Active Aging in the People's Republic of China: A Case Study of Working After Retirement

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This study examines trends in working after retirement and its relationship to the wider policy and welfare state context in the People's Republic of China (PRC). Using a mixed methods approach, we first analyzed China Health and Retirement Longitudinal Study data for 2011–2020 to identify trends and individual- and household-level factors associated with working after retirement. We then examined how changes in the policy context shape older people's economic participation over time, concluding with a discussion on the findings' implications for the PRC's social protection system. We argue that while mandatory retirement ages push certain older people out of the labor market, there is an increase in older people working beyond the retirement age, as opportunities to supplement pension income pull older people into the labor market. Yet, policymakers do not regulate this, pointing to a policy gap. Although an expanded labor force would reduce pressure on the PRC's social protection system, it would also continue to reproduce preexisting socioeconomic inequalities.

Keywords: labor market participation, policy context, social protection system, socioeconomic inequalities, working after retirement

JEL codes: H55, J26

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I. Introduction

By 2050, 80% of older people worldwide will live in low- and middle-income countries (LMCs) (World Health Organization [WHO] 2022). These countries are likely to face higher social and fiscal costs of aging than high-income countries, as they are "growing old before getting rich" (Asian Development Bank 2019). This issue is particularly salient when it comes to population aging in Asia, where many LMCs such as the People's Republic of China (PRC), Thailand, and Viet Nam are experiencing rapid aging before reaching the development level of their neighbors such as Japan and the Republic of Korea (The Economist 2023). Maintaining active participation in a wide realm of societal activities as people age, known as "active aging" (WHO 2020), has been promoted as a comprehensive strategy to sustain the social protection system and address the challenges of both individual and population aging in many European countries (Walker 2006, Walker and Zaidi 2018). Active aging emphasizes the importance of health; protection; and participation in social, economic, cultural, and civic spheres in ensuring the quality of life as people age (WHO 2002).

Applying and implementing international best practices such as active aging in LMCs, however, has been challenging due to their different socioeconomic and cultural contexts. In contrast to industrialized nations, for instance, pensions, health, and social care provision in LMCs are mostly underdeveloped (Wood and Gough 2006, Evans et al. 2018). In addition, there are differences in ideas about active aging (Foster and Walker 2015). Who counts as being "old," for instance, is differently conceptualized in policy (e.g., retirement or retirement ages) in different countries (Jacobsen 2017). There is thus a need to examine how older people in LMCs age actively and how the existing social protection system supports or impedes their activities.

The PRC, for example, is one of the most rapidly aging countries in Asia and has the largest number of older people (254 million) in the world (WHO 2024). In this context, the concept of active aging has gained increasing policy attention in the PRC. This is evident in policy documents such as the National Medium and Long-Term Plan of Responding to Population Aging Actively issued by the State Council of the People's Republic of China (State Council) in 2019. However, the retirement ages in the PRC have remained low for the past 7 decades—50 (blue-collar jobs) or 55 (white-collar jobs) years old for women, and 60 years old for men (Zhu and Walker 2022)—which crowds older people out of the labor market. Although from 2025 onward, retirement ages will be gradually increased to 63 years old (men) and 55 or 58 years old (women) over a 15-year period (Nulimaimaiti 2024), they will still be lower than

in most industrial countries. As pension levels are low and life after retirement is long, many older people continue to work while receiving a pension and thereby stay active during old age (Cheng 2014). Yet, we know little about why Chinese older people continue to work after reaching their statutory pension age and how this is linked to the socioeconomic and welfare state environment. This study seeks to contribute to the literature by filling this knowledge gap. Filling this gap is not only relevant to the literature, it is also of policy relevance. The Chinese party-state's recent increase in statutory retirement ages may only impact a proportion of older people: those who can and wish to retire. As this study provides insight into which older people seek to work beyond the statutory retirement ages and why, it sheds light on who may be impacted by these recent changes and what further policy changes may be needed to enhance the financial sustainability of the PRC's social security system.

In this study, working after retirement is defined as engaging in paid work while receiving a pension (Parry and Diane 2014, Dingemans and Möhring 2019). To shed light on trends of working after retirement and its implications for fostering active aging in the PRC, this study seeks to answer the following research questions: First, what are the trends in working after retirement in the PRC, and what factors are associated with this phenomenon? Secondly, how does the policy environment support or impede working after retirement? And finally, what implications does this have for the sustainability of the PRC's social protection system? To answer these questions, the study uses a mixed methods approach. Specifically, we conducted a quantitative analysis using China Health and Retirement Longitudinal Study (CHARLS) data for 2011-2020 to identify individual- and household-level factors that might explain the trends. Using policy analysis, we further examined how changes in the policy context shape older people's economic participation over time. We then discuss these findings from the perspective of active and healthy aging frameworks to ascertain facilitators and barriers to economic participation in later life and its implications for aging actively in the PRC.

Based on this analysis, we argue that while the pension system pushes certain older people out of the labor market, due to early mandatory retirement ages, there is an increase in older people in the PRC working beyond the retirement age, as opportunities to supplement pension income pull older people into the labor market. Yet, despite very recent efforts to encourage older people's employment, policymakers do not regulate this, pointing to a policy gap. Although an expanded labor force would reduce pressure on the PRC's social protection system, it would not stop the reproduction of preexisting socioeconomic inequalities. In contrast to existing studies, such as Chen and Park (2024), who examine the potential of older people working

longer by calculating their untapped work capacity, this study traces the actual behavior of older people in relation to their continuing labor market participation while receiving a pension and seeks to explain these trends by analyzing individual predictors and contextual (policy) factors. Similar to Chen and Park (2024), we use CHARLS data to examine employment rates by gender and household registration (rural versus urban), including the impact of health issues on employment; however, our focus is not on how health status impacts older people's probability to work. Instead, we are interested in examining who works after retirement and what might explain this behavior.

Our study contributes to the literature more broadly in various ways: First, it includes the most recent CHARLS data available and illustrates the trends in working at old ages from 2011 to 2020, which existing studies on retirement patterns have not fully examined (see, for example, Giles et al. [2023]). Second, we pay particular attention to older people continuing to work while receiving a pension, shedding light on a specific cohort of older people who are less frequently discussed. Given that early retirement ages are also said to reduce the financial sustainability of the PRC's social protection system, continuing to work after retirement could foster a "silver demographic dividend" for the PRC (Park and Shin 2023, Kikkawa et al. 2024). This dividend relates to the economic gains of using older people's untapped work capacity and willingness to work. We therefore focus on older people who seek to continue working after retirement, yet within the context of larger trends. Finally, we link the analysis of survey data (individual behaviors) to the policy environment by conducting analysis of various related policy fields, thereby demonstrating how the two interact.

In the following section, we provide a brief literature review. In section III, we present an outline of our theoretical and methodological approach before tracing recent trends in working after retirement and associated predictors in section IV. In section V, we then situate these findings in an analysis of the policy context to examine how this context facilitates or impedes working beyond the retirement age. Finally, section VI concludes with a discussion of the findings and a brief conclusion.

II. Literature Review

The phenomenon of "work after retirement" in the PRC has received increasing scholarly attention (Pang, de Brauw, and Rozelle 2004; Du and Yang 2010; Cheng 2014; Liu and Lou 2016; Ko and Yeung 2018; Chen and Park 2024), leading to the identification of trends and factors associated with this trend. Early studies point to the rural—urban divide and gender-specific differences among older people's engagement

in working beyond their retirement age. Studying the early 2000s, Du and Yang (2010) found that older people's employment rates are much higher in rural areas than in urban areas, due to the differences in rural and urban social security systems. Pang, de Brauw, and Rozelle's (2004) renowned earlier study demonstrated that rural older people needed to "work until they drop" due to insufficient pension support, leading to them exiting the labor force only when they become too ill or weak to continue working. In addition, among older people working in the 2000s, "young-old" men were more frequently employed than women or "older" persons (Du and Yang 2010).

