rich' is a significant challenge associated with aging population in that country. For instance, the poverty rate of people aged 60 and over was 4.6% in urban areas and 22.3% in rural areas in 2010, and there were more than 18 million elderly poor people in China in 2011 (Lu, 2013). At the same time, changes in cultural ideas and modern family structures have weakened the traditional family, which has long provided for the elderly (Chou, 2011). Despite this, China has yet to establish an adequate supplementary pension system for the elderly population (Dorfman et al., 2013; Shi & Mok, 2012). In contrast to the multi-pillar model popularized by the World Bank, China relies almost solely on a single pillar—public pension—to mitigate poverty among the elderly. In the early days of post-reform China, the pension system for government employees and old-age insurance for public enterprise workers were the sole components of the country's pension system. At the same time, most urban and rural residents had no access to pensions at all. Since then, a series of reforms have gradually expanded pension coverage. Over the years, China has built a much more comprehensive pension system, and 125 million retired participants (approximately 60% of the total population aged 60 and over in 2012) are reported to be receiving a regular monthly pension (National Bureau of Statistics of the People's Republic of China, 2011b).

Talk about the financial pension is present all over the world (Blackburn, 2006; Bouvatier & Rigot, 2013; Ryan & Fabozzi, 2003), but with increasing life expectancy and declining fertility due to China's one-child policy, the Chinese population has been aging rapidly, making the Chinese pension system's sustainability a central policy concern for the central government (Bouvatier & Rigot, 2013). In a June 2012 article published in the Chinese magazine *Caijing*, Ma and his colleagues claimed that "The financing gap of China's pension system will be 18.3 trillion Yuan until 2013, and the percentage of pension spending in fiscal expenditure will be more than 20% in 2050" (Ma et al., 2012). The publication of this article caused a great deal of expert and public concern in China about the alleged existence of a looming financial crisis in pensions.

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More generally, claims about China's large pension fund gap have become increasingly widespread in recent years. For example, the World Bank stated that the size of China's 2001 to 2075 pension fund gap is 9.15 trillion Yuan (Sin, 2005). Zheng has suggested that "Up to 2011, there was a carryover of 2.5 trillion Yuan in individual accounts, 2.23 trillion Yuan of which was in empty accounts (the money was transferred to the social pooling account to compensate for the shortage in the social pooling account, so this is only about book entry rather than real money) (Zheng, 2012)." Finally, Gao's research indicated that the financing gap of China's pension system is 2.824 trillion Yuan (Gao & Ding, 2006). Meanwhile, the vice-chairman of the China Insurance Regulatory Commission said that, over the last decade, fiscal subsidies to the pension system represented more than 1 trillion Yuan, a reality that would point to a serious financial crisis of the pension system in China (Yu, 2012).

Another popular argument takes the opposite view, claiming that there is simply no financial pension crisis in China. For instance, in March 2012, the Vice-Minister of Labor and Human Resources stated that, the previous year, the public pension system had revenues of about 1.3 trillion Yuan and expenditures of about 1.2 trillion, which meant that there was no crisis in old-age pension funding (Guangzhou Daily, 2012). At the same time, Hu noted that there was no payment crisis in China's pension system (Fu, 2012). Yi, a media spokesperson of Labor and Human Resources, concurred. He argued that there was no financial crisis in BOAISEE for the simple reason that, overall, the fund's revenues are greater than its expenditures (Ministry of Human Resources and Social Security, 2012).

The Director of National Social Security Fund, for his part, found a way to synthesize these two opposing views, stating that, "In pay-as-you-go plans, today's pension is covered by the wages of the current workforce, so there is no financial crisis; but in the long run, because individual accounts are fully funded, a financial crisis is bound to appear alongside a rapid population aging (Liang, 2012)." Overall, it is clear that the heart of this ongoing debate about the sustainability of China's pension system is simply that people's understanding of what constitutes a financial crisis in pensions differ (Chen, 2012; Zhang, Guo, & Zheng, 2012).

Considering the above remarks, before entering into the pension financial crisis debate, it is crucial to note that there are now five types of public pension schemes in China (Wang, Béland, & Zhang, 2014): 1) the basic old-age insurance system for enterprise employees; 2) the basic old-age insurance system for public institution employees (BOAISPIE), which has yet to be implemented all around the county; 3) the old-age insurance system for urban residents (OAISUR); 4) the new rural social endowment insurance (NRSEI); and 5) pensions for civil servants (PCS). Because OAISUR, NRSEI, and PCS rely largely on government transfer payments, they are not central to the pension financial crisis debate, which in China chiefly relates to BOAISEE. In the analysis, therefore, we focus primarily on BOAISEE.

In accordance with article 13 of the *People's Republic of China Social Insurance Law*, "the government shall supplement any shortage in basic pension insurance" (Bridge IP Law Commentary, 2012). In 2011, the shortage of the basic old-age insurance system for enterprise employees was 76.7 billion Yuan (Zheng, 2013), requiring only relatively limited government subsidies to compensate for it. Thus, a pension fund gap is to be expected and the main policy problem is whether the government will do something to compensate for it.

Beyond that important point, recent scholarship suggests that the existence and scale of China's alleged financial crisis of the pension system are uncertain (James, 2002). From a pay-as-you-go (PAYG) perspective, pension funding comes from individual contributions, collective subsidies and government subsidies, so there is no genuine financial crisis as long as the government does not go bankrupt. On the other hand, from a fully funded perspective, due to transition costs, the rapid growth in payments from both individual accounts and the social pooling account triggered by population aging should at some point lead to a financial crisis in China' pension system (Wang & Deng, 2012). Wang reviewed the development of the urban and rural old-age security system and showed that funding gaps and empty individual accounts are two main challenges for pension sustainability in China (Wang, 2006). Additionally, Chen analyzed the scale and causes of the large financial gap in Chinese pension funds, reviewed key government funding measures and evaluated the effects of policy implementation (Chen, 2012).[1] Yet, in spite of all these relevant studies, the alleged financial crisis of the pension system in China remains both a contentious and crucial policy issue.

Assessing the idea of a looming financial crisis in the Chinese pension system, this article estimates the level of overspending in individual accounts, the shortage in the social pooling account, the transition cost of BOAISEE and, finally, the total amount of the pension funding gap in China. On this basis, the analysis measures the fiscal burden for covering the anticipated pension gap by forecasting government revenue in China during the same period. Finally, the article assesses whether there is a fiscal crisis in the pension system in China before putting forward some policy options for the Chinese government.

2. Assessing the pension funding gap

2.1. BOAISEE structure and financing

Changes in the pension arrangements for employees of urban enterprises came along with the economic reforms of 1978. The key change here was the establishment of a pension mutual-aid mechanism and, in 1997, the State Council's issuance—the 'Decision on establishing a BOAISEE'—was formally adopted (Salditt, Whiteford, & Adema, 2007). BOAISEE started to become a mandatory scheme covering employees of all types of enterprises.

More precisely, BOAISEE was legally implemented on January 1, 1997. It resulted in the creation of a pre-1997 group, who participated in the old system and retired before 1997, and a post-1997 group, who entered the labor market after 1997. In between are the employees who began working before 1997 but remained on the labor market after that year. We label these three groups as 'retired participants,' 'new participants,' and 'middle participants', respectively. Retired participants do not have

[1] Williamson, Price, and Shen (2012), Ma (2013) and Lan (2012) also studied the financial sustainability issue in China.