# Capture versus Redistribution: Local Determinants of Pension Fund SOE Share Transfers in China

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In China, demographic changes and slowing economic growth have put increasing pressure on a fragmented and underfunded pension system. Despite recent efforts to equalize income distribution and eliminate poverty, income inequality among older households in China has been rising, and although a more equitable social security system with broader coverage has developed over the past decade, the fragmented nature of the current public pension system exacerbates rising older household income inequality. As Frazier (2010; 2015) has shown, processes of socioeconomic and institutional change in the 1990s and early 2000s shifted China's growth model and the relative bargaining power of workers, state-owned enterprises (SOEs), local governments, and central governments, leading to a locally-based regressive social security system. In this paper, I argue that China's recent shifts towards a "state capitalist welfare state"—the use of state ownership in a predominantly market economy to support redistributive goals—are also conditioned by local-central and state-firm bargaining dynamics, with large degrees of local variation. Utilizing variation in the timing and scope of provincial efforts to transfer SOE capital shares into local social security funds, this paper explores the emerging characteristics of a growing welfare state in China's state capitalist system. I find that the willingness of provincial governments to implement these transfers is a function of both the scale of the provincial demographic challenge as well as the performance and strength of local SOEs. In particular, stronger local SOEs are able to resist transfers, with important implications for system development.

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## I. Introduction

China's persistent inequality and aging population, combined with slowing economic growth, have put increasing pressure on a fragmented and underfunded pension system. Despite recent efforts to equalize income distribution and eliminate poverty, income inequality among older households in China has been rising, and although a more equitable social security system with broader coverage has developed over the past decade, the fragmented and underfunded nature of the current public pension system exacerbates older household income inequality rather than ameliorates it.

Since 2013, Xi Jinping has stressed Communist Party of China (CPC) efforts to "build a socialism that is superior to capitalism" (建设对资本主义具有优越性的社会主义).[1] Although most observers define China's system as a combination of political Leninist authoritarianism and economic state capitalism, with "socialism" itself seen as rhetoric,[2] it would be short-sighted to ignore the CPC's socialist proposals to confront what it identifies as the "principal contradiction" in modern China between "unbalanced and inadequate development and the people's ever-growing needs for a better life."[3] It has become increasingly clear that one way the CPC intends to achieve this goal is by funding increased social expenditure, social insurance, and income redistribution, not through a modern taxation system, but through state-owned enterprise (SOE) share transfers and dividends. As China faces dual challenges of rapid aging and persistent inequality across multiple dimensions, the use of state asset ownership in a predominantly market economy to develop a non-tax-based redistributive welfare system—what this paper calls a "state capitalist welfare state"—has huge implications for China's socioeconomic development and CPC legitimacy.

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[1] 习近平. "关于坚持和发展中国特色社会主义的几个问题", 求实, March 31, 2019. Available at: http://cpc.people.com.cn/n1/2019/0331/c64094-31005184.html.
[2] Naughton, Barry. "Is China Socialist?" *Journal of Economic Perspectives* 31(1) (2017): 3-24.
[3] Xi, Jinping. "Secure a Decisive Victory in Building a Moderately Prosperous Society in All Respects and Strive for the Great Success of Socialism with Chinese Characteristics for a New Era." Speech delivered at the 19th National Congress of the Communist Party of China. October 18, 2017. Available at: http://www.xinhuanet.com/english/download/Xi_Jinping's_report_at_19th_CPC_National_Congress.pdf.

After four decades of nearly double-digit economic growth, China has become an upper middle income economy and the world's second largest economy. Yet structural and demographic changes have led to decreasing returns to capital and slower economic growth while exacerbating inequality and pressuring fragmented and underfunded social security and welfare systems. Despite assertions of a "socialist" market economy, China's overall public financial system actually remains regressive, and social security expenditure as a share of GDP in China remains only half that of OECD countries. Rising inequality, limited redistribution, and weak social insurance pose social, political, and economic challenges. Inequality is a barrier to growth, and demographic change and the needs of a modern economy require publicly provided social insurance and increased spending. No resource-scarce country with so underdeveloped a social security system and such high levels of inequality has ever made the transition to high income.[4]

The CPC recognizes the challenges this poses for China's high income transition and the need for a greater state role. Until relatively recently, China appeared to be following the playbook of other successful high income economies by expanding broad-based taxation to enable higher levels of social expenditure. As Zhu Rongji pushed through massive SOE restructuring in the late 1990s, the beginnings of a welfare system were put in place, and by the mid-2000s, China's rural poor became net recipients of state largesse for the first time in PRC history. A modern taxation system began to tax all enterprises at equal corporate rates while expanding progressive personal income taxation, all in order to finance a rapidly expanding (albeit from a small base) welfare state.

SCWS as envisioned by the CPC marks an end to that convergence and a return to an earlier model of SOE-based public finance; yet this is not the *danwei*-based iron rice bowl, but rather a more sophisticated and potentially sustainable SOE-based public finance 2.0. China's tax-based revenue has shrunk in relative terms while social expenditure continues to rise. While public economic expenditure has relied on debt financing, China in recent years has begun funding social expenditure by increasing the role of SOEs in managing capital investments and

[4] Bulman, David, Maya Eden, and Ha Nguyen. "Transitioning from low-income growth to high-income growth: is there a middle-income trap?" *Journal of the Asia Pacific Economy* 22 (2017): 5-28.

contributing profits and corporate shares to social security funds. This latter effort became explicit State Council national policy in 2017 after its initiation in Shandong in 2015.[5]

Yet these efforts remain in initial stages, and their implementation varies greatly across China's provinces. Although SOE share transfer were intended to be completed by 2021 in all provinces, over half of China's provinces have yet to set up a social security council and transfer shares. These nascent efforts have important implications for China's future growth and the attractiveness of the "China model," but weak implementation to date leaves many questions unanswered regarding future development.

This paper sets out to understand varied implementation across China's provinces: which provinces have led and which have lagged, and what do relevant provincial characteristics imply about provincial motivations and capabilities? In particular, the paper compares two potential rationales: addressing deep-rooted challenges related to demographics, inequality, and pension fund sustainability; and using share transfers to help reform SOEs. Rhetorically, the system has been designed and implemented to mark benefits of socialism and ease the challenges of unequal aging, and evidence from this paper finds supportive evidence that provinces facing the starkest demographic challenges and pension fund unsustainability are most likely to engage in reforms. Yet the evidence also suggests that the goals of SOE reform have been equally prominent, and, problematically for future reform, where SOEs are strongest in terms of both size and performance, reform implementation is least likely.

The paper proceeds as follows. The following section discusses the aging and old-age poverty and inequality challenges that China faces, and how the existing pension system fails to suitably address these challenges. Section III discusses China's proposed SOE share transfer solution and how this fits with Xi Jinping's efforts to "build a socialism that is superior to capitalism," before outlining share transfer progress to date, including origins and lagging geographic implementation. Section IV introduces competing hypotheses for differential implementation and then tests these hypotheses quantitatively. Section V concludes.

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[5] 国发〔2017〕49 号: 国务院关于印发划转部分国有资本充实社保基金实施方案的通知. Available at: http://www.gov.cn/zhengce/content/2017-11/18/content_5240652.htm.