With a change in the policy environment, in particular the pension system, scholars have discussed how trends in "working after retirement" have changed. After the Urban Employee Pension (UEP) system was introduced in the 1990s, covering urban employees only, the pension system was extended to include the New Rural Pension Scheme in 2009 and the Urban Residents Pension plan in 2011 to provide rural and urban nonemployed residents with pension coverage. These two systems were merged in 2014, while the UEP was merged with the pension program for civil servants and public sector employees in 2015, resulting in nearly universal coverage by the pension system, albeit at different benefit levels (Liu and Sun 2016) (Figure 1). Despite pension reforms, the statutory retirement ages defined in 1951 were not changed until recently: Men retire at age 60, while women retire either at 55 (female professionals and cadres such as teachers and administrators) or 50 (all other female workers) (Feng et al. 2019).

On the one hand, Du and Yang (2010) found a decline in employment rates among older people in the 2000s, which they attribute to the extension of the pension system and other social security nets. As they note:

The declining employment rate of Chinese older adults in both urban and rural areas in recent years is not an indicator of the effect of active aging. On the contrary, it shows that more older people are freed from working, thus having more opportunities to participate in volunteering, caregiving, and other active aging activities (p. 144).

On the other hand, although employment rates among older people over 60 years old were somewhat in decline, they were nonetheless substantive, indicating that a large proportion of older people continued to work after reaching their retirement age, particularly in rural areas where pensions were only introduced later (Chen and Park 2024). Recent studies all point to the salience of working after retirement, even after pension reforms have been introduced. Analyzing CHARLS data from 2011, Ko and

¹Employment rates for people over age 60 in urban areas stood at 10.1% in 2000 and 9.7% in 2005. In rural areas, the corresponding employment rates were 19.7% (town) and 43.2% (village) in 2000 and 20.8% (town) and 39.2% (village) in 2005 (Du and Yang 2010).

Income Replacement Rate (IRR) Introduction of Urban Expansion of UEP to all Employee Pension (UEP) urban workersa Merger of UEP and IRR: 45.5%-60%.a civil servant pension Civil servant pension (noncontributory) Urban Residents Pension (URP) Merger of URP IRR:10 7%-15 3% and NRPS New Rural Pension \$cheme (NRPS) introduced 1950s 1995 2005 2009 2011 2014 2015 2025

Figure 1. Overview of Pension Reforms in the People's Republic of China

^aDifferent calculations exist, reporting 45.5%–48.9% (Giles et al. 2023) to 60% income replacement rate (Chen and Park 2024).

Sources: Liu and Sun (2016), Zhu and Walker (2018), Giles et al. (2023), and Chen and Park (2024),

Yeung (2018) found that 8.4% of older people work after retirement. Similarly, Liu and Lou (2016) noted that working after retirement has become a necessity for some older people in the PRC despite increased social security provisions. This is echoed by Chu and Chen (2021), who argued that many older people rely on supplementing their pension income through continued employment or familial financial support. The PRC's pension system thus does not seem to have eliminated the necessity of engaging in work after retirement for some older people in the PRC.

So, why do people continue to work while receiving a pension and what factors are associated with this phenomenon? Some older people continue to work due to the need or intention to supplement pension income, although there are marked differences between older people in urban and rural areas. While older people in urban areas mainly draw on their pension income to survive in old age (Cai and Cheng 2014), rural older people are not able to rely on their pension income to the same extent—although pensions have helped rural older people with chronic illnesses (Ning et al. 2016) and rural older women (Shu 2018) to gain some income security. This points to the continuing need for rural older people to work beyond retirement age despite the introduction of a rural pension system. Chen and Park (2024) show that while the pension benefits for those receiving the UEP are around 60% of previous income levels, resident pensions for rural and unemployed people only make up about 12% of previous income levels. Moreover, urban older people are often paid for their work

after retirement, while rural people commonly are not formally paid (Ko and Yeung 2018). This suggests that when urban older people continue to work, they often do so to financially supplement their pension, while rural older people may have to work to sustain their livelihood, whether in a formal or informal (agricultural) manner (Sia et al. 2021). Thus, the rural—urban divide in retirement trends identified in earlier studies may persist today.

Moreover, as Cheng (2014) highlights, trends in working after retirement are also sector specific. While some urban older people register as being "retired," receive a pension, and stop working (i.e., traditional retirement), others receive a pension while continuing to work. Again, some do not receive a pension while working. This demonstrates the significance of statutory retirement ages and registering as retired in urban areas. As Lum (2013) notes, due to rigid and compulsory retirement ages for those in public sector employment, some urban older people experience difficulty finding employment after reaching their retirement age. Yet, others, for instance in the private or informal sector, nonetheless continue to work as statutory retirement ages are not as strictly enforced. Zhu and Walker (2022), therefore, call for a change in the PRC's pension policies to facilitate more "active social policies on aging," thereby reducing institutional barriers to working in old age.

Finally, gender-based differences are likely to continue. Kong et al. (2022) found that whereas men are more willing to work longer, women are less willing to do so and oppose the equalization of retirement ages. This may be due to the type of work men and women engage in after reaching retirement age. Sia et al. (2021) found that health, income, and family-caring relationships played a crucial role in older people working after retirement. As Connelly et al. (2018) note, women often take care of their children's children after they reach their retirement age, thereby providing unpaid informal labor. While women thus were not less likely than men to work after retirement, this work was more likely to be informal—for example, as caregivers. In addition to location-, sector-, and gender-based differences, there are many other factors that influence whether an older person seeks to work after retirement. As Kong et al. (2022) show, the intention to delay retirement is correlated not only with the economic situation of the household but also with an older person's health and job satisfaction.

In sum, existing studies discuss new and continuing trends and factors associated with "working after retirement." Studies highlight the variety of reasons why older people wish to continue to work while receiving a pension, revealing the heterogeneity of older people in the PRC. Although studies such as these are highly informative, many examine individual predictors of working during old age (Sia et al. 2021, Kong

et al. 2022, Chen and Park 2024), yet they do not emphasize contextual factors such as the policy environment. Existing studies thus do not examine the phenomenon in conjunction with a focused analysis of the policy environment and welfare state developments more broadly. In addition, while many studies have used CHARLS data to examine this phenomenon, the studies neither examine trends over time nor include the most recent CHARLS data. In other words, there seems to be a knowledge gap in the literature that links research on patterns of older people's working after retirement with the policy and welfare state context. More research that exclusively focuses on Chinese older people's work after retirement age is needed, using recent data to trace developments over time, especially against the backdrop of the PRC's developing welfare state. This study seeks to fill this knowledge gap by providing an analysis of recent data on working after retirement. It examines patterns across time and links these with an analysis of Chinese policies across the same time frame, thereby connecting findings on older people's behavioral changes to changes in Chinese policy. Shedding light on these developments not only draws attention to how policy design may facilitate or impede older people's continued economic participation but also provides insights into how the PRC can exploit its "silver demographic dividend" (Park and Shin 2023, Kikkawa et al. 2024).

III. Theoretical and Methodological Approach

Continued economic participation has been a key dimension of the WHO's active and healthy aging agenda. After preexisting concepts such as "successful" aging (Rowe and Khan 1987) and "productive" aging (Johnson, Sarkisian, and Williamson 2015) were criticized due to being overly focused on older people's economic "productivity" (Walker 2002) and for displaying a passive and ageist depiction of older persons (Katz and Calasanti 2015), the WHO started to promote concepts of "healthy" and "active aging." While "healthy aging" means "the process of developing and maintaining the functional ability that enables wellbeing in older age" (WHO 2020), "active aging" refers to the "process of optimizing opportunities for health, participation, and security in order to enhance the quality of life as people age" (WHO 2002, p. 12). The latter seeks to promote older persons' participation in their social, economic, cultural, spiritual, and civic environment by taking a life course perspective (Foster and Walker 2015). Both concepts emphasize the diversity of older persons and that intersectionality—for instance, gender and socioeconomic status—leads to inequality between older people (WHO 2002, 2020).

While the sole focus on economic (labor market) participation of older people as an indicator of how older people "should" age has thus been criticized, it nonetheless remains a key component of active and healthy aging (Foster and Walker 2015). Walker (2006) has argued that enabling labor market participation for people across the life course, including in old age, can empower older people by strengthening their influence over their own careers as well as fostering their ability to stay active and healthy. In addition, from a macro-level economic perspective, enabling people's continued employment—if they wish to do so—can enhance the efficient and optimal use of human capital as well as make social protection systems more sustainable. It is thus not only an individual's responsibility to age actively and healthily, but it is also society's and government's responsibility to support people in doing so to manage population aging (Foster and Walker 2015).

As the above discussion of empirical and conceptual literature demonstrates, older people's continued labor market participation needs to be examined from two perspectives: (i) the individuals' working patterns and preferences, and how these differ in terms of different genders and socioeconomic groups; as well as (ii) the environment in which older individuals age, such as the policy environment, which may impede or facilitate work after retirement. Taken together, these two perspectives allow for an assessment of the phenomenon of working after retirement in the PRC. To examine these two dimensions—individual and (policy) environmental contexts—the authors use a mixed methods approach conducted in two steps: First, we used the most recent CHARLS data for 2011-2020 to describe the trend of working after retirement over time (10 years). The CHARLS is a nationally represented longitudinal study of community-dwelling individuals aged 45 years and above and their spouses. It covers a range of topics including demographics, economic activities, family, health, and pension, providing rich information to study active aging in the PRC. More information on the sampling process can be found in Zhao et al. (2014, 2023). To further examine the predictors of working after retirement, logistic random effects models were used. This type of model can take account of the serial correlation from multiple observations within a common individual in the longitudinal data used in this study. The method also allows us to estimate the variability in the propensity for working between individuals (versus within individuals) that persists throughout the entire 10-year review period.

The dependent variable, working after retirement, was derived based on respondents' answers to the question of whether they "engaged in any work in the past year." If retirees (people who received any type of pension) answered "yes," they were defined as working after retirement. Otherwise, they were defined as not working

after retirement. As described in the literature review, older people's labor force participation decisions are influenced by demographic factors, financial needs, health status, and family contexts. In this study, we considered age and marital status as key demographic factors. To account for financial needs, we included education, pension type, and pension income in our models. Health status was measured by the number of activities of daily living (ADL) and instrumental activities of daily living (IADL) that older people had difficulty with. Regarding family contexts and household-level factors, we examined the spouse's pension status and employment status, the number of living daughters and sons, and whether they are receiving financial support from their children. These factors can affect the social support and financial resources available to older people. Additionally, we included the spouse's number of ADL-IADL difficulties and whether the respondent was living with grandchildren in the models, as these variables indicate the caregiving responsibilities that may hinder work after retirement (Mitra et al. 2020, Chen and Park 2024). Detailed variable definitions and their summary statistics can be found in Table A2 in the Appendix and Table 1, respectively.²

Second, we compare these findings with a "retrospective policy analysis" of government policies (Dunn 2016, p. 11), concentrating on compiling information on how policies have been formulated and what consequences this produces (i.e., problem-oriented analysis). Specifically, since regulations on working after retirement are not limited to a singular policy field, policies and 5-year plans on (i) pensions, (ii) retirement, and (iii) active or healthy aging were collected to examine to what extent the phenomenon is recognized and how it is discussed in the PRC's regulations, as well as what implications this has for the PRC's social protection system. A total of 160 policies were collected through the PKU Law database using the following keywords: pension (养老金 or 养老保险), retirement (退休), and healthy aging (健康养老 or 健康老龄化). After all policy documents were read and grouped into topics (e.g., adjustment of benefit levels, retirement services for military personnel), 30 policies were identified for further in-depth analysis (see Table A1 in the Appendix for details).

Third, findings were triangulated with findings in the secondary Chinese and English language literature to identify the implications of the study's findings on the PRC's social protection system. In using this approach, we seek to contribute to the

²To view all appendixes, please refer to the supplemental materials that are available at: https://www.worldscientific.com/doi/suppl/10.1142/S0116110525500209.

³The PKU Law database is managed by Peking University and includes one of the most comprehensive collections of domestic laws and regulations since the founding of the PRC in 1949.

Table 1. Descriptive Statistics of the Analytical Sample by Hukou, Status, and Gender

| | Uı | rban | R | ural |
|---|--------|--------|--------|--------|
| | Man | Woman | Man | Woman |
| Work status (%) | | | | |
| No | 68.84 | 79.06 | 29.05 | 42.75 |
| Yes | 30.16 | 20.94 | 70.95 | 57.25 |
| Age | 67.00 | 62.84 | 66.91 | 66.15 |
| | (6.01) | (7.38) | (5.30) | (5.87) |
| Marital status (%) | | | | |
| Not partnered | 6.12 | 19.13 | 12.35 | 22.72 |
| Partnered | 90.85 | 77.35 | 86.51 | 76.24 |
| Partnered but without partner information Education (%) | 3.03 | 3.52 | 1.14 | 1.04 |
| ≤ Primary school | 37.41 | 37.88 | 73.42 | 90.51 |
| Middle school | 28.61 | 29.59 | 20.07 | 7.40 |
| ≥ High school | 33.98 | 32.53 | 6.51 | 2.09 |
| Pension type (%) | | | | |
| Receive occupational pension | 84.34 | 74.94 | 5.95 | 3.77 |
| Receive resident pension | 15.66 | 25.06 | 94.05 | 96.23 |
| Log (pension income) | 9.91 | 9.65 | 7.08 | 7.10 |
| | (1.69) | (1.39) | (1.34) | (1.24) |
| No. of ADL-IADL difficulties | 0.68 | 0.65 | 1.00 | 1.35 |
| | (1.84) | (1.67) | (2.15) | (2.28) |
| Spouse's pension (%) | | | | |
| Receive occupational pension | 45.33 | 57.92 | 2.13 | 10.97 |
| Receive resident pension | 33.52 | 14.00 | 73.95 | 74.58 |
| No pension | 21.16 | 28.08 | 23.93 | 14.45 |
| Spouse's employment status (%) | | | | |
| Spouse not working | 73.82 | 63.05 | 35.21 | 30.04 |
| Spouse currently working | 26.18 | 36.95 | 64.79 | 69.96 |
| Spouse no. of ADL-IADL | 0.76 | 0.49 | 1.11 | 0.77 |
| | (1.76) | (1.65) | (2.12) | (1.95) |
| Number of living daughters | 1.13 | 0.97 | 1.45 | 1.53 |
| | (0.97) | (0.91) | (1.15) | (1.16) |
| Number of living sons | 1.22 | 1.05 | 1.58 | 1.66 |
| | (0.96) | (0.91) | (1.03) | (1.04) |
| Living with grandchildren (%) | | | | |
| No | 76.88 | 78.98 | 73.21 | 72.93 |
| Yes | 23.12 | 21.02 | 26.79 | 27.07 |

Continued.

Urban Rural Man Woman Man Woman Financial support from children (%) No 33.30 38.41 16.85 15.14 Yes 61.59 66.70 83.15 84.86 3,978 N 3,793 4,534 4,985

Table 1. Continued.

ADL = activities of daily living, IADL = instrumental activities of daily living. Notes: Means or percentages are displayed with standard deviation in parentheses. All numbers (except for N) are weighted.

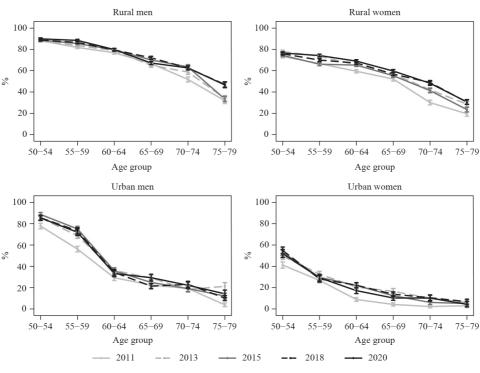
Source: China Health and Retirement Longitudinal Study, 2011-2020.

literature by enhancing our understanding of the degree and characteristics of older people's labor market participation after retirement, and how this is impeded or supported by the policy environment. Finally, we seek to link these findings to the PRC's social protection system overall to develop recommendations as to how it would need to develop to cope with "getting older, before getting rich."

IV. Working After Retirement: Recent Trends

To examine the trends in employment status among older people, we pooled five cross-sectional waves of the CHARLS data and calculated the weighted proportions of people aged 50–79 years who are currently working by age group, *hukou* (household registration) status, and gender (Figure 2).⁴ From 2011 to 2020, the employment rate among people aged 50–79 years experienced an overall increase, with the rate in 2011 being significantly lower than other survey years across most 5-year age groups. The pattern was observed among both men and women, especially in urban areas. In comparison, the differences in employment status between 2013 and 2020 were less substantial and the observed changes over time were not in a linear pattern. In other words, working at an older age increased overall, yet the speed of change varied across time. In addition, the level of increase over the 10-year review period varied by age group. For urban men, the increase in the employment rate was

⁴Compared with repeated cross-sectional data, longitudinal data are less efficient in estimating period trends of population means due to the serial correlations of observations within individuals. However, as we are interested in the intersection of working status and pension status among older people, individual-level data with a relatively large sample size of the older population is required. CHARLS is the most suitable nationally represented data in this regard. To ensure the representativeness of the sample over time, all the descriptive statistics were calculated using cross-sectional individual weights with household and individual nonresponse adjustments.



Employment Rate by Age, Hukou, Gender, and Year

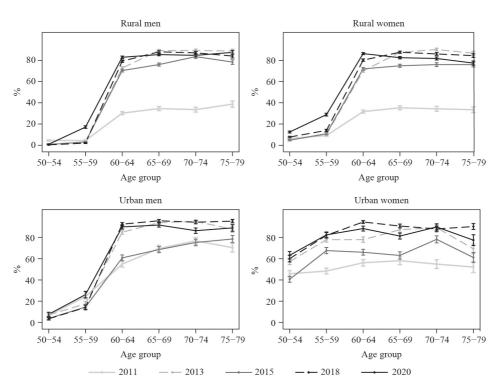
Notes: All results are weighted. The error bars indicate the 95% confidence intervals. N = 69,514 person-years. Source: China Health and Retirement Longitudinal Study, 2011-2020.

primarily concentrated in the 50-59 age group. In contrast, the rise in employment among those aged 60-79 years was relatively small. This trend was also corroborated by the employment rate estimated based on the Chinese Census in 2010 and 2020 (Feng 2024). This finding might be related to the fact that many people aged 50–59 years are still fit enough to participate in the workforce. Accordingly, they may have more excess capacity to work than the older age groups (Hou et al. 2021).

The proportions of people aged 50-79 years receiving a pension are depicted in Figure 3.5 The proportions were calculated according to hukou status, gender, and age group. The proportion of those receiving a pension fluctuated among urban older people, with the proportion being lower in 2011 and 2015 than in all other years,

⁵We also calculated the proportion of people receiving a pension according to the pension type (i.e., occupational pension versus resident pension), and the results are reported in Figure A4.1 in the Appendix. There is inconsistency regarding the types of pensions included and how pension-related questions were asked, which is partly due to the pension reforms in the PRC. More details about what is included in occupational and resident pensions are presented in Table A3 in the Appendix.

Figure 3. Proportion of Receiving a Pension Among People by Age, Hukou Status, Gender, and Year



Notes: All results are weighted. The error bars indicate the 95% confidence intervals. N = 69,514 person-years. Source: China Health and Retirement Longitudinal Study, 2011–2020.

regardless of gender. The fluctuation is partly due to changes in the pension categories included in the questionnaire and to modifications in the routing of questions in CHARLS over time. In rural parts of the PRC, we found a substantial increase in the proportion of people receiving a pension from 2011 to 2013, while this proportion remained relatively stable for the rest of the review period. This increase at the beginning of the decade was consistent with the policy efforts to achieve universal coverage of public pensions, such as the roll out of the New Rural Pension Scheme in 2009.

A. General Trends in Working After Retirement from 2011 to 2020

While the above findings mirror those of earlier studies on retirement patterns (see, for example, Giles et al. [2023]), our study found that exiting the labor market and receiving a pension are not necessarily synchronized in the PRC. In this study, we

Rural men Rural women 80 60 60 % 40 20 20 0 0 2015 2013 2011 2013 2018 2020 2011 2015 2018 2020 Urban men Urban women 80 80 60 40 20 20 0 2013 2011 2015 2018 2020 2011 2015 2018 2020 2013 No work and no pension No work with pension Work with pension ··· Work with no pension

The Distribution of Combined Employment and Pension Status by Gender, Hukou Status, and Year

Notes: All results are weighted. The error bars indicate the 95% confidence intervals. N = 69,514 person-years. Source: China Health and Retirement Longitudinal Study, 2011-2020.

were particularly interested in those receiving a pension but continuing to work. For this purpose, we calculated the distribution of combined employment and pension status among older people aged 50-79, which includes four categories of people: (i) working while receiving a pension, (ii) working without a pension, (iii) not working while receiving a pension, and (iv) not working without a pension. This distribution was analyzed by gender and hukou status over time and the results are presented in Figure 4. Overall, the proportion of people receiving a pension while working increased in both rural and urban parts of the PRC from 2011 to 2020. This trend is especially pronounced among rural older adults, with the proportion of rural men and women receiving a pension while working increasing by 23.7 and 23.9 percentage points, respectively. In comparison, the increase among urban older adults was more moderate, though the proportion still nearly doubled over the 10-year period for both men and women. Considering the vast regional socioeconomic disparities in the PRC, we also conducted descriptive analyses by region (i.e., Eastern versus non-Eastern). However, the differences in the distribution of combined employment and pension status by gender and years are not substantial (see Figure A4.2 in the Appendix).

In sum, we find that while older people in the PRC are less likely to not have any income (i.e., they do not work and do not receive a pension), there are two additional simultaneous trends: (i) an increase of traditional retirement (not working and receiving a pension) on the one hand, and (ii) an increase of working after retirement (working and receiving a pension) on the other. Ultimately, this suggests that increasing pension coverage will not incentivize people to exit the labor market. Even when accounting for pension status, the employment rate still increased over time.

B. Predictors of Working After Retirement Over Time from 2011 to 2020

To further examine the predictors of working after retirement, we estimated logistic random effects models by gender and *hukou* status. As we are interested in older people continuing to work while receiving a pension, we restricted our sample to those aged 50–79 years and receiving a pension, reducing our sample to 33,706. After removing the cases with missing data for key variables, the final analytical sample size is 28,956 person-years from 13,284 individuals.

The results are reported in Table 2. Models 1, 3, 5, and 7 are base models without adjusting for any predictors other than age and survey years for urban men, urban women, rural men, and rural women, respectively. The results show that the probabilities of working after retirement were significantly lower in 2011 than in other survey years regardless of gender and hukou status (the only exception is 2015 for rural men). The odds of working after retirement increased overall from 2013 to 2020 for urban men and rural women despite the increase not being in a linear fashion. Moreover, the magnitude of the increase differs by hukou status and gender. In general, urban older people experienced a greater increase in the likelihood of working after retirement than their rural counterparts. For example, the odds of working increased by 145.5% from 2011 to 2020 for urban men but only increased by 37.5% for rural men during the same period. As urban people mostly retire at younger ages than rural people due to the lack of mandatory retirement age for agricultural workers, there is more potential for urban pensioners to continue working than rural pensioners. Regarding gender differences, women experienced a greater increase in the probability of working after retirement than their male counterparts. In the same vein, this trend can be attributed to the fact that urban women often have a lower mandatory retirement age than urban men, and women also generally have a lower employment rate due to caregiving responsibilities, indicating that they have more room and opportunity to extend their working life beyond retirement age compared to their male counterparts.

To identify key predictors of working after retirement and explain the trends from 2011 to 2020, demographic characteristics, financial needs, health status, as well as household-level characteristics were added to the models and the results are shown in Models 2, 4, 6, and 8, respectively. Several common predictors for working after

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Results from Logistic Random Effects Models on Working After Retirement, 2011-2020 Table 2.

| | | Url | Urban | | | Rural | ral | |
|---|-----------|----------|----------|-----------|----------|----------|----------|----------|
| | M | Men | Wol | Women | M | Men | Wol | Women |
| | Base | Adjusted | Base | Adjusted | Base | Adjusted | Base | Adjusted |
| Variables | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 | Model 7 | Model 8 |
| Age (centered) | 0.794*** | 0.863*** | 0.847*** | 0.882*** | 0.872*** | 0.908*** | 0.950*** | 0.982 |
| | (0.025) | (0.028) | (0.015) | (0.018) | (0.019) | (0.020) | (0.012) | (0.013) |
| Age ² (centered) | 1.003 | 1.001 | 1.002 | 1.000 | 0.996** | 866.0 | 0.993*** | 0.995 |
| | (0.002) | (0.002) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) |
| Year (ref: 2011) | | | | | | | | |
| 2013 | 2.271*** | 2.319*** | 2.558*** | 2.881*** | 1.324* | 1.305* | 1.600*** | 1.518*** |
| | (0.450) | (0.507) | (0.602) | (0.703) | (0.180) | (0.177) | (0.190) | (0.184) |
| 2015 | 2.152*** | 1.895* | 3.443*** | 3.226*** | 1.179 | 1.177 | 1.505*** | 1.528*** |
| | (0.490) | (0.481) | (0.864) | (0.852) | (0.164) | (0.169) | (0.184) | (0.197) |
| 2018 | 2.023 *** | 2.292*** | 2.437*** | 2.756*** | 1.514** | 1.533** | 1.769*** | 1.844*** |
| | (0.430) | (0.544) | (0.609) | (0.716) | (0.203) | (0.213) | (0.210) | (0.231) |
| 2020 | 2.455*** | 2.668*** | 2.681*** | 2.777*** | 1.375* | 1.408* | 2.084*** | 2.226*** |
| | (0.546) | (0.660) | (0.684) | (0.749) | (0.190) | (0.206) | (0.251) | (0.291) |
| Marital status (ref: Not partnered) | | | | | | | | |
| Partnered | | 1.363 | | 0.323 *** | | 0.889 | | 0.408 |
| | | (0.586) | | (0.097) | | (0.138) | | (0.063) |
| Partnered but without partner information | | 1.739 | | 1.900 | | 1.413 | | 1.861* |
| | | (0.950) | | (0.755) | | (0.417) | | (0.543) |
| | | | | | | | | |

Continued.

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Table 2. Continued.

| | | Url | Urban | | | Rural | ral | |
|--|---------|-----------|---------|-----------|---------|----------|---------|-----------|
| | M | Men | Wo | Women | M | Men | Wo | Women |
| | Base | Adjusted | Base | Adjusted | Base | Adjusted | Base | Adjusted |
| Variables | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 | Model 7 | Model 8 |
| Education (ref: \leq Primary school) | | | | | | | | |
| Middle school | | 0.499** | | 0.579* | | 0.785* | | 0.603** |
| | | (0.109) | | (0.134) | | (0.086) | | (0.095) |
| ≥ High school | | 0.582* | | 0.788 | | 0.708 | | 0.656 |
| | | (0.123) | | (0.192) | | (0.130) | | (0.178) |
| Receive resident pension | | 1.524 | | 4.563*** | | 1.426* | | 1.350 |
| | | (0.345) | | (0.955) | | (0.252) | | (0.250) |
| Log (pension income) | | 0.751*** | | 0.865* | | 0.919* | | 0.915** |
| | | (0.038) | | (0.051) | | (0.036) | | (0.029) |
| No. of ADL-IADL difficulties | | 0.526*** | | 0.822*** | | 0.646*** | | 0.755 |
| | | (0.042) | | (0.041) | | (0.014) | | (0.013) |
| Spouse receiving occupational pension | | 0.442*** | | 1.043 | | 0.395*** | | 0.657 |
| | | (0.098) | | (0.238) | | (0.109) | | (0.104) |
| Spouse receiving resident pension | | 1.482* | | 2.224** | | 1.027 | | 1.129 |
| | | (0.285) | | (0.581) | | (0.103) | | (0.132) |
| Spouse currently working | | 19.734*** | | 11.419*** | | 7.335*** | | 8.297*** |
| | | (4.176) | | (2.539) | | (0.695) | | (0.812) |
| Spouse no. of ADL-IADL difficulties | | 1.070 | | 1.047 | | 1.135*** | | 1.147*** |
| | | (0.047) | | (0.050) | | (0.022) | | (0.023) |
| Number of living daughters | | 1.066 | | 1.023 | | 0.884** | | 0.979 |
| | | (0.101) | | (0.110) | | (0.034) | | (0.035) |
| | | | | | | | | Continued |

Continued.

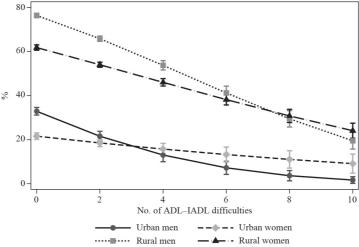
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Table 2. Continued.

| | | Url | Urban | | | Rural | ral | |
|---------------------------------|----------|----------|----------|----------|-----------|----------|----------|----------|
| | Men | en | Women | nen | Men | en | Woı | Women |
| | Base | Adjusted | Base | Adjusted | Base | Adjusted | Base | Adjusted |
| Variables | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 | Model 7 | Model 8 |
| Number of living sons | | 1.145 | | 1.207 | | 0.935 | | 1.034 |
| | | (0.112) | | (0.124) | | (0.041) | | (0.043) |
| Living with grandchildren | | 0.831 | | 0.635* | | 1.018 | | 0.923 |
| | | (0.150) | | (0.127) | | (0.087) | | (0.071) |
| Financial support from children | | 1.108 | | 1.382 | | 1.014 | | 1.314** |
| | | (0.189) | | (0.238) | | (0.107) | | (0.123) |
| Constant | 0.298*** | 2.311 | 0.038*** | 0.097 | 12.425*** | 7.004*** | 2.055*** | 1.395 |
| | (0.058) | (1.499) | (0.010) | (0.066) | (1.845) | (2.698) | (0.225) | (0.476) |
| Observations | 3,793 | 3,793 | 3,978 | 3,978 | 10,031 | 10,031 | 11,154 | 11,154 |
| Number of individuals | 1,827 | 1,827 | 1,938 | 1,938 | 4,534 | 4,534 | 4,985 | 4,985 |

Notes: Odds ratios are displayed with robust standard error in parentheses, all standard errors are clustered by individuals. ***p < 0.001, **p < 0.05.
Source: China Health and Retirement Longitudinal Study, 2011–2020. ADL = activities of daily living, IADL = instrumental activities of daily living.

Predicted Probability of Working After Retirement by the Number of ADL-IADL



ADL = activities of daily living, IADL = instrumental activities of daily living.

Notes: The solid lines represent average predicted probabilities; the error bars indicate the 95% confidence intervals for robust standard error. All standard errors are clustered by individuals.

Source: China Health and Retirement Longitudinal Study, 2011-2020.

retirement were found across all four subgroups. For example, functional health was found to be a strong predictor of working after retirement. As shown in Figure 5, when the number of ADL–IADL difficulties increases from zero to two, the probability of working after retirement decreases by 11.3 percentage points for urban men, 3.1 percentage points for urban women, 10.6 percentage points for rural men, and 7.8 percentage points for rural women. Apart from poorer health conditions, having a middle school education (as opposed to a primary school education) and a higher pension income were significantly associated with a lower probability of working after retirement, suggesting that having greater financial needs is a key motivation for working after retirement. In addition, having a spouse currently working is positively associated with the probability of working after retirement, which shows the interdependence of the older couple's retirement decisions.

In addition to the common predictors, rural—urban differences were found in the predictors of working after retirement. Specifically, having a spouse receiving a resident pension was significantly associated with a higher likelihood of working after retirement among urban but not rural older people. This might be because, in urban areas, only those who are marginalized in the urban labor market and are economically disadvantaged receive a resident pension, whereas in rural areas, receiving a resident

pension is common regardless of socioeconomic status (Zhu and Walker 2022). Moreover, having a spouse with more ADL–IADL difficulties was associated with a higher likelihood of working after retirement among rural, but not urban, older people. In rural areas, limited financial resources and weaker social protection systems mean that older people are more likely to work later in life to cover medical expenses and compensate for the loss of labor if their spouse has poor functional health.

The results also reveal gender differences in the factors associated with working after retirement. Partnered urban and rural women are 67.7% and 59.2% less likely, respectively, to work after retirement compared with their counterparts without a partner. However, these trends were not observed among men. The results suggest that sufficient spousal financial support is more important for women than for men in alleviating the need to work after retirement. There are also differences between rural and urban women. For example, living with grandchildren was only negatively associated with working after retirement among urban women, rather than rural women or men. This may be linked to the fact that gender norms prescribe women to have a more important role in family caregiving (Sia et al. 2021). Compared with rural women who are mostly engaged in agricultural work, urban women's work is less flexible and thus less compatible with caregiving.

C. Robustness Checks

The nature of our analyses is mainly descriptive and exploratory, and the results should be interpreted as associations rather than causal effects due to the observational design of the study. While the focus of the study is on the relationship between calendar year and work after retirement, potential endogeneity issues could arise when examining other contributing factors associated with working after retirement. For example, if older people are unable to work due to poor functional health, causality could thus run in the opposite direction. Moreover, omitted variables, such as people's ability to work or their personalities, may influence both the likelihood of working and other independent variables.

To ensure the robustness of the results, we conducted several additional tests: (i) To attenuate the potential biases arising from time-invariant omitted variables, we estimated fixed effects models (see Table A5.1 in the Appendix). This approach facilitates the understanding of the effects of covariates by focusing on within-individual variation over time (Allison 2009). The main results remain largely consistent, though the effect sizes for marital status and spouse's pension type are smaller. (ii) To enhance comparability with other studies, we also adopted alternative

definitions of working after retirement. These included defining retirement based on the oldest mandatory retirement ages for men (60 years) and women (55 years) and using retirement registration status (mainly applicable to employed urban people). Results based on these definitions are presented in Tables A5.2 and A5.3 in the Appendix. Additionally, in the main analysis, rural-urban status was defined using hukou status. Considering the substantial number of older rural migrants living in urban areas (Qin, Peng, and Wan 2024), we conducted analyses based on their residency rather than hukou status, with the corresponding results provided in Table A5.4 in the Appendix. (iii) The CHARLS dataset includes unit nonresponse and item nonresponse (including attrition). Given that both types of missing data are unlikely to be missing completely at random—for example, people with poorer physical and mental health are more likely to be missing—we used multiple imputations by chained equations to address the issue (Allison 2001, Young and Johnson 2015). The results with imputed data largely align with the main results, demonstrating the robustness of our main results. Technical details and the results are presented in Table A5.5 in the Appendix. In sum, these findings suggest that older Chinese people who continue to work after retirement are more likely to have lower socioeconomic status and fewer economic resources, indicating that financial need is an important motivator of working while receiving a pension at old age. This is explained by differences in pension replacement levels. While replacement levels for those under the UEP range from 45.5% to 48.8%, this drops down to 10.7%–15.3% for participants in the Residents Pension Program, with rural workers being at the lower end of this latter range (Xue and Zeng 2019). In addition, family contexts, such as spouse's characteristics and caring responsibilities, also play an important role in shaping older people's labor force participation decisions after retirement. It should be noted that after adding the covariates, the difference in the odds of working after retirement between 2011 and other years remain significant without substantial changes, which suggests that the individual-level and household-level characteristics considered in this study cannot fully explain the trends of working after retirement over the study period. Macro-level economic and political factors may play a more important role in the increasing trend of working after retirement in the PRC. Therefore, it is the policy and institutional context we turn to next.

V. The Policy Context

The analysis of survey data demonstrates the impact of pension reform on individual employment and retirement patterns. First, as expected, the statutory

retirement ages lead to a decrease in older people working when they reach a certain retirement age. Yet, this is not the case for everyone, as we simultaneously see an increase in employment beyond retirement age. This can be explained by the type of employment. During the PRC's economic transitions in the 1990s and early 2020s, many workers in state-owned enterprises were made redundant or retired early through "internal retirement" schemes. However, with the development of the market economy, older people have more opportunities to work in private companies and small enterprises where the mandatory retirement age is not strictly imposed (Che and Li 2018).

Second, as the retirement age is not necessarily mandatory, this allows women to stay in the labor force longer than envisioned by policy. Compared to men, there was a larger increase in women's uptake of pensions from 2011 to 2020. This can also be explained by the implementation of the Social Insurance Law in 2011 and tax exemption for contributions to employee pension plans. Consequently, the coverage of the UEP scheme and enterprise annuity has expanded during the study period, especially among women who are more likely to work in small enterprises and often lack continuous pension contributions (Zhu and Walker 2018, Fang and Feng 2020, Wong and Yuan 2020). Additionally, the low retirement age for urban women might contribute to them being more likely to delay their retirement even if they already receive a pension.

Finally, as there are opportunities to work after retirement, older people do so (if they wish to do so). Although pension coverage has increased overall, people are more likely to continue working beyond retirement age if they have lower education levels, less income support from spouses, and are more likely to be in good health. In other words, if they need the money and are able to work. While this has been the case for rural older people all along, the increase in women working after retirement may be due to women's lower likelihood of receiving an occupational pension, which is due to lower educational attainment and working in different sectors, and lower pension benefits due to lower salaries, as well as fewer years in the labor force (Zhao and Zhao 2018). We thus see that despite pension reforms and increased coverage, the PRC's pension system continues to reinforce preexisting gender and socioeconomic inequalities (Liu and Sun 2016).

A. Pension-Related Policies and Plans

If the PRC's pension system influences who works after retirement (i.e., mandatory versus flexible retirement) and why (e.g., low benefit levels), a key

question is to what extent policies regulate the increase in work after retirement. Pension policies stipulate the age at which older people can receive a pension and how many years a person would have needed to pay into the system to receive any benefits. Pension policies therefore mainly regulate who can register for a pension, determine monthly pension payments, deal with any transfers, verify the pension benefit level, and finally pay the pension (State Council 2014b, see Table A1 in the Appendix). They thus neither allow nor prohibit working after retirement. These policies are mainly concerned with setting rules for pension financing, including individual or employer contributions and government subsidies, and adjusting pension levels as well as the administration, management, and transfer of pension funds (State Council 2011, 2014b, see Table A1 in the Appendix).

