

## THE MOTIVES OF INTERGENERATIONAL TRANSFERS IN CHINA



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### ABSTRACT

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International transfers in China are mostly from adult children to elderly parents. Using data from the China Health and Retirement Longitudinal Study (CHARLS), this study explores the motives of intergenerational transfers in China. Understanding the motives of intergenerational transfers is crucial for policy makers. Altruistic motive and exchange motive would lead to different response from the transferors. Theories show that transfers based on altruistic motives would be crowded out by public transfers. The conditional least-square threshold model is used to allow the possible coexistence of altruistic motive and exchange motive. Results show adequate evidence to support the altruistic motive. Other motives include the social norm motive, the self-interest motive and the demonstration effect motive are explored, but the results are not sufficient to support them. Appropriate public old-age policy needs to address this crowding-out issue, to help elderly people, especially in rural areas.

**Contribution/ Originality:** Using a nationwide dataset, we explored the motives of intergenerational transfers in China. The conditional least-square threshold model is used to allow the possible coexistence of altruistic motive and exchange motive. This study improved the understanding of intergenerational transfers in China. Other transfer motives, previously not studied in transfer literature, are also explored.

## 1. INTRODUCTION

Intergenerational transfers, between parents and adult children, are part of the resource reallocation practice in families. In developed countries like the U.S., the direction of these transfers is mostly from the parents to the adult children (e.g., Gale and Scholz (1994)). In developing countries like China, the flow of the transfers is the opposite of that of developed countries. In developing countries, a significant proportion of intergenerational transfers is from the adult children to the parents (e.g., Lee, Parish, and Willis (1994)). These transfers seem to function like old-age support.

Ageing population continues to be an issue in China. The percentage of people aged 65 and above will increase from 11.5 percent in 2019 to an estimated 26.1 percent in 2050. The main reason is the drastic decline in total fertility rate<sup>1</sup> over the past several decades. The rate dropped from around 6 in the late 1960s to 1.7 in 2019 (United Nations,

<sup>1</sup> The total fertility rate is defined as the average number of children a hypothetical cohort of women would have at the end of their reproductive period if they were subject during their whole lives to the fertility rates of a given period and if they were not subject to mortality. It is expressed as children per woman.

2020).<sup>2</sup> China started to abandon the one-child policy and fully implemented the two-child policy in 2016. Nonetheless, the policy change may not be able to alter the trend of the ageing population in time. The current generation of adults has a much lower fertility rate than that of the previous generation, and these adults will approach retirement soon. An increase in the demand for old-age support is imminent, so an answer is needed to how this demand can be satisfied.

The public old-age support program in China is relatively inadequate. According to the reports by the OECD in 2018 and 2019, China's old-age pension spending was around 4.3 percent of the GDP. The figure was 7.1 percent in the U.S., and the average figure of OECD countries was 8 percent (OECD, 2018; OECD, 2019). China established a new universal non-contributory pension plan in 2014. This plan covers both urban and rural areas. Nonetheless, this pension plan has inadequacies. For example, Liu and Sun (2016) argued that the benefit level of the new pension plan is still low. They also claimed that the benefit level varies in different areas. The benefit level in rural areas is lower than that in urban areas.

The private transfers from children to parents are significant sources of income for elderly people in China. For example, using the China Urban Labor Survey, Cai, Giles, and Meng (2006) found that 60 percent of the respondents agreed that adult children should be partly responsible for supporting the parents. In the sample used in this paper, it was found that transfers from adult children could contribute around 60 percent of parents' per capita household income. Even with the availability of public old-age support, children are viewed as the major parties providing old-age support for their parents, consistent with the long-standing concept of "raising offspring for old age" in China.