## II. The challenge: sustainably funding equitable aging

On the surface, China in the Xi Jinping era has successfully addressed many challenges related to demographics and distribution. The Gini coefficient has peaked, extreme poverty by the CPC's own definition has been eradicated, rural-urban gaps are shrinking, and wage-based inequality has declined. But China is aging rapidly and has become a global outlier in terms of the age distribution of poverty and inequality. The multi-pronged pension system that China has developed and implemented is laudable in terms of its rapid expansion of coverage, but the generosity of benefits remains extremely low for non-formal urban and rural residents, and the current system is both itself a major *cause* of old-age inequality as well as financially unsustainable as the country ages. The following sub-sections lay out the challenges that China faces in terms of aging and inequality and the inability of the current pension system to address these challenges.

### *Aging, poverty, and inequality*

China is aging rapidly, and it has become a cliché to note that China is getting old before it gets rich. According to China's Office of the National Working Commission on Aging, the number of elderly will rise to 300 million by 2025 and 400 million by 2033 before peaking at nearly 500 million people in 2050, fully 35% of the population.[6] The working age population itself will shrink by over one-quarter over this period. Consequently, according to UN data, China's old-age to working-age population ratio will rise from 18.5% in 2020 to 58.3% in 2060, exceeding average OECD levels in that year. In other words, China will go from having more than five workers per retiree today to having fewer than two workers per retiree within the next 30 years. Other countries face similar future old-age dependency ratios, but no other country will experience such a rapid aging of its population over this period; China reaped the benefits of a demographic dividend for 30 years in the post-Mao era, and it now faces a turbocharged reversal.

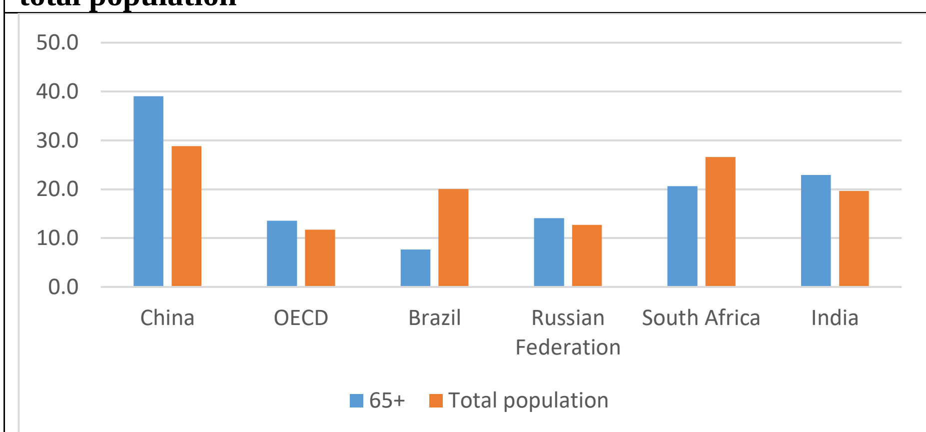
Aging in a middle-income country with high levels of inequality and poverty poses a deeper challenge than it does in a developed country or a country with low levels of inequality.

[6] http://www.xinhuanet.com/english/2018-07/20/c_137338328.htm

Partially as a result of rapid economic and human capital growth in the compressed post-Mao decades, China's current elderly population faces greater problems of poverty than younger cohorts. Poverty is particularly acute for rural elderly, up to 19% of whom had consumption levels below the official poverty line a decade ago, according to the nationally-representative China Urban and Rural Elderly Survey.[7]

Although across the OECD as a whole, poverty risks have shifted from older to younger cohorts since the 1990s; in China, the opposite has occurred. Defining relative old-age (65+) poverty as having income below half the national median equivalised household income, following the OECD, China's old-age poverty is over 10 percentage points higher than poverty among the general population, and these levels are significantly higher than in OECD and other BRICS economies (Figure 1). In the OECD, falling poverty risk has been driven by rising older employment rates—employment rates for 55-64 year old cohorts grew by 18% in OECD countries from 2000-2018—which China has not experienced. Instead, in China employment for this age cohort has remained low and static (after falling considerably in the 1980s and 1990s as a result of rural-urban migration).

**Figure 1. Relative poverty rates among older age groups and the total population**

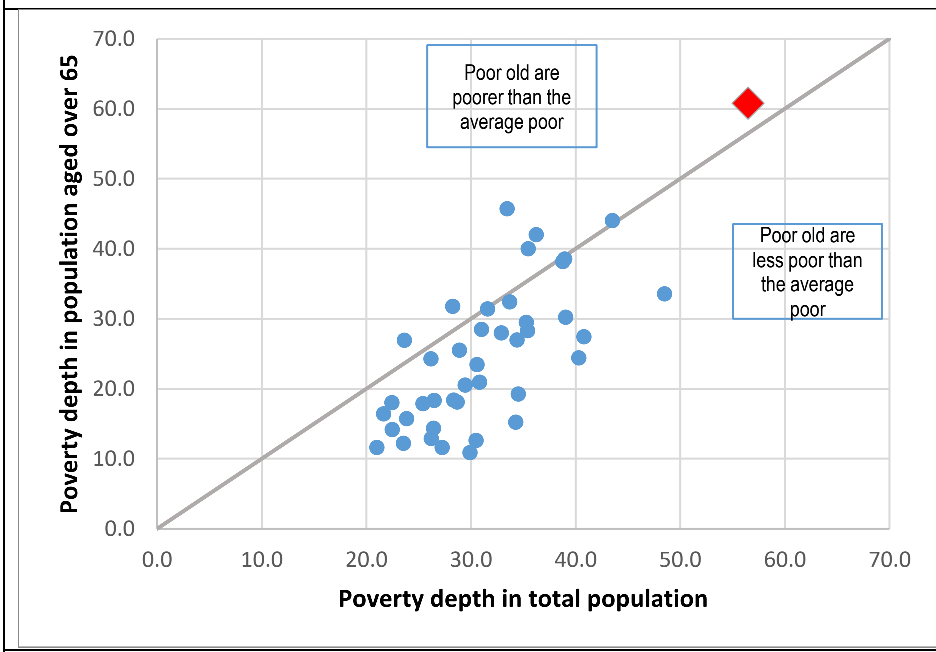



Note: Relative poverty is defined as an income below half of the national median equivalized household income.
Source: OECD 2020

[7] Dorfman, et al. 2013

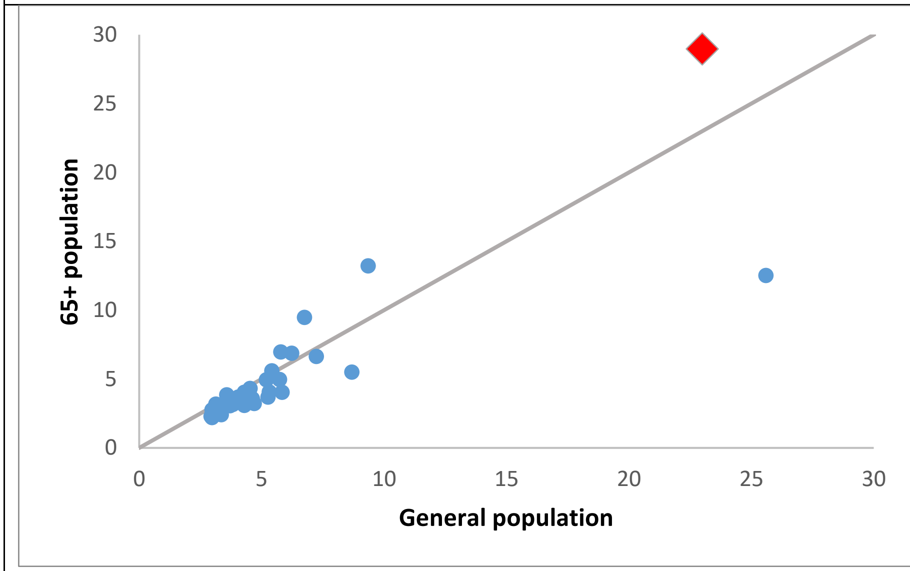
China faces persistent old-age poverty despite rapid economic growth as a direct result of extremely high levels of old-age inequality. China's poor old are poorer on average than younger poor populations (see Figure 2). While China as a whole has faced rising and high levels of inequality, these challenges are greater for the older population, as seen in Figure 3 below that compares the 90th percentile income to 10th percentile income for the 65+ population and the general population across OECD and BRICS economies. In terms of both old-age poverty depth and old-age inequality, China is an extreme global outlier.

