

Social Security Expansion and Child Health in China

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Fact 1: Co-residence of the Elderly with Children is Common in Rural China

According to our tabulation using China Family Panel Studies (2012, 2014), > 40% of adults age 55-65 co-reside with children under 12; > 30% of rural children are mainly cared by grandparents.

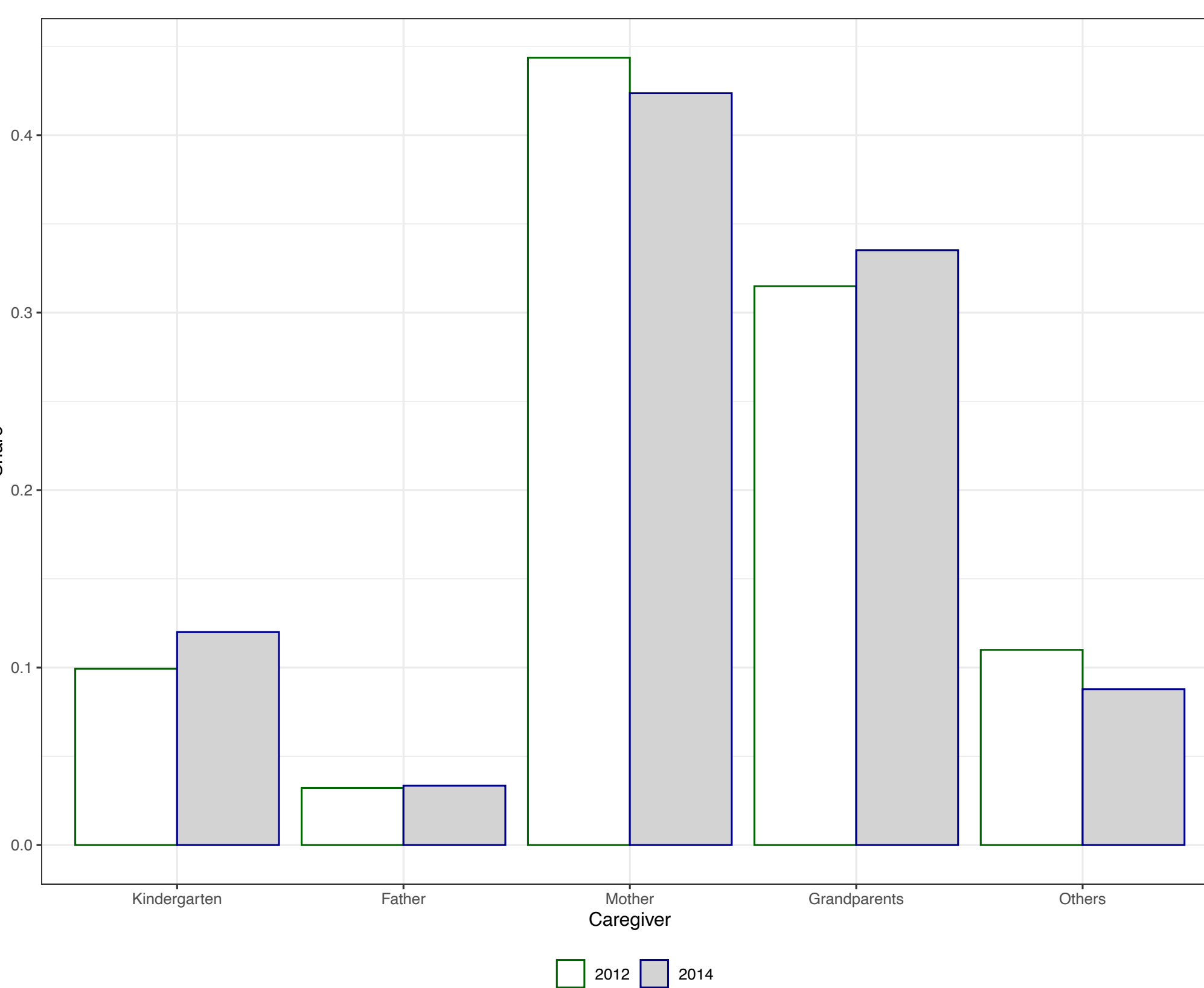


Figure 1. Share of Primary Childcare Giver for Children under 12

Fact 2: Double Burden of Child Malnutrition in Rural China

Compared with urban children, rural children are shorter at each age, but their weight is catching up. BMI of those under 12 is even larger than their urban counterparts.

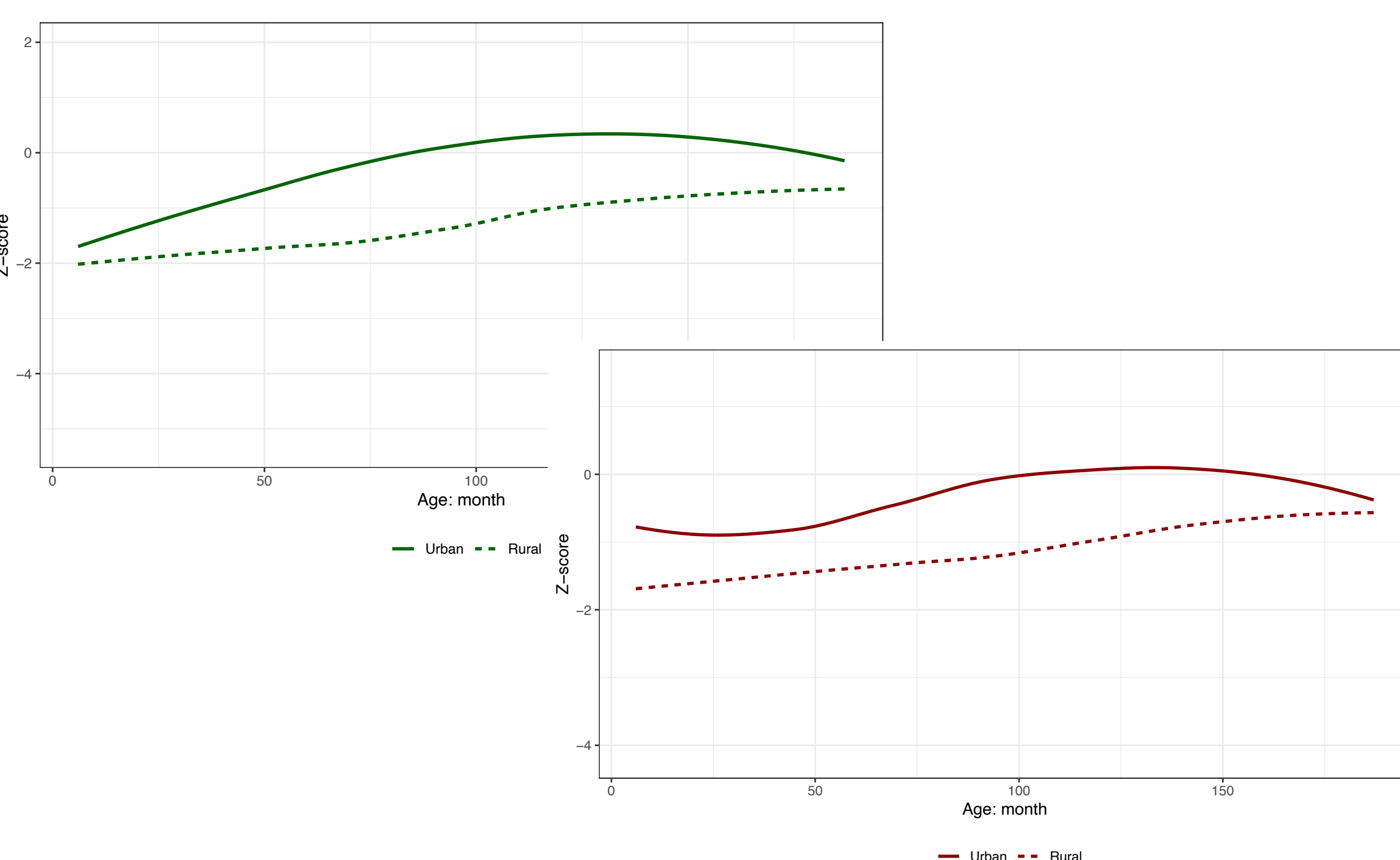


Figure 2. Height-for-age Z Scores of Boys (Green) and Girls (Red)

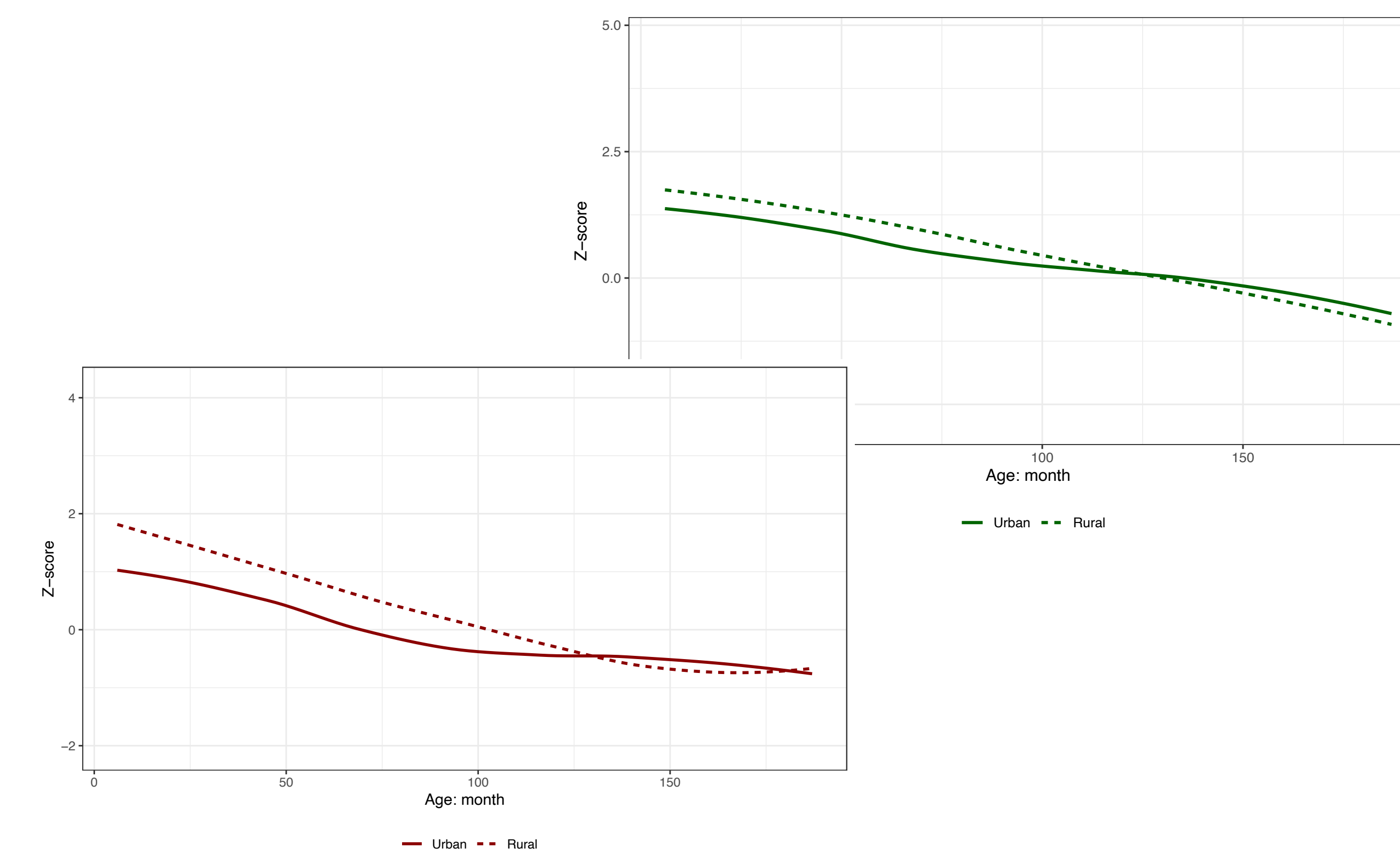


Figure 3. BMI Z Scores of Boys (Green) and Girls (Red)

New Rural Pension Scheme (NRPS)

NRPS was rolled out in full scale since 2012, and rural enrollees over age 60 are eligible to receive a minimum of 70 CNY non-contributory monthly pension.

Following Duflo (2003), we leveraged discontinuity change of age eligibility and variations in pension receipt to identify the inter-generational effect of NRPS on height and weight among grandchildren.

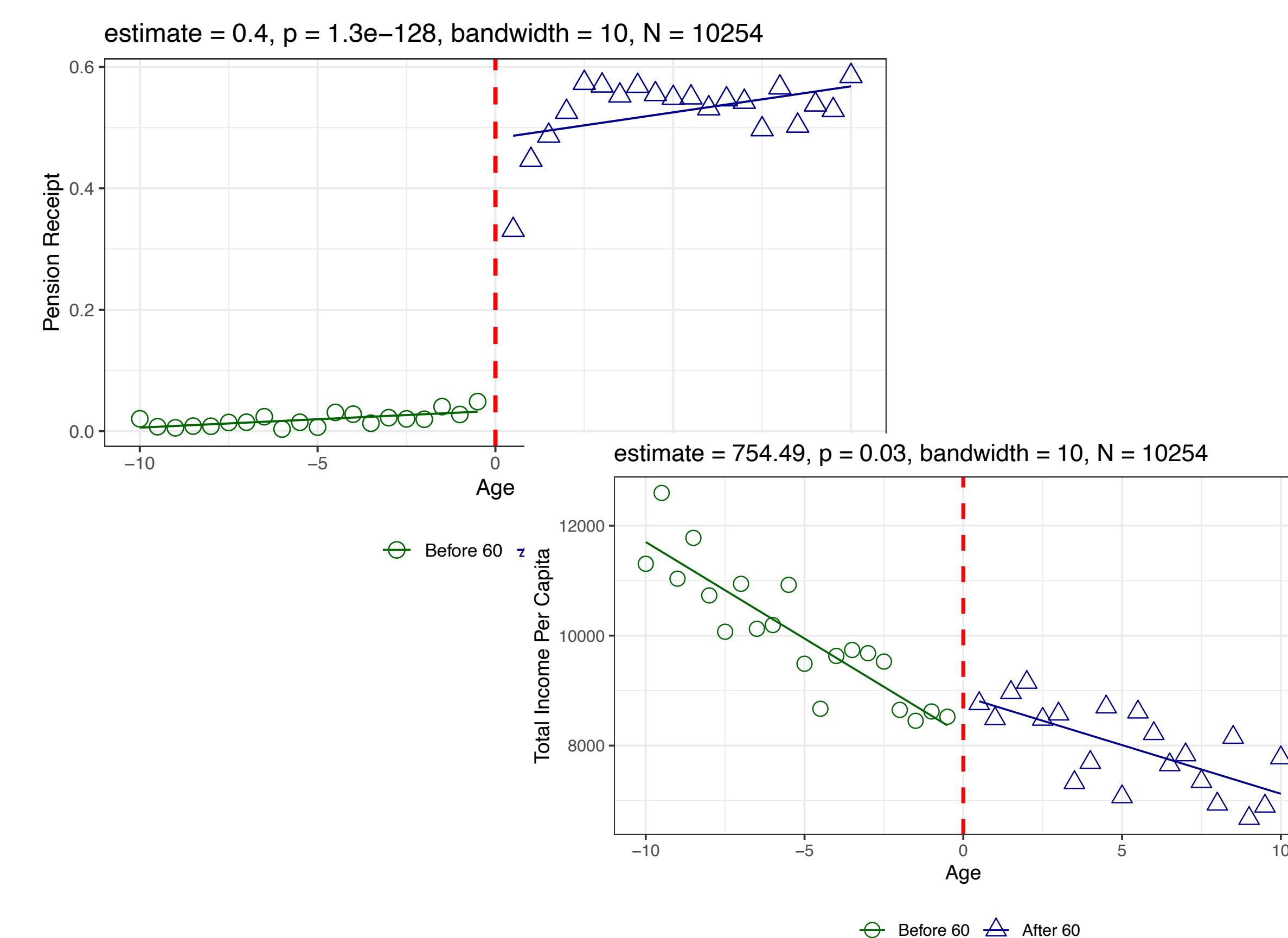


Figure 4. Effects of NRPS on Household Income

Results 1: NRPS Increases Child Weight, But Not Height

	(1)	(2)	(3)	(4)	(5)	(6)
<i>Panel A: Reduced-form results</i>						
NRPS eligibility	0.395*** (0.126)	0.334** (0.150)	0.412*** (0.138)	0.496*** (0.156)		
Male eligibility					0.436*** (0.150)	0.522*** (0.163)
Female eligibility					0.038 (0.156)	0.055 (0.169)
<i>Panel B: 2SLS results</i>						
NRPS pensioner	0.834*** (0.267)	0.745** (0.337)	0.906*** (0.307)	1.088*** (0.356)		
Male pensioner					1.092** (0.427)	1.301*** (0.447)
Female pensioner					-0.008 (0.404)	-0.016 (0.437)
Age and gender	Y	Y	Y	Y	Y	Y
Household covariates		Y	Y	Y	Y	Y
County FEs			Y	Y	Y	Y
Year FEs	Y	Y	Y	Y	Y	Y
Older seniors				Y		Y
Observations	7366	7366	7366	7366	7366	7366

Table 1. Effects of NRPS on Child BMI Z Score: Full Sample

Results 2: Effects are Driven by Male Pension Receipt, in Boys Subsample

	Boys subsample			Girls subsample		
	BMI z	Overweight	Obese	BMI z	Overweight	Obese
Male pensioner	1.148** (0.563)	0.154** (0.077)	0.142** (0.067)	1.098 (0.709)	0.072 (0.077)	0.069 (0.059)
Female pensioner	0.637 (0.557)	0.025 (0.085)	0.027 (0.065)	-0.510 (0.622)	-0.011 (0.072)	-0.012 (0.061)
Age and gender	Y	Y	Y	Y	Y	Y
Household covariates	Y	Y	Y	Y	Y	Y
County FEs	Y	Y	Y	Y	Y	Y
Year FEs	Y	Y	Y	Y	Y	Y
Observations	3898	3898	3898	3468	3468	3468

Table 2. Effects of NRPS on Child Weight: Subsample Results

Mechanism

We found time allocation of grandparents to childcare changed moderately. The effects are likely to be driven by an income expansion. We tested the mechanism of son-preference by differentiating father's father from mother's father. The effects of father's father show more economic and statistical significance, implying son-preference is a plausible channel. Because the grandson carries the family name from father's father.

Please see the latest version of paper on my website: <https://sites.google.com/view/jinyang-yang>

References

Duflo, Esther. 2003. "Grandmothers and Granddaughters: Old-Age Pensions and Intrahousehold Allocation in South Africa." World Bank Economic Review, 17(1): 1-25.