Each pension system, however, is somewhat different. The UEP is a mandatory pension scheme, which every formally employed, full-time worker must pay into (Queisser, Reilly, and Hu 2016). It comprises two pillars: (i) a pay-as-you-go contribution made by the employer, which is socially pooled; and (ii) an individual account, which acts as an individual savings account for the employee (State Council 1995, see Table A1 in the Appendix). UEP pension accounts are therefore individually based. Although paying into the scheme is mandatory, policies do not discuss mandatory retirement as such. According to a 1997 policy, "employees who join the workforce after the implementation of this decision and have accumulated 15 years of personal contributions will receive a basic pension on a monthly basis after retirement" (State Council 1997, Article 5, see Table A1 in the Appendix). The same language is used in the 2005 update to the pension policy, where it is stated that "those who reach retirement age but have paid less than 15 years of premiums will not be given basic pensions; the balance in their personal accounts will be paid to them in one lump sum, and their basic pension insurance relationship will be terminated" (State Council 2005, Articles 5 and 7, see Table A1 in the Appendix). The language used in the policy texts thus does not prohibit working beyond retirement. It is mostly seen as a given that an employee commences his retirement once he reaches the retirement age. That working after retirement is possible is also evident in the fact that older people in the UEP scheme can continue to work, either as wage workers or self-employed workers, but they must end their preexisting, long-term employment (Giles et al. 2023).

In contrast to the UEP and the civil servant pension scheme, the Urban and Rural Residents Pension systems are voluntary (Queisser, Reilly, and Hu 2016). Individuals can join the scheme by choosing a level of individual contribution, which the government subsidizes. Both contributions are added to an individual account (Wang and Huang 2023). In residential pension policies, the language used is similar but

slightly different to the UEP. When the Urban Residents Pension scheme was established, it stipulated that "urban residents who participate in urban residents' pension insurance and reach the age of 60 can receive a monthly pension" (State Council 2011, Article 7). In contrast to the UEP, which outlines that employees "will" receive their pension after reaching retirement age, the Urban Residents Pension states that they "can" receive a pension, making the withdrawal of the pension voluntary. In the words of Queisser, Reilly, and Hu (2016), they are thus "pensionable" (p. 353) at 60 years old. Yet neither this policy, nor the policies outlining the integration of this scheme with the New Rural Pension Scheme in 2014, explicitly state that older people must retire or that they cannot work after they reach the retirement age. They just stipulate pension eligibility based on age (60+ years), having paid in for 15 years, and not having received a basic state pension prior to taking up the pension (State Council 2014a, see Table A1 in the Appendix). Older people can continue to work, which may be a necessity since most people on the resident pension scheme are not able to survive on their pension income alone (Giles et al. 2023). A primary difference is thus that while the UEP is a mandatory scheme and beneficiaries have mandatory retirement ages, this is not the case for beneficiaries of the Urban and Rural Residents Pension schemes, which are voluntary.

The two pension schemes—the UEP, which was merged with the civil servant scheme in 2015, on the one hand, and the resident pension schemes on the other hand—function in different ways due to their historic development The former was born out of the necessity to reinstate old-age security for workers in the Reform and Opening period after 1978. While the mandatory retirement ages were set in the 1950s and remain the same today, enterprises became responsible for paying pensions out of current revenues after the collapse of the old system during the Cultural Revolution. With state-owned enterprises restructuring or going bankrupt, and growing private sector employment in the 1990s, there was a need to create a mandatory pension system that forces employers to enroll their employees to ensure the system's financial sustainability (Salditt, Whiteford, and Adema 2008). Similarly, in the 1980s and 1990s, there was a clear sense of needing to introduce retirement ages for Party cadres and civil servants to end "lifelong employment" (Liu 2018, p. 193). Civil servants are thus also subject to mandatory retirement ages, although their pension scheme was noncontributory until the merger with the UEP in 2015. Benefits were calculated based on the number of years in employment and funded via the general government budget (Wang and Huang 2023). Pension reforms have thus focused on managing the transition from a socialist to a quasi-market economy by creating mandatory pension systems with mandatory retirement ages for formal workers and civil servants. This

was not the case for rural residents, who had never previously been part of a pension system (Salditt, Whiteford, and Adema 2008). Therefore, the Urban and Rural Residents Pension systems support the rest of the population with a very basic form of old-age support.

However, even if participation in the UEP and civil servant pension schemes is mandatory, policies do not state that employees must leave the workplace when reaching retirement age. If this is the case, how are mandatory retirement ages enforced? While the State Council is the primary government agency adopting pension policies (Cai and Cheng 2014), it might be that ministerial-level, pension-related policies provide further insights into how policies regulate work after retirement. A review of the policies of the Ministry of Human Resources and Social Security, Ministry of Finance, and Ministry of Civil Affairs (MCA; see Table A1 in the Appendix for details) shows that these policies are more concerned with managing pension funds and benefits—not enforcing retirement. Subnational policies are more revealing in this regard. Under a 2021 policy issued by the Jiangsu Provincial Government, enterprises must report any formal, full-time employees to the relevant agency when they reach their mandatory retirement age, thereby registering them for retirement and beginning the process of issuing pension benefits. Part-time or casual workers can register for retirement themselves, if they have opted to participate in the UEP voluntarily (Jiangsu Provincial Government policy 2021, see Table A1 in the Appendix). While pension policies do not explicitly forbid working after retirement, it is the administration behind formal employment that enforces mandatory retirement ages by phasing employees out of their employment relationship.

However, the scholarly literature demonstrates that the local implementation of government policies varies by sector. As noted above, Che and Li (2018) find that private and small enterprises often do not impose mandatory retirement ages, indicating that they at times refrain from registering workers for retirement when they reach statutory retirement ages. Companies may also shirk mandatory enrollment in the UEP scheme. As Wang and Huang (2023) note:

Although enterprises are legally required to enroll in the [UEP], private enterprises, which account for over 90% of the market, many adopt diverse forms of employment besides the formal variety. By negotiation, enterprises pay their employees higher salaries rather than make larger pension contributions, indicating that the legal participation requirement is only ostensibly implemented in practice (pp. 42–43).

Variation in policy implementation explains some of the diversity in retirement patterns outlined above. Moreover, as pension policies do not prohibit working while receiving a pension, older people can rejoin the workforce, albeit with a different employer, which, as Cai and Cheng (2014) note, often means earning lower wages and not accruing additional pension-related benefits. Finally, since employees who are not engaged in formal, full-time enterprise employment can register to receive pension benefits themselves, they are not automatically pushed out of the labor force.

B. The Wider Policy Context

If pension policies and administration to some extent push certain formal employees out of the workforce, are there any policies that facilitate work after retirement? For example, the Government of the PRC issues retirement-related policies. Yet, these are centered around special groups of retirees such as military cadres (MCA 2012, see Table A1 in the Appendix), high-ranking academics in public institutions (MCA 2013, see Table A1 in the Appendix), and state-owned enterprise workers (MCA 2020, see Table A1 in the Appendix), who may receive additional subsidies or benefits due to their special status. However, the PRC's retirement policies are increasingly focused on supporting "active aging" and "healthy aging" in accordance with WHO (2002) guidelines. Retirement-related policies follow the WHO's guidelines by supporting retired people's engagement in cultural and sports activities (MCA 2012, see Table A1 in the Appendix), continued opportunities to learn and study (i.e., lifelong learning) (Ministry of Education 2012, see Table A1 in the Appendix), access to health (MCA 2012, see Table A1 in the Appendix; MCA and Ministry of Finance 2013, see Table A1 in the Appendix), and elder care services in the form of community-based services (MCA 2012, see Table A1 in the Appendix). Thus, while not explicitly mentioning working after retirement, retirement policies reflect key objectives of the active and healthy aging agenda. Could it be that due to bureaucratic fragmentation policy objectives in different policy areas contradict each other?

An analysis of the PRC's active and healthy aging policies suggests that the government is supporting all WHO principles—except for continued labor market participation. The concepts of active aging and healthy aging have been increasingly significant for the government's thinking around mitigating aging-related social risk (Krings et al. 2022). This is most evident in the Chinese party-state's Healthy China 2030 agenda and the PRC's Five-Year Plans for Healthy Ageing (see Table A1 in the Appendix). Yet, the PRC's healthy aging agenda seems to primarily be focused on improving older people's health by improving medical care and elder care, and the integration of the two—not by promoting other dimensions such as continued employment in old age. This approach focuses on improving older people's functional

abilities in old age, while other dimensions of the WHO's concept—such as continuing economic, social, cultural, spiritual, and civic participation—are not discussed (see Table A1 in the Appendix). Counterintuitively, these forms of participation receive even less attention in healthy aging policies than in retirement policies. This emphasis on health in the PRC's healthy aging strategy is moreover reflected in Chinese academic research (Ko and Yeung 2018; Yu 2020; Chu and Chen 2021; Shi, Liu, and Feng 2023). Although being in good health is an important factor in enabling working after retirement, healthy-aging-related policies and initiatives thus fail to consider that people may wish to continue working after retirement due to job satisfaction or financial necessity (Kong et al. 2022).

In sum, the analysis of the policy context demonstrates that working after retirement is a nonissue in Chinese policies. It does not seem to be of importance or policy concern, even in policies that would most likely address it in some way. Recent government activities indicate that this might be changing. Although increasing the retirement age has been discussed for some time, this was not adopted in practice until 2024 due to societal opposition (Feng et al. 2019, Wang and Huang 2023). However, as early as 2010, local governments, such as in Shanghai, began pilot projects allowing workers of both genders to defer their retirement beyond their statutory retirement ages until the age of 65 (Cai and Cheng 2014). More recently, there are indications of pending policy changes at the national level. A recent State Council policy on Opinions on Strengthening Ageing Work in the Era stated that flexible employment models should be created for older people and that localities should create information bases for older "talents" and "qualified personnel," offering job introductions, vocational skills training, and guidance services for older people who would like to continue to work (State Council 2021, Article 12, see Table A1 in the Appendix). In addition, the central government has recently created an online platform, the Chinese Older Talent Website (中国老年人才网), indicating that more is being done to promote, and perhaps eventually regulate, work beyond the retirement age (National Ageing Commission 2023).

VI. Discussion and Conclusion

The study thus finds that despite an expansion of pension system coverage, there is an increase in older Chinese people working after retirement, particularly those who have lower education levels, less income support from spouses, and are more likely to be in good health. This points to a growing need to supplement pensions with

additional income since pension levels are too low for some older people to survive. Although there are some indicators of change, policymakers have treated this phenomenon as a nonissue. They do not regulate this behavior, pointing to a policy gap. How can we explain the lack of policy attention? And what implications does this have for the sustainability of the PRC's social protection system?

A. Explaining the Findings

The findings above demonstrate the combined effect of push and pull factors, which simultaneously pull certain older people into the labor market, while pushing others out. On the one hand, as working after retirement is not prohibited by government policy, many older people continue to work. While our study suggests that people from lower socioeconomic backgrounds seek to increase their income at old age by continuing to work, a recent Retirement and Reemployment Survey Among Older People from 2022 suggests there are further incentives: 46.7% of older people seek reemployment to enhance their personal and societal "value," 34.3% wish to contribute to their family's income and enhance their personal income to meet higher consumption needs, and 19.0% aim to fulfill career development opportunities (199IT. com 2022). Moreover, as other studies show, older people who have high levels of job satisfaction may also want to continue to work, irrespective of income (Kong et al. 2022). In contrast to these pull factors, government regulations seem to act as a push factor, which pushes older people, particularly those covered by the UEP and civil servant pensions, out of the labor market. This is due to the combined effect of mandatory statutory retirement ages and higher pension levels for people under these schemes (Giles et al. 2023).

Since increasing older people's labor market participation has a triple dividend—meaning a larger labor force, reduced pressure on public finance, and the smoother replacement of retired workers (Feng et al. 2019)—a key question is why policies treat working after retirement as a nonissue. There are several potential reasons for this: Labor market participation in old age is linked to debates around increasing the retirement age. Although Chinese policymakers are concerned about the financial sustainability of the PRC's pension system and the decrease in the working-age population, statutory retirement ages were only increased in 2024 (while gradually coming into effect in 2025) and remain low by international comparison (Nulimaimaiti 2024). This somewhat delayed decision to increase pension ages may be due to the fact that raising statutory pension ages has been highly unpopular among the Chinese population, in particular among those approaching retirement age (Feng et al. 2019). As Cai and Cheng

(2014, p. 644) note: "Those whose interests are damaged in the process resist change, while those whose interests are advanced support change. Conflicts between the losers and winners affect the outcome of reform." In addition, some studies suggest that delaying retirement or older people's exit from the labor force may increase youth unemployment (Dai et al. 2022), which is another sensitive issue for the government. Finally, the government's own policies continue to propagate a reliance on the family to provide care for children and older people (Krings et al. 2022). Older people have been encouraged to engage in caregiving and volunteer in their community—not to continue to work. Therefore, the Chinese party-state may be delaying its decision to increase retirement age.

Yet, statutory retirement ages have influenced social perceptions, norms, and expectations around retirement, which may reduce older people's willingness to retire at a later stage. Presently, people aged 60 years are considered to be old. This, for instance, has resulted in age specifications that discriminate against older job seekers in the PRC. Moreover, even with low statutory retirement ages in place, many Chinese retire early (Feng et al. 2019). Therefore, despite the increase in retirement age, social norms may somewhat impede the impact of increased retirement age. Conversely, those who want or seek to work beyond the retirement age continue to receive little support. The government does not offer training and educational programs for older adults (Feng et al. 2019), although there are many opportunities for lifelong learning (Guo and Shan 2019). In other words, while certain older people are eventually pushed out of the labor market, recent policy changes do not consider the significant pull factors that incentivize older people's continued willingness to work beyond the statutory retirement age.

B. Implications for the People's Republic of China's Social Protection System

What are the implications of the mismatch between push and pull factors for the PRC's social protection system? Chinese (Cai 2020) and international academics (Zhu and Walker 2022, Park and Shin 2023, Kikkawa et al. 2024) have pointed to the contribution that older people's continued labor market participation could make to economic restructuring and the sustainability of social protection systems, in particular the pension system, which has been deemed to be financially unsustainable (Cai and Cheng 2014). Therefore, the delayed decision to increase retirement age seems to have limited the Chinese party-state's ability to reap the benefits of the "silver demographic dividend." However, as Feng et al. (2019) note, merely changing retirement ages will not suffice as social norms around retirement prevail and different older people have

different needs. Instead, the Chinese party-state needs to take a holistic approach to facilitating work beyond the retirement age—for instance, through flexible retirement policies (Zhu and Walker 2022), continued training for older people, and age-friendly working environments that reduce age discrimination by employers. Authorities also need to consider the diversity of individual reasons for continuing to work, as outlined above. Moreover, facilitating older people's continued economic participation supports active and healthy aging. Studies have pointed out that opportunities to generate income support healthy aging as do education, marriage, and good health (Chu and Chen 2021). As Evans et al. (2018) note, enabling older people to support themselves financially would help address the PRC's declining birth rate and migration patterns, which make familial care less available to older people. Increased income at old age would therefore relieve pressures on families to provide care and allow older people to age in place as they could stay in their homes and purchase care. Finally, an increase in statutory retirement ages would also impact older people's ability to provide informal childcare. Although the Government of the PRC has made some progress in improving childbirth and childcare policy, significant challenges remain, including insufficient implementation (UNICEF 2024, Wang and Yang 2024).

Therefore, while a transformation of the government's push (out of) to a pull (into) the labor market—for instance, through the recent increase in statutory retirement ages—can help reduce pressures on the PRC's social protection system, particularly in relation to pensions and elder care, it does not necessarily reduce the gender-based and socioeconomic inequalities mentioned above. People in informal work with lower pension benefits, especially in rural areas, will need to continue to work as long as they are physically able to (Giles et al. 2023). In addition, socioeconomic inequalities are compounded by gender inequalities as women earn less and take on the majority of care work (Connelly et al. 2018). As long as the PRC's welfare state is conservative and not based on universalism (Liu and Sun 2016, Aspalter 2023), social inequalities at old age will persist and be further exacerbated by intersectionalities.

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Appendix

To view all appendixes, readers can refer to the supplemental material that is available at: https://www.worldscientific.com/doi/suppl/10.1142/S0116110525500209.

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