**Figure 2. Poverty depth, old-age population versus total population**




Note: Poverty depth is defined as the mean income gap of the poor population relative to the poverty line (in % of poverty-line income)
Source: OECD 2020

**Figure 3. 90th percentile-10th percentile income ratios**




Note: China is the red diamond. OECD and BRICS economies represented by blue circles.

Source: OECD 2020

*Existing pension system inadequacy: inequality*

Yet China's current pension system does little to address old-age poverty and actually exacerbates inequality. At a simplified level, the public pension system has two different components that make up the bulk of the system: employment-based pension systems for urban formal workers and civil service employees, and a social pension system for rural and urban residents. The urban employment-based pension system is generous but increasingly underfunded; the social pension system has expanded rapidly over the decade of its existence in terms of coverage, but remains extremely limited in terms of benefits.

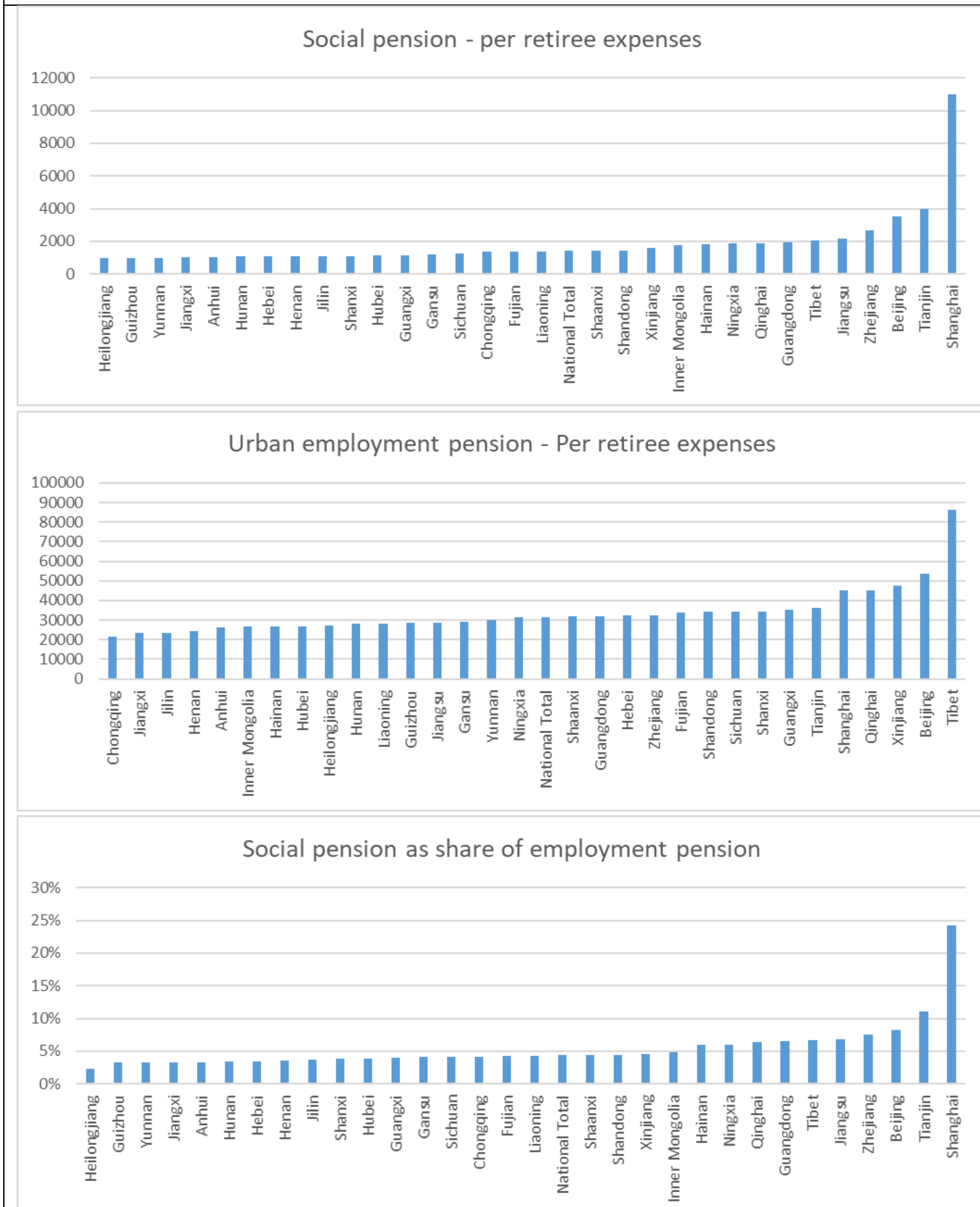
Social pensions grew from covering only 1% of the elderly in 2009 to covering over 75% in 2013, but this expansion was based on maintaining miniscule benefits. Less than 30% of the current working-age population is covered by the considerably more generous urban employee and public unit pensions. This dual approach leads to considerable inequality given that social pension annual benefits are only ~2% of GDP per capita, *25 times* lower than public unit pensions at 50% of GDP per capita. Using household income and consumption survey data to look at the distribution of pension benefits across income quartiles, Shen and Lee find that public pensions are highly regressive, in contrast to education and health care spending. Elderly in the top quartile received nearly 12,000 RMB, those in the second quartile receive 4000 RMB, and those in the bottom quartile receive only 250 RMB, about 2% of those in the top quartile![8] The gap between formal unit employees and self-employed/informal workers is extremely large. This gap of course exists elsewhere, but on average in OECD countries, median retired self-employed public pensions are only 22% lower than formal employee public pensions.

This inequality has a clear impact on elderly work: while employment pensions greatly decrease probably of elderly working (and hours), social pensions are correlated with greater likelihood of work (and more hours).[9] Much of this inequality is rural-urban: while over 60% of retirees in urban areas feel they can rely on their pension as a primary financial source, only 20% of rural retirees feel they can, while 70% of rural retirees expect to rely on their children.[10]

Inequality is also stark across provinces (see Figure 4). Average payments per retiree in the social pension program range from under 1000 RMB annually in Heilongjiang, Guizhou, and Yunnan, to over 10,000 RMB annually in Shanghai.[11] Average payments per retiree in the urban employment pension program range from 21,000 RMB annually in Chongqing to over 80,000 RMB in Tibet. And the relative generosity of the two programs varies greatly by province as well, with social pensions only 2% as generous in Tibet as urban employment pensions, while that share is 24% in Shanghai.

[8] https://www.adb.org/sites/default/files/publication/31241/ado-2014_1.pdf
[9] ILO. https://www.ilo.org/wcmsp5/groups/public/---dgreports/---inst/documents/publication/wcms_659543.pdf. Based on: China Health and Retirement Longitudinal Survey (CHARLS).
[10] ILO. https://www.ilo.org/wcmsp5/groups/public/---dgreports/---inst/documents/publication/wcms_659543.pdf. Based on: China Health and Retirement Longitudinal Survey (CHARLS).
[11] Note that average payments here are calculated simply as overall pension annual expenditures divided by total recipients.

**Figure 4. Pension generosity across programs and provinces**




Source: Author’s calculations based on China Statistical Yearbook 2017

*Existing pension system inadequacy: financial unsustainability*

China's pension system has risen rapidly and meets current needs, but it is vastly underfunded when it comes to future payments. Even without increasing benefits, population aging will drive the system to insolvency. If China hopes to increase social pension generosity, this insolvency will come much sooner.

Pension systems worldwide face funding challenges as populations age: already, public pension spending in the OECD accounted for 18.4% of total government spending in 2015 (OECD 2020). In China, according to IMF economists, population aging will result in spending increase from under 4% of GDP to over 10% of GDP from 2015-2050, even with no increase in generosity.[12] And contributions will only reach 2.8% of GDP, leaving a gap of 7.3% of GDP. Consequently, the system's actuarial imbalance (i.e., the present discounted value of benefits minus contributions) is nearly 125% of 2015 GDP. In other words, funding pensions through 2050 would result in an increase of 125% in public debt. Other researchers find similar estimates.[13]

A widely circulated and discussed 2019 report released by the Chinese Academy of Social Sciences and the Ministry of Human Resources and Social Security's National Council for Social Security Fund[14] forecast that the pension balance would become negative by 2028, and reserves would dry up by 2035, with payment shortfalls accumulating to 11 trillion RMB by 2050. Today, pension benefits already exceed revenues in many provinces.[15]

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[12] Soto and Gupta (2017)

[13] Li and Zhang (2013) find the average of estimates for the "unfunded pension liability" of the social pension scheme to be 86% of 2010 GDP. See Li, Yan, and Xiaojing Zhang. 2013. "China's Sovereign Balance Sheet Risks and Implications for Financial Stability." In China's Road to Greater Financial Stability: Some Policy Perspectives, edited by U. Das, J. Fiechter, and T. Sun. Washington: International Monetary Fund. Ma, Zhang, and Li (2012) estimate the employment pension imbalance over 2013–50 at 83% of 2011 GDP (Zuo 2013)." See: Ma, Jun, Xiaomeng Zhang, and Zhiguo Li. 2012. A Study of China's National Balance Sheet. Beijing: Social Sciences Academic Press.
See also: Zuo, Xuejin. 2013. "Reforming Pensions to Ensure Equitable and Adequate Retirement Incomes in China." In Sustainable and Equitable Pensions: Challenges and Experiences, edited by B. Clements, F. Eich, and S. Gupta. Washington: International Monetary Fund.

[14] 《中国养老金精算报告 2019-2050》

[15] And this does not mention the 空账 problem: there should be 社会统筹 and 个人 accounts, but the former illegally borrows from the latter to pay current retirees, leading to an empty account. As of 2015, the urban employee pension fund had accumulated 4.7 trillion RMB, but only 3.5 trillion RMB had actually been deposited. See: https://www.jiemian.com/article/1581875.html.

All of these estimates assume that basic social pension expenditure remains miniscule. Nearly 40% of the working age population contributes to social pensions contributory system, with small government contributions, but the low generosity leads to low overall expenditure (0.3% of GDP in 2014). None of these estimates have social pension expenditure rising about 0.7% of GDP, based only on aging rather than increased generosity, and these estimates are therefore extremely sensitive to increasing basic pension benefits. Raising benefits to just 10% that of urban workers (from 2% today) would result in an additional 3 percentage point of GDP gap in 2050; equalization of benefits would yield a 41 percentage point gap!

So how will pensions be funded? Currently, China is at the emerging market average in pension expenditure (~4% of GDP). But over the next decade China will reach OECD old-age dependency ratios, and the Office of the National Working Commission on Aging estimates that elderly care will consume 26% of GDP by 2050, up from 7% in 2015.[16] Any increase in social pension generosity will drive these figures considerably higher.

But urban employment pensions cannot simply be funded from greater contributions, as contribution rates (at 28% of wages on average) are already well above advanced (20%) and emerging market economy (15%) averages. The system is regressive already, with high minimum thresholds, and there is already considerable evasion by small companies and those with high turnover: one survey finds that only 27% of companies paid their social security contributions in full.[17] According to one CASS analyst, if companies actually met their payment oblications, labor costs would increase by 30%, falling well afoul of Li Keqiang's cost-cutting efforts.[18] This would appear to be a non-starter. And gradually raising retirement ages, as mooted this year, will likely simply be offset by rising life expectancies, especially at the envisioned pace of change.

Pensions will therefore need to be funded from alternative revenue streams. Overall, it is clear that China could have a more progressive fiscal system to be more in line with advanced economy trends. But China is unlikely to trend towards OECD levels of personal income taxation (~25% of total revenue in OECD, but only ~5% in China). China already relies on

[16] http://www.xinhuanet.com/english/2018-07/20/c_137338328.htm
[17] https://www.ft.com/content/bf3700dc-b582-11e8-bbc3-ccd7de085ffe
[18] Caixin

higher shares of corporate taxation and indirect taxes on goods and services, and increasing either to fund pension shortfalls seems unlikely.

### III. SOE share transfers: A "socialist" solution?

So how does China plan to reform its pension system to meet the challenges of aging, inequality, and financial sustainability? One element will be share transfers from state-owned enterprises to allow local and central governments access to SOE dividends to shore up social security funds. This development is underway, but should be considered in tandem with SOE reform and with Xi's promotion of a socialism superior to capitalism.

*Reform and Xi's socialism*

China appeared in some ways to converge towards a Western market economy model until the global financial crisis of 2008. A modern taxation system was created from scratch, with considerable help from Western economists. The late 1990s SOE restructuring paved the way for WTO entrance and a private-sector led economy. By the mid-2000s, dynamic economic growth was driven almost entirely by private sector creative destruction, and an increasingly modern taxation system financed an increasingly generous welfare state. With regard to social security, existing international regimes and the World Bank in particular promoted common global frameworks for social security development through technical assistance, policy dialogues, and recommendations, many of which China adopted.[19]

Yet following the global financial crisis, China's liberal market reforms stalled and then reversed as state banks channeled loans towards local governments and SOEs to sustain investment and growth and as broad-based taxation, and particularly personal income taxation, was cut to stimulate growth. These market illiberalization trends have accelerated under Xi, with increasing attention to defining a new global alternative to market capitalism identified with the

[19] 刘冬梅 (2011). 论国际机制对中国社会保障制度与法律改革的影响——以联合国、国际劳工组织和世界银行的影响为例 [Study on the impact of international regimes on China's Social Security System and Legal Reform: Taking the impact of the UN, ILO, and World Bank as examples]. 《比较法研究》[Journal of Comparative Law], 2011 年第 5 期。 22–36

Chinese experience. From a January 2013 speech, reprinted in 2019 with much fanfare, Xi's major point was that "Socialism with Chinese characteristics is socialism, not some other ism."[20] As Jiang Shigong notes, having adopted Western lessons, Xi's CPC is now seeking to define an alternative socialism with "Chinese characteristics."[21] The "China Dream" is not simply producing technological breakthroughs and gaining global hard (economic and military) power, but establishing China as a global socialist model.