With all this in mind, it is important to study the transfers from the adult children to their parents in China. It is particularly crucial to understand the motives behind making intergenerational transfers. Studies show that the actions of the transferors in response to public policy may vary because of different transfer motives. Two major motives have been proposed: the altruistic motive and the exchange motive. Becker (1974) proposed altruistic behaviour between people. People show this behaviour because they care about the well-being of another person. If the adult child is altruistic, the child would care about the well-being of the parents. It has been shown that transfers from the adult children would decrease if the income of the parents increases. The exchange motive was proposed by Cox (1987) to model transfer behaviour. In his model, money transfer is the payment for services given by the transfer recipient. It has been shown that transfers from the adult children would increase if the income of the parents increases under some conditions.<sup>3</sup>

The correlation between the recipient's income and transfer amounts serves as the indicator of the transfer motive. This correlation is called "transfer derivative" in the literature (Cox, Hansen, & Jimenez, 2004). As mentioned in last paragraph, transfers from the adult children and parents' income are negatively correlated if the adult child is altruistic. It means that the presence of the altruistic motive can be indicated by a negative transfer derivative. On the other hand, transfers from the adult children and parents' income are positively correlated if exchange motive is behind the transfer. It means that a positive transfer derivative indicates the existence of the exchange motive.

Understanding the transfer motive is important for policy makers. Public old-age support raises the income of elderly people. It may increase the transfers from the adult children if the exchange motive is behind these transfers. However, if the altruistic motive is true, public old-age support will decrease private transfers from the adult children. In other words, public old-age support crowds out private old-age support, and elderly people will be worse off.

Many empirical studies have examined transfer motives. Results are mixed. Some found a positive correlation between the recipient's pre-transfer income and the transfer amounts, a result that supports the exchange motive (e.g., (Cox, 1987; Cox & Rank, 1992; Cox, Eser, & Jimenez, 1998)). McGarry and Schoeni (1995), on the other hand,

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<sup>2</sup> The one-child policy was introduced in 1978. The drop in the total fertility rate was the most significant during the late 1970s and the early 1980s.

<sup>3</sup> For details, see Cox (1987).

found evidence to support the altruistic motive. There are also studies that could not find significant evidence to support either motive (e.g. (Altonji, Hayashi, & Kotlikoff, 1997; Knowles & Anker, 1981; Lucas & Stark, 1985)).

Because of the mixed results of transfer motives, some researchers started to explore the possibility of a mixed motive. Cox et al. (2004) proposed that the correlation between the transfer amounts and recipients' income could be nonlinear. They suggested that transfer motives could depend on the recipient's income. When the recipient's income level is low, the purpose of the transferor making a transfer is probably to help the recipient to improve the living standard. As a result, the transfer derivative is negative, indicating the altruistic motive. When the recipient's income level is higher, the need for helping the recipient becomes smaller, and the altruistic motive will gradually vanish. Cox et al. (2004) further suggested that the transfers need not disappear. Instead, the transfer derivative will change from negative to positive, indicating a change from altruistic motive to exchange motive.

Given the importance of intergenerational transfers in China, empirical studies on intergenerational transfers using China's dataset are not sufficient. Secondi (1997) used the data of a Chinese household survey to examine transfer motives. He found a positive transfer derivative, which showed that exchange motive was behind some of the transfers. However, some of the transfers included in that study, such as the remittances from husbands who lived in urban areas to wives who lived in rural areas, are intragenerational transfers rather than intergenerational transfers. Because of the inclusion of the intragenerational transfer, the results could not reveal the motive of intergenerational transfers. Liu and Reilly (2004) studied the determinants of remittances made by migrant workers to rural households, using a 1995 survey in Shandong province. Their results did not support either motive. Nonetheless, they included intragenerational transfers in the analysis, and thus their result was unable to reveal the motive of intergenerational transfers, as in the study by Secondi (1997).

Cai et al. (2006) studied the private transfers to retirees using the China Urban Labor Survey. They followed the method used in Cox et al. (2004), the conditional least squares threshold model. As in Cox et al. (2004); Cai et al. (2006) allowed the transfer derivative to be nonlinear. In particular, the transfer derivative could change when the recipient's income was above a threshold. They showed the presence of the altruistic motive when the recipient's income was low. However, like the other two studies mentioned, the transfers in their study might include intragenerational transfers. The results should thus be viewed with caution.

Wu and Li (2014) used the pilot data of the China Health and Retirement Longitudinal Study (CHARLS). The pilot data included data on two provinces, Zhejiang and Gansu. Because of the quality of the dataset, they were able to focus solely on intergenerational transfers from adult children to their parents. They also used the conditional least squares threshold model. Their results showed a negative transfer derivative when the parents' pre-transfer income was low, which is consistent with the altruistic motive. Some evidence consistent with the exchange motive could also be found, but only for the son-only subsample.

Using three waves of CHARLS nationwide data, this paper examines how the transfers from the adult children correlate with the pre-transfer income level of the parents in China. The methodology is similar to the one used in Wu and Li (2014), the conditional least squares threshold model. This allows the testing of both the altruistic motive and the exchange motive. Although the methodology used is similar, this study is different from Wu and Li (2014). Some extra independent variables are included in the analysis to show the possible existence of other transfer motives apart from the altruistic motive and exchange motive. Those transfer motives include the social norm motive, the self-interest motive and the demonstration effect motive.

## 2. DATA AND ESTIMATION STRATEGY

The dataset used in this study is the China Health and Retirement Longitudinal Study (CHARLS). It has detailed information on individuals over age 45 in China. Three waves of CHARLS were used: 2011 CHARLS Wave 1, 2013 CHARLS Wave 2, and 2015 CHARLS wave 4. CHARLS is a nationwide survey, and individuals are followed up every two years. CHARLS provides a high-quality nationally representative sample of Chinese elderly people. It includes a

rich set of questions, covering broad aspects of elderly people like their health status and socioeconomic status. It provides a solid foundation for research on ageing in China.

The dependent variable of this study is the net transfer amount received from children. The parents are the observations of this study. A total of 12,392 individuals who are over 45 years of age in China are included in the sample. The core explanatory variable is the pre-transfer income of elderly people. Other explanatory variables about the elderly people like their age, gender, marital status and household wealth were also included in the result estimations. Descriptive statistics for all the variables used in the analysis are reported in Table 1.

The focus of this study is to examine how the recipient's pre-transfer income correlates with the net transfer amounts received from children. Cox et al. (2004) suggested that the altruistic motive and the exchange motive may coexist. A linear model is too restrictive in the sense that it does not allow the transfer derivative to change across different income levels. This study uses the methodology in the literature (e.g., (Cai et al., 2006; Cox et al., 2004; Wu & Li, 2014)), which is the conditional least square threshold model. This model is preferred because it allows a change in transfer derivative at a certain threshold. When the pre-transfer income is below the threshold, it is expected that the transfer derivative is negative, and the magnitude of the derivative is large. This indicates a very strong altruistic motive behind the transfers for relatively poor households. When the pre-transfer income is above the threshold, the transfer derivative would become less negative or even positive, indicating the disappearance of the altruistic motive or even the exchange motive.

Table 1. Summary statistics of the CHARLS sample.

Variables	Mean	Standard deviation
Net transfers	925.449	19788.39
Pre-transfer income	7231.444	24844.97
Adjusted pre-transfer income	6188.586	25732.87
Household wealth per capita (thousands)	86.902	941.305
Taking care of grandchildren	0.503	0.500
Co-residing	0.486	0.500
Living in rural area	0.695	0.460
ADL	0.362	0.963
Household size	3.475	1.730
Age	59.778	8.081
Age square	3638.764	996.535
Married	0.892	0.311
Male	0.011	0.126
Education	3.172	1.859
Having a son	0.875	0.331
No. of children	2.867	1.302
Housing wealth (thousands)	196.077	1959.938
Transfers to own parents	434.851	2110.059
Only child	0.095	0.294
No. of observations	12,392	

The transfer derivative is estimated using the conditional least square threshold model. It is represented by Equation 1 as follows:

$$T_i = b_0 + b_1 \min(E_i, K) + b_2 \max(0, E_i - K) + b_3 X_i + u_i \quad (1)$$

where  $T_i$  denotes net transfer received.  $E_i$  denotes household's pre-transfer income, and  $K$  is the threshold. The transfer derivatives are captured by  $b_1$  and  $b_2$ . The transfer derivative below the threshold is denoted by  $b_1$ ;  $b_2$  denotes the transfer derivative above the threshold. Different percentiles of a household's pre-transfer income are chosen as the thresholds and the transfer derivatives are estimated with each threshold. The vector  $X_i$  denotes all other determining variables that may be correlated with the transfer amounts. These variables include the characteristics of the parents or households, like age, education, marital status, health status, wealth, whether

coresiding with adult children or not, and whether taking care of grandchildren.

In addition to the altruistic motive and the exchange motive, this study explores the possibility of other transfer motives. We first consider the self-interest motive.<sup>4</sup> People are assumed to maximize their own interest. Parents with a significant amount of wealth could be a strong pull factor for children's supportive behavior, such as caring for them or co-residing. Children with siblings are more involved in supportive behavior for the parents because they are competing for the inheritance. In contrast, a child without siblings does not need to compete with other people. The interaction term between parents' wealth and only-child family type is used to test the self-interest motive.

Social norm is a possible motive for adult children to transfer money to their parents. Literature about parent-child co-residence suggested that social norm was the motive behind the co-residence decision (e.g., (Tsuya & Martin, 1992; Wang et al., 2019)). This idea is adopted to explore if social norm is the motive behind transfers. Chinese believe in "raising sons to support older parents." This study includes the variable "having a son" in the analysis to examine the social norm motive.

Another motive mentioned in the literature is the demonstration effect motive. It means that children observe how their parents transfer money to their own parents, and then they follow suit (Cox & Stark, 1994). The variable "transfer to own parents" is used to explore this demonstration effect motive.

**Table 2.** Full regression estimates of the net transfer amount received from children to parents (pre-transfer income without adjustment for medical expenditure).

Variables	Regression 1	Regression 2	Regression 3
Threshold Used	25%: 150	50%: 3177.5	75%: 9822.223
Pre-transfer income below threshold	-1.640*** (0.029)	-1.537*** (0.027)	-1.191*** (0.023)
Pre-transfer income above threshold	-0.147*** (0.007)	-0.133*** (0.007)	-0.116*** (0.007)
Household wealth per capita (thousands)	0.128 (0.204)	0.101 (0.205)	0.112 (0.209)
Household wealth per capita (thousands) × only child	-4.093 (2.568)	-3.380 (2.574)	-1.087 (2.626)
Taking care of grandchildren	669.406** (331.555)	532.992 (332.411)	470.296 (339.118)
Co-residing	579.741 (397.558)	1064.888*** (398.876)	1396.584*** (407.450)
Living in rural area	-1107.952*** (351.358)	-1743.366*** (351.937)	-2939.929*** (359.898)
ADL	-7.784 (164.309)	-112.669 (164.701)	-301.605* (168.054)
Household size	79.294 (117.837)	125.919 (118.187)	-6.712 (120.444)
Age	316.979 (217.448)	259.527 (218)	139.549 (222.436)
Age square	-2.191 (1.773)	-1.894 (1.777)	-1.023 (1.813)
Married	940.844* (506.701)	746.214 (507.921)	407.410 (518.114)
Male	-640.607 (1232.674)	-642.126 (1235.732)	-832.309 (1260.492)
Education	125.005 (87.903)	253.685*** (88.102)	495.993*** (90.090)
Having a son	-900.812* (483.954)	-833.739* (485.133)	-724.071 (494.839)
Number of children	485.407*** (141.105)	348.930** (141.542)	177.853 (144.646)
Housing wealth (thousands)	-0.013 (0.098)	-0.015 (0.098)	-0.018 (0.100)
Transfers to own parents	-0.153** (0.074)	-0.131* (0.074)	-0.088 (0.075)
R <sup>2</sup>	0.2446	0.2409	0.2101
Sample Size	12,392	12,392	12,392

Note: Standard errors are reported in parentheses, \*\*\*statistical significance at the 1% level; \*\*statistical significance at the 5% level; \*statistical significance at the 10% level.

### 3. RESULTS AND DISCUSSION

Table 2 summarizes the results from the baseline model. Using the conditional least square threshold model, this study estimates how the various factors are correlated with intergenerational transfers in China. The dