Wealth Inequality in China: Evidence from the 2017 and 2019 CHFS

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1 Introduction

China has experienced remarkable economic growth in recent decades following its reform and opening-up policy initiated in 1978. However, this period has also been marked by a significant rise in income and wealth inequality (Piketty, Li, and Zucman 2019). Some scholars have provided evidence suggesting that China's overall inequality peaked around 2010 and subsequently began to decline (Kanbur, Wang, and Zhang 2021; Zhang 2021). It is also well-documented that China's inequality is strongly intertwined with its urban-rural and coastal-inland divisions (Piketty, Li, and Zucman 2019; Zhang 2021). This paper utilizes data from the 2017 and 2019 China Household Finance Survey (CHFS) to examine the current state of China's wealth inequality. Specifically, it investigates whether the latest publicly available data supports the view that China's inequality has continued to decline since around 2010, as well as how China's wealth inequality relates to urban-rural and regional disparities.

2 Background

This section presents some notable findings on China's income and wealth inequality in the existing literature.

China has experienced a considerable increase in income and wealth inequality since the reform and opening-up policy initiated in 1978. Using diverse sources, including tax records, household surveys, and private wealth rankings, Piketty, Li, and Zucman (2019) provide a detailed analysis of the transformation in China's inequality profile. Their findings show that between 1978 and 2015, the income share of the top 10% increased from 27% to 41%, while the share of the bottom 50% decreased from 27% to 15%. Wealth concentration also intensified significantly: the wealth share held by the top 10% rose from around 40% to nearly 70%, whereas the bottom 50%'s share dropped from over 15% to about 5%. Additionally, they documented an increase in the urban-to-rural per capita income ratio, from less than 200% in 1978 to approximately 350% by 2015. Humorously noting this stark shift, they remarked that China had transitioned from Nordic-level equality to U.S.-level inequality during the reform era.

Knight, Li, and Wan (2022) further document a rapid rise in China's household wealth inequality between 2002 and 2013, reporting that the national Gini coefficient for household wealth per capita increased markedly from 0.50 to 0.62. They identify housing wealth as the primary driver behind this increase, with its share rising from 53% to 73% of total household wealth, and its contribution to overall wealth inequality growing from 64% to 79%. The authors emphasize that differential savings rates across income groups, uneven house price inflation—particularly pronounced in major urban centers—and widening urban-rural disparities significantly intensified wealth inequality during this period.

The income and wealth inequality highly intersects with urban-rural and reginal disparities. Zhang (2021) highlights significant rural-urban and regional disparities underlying China's rising inequality since its economic reforms. The urban-rural income ratio increased sharply, peaking at around 3.3 in 2009 before declining slightly to 2.7 by 2019, still substantially higher than pre-reform levels. Despite a notable decline in overall inequality after 2010—with the national Gini coefficient decreasing from a peak of 0.491 in 2008 to approximately 0.465 in 2019—regional inequality remains pronounced. For instance, per capita GDP in the eastern coastal region was roughly 2.6 times higher than in the western region by 2018. Additionally, rural-to-urban migration grew dramatically from fewer than 20 million in 1990 to approximately 290 million by 2019, reflecting both the economic disparity between regions and the persistent urban-rural divide, exacerbated by restricted access to urban public services under the Hukou household registration system.

Consistent with the finding in Zhang (2021) that China's inequality peaked in 2008 and 2009, Kanbur, Wang, and Zhang (2021) similarly document that China's inequality increased sharply after economic reforms but started to plateau around 2010. They find the national Gini coefficient peaked at about 0.525 in 2010, subsequently declining to approximately 0.476 in 2016 before rising slightly again. Consistent with Zhang (2021), they attribute this recent turnaround primarily to narrowing rural-urban and coastal-inland disparities, driven by demographic changes, tightening rural labor markets, and rising rural wages.

3 Data

Using the relatively new and underexplored 2017 and 2019 China Household Finance Survey (CHFS) datasets, this paper aims to compare its findings with results from earlier literature. CHFS is a national household survey initiated by the Southwestern University of Finance and Economics (SWUFE) in 2009, with the first results published in 2011. It focuses specifically on collecting detailed, micro-level information on household finances (Kanbur, Wang, and Zhang (2021)).

The household wealth variables consistently available in both 2017 and 2019 include total household assets and debts, financial assets and debts, agricultural assets and debts, business assets and debts, land, housing assets and debts, commercial property assets and debts, vehicle assets and debts, education debts, credit debts, medical debts, and other miscellaneous assets and debts. In 2019, an additional variable, garage assets, was reported separately from housing assets; this variable was not present in 2017.

For consistency, this paper calculates equity values by deducting debts from corresponding assets, except for land, which is typically fully owned and non-transferable. Due to its relatively small aggregate value, garage assets in 2019 are recombined with housing assets for analytical consistency.

Given the relatively short period between 2017 and 2019, this study aims to identify stable patterns in China's wealth inequality using data from these two years. Additionally, it compares the findings with earlier studies that utilize the same CHFS dataset to infer recent trends in wealth inequality(Tan, Zeng, and Zhu 2017).

4 Analysis

4.1 Change of Gini from 2011 to 2019

This section presents the Gini index analysis using the 2017 and 2019 CHFS data. The statistics from the 2011 CHFS data is from Tan, Zeng, and Zhu (2017), which is work from CFHS's research team. All the

income and wealth statistics are aggregated at the household level.

Statistic	Income 2011	Income 2017	Income 2019	Wealth 2011	Wealth 2017	Wealth 2019
Mean	60,053	89,634	94,005	687,061	839,008	1,085,589
Median	28,312	54,108	57,035	197,150	322,515	457,600
Gini	0.664	0.605	0.614	0.761	0.701	0.667
N	8,438	38,994	33,387	8,438	38,994	33,387

Compared to the 2011 data, the Gini coefficient for income has decresed from 0.664 in 2011 to 0.605 in 2017 and remained stable in 2019. The Gini coefficient for wealth has decreased from 0.761 in 2011 to 0.701 in 2017 and continued to decrease to 0.667 in 2019. The results show that China's income and wealth inequality has been decreasing since 2011. The finding is consistent with the findings in Kanbur, Wang, and Zhang (2021) and Zhang (2021), that China's inequality peaked around 2010 and started to decrease since then.

Notably, the growth rate of mean and median income from 2011 to 2017 is clearly higher than that of wealth but from 2017 to 2019, the growth of mean and median wealth surpasses that of income by a great margin.

4.2 Factor decomposition of wealth inequality

2017 Wealth	Gini Correlation	Gini Coefficient	Share	Contribution
Housing Equity	0.9610	0.7244	0.6996	0.6950
Land Asset	0.4722	0.9204	0.0392	0.0243
Commercial Equity	0.8246	1.1989	0.0667	0.0941
Commercial Property	0.8290	0.9890	0.0213	0.0250
Car Equity	0.6648	0.9037	0.0339	0.0290
Financial Equity	0.8022	0.7964	0.1232	0.1123
Other Equity	0.6485	0.9438	0.0213	0.0186
Educational Debt	-0.3166	0.9846	0.0014	-0.0006
Credit Card Debt	0.3678	0.9899	0.0015	0.0008
Medical Debt	-0.5801	0.9786	0.0023	-0.0018

2019 Wealth	Gini Correlation	Gini Coefficient	Share	Contribution
Housing Equity	0.9591	0.7015	0.6834	0.6876
Land Asset	0.7155	0.9700	0.0593	0.0615
Commercial Equity	0.6812	1.2014	0.0359	0.0440
Commercial Property	0.7778	0.9886	0.0144	0.0166
Car Equity	0.6651	0.8224	0.0344	0.0281
Financial Equity	0.7895	0.7484	0.1532	0.1354
Other Equity	0.7171	1.0296	0.0224	0.0247
Educational Debt	-0.4199	0.9885	0.0008	-0.0005
Credit Card Debt	0.3029	0.9854	0.0012	0.0005
Medical Debt	-0.5591	0.9844	0.0016	-0.0014

The factor decompostion of the Gini coefficient for household wealth in two years shows that housing equity is still the largest and dominant contributor to China's wealth inequality, contributing around 70% to the overall wealth Gini. Financial equity follows by contributing to 11.1% in 2017 and 12.5% in 2019 to the overall wealth Gini. Commercial equity such as agricultural and business assets contrbutes to a relatively large portion in 2017 but to a smaller portion in 2019. Land asset contributes to a relatively large portion in 2017 but to a smaller portion in 2019. The cause of this is uninvestigated, which could be due to the change in survey design. Commercial property and car equity contribute to a relatively small portion in both years. Educational debt and medical debt negatively correlates with wealth inequality, which shows that the poor is disporportionately burdened by educational and medical debts, although their contribution to the overall wealth Gini is small.

This high contribution of housing equity to wealth inequality is consistent with other studies. Xie and Yongai (2015) used the 2012 CHPS data and documented that housing equity conprises of 71.6% of household wealth in China. Kanbur, Wang, and Zhang (2021) used the 2002 and 2013 CHIP data and found that housing euqity contribues to 64% of wealth inequality in 2002 and 79% in 2013. Tan, Zeng, and Zhu (2017) documented with the 2011 CHFS data that the housing asset to total asset ratio was 66.73%, and the same ratio was 71.08% in 2017 and 67.23% in 2019. It appears that housing remains the largest wealth holding for Chinese households in 2017 and 2019, and housing is still the largest contributor to wealth inequality with no clear sign of change.

4.3 Group decomposition of wealth inequality by rural and urban

The following two sections present the group decomposition of wealth inequality by the urban-rural and regional divisions.

Group	Sample Share	Mean	Relative Mean	Median Income	Wealth Share	Gini
2017 Urban	0.6235	1,146,510	1.3665	66,760	0.8521	0.6573
2017 Rural	0.3765	329,715	0.3930	23,660	0.1479	0.6945
2019 Urban	0.6500	1,461,675	1.3464	69,600	0.8752	0.6165
2019 Rural	0.3500	387,130	0.3566	27,541	0.1248	0.6629

The summary statistics above shows that in both 2017 and 2019, the mean and median income levels are significantly higher in urban areas compared to rural areas. The mean wealth in urban areas is 3.48 times the mean wealth in rural areas in 2017, and 3.78 times in 2019. The median wealth in urban areas is 2.82 times the median wealth in rural areas in 2017, and 2.52 times in 2019.

Notably, the Gini coefficient for wealth is higher in rural areas than in urban areas in both 2017 and 2019. The Gini coefficient for both urban rural areas declined from 2017 to 2019.

The decomposition of the Gini coefficient into within-group, between-group, and residual components shows(Lambert and Aronson 1993):

Year	Total Gini	Within-group	Between-group	Residual
2017	100.00	55.35	32.61	12.04
2019	100.00	56.79	33.68	9.53

This decomposition reveals that about 55-57% of total wealth inequality is due to inequality within urban and rural groups, while about 33-34% is due to inequality between urban and rural areas. The residual component, representing the interaction between the within and between components, accounts for about 10-12% of total inequality. The stability of these components between 2017 and 2019 suggests that the urban-rural parity remains a significant driver of wealth inequality in China.

4.4 Group decomposition of wealth inequality by region

Region	Sample Share	Mean	Relative Mean	Median Income	Wealth Share	Gini
2017 East	0.3754	1,391,421	1.6584	556,993	0.6226	0.6747
2017 Middle	0.2659	550,976	0.6567	272,235	0.1746	0.6648
2017 West	0.2628	496,937	0.5923	252,341	0.1556	0.6569
2017 Northeast	0.0960	412,387	0.4915	212,512	0.0472	0.6513
2019 East	0.3987	1,658,323	1.5276	760,140	0.6090	0.6305
2019 Middle	0.2651	677,697	0.6243	372,434	0.1655	0.5997
2019 West	0.2400	799,535	0.7365	343,542	0.1768	0.6947
2019 Northeast	0.0962	549,715	0.5064	291,085	0.0487	0.6369

The above summary statistics shows that the mean and median wealth in the East is significantly higher than in the other regions in both 2017 and 2019. Notably, the mean and median wealth of the West-area households surpassed that of the Middle in 2019, but West's Gini coefficient rose to the highest among all regions in 2019 as well.

The decomposition of the Gini coefficient into within-group, between-group, and residual components shows:

Year	Total Gini	Within-group	Between-group	Residual
2017	100.00	31.16	36.88	31.96
2019	100.00	31.69	33.77	34.54

The group decompsition shows that similar to the urban-rural decomposition, the between-group component contribues over 30% to the overall wealth inequality in both 2017 and 2019. The between group contribution saw a slight decrease from 2017 to 2019 with a similari increase in the residual component. This might signal some modest convergence in household wealth between regions.

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