Xi has made it clear that he intends to define China's "new-type national system" (新型举国体制) by 2035,[22] but since the Fifth Plenum in October 2020, Xi has increasingly emphasized common prosperity (共同富裕), and in particular, making "tangible progress in substance" (全体人民共同富裕取得更为明显的实质性进展). Haggard and Kaufman identify three periods of Communist social policy evolution, from basic social guarantees, to increased benefits, to economic stagnation with service quality deterioration.[23] China seeks to flip this script: having gone through the first two stages, China hopes to reinvigorate the system through increased social benefits. Doing so is a political necessity, according to Xi, who has argued that the Soviet Union's collapse was due to its lack of attention to the people.[24] In his words:

> "We must not allow the gap between the rich and the poor to grow wider, the poor getting poorer and the rich getting richer, and an insurmountable gap between the rich and the poor must not appear. … this work can not wait, we must consciously and actively solve the problems of regional disparities, urban-rural disparities, income disparities, etc.,…so

[20] Xi: 关于坚持和发展中国特色社会主义的几个问题, March 2019 publication of Xi's January 2013 speech http://www.xinhuanet.com/2019-03/31/c_1124307481.htm
[21] 强世功. "哲学与历史—从党的十九大报告解读'习近平时代'", 开放时代, 2018 年第 1 期.
[22] Xi's politburo speech on the "new development concept" (新发展理念)
我们已经明确了未来发展的路线图和时间表。这就是，到 2035 年，用 3 个五年规划期，基本实现社会主义现代化。We have clearly defined the roadmap and timetable for future development. This is, by 2035, with three five-year planning periods, the basic realization of socialist modernization.
[23] Stephan Haggard and Robert R. Kaufman. *Development, Democracy, and Welfare States. Latin America, East Asia, and Eastern Europe*, Princeton 2008
[24] Xi: "苏联是世界上第一个社会主义国家，取得过辉煌成就，但后来失败了、解体了，其中一个重要原因是苏联共产党脱离了人民，成为一个只维护自身利益的特权官僚集团。即使是实现了现代化的国家，如果执政党背离人民，也会损害现代化成果." From 2021 speech: http://www.qstheory.cn/dukan/qs/2021-04/30/c_1127390013.htm

that the people really feel that common prosperity is not just a slogan, but a visible, touchable, real and perceptible fact."[25]

It is because of the shortcomings of China's existing social security system that further development has become a priority under Xi. In his words: "Although China has basically established a fully-functional social security system that covers the largest population in the world, the country still needs to attach great importance to and make practical improvements on the weak links of the system, as the principal contradiction in Chinese society has evolved… Social security is the most imminent and realistic issue the people care about…"[26] In February 2021, Xi announced a far-reaching reform plan (with few details) to broaden the range and strengthen the benefits of the system, arguing that doing so was imperative for state security ("是治国安邦的大问题").[27] The NPC session that followed in March, kicking off the 14th Five Year plan to guide development through 2026, noted that, "The period covered by the 14th Five-Year Plan will be the first five years in which we embark on a new journey to build China into a modern socialist country in all respects."[28] This will include "improving the multi-level social security system in terms of universal coverage, comprehensive rural-urban planning, and being equitable, unified and sustainable…"[29]

In addition to greater redistribution, Xi's vision of socialism with Chinese characteristics also foresees a continued role for strengthened and more profitable state-owned enterprises: "We will deepen the reform of state-owned capital and enterprises, and will strengthen, optimize and enlarge state-owned capital and state-owned enterprises (SOEs). We will accelerate the layout optimization and structural adjustment of the state-owned economy, and utilize the strategic supporting role played by the state-owned economy."[30]

These two pillars of socialism—state ownership and greater redistribution—join together in efforts to improve the basic pension system through SOE share transfers.

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[25] Readout released in January: http://cpc.people.com.cn/n1/2021/0130/c64094-32017405.html
Full speech published in April in Qiushi (http://www.qstheory.cn/dukan/qs/2021-04/30/c_1127390013.htm
[26] Xi stresses high-quality, sustainable development of social security (2/27/21)
http://www.xinhuanet.com/english/2021-02/27/c_139772013.htm
[27] http://paper.people.com.cn/rmrb/html/2021-02/28/nw.D110000renmrb_20210228_1-01.htm
[28] Government work report NPC 2021
[29] From fifth plenum proposal on 14th five year plan (translated by Georgetown)
[30] From fifth plenum proposal on 14th five year plan (translated by Georgetown)

*SOE share transfer progress*

China has a relatively long history of efforts to transfer state assets to support broader social security funding beyond the unit (单位). Efforts began in 2001 with measures to transfer 10% of SOE IPO proceeds to the National Social Security Fund.[31] In 2007, central SOEs, which had been exempt from paying dividends previously, began paying 10% dividends in profitable industries (though still 0% in protected strategic sectors). In 2011, the top dividend rates increased to 15%.

The most recent and perhaps most ambitious step, and the focus of this paper, is transferring state-owned assets to social security funds so that the latter can enjoy dividend payments in the future. The official name is "划转部分国有资本充实社保基金". The policy was begun in earnest by Guo Shuqing in Shandong in 2015, though Guo's emphasis seemed to be SOE reform rather than pension fund sustainability. Initially 18 companies were picked to transfer their 30% of their total capital to the newly created provincial social security council. Later more companies were added, but the share was reduced to 10%. Shandong also pioneered in setting up the Shandong Provincial Council for Social Security Fund (山东省社会保障基金理事会) following the same manner of the central government. The Council would become the shareholder receiving the transferred capital and subsequent dividend payments.

Following Shandong, in November 2017 the State Council issued the "Implementation Plan for the Transfer of Some State-owned Assets to Firm up Social Security Funds" (划转部分国有资本充实社保基金实施方案).[32] The Ministry of Finance in 2019 finally followed up with more specifics on transferring SOE shares to social security funds.[33] At the national level, the 2019 document seemed to finally pressure reforms that had lagged after the initial 2017 announcement. At the national level, transfer of financial and non-financial SOE shares proceeded rapidly after mid-2019. In 2019 alone, over 1 trillion RMB of SOE shares were

[31] "Interim Measures of the State Council on the Management of Reducing Held State Shares and Raising Social Security Funds", State Council Document [2001]
[32] http://english.gov.cn/premier/news/2019/07/10/content_281476758119700.htm
[33] http://zcgls.mof.gov.cn/zhengwuxinxi/zhengcefabu/201909/t20190920_3389686.html

transferred to the fund.[34] And by January 2021, the Ministry of Finance announced completion of the program, with 10 percent of all 93 of the largest state owned companies transferred to the national pension fund, worth 1.7 trillion RMB.

Yet this 1.7 trillion RMB transfer only covers central firms, and is not enough to fill expected pension gaps. The State Council made clear that provincial and sub-provincial SOEs should also transfer shares. Combined, these transfers could make a considerable dent in expected pension shortfalls. Currently, the net assets of all SOEs in China is 86% of 2019 GDP (85 trillion RMB).[35] If 10% of this capital is transferred to social security funds, assuming the current SOE dividend yield of 1.64% in 2019,[36] then total annual dividend income from the transferred shares could reach 156 billion RMB.[37] But China also has scope to increase dividend payout ratios. The top current rate for SOEs (15%) remains far below the average dividend payout for US industrial firms (50-60%) and SOEs in Nordic countries (33-67%).[38] SOE profits as a share of GDP have been approximately 3-4% of GDP in recent years. Given SOE profits of nearly 4 trillion RMB, an increase in dividend payments to US levels on 10% ownership stakes would mean 140 billion RMB in additional revenue for social security funds each year.[39] Combined, with sustained SOE profitability and increased dividend payout ratios, social security funds could net 0.3% of GDP in additional revenue each year from these 10% share transfers. Over time, that could significantly shore up pension fund sustainability.

## IV. Understanding implementation: SOE reform versus safety net development versus

If the general contours of shoring up pension funds are relatively clear, in direction if not in scale, system implementation remains uneven. Despite considerable developments at the central level, implementation has been far behind schedule at the provincial level.[40] By 2019, only four provincial governments had started the transfer process, according to the National

[34] https://www.caixinglobal.com/2019-12-26/china-transfers-157-billion-in-soe-equity-to-social-security-fund-101498354.html
[35] http://www.npc.gov.cn/npc/c30834/202010/8459210b544e4b9dba931e5b4682e9fa.shtml
[36] http://www.csindex.com.cn/uploads/researches/files/zh_CN/research_c_1622.pdf
[37] https://wid.world/document/towards-equity-and-sustainability-chinas-pension-system-reform-moves-center-stage-world-inequality-lab-wp-2021-13/
[38] World Bank 2012
[39] Similar calculation at: https://www.nber.org/system/files/working_papers/w25088/w25088.pdf
[40] http://finance.caixin.com/2019-03-06/101388568.html

Audit Office.[41] Using updated data developed for this paper, as described below, by June 2021, only fifteen provinces had begun the process, and had moved at varying speeds. Why?

*Hypotheses*

On the one hand, differential and underwhelming implementation is not surprising given the characteristics of central-local relations in China. The fragmented authoritarianism literature has long provided evidence and interpretation for local-level implementation biases. And even under Xi, localist biases and local variation persist.[42] But variation in local implementation can shed light on the rationale of the share transfer reforms for local officials. There appear to be two broad rationales for provincial implementation, with different associated hypotheses: an official rationale, based on the nature of the demographic challenge and pension fund sustainability; and a state enterprise rationale, based on provincial SOE strength and performance.

According to the official rationale, provinces are implementing share transfer reforms to shore up future pension fund sustainability. Therefore, the greater the challenge facing future pension fund sustainability, the greater the share transfers should be in a province. Consequently, we should expect:

- *More share transfers in provinces experiencing faster and more extreme aging* (H1). A province with a larger share of elderly and a larger expected old-age dependency ratio will face greater pension fund sustainability challenges in the future.
- *More share transfers in poorer provinces* (H2). Poorer provinces can expect to have lower payments into the formal urban employment pension system. These provinces also have fewer alternative revenue streams to rely on.[43]

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[41] https://www.caixinglobal.com/2019-06-27/state-firms-dragging-their-feet-on-measure-to-head-off-pension-shortfall-101432369.html
[42] David J. Bulman & Kyle A. Jaros (2021) Localism in Retreat? Central-Provincial Relations in the Xi Jinping Era, Journal of Contemporary China
[43] There is also a question of whether poorer or richer provinces are more responsive to central policy. The evidence is mixed. Solinger and Jiang (2016) find that dibao reforms werer more responsive in poorer cities; richer cities disregarded center by continuing to support merely unemployed in order to prevent social instability. But Van der

- *More share transfers in more unequal provinces* (H3). Higher levels of inequality should negatively affect future pension fund sustainability in two ways. First, inequality lowers average payments into pension funds as more working-age individuals avoid the formal system. Second, more unequal provinces will have greater expected state support for impoverished elderly in the future, all else equal.
- *More share transfers where pension fund balances are lower* (H4). For obvious reasons, where pension funds are already less financially viable, we should expect greater pressure to shore up funds.

Yet this official rationale of pension fund sustainability is not the only potential rationale for share transfer implementation. An alternative rationale relates to goals of SOE reform, with very different associated hypotheses. Initial share transfers in Shandong were driven by Guo Shuqing, a politician who has generally been more concerned with SOE reform issues than equity issues. As such, a key rationale for share transfers may simply be to gain more oversight of poorly performing SOEs. As indicated by one CASS researcher focused on SOE reform when Shandong began implementing reforms in 2015: "The social security fund will influence these enterprises' governance structure and operations. It's still a state shareholder but they have their own interests and their own voting rights to advance those interests."[44]

But provincial demands for increased oversight as a bottom-line-focused shareholder may not face amenable SOEs within a province. Not all state-owned enterprises are created equally, and some provinces may be relatively weak in relation to local SOEs and local SASACs. Although the state, at various administrative levels retains ownership, the nature of SOEs—their sector, performance, political ties, etc.—dictates their ability to retain profits and/or remit taxes. State ownership itself, as opposed to rules-based taxation of private firms, leads to a greater degree of "redistributional bargaining" for SOEs, i.e., the striking up of deals to divide up enterprise revenue and profit, and in this bargaining process there is a wide degree of variation.[45] As Frazier (2010; 2015) has shown, processes of socioeconomic and institutional change in the

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Kemp, Lorentzen, and Mattingly (2017) find that environmental transparency implementation is better in richer areas.

[44] https://www.ft.com/content/59c4987c-fdf2-11e4-9f10-00144feabdc0'

[45] Janos Kornai, "The Hungarian Reform Process," Journal of Economic Literature, 24 (December 1986): 1691-1701.

1990s and early 2000s shifted China's growth model and the relative bargaining power of workers, state-owned enterprises (SOEs), local governments, and central governments, leading to a locally-based regressive social security system. China's recent shifts towards a "state capitalist welfare state" are likely also conditioned by state-firm bargaining dynamics.

Two particular aggregate SOE characteristics may be relevant at the provincial level: relative size/scale and relative performance. Both characteristics should affect both the *demand* to reform local SOEs by provincial leaders and the *supply* of capital shares that SOEs can be coerced into providing. Relative size/scale is important because where SOEs dominate local economies, provincial leaders may face greater collective resistance to transferring shares, both from SOEs themselves, which will face greater oversight, as well as from provincial SASACs that will lose out financially. For instance, in cities dominated by large industrial SOEs dominate, city bureaus were less likely to faithfully implement environmental transparency regulations.[46] And early news reports indicated that SASAC resistance was a key reason for lagging implementation at the central level.[47] Consequently, we should expect:

- *More asset transfers where SOEs are smaller relative to the provincial economy (H5).*

Relative performance should also matter. On the one hand, better performing SOEs may be in a stronger position to resist demands for share transfers, even when such transfers would be more beneficial to social security sustainability at the provincial level. On the other hand, on the demand side, provincial authorities should feel more pressure to transfer shares when SOEs are underperforming relative to the non-state economy. Consequently, we should expect:

- *More asset transfers where SOEs perform worse relative to private firms (H6).*

*Data and methodology*

To test between these competing hypotheses, this paper collects and analyzes province-level data related to share transfer progress over time, demographics and macroeconomic

[46] Lorentzen, Peter, Pierre Landry, and John Yasuda. "Undermining Authoritarian Innovation: The Power of China's Industrial Giants." *The Journal of Politics* 76, no. 1 (2013): 182-94.
[47] https://www.ft.com/content/59c4987c-fdf2-11e4-9f10-00144feabdc0'

conditions, and SOE size and performance. Given the static or slow-changing nature of most variables, simple cross-sectional OLS regressions and probits are conducted at the provincial level using data for the most recent available years, as noted. The dependent variables in these regressions are alternatively degrees of capital share transfers or the binary establishment of a provincial social security council to accept SOE shares.

The original data for the development of share transfers by province were collected from public company registration records. Since the Councils were set up to collect transferred shares, I use their names to search for shareholding records in Qichacha.com and Qixin.com. These sites list the companies whose shares were held by the Council, how much was transferred in RMB and percentage terms, and the date of transfer. Subsequently, I compare and contrast these lists with new sources to validate the data.[48] This method is not entirely accurate since it may incorrectly classify an irrelevant transaction as part of the capital transfer policy, but it has merit that if we can find transaction data in these websites, it means the transaction is 100% completed. Local social security funds seldom make voluntary investments into SOEs, so in almost all cases, the shares they hold are transferred from the local SASAC. Based on these data, out of 31 provincial-level units, only 15 have set up a council and transferred SOE shares, as seen in Table 1.

[48] For example, in this page (https://www.qcc.com/firm_123VUQ6.shtml) you can see that it shows the public records of 山东省社会保障理事会. If you scroll down you will find "对外投资", which shows its investments in other companies including their names, registered capital, investment percentage, investment amount, and established date. To see the transfer transaction date, you can click the company name (e.g. 山东高速集团有限公司 https://www.qcc.com/firm_765e8f4af83ff8b2f700644c1e536373.html), and scroll down to "变更记录", where you can see that on August 29, 2018, 山东省社会保障基金理事会 was added as a new shareholder. Before this date, Shandong SASAC was the only shareholder of this company. Therefore, we can deduce that this is part of the capital transfer policy.

**Table 1. Provincial social security council establishment date and transferred capital**

| Province | Year council established | Total registered capital transferred |
|---|---|---|
| Anhui | 2018 | 0.00 |
| Beijing | | 0.00 |
| Chongqing | | 0.00 |
| Fujian | | 0.00 |
| Gansu | | 0.00 |
| Guangdong | 2020 | 5,361.70 |
| Guangxi | 2020 | 0.00 |
| Guizhou | | 0.00 |
| Hainan | | 0.00 |
| Hebei | 2020 | 5,361.70 |
| Heilongjiang | | 0.00 |
| Henan | | 0.00 |
| Hubei | | 0.00 |
| Hunan | 2020 | 6,987.90 |
| Jiangsu | 2020 | 6,310.60 |
| Jiangxi | 2019 | 7,009.15 |
| Jilin | 2020 | 369.64 |
| Liaoning | 2016 | 17,465.00 |
| Neimenggu | | 0.00 |
| Ningxia | 2019 | 0.00 |
| Qinghai | | 0.00 |
| Shaanxi | | 0.00 |
| Shandong | 2016 | 14,277.80 |
| Shanghai | | 0.00 |
| Shanxi | | 0.00 |
| Sichuan | 2020 | 979.15 |
| Tianjin | 2020 | 0.00 |
| Xinjiang | 2019 | 11.80 |
| Xizang | | 0.00 |
| Yunnan | 2018 | 20,581.20 |
| Zhejiang | | 0.00 |

In addition to collecting data for social security council establishment and transferred shares, this paper also collects data on relevant variables related to demographics, pension fund sustainability, and SOE performance and size. In terms of the official sustainability rationale for share transfers, key variables for measuring aging include old-age dependency and old-age population growth in the past decade (to represent the rapidity of aging rather than just the level). Key variables for measuring provincial wealth include overall GDP, GDP per capita, and the illiterate share of the population, as a proxy for poverty. Key variables for measuring inequality include the provincial Gini coefficient, the urban-rural income gap, and the urban-rural transfer gap (i.e., the ratio in per capita net transfers to rural and urban residents within a province). Key variables for measuring pension sustainability include the pension surplus (total employee and social pension year-end balances as a share of annual pension expenditure), overall pension expenditure as a share of GDP, and the year-end balances themselves. Variables and sources are listed in Table 2.

**Table 2. Summary statistics**

| Variable | Obs | Mean | Std. Dev. | Min | Max |
|---|---|---|---|---|---|
| *Dependent variables* | | | | | |
| Total registered capital transferred | 31 | 2732.76 | 5469.10 | 0.00 | 20581.19 |
| Council established (0=no, 1=yes) | 31 | 0.48 | 0.51 | 0.00 | 1.00 |
| *Demographic and pension variables* | | | | | |
| Old age dependency | 31 | 15.69 | 3.69 | 8.04 | 22.69 |
| Youth dependency | 31 | 22.34 | 6.05 | 11.71 | 32.50 |
| Old age population growth, 2010-2019 | 31 | 3.68 | 1.46 | 0.48 | 6.52 |
| Pension balance (social and employee pension year-end balances as share of annual expenditure) | 31 | 1.54 | 0.72 | 0.52 | 4.29 |
| Pension expenditure (social and employee pension expenditure as a share of GDP) | 31 | 0.03 | 0.01 | 0.01 | 0.06 |
| Social pension year-end balance | 31 | 96.96 | 88.22 | 5.08 | 357.79 |
| Employee pension year-end balance | 31 | 911.56 | 944.57 | 32.03 | 4673.13 |
| GDP (100 million RMB) | 31 | 27596.11 | 22213.03 | 1310.63 | 89879.23 |
| GDP per capita (10000 RMB) | 31 | 0.76 | 0.34 | 0.36 | 1.60 |
| Gini coefficient | 31 | 0.49 | 0.39 | 0.06 | 0.99 |
| Education and health spending, share of total provincial expenditure | 31 | 0.24 | 0.04 | 0.17 | 0.29 |
| Urban/rural per capita transfer gap | 31 | 8.14 | 2.88 | 2.12 | 13.90 |
| Urban/rural income gap | 31 | 2.81 | 0.49 | 2.03 | 3.80 |
| Illiterate share of population | 31 | 5.99 | 7.06 | 1.52 | 41.18 |
| *SOE variables* | | | | | |
| SOE taxes, share of provincial GDP | 31 | 0.02 | 0.01 | 0.00 | 0.05 |
| SOE relative return on assets (gap from private return on assets) | 31 | 0.06 | 0.11 | -0.22 | 0.47 |
| SOE profits, share of provincial GDP | 31 | 0.02 | 0.02 | 0.00 | 0.06 |
| SOE share of provincial subsidies | 31 | 0.34 | 0.17 | 0.06 | 0.88 |

Sources: Dependent variable sources as described in text. Gini coefficient from Bhattacharya, P. , Palacio-Torralba, J. and Li, X. (2018) On Income Inequality within China's Provinces. Chinese Studies, 7, 174-182. SOE and zombie share of provincial subsidies based on National Taxation Administration data, from Bulman, Zhang, and Yan (2021). All other variables from various editions of the China Statistical Yearbook.

For measuring the SOE reform and resistance rationale, this paper collects data on SOE taxes, SOE return on assets, SOE profits, and SOE shares of total provincial subsidies. SOE profits as a share of GDP can proxy both SOE size in a province as well as SOE performance. SOE relative return on assets is calculated as the difference between non-SOE ROAs and SOE

ROAs, so a larger number indicates that SOEs perform worse relatively; according to the hypotheses above, a larger gap should indicate more pressure for reform. SOE taxes as a share of GDP and SOE share of subsidies are meant to proxy SOE strength within a province: after controlling for overall profits, a higher level of taxation should correspond to SOE weakness (inability to resist taxation pressures), while a high share of subsidies should correspond to a greater ability to capture local financial officials. Specific variables and sources are listed in Table 2.

*Results*

To test the above hypotheses, I run basic OLS regressions using total transferred capital as the dependent variable, as well as probits using council establishment as the binary dependent variable. Basic results are presented in Table 3. Columns 1-4 present OLS regression results for correlations with the amount of registered capital transferred to provincial social security councils by June 2021. Columns 5 and 6 report results from probits on the likelihood of establishing a council by June 2021. The first set of reported IVs corresponds to demographic, pension funding, and inequality related variables. The second set corresponds to SOE strength and performance.

Several results stand out, and seem to support both the official and SOE rationales. In terms of the official rationale, starting with aging, old-age dependency has a positive and statistically significant relationship with both transferred capital and council establishment, though youth dependency and aging speed have no clear correlation. In terms of inequality, higher Gini coefficients are strongly associated with both transferred capital and council establishment, though urban-rural transfer and income gaps have no clear association, even when excluding the Gini score from the regressions (column 2). In terms of provincial wealth, although larger provinces seem to be more likely to implement transfers, per capita GDP is consistently and significantly negatively associated with transfers and council establishment, as expected. Finally, and interestingly, pension fund surpluses and pension expenditure have negative and statistically insignificant associations with the DVs. This is somewhat surprising given that all other variables confirm the hypotheses associated with the official rationale, but may be an indication that current balances and expenditure do not necessarily correlate with future challenges, even in the short term. (These pension-related variables are also relatively closely correlated with GDP and GDP per capita, which may affect results.)

Turning to the SOE-related variables, results tend to support the hypotheses, with high levels of significance and magnitude. Most significantly, SOE relative return on assets is consistently significance with a large positive magnitude: the more the private sector out-performs SOEs, the more likely provinces are to transfer SOE capital. Together with the finding that SOE profits as a share of GDP are strongly negatively associated with transfers, this may imply that better performing SOEs are in a stronger position to resist demands for share transfers, even when such transfers would be *more* beneficial to social security sustainability at the provincial level. Indeed, in more reduced form approaches with fewer and alternate variables, these SOE-related variables remain consistently significant, while the demographic variables often become weaker. Together, this lends support to an interpretation that although both rationales appear to have explanatory power, the SOE rationale, from both capture and reform angles, seems to dominate. The finding that high levels of SOE taxation, controlling for profits, is also associated with greater transfers, also supports a "capture" interpretation: where SOEs are less able to resist taxation, they are also less able to resist transfers.

## Table 3. Regression results

| | (1) | (2) | (3) | (4) | (5) | (6) |
|---|---|---|---|---|---|---|
| | *OLS, DV = registered capital transferred to council* | | | | *Probit, DV=council establishment* | |
| Old age dependency | 303.9 | -6.144 | 696.6* | | 0.426** | |
| | (0.527) | (0.991) | (0.064) | | (0.011) | |
| Youth dependency | -254.7 | -143.2 | -412.8 | | 0.197* | |
| | (0.244) | (0.585) | (0.205) | | (0.057) | |
| Old age pop. growth, 2010-2019 | -391.9 | -1193.0 | -319.1 | | 0.102 | |
| | (0.724) | (0.432) | (0.735) | | (0.757) | |
| Pension fund build-up | -2282.5 | -1194.0 | -1671.0 | | 0.103 | |
| | (0.213) | (0.597) | (0.424) | | (0.861) | |
| Pension expenditure (share of GDP) | -32901.0 | 98700.9 | -139083.0 | | -138.1** | |
| | (0.885) | (0.636) | (0.557) | | (0.048) | |
| GDP (100 million RMB) | 0.154** | 0.142 | 0.143* | 0.0731 | 0.0000274 | 0.0000221 |
| | (0.040) | (0.172) | (0.097) | (0.128) | (0.289) | (0.156) |
| GDP per capita (10,000 RMB) | -12310.3* | -4927.4 | -16866.5** | -26.34 | -5.652** | -0.917 |
| | (0.060) | (0.362) | (0.044) | (0.990) | (0.021) | (0.517) |
| Gini coefficient | 9396.8*** | | 12359.3** | | 3.961*** | |
| | (0.006) | | (0.027) | | (0.002) | |
| Ed. and health spending, share | -80005.8* | -25207.2 | -96499.5 | | -67.02*** | |
| | (0.079) | (0.591) | (0.186) | | (0.004) | |
| Urban/rural per capita transfer gap | 146.9 | -28.82 | 627.3 | | 0.197 | |
| | (0.732) | (0.956) | (0.298) | | (0.154) | |
| Urban/rural income gap | 3175.6 | 792.8 | 4797.8 | | -0.207 | |
| | (0.194) | (0.797) | (0.190) | | (0.865) | |
| Illiterate share of population | -77.02 | -56.08 | 4.420 | | -0.500** | |
| | (0.539) | (0.657) | (0.980) | | (0.047) | |
| SOE taxes, share of GDP | 199859.5** | 258574.3*** | | 328287.8*** | | 46.65 |
| | (0.027) | (0.004) | | (0.001) | | (0.163) |
| SOE relative return on assets | 19926.4*** | 22464.5*** | | 16382.3*** | | 1.751 |
| | (0.006) | (0.002) | | (0.000) | | (0.486) |
| SOE profits, share of GDP | -194240.2** | -207329.4** | | -182291.6*** | | -6.153 |
| | (0.032) | (0.020) | | (0.005) | | (0.765) |
| SOE share of provincial subsidies | 2716.0 | 1637.2 | | -1665.2 | | -4.463* |
| | (0.665) | (0.838) | | (0.604) | | (0.051) |
| Constant | 18613.3 | 12605.2 | 15799.6 | -695.4 | 11.11 | 0.805 |
| | (0.169) | (0.366) | (0.406) | (0.717) | (0.199) | (0.516) |
| N | 31 | 31 | 31 | 31 | 31 | 31 |
| R-sq | 0.790 | 0.665 | 0.512 | 0.591 | | |
| pseudo R-sq | | | | | 0.517 | 0.254 |

ADD PAN/XU PROVINCIAL IDEOLOGY OUTCOMES

## V. Conclusions (TBC)

China's development of a social security system has important implications for CPC legitimacy and whether or not China can chart a successful path of socialism with Chinese characteristics. In many ways, the current so-called "crisis of capitalism" in the United States stems from revenue inadequacy (Stiglitz).[49] China has already created a "strong" state in revenue terms,[50] but these revenue streams are not broad-based, so demands for their redistribution have been limited. China's current efforts to develop a state capital welfare state is best identified to date by efforts described in this paper to transfer SOE shares to shore up social security systems. The idea of funding redistribution through state-owned enterprise shares and profits has precursors in the West and in Singapore, much more so than traditional socialist states in which the *danwei* took responsibility for support of its members, thus creating a tiered and unequal system. China's efforts have echoes of Bardhan and Roemer's (1992; 1993) "market socialism," which gave a broader role to markets but distributed capital stock shares equally to all citizens. This itself followed partially from James Meade's idea of "liberal socialism," which argued that publicly-owned enterprises should face market conditions but have their profits redistributed to provide citizens with "social dividends."[51]

Yet the evidence presented here is mixed in terms of its implications for China's ability to successfully develop such a system. On the one hand, there is evidence that China has successfully transferred shares into local and central social security funds, and that these transfers were more likely to take place where future demographic and pension funding challenges were greater. This hints at a basic capacity to use state assets for redistribution moving forward. However, the evidence also suggests that a stronger rationale has been SOE reform, and also that SOE capture has limited transferred. If the system relies predominantly on underperforming SOEs, its future is highly in doubt. The current contours of the system are not

[49] https://www.foreignaffairs.com/issue-packages/2019-12-10/future-capitalism
[50] Naughton, Is China Socialist?
[51] Meade 1949; 1964. Meade's analysis, it should be noted, has found echoes by Cui Zhiyuan in discussing Chinese reforms since Jiang Zemin.

ambitious enough to fully confront future pension sustainability challenges—doing so would require increasing transferred shares as well as dividend payouts over time, but if stronger and better performing SOEs can resist these efforts, the future of the system is highly in doubt.