Research Proposal
Decomposing the Gender Pension Gap in China

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1 Abstract

This paper will study the gender gap in retirement pensions among China's five most generous types of pension systems. Based on the dataset from the China Health and Retirement Longitudinal Study (CHARLS) of 2013 wave and CHARLS Life History Survey of 2014, we use the methods of OLS and Blinder-Oaxaca Decomposition to examine the factors that explain the gender disparity in pensions. We also use quantile regression to decompose gender gaps at the different percentiles of pension income.

2 Motivation

There are five pension systems in China: public sector pension, firm workers pension, urban resident pension, new rural resident pension, and unified urban and rural resident pension. Data from the China Health and Retirement Longitudinal Study (CHARLS) in 2013 reveals considerable differences between the pension income of females and males in all pension systems. Understanding what leads to such a gender gap is crucial for understanding the effects of the pension system on maintaining living standards after retirement. It also helps policymakers to improve pension policies. Therefore, this study aims to decompose the factors contributing to the gender gap in pension income.

3 Literature Review

Much previous literature has shown that the gender gap in pension is primarily explained by the gender wage gap (Vara 2013; Möhring 2015). In addition, some literature has examined the effect of retirement age on pensions and shown that women are more likely to be laid off than men to take on family responsibilities such as caring for grandchildren (Liu, Dong, and Zheng 2010; Mao, Connelly, and Chen 2017; Wang and Zhang 2017). It is especially true in China, where earnings solely determine pension benefits in the last year of employment, and women have earlier mandatory retirement ages than men. Therefore, we will decompose the gender disparity in pension income and further examine the significant factors contributing to the gap.

4 Data

Data is from the 2013 wave of China Health and Retirement Longitudinal Study (CHARLS) and CHARLS Life History Survey collected by Peking University. These two datasets cover 18,613 representative retired individuals in China, with information about pension income, work history and demographic characteristics.

5 Research Design

1. **Summary Statistics**

   First, we will provide basic summary statistics about individual characteristics and the gender gap in pension income of each pension system.

2. **Blinder–Oaxaca Decomposition**

   $$Y = \beta X + \delta \times gender + \epsilon$$

   where X includes demographic, geographic and firm fixed effects, as well as income before retirement, total years of work, and the type of pension system.

   By observing the change of δ as we add more and more variables in X, we can know that each variable explains how many proportions of the gender gap.

3. **Quantile Regression**

   We will also perform the quantile regressions to see the gender gap decomposition at different quantiles of pension income.

6 Timeline

April 14th: data work; April 15th: estimation; April 16: write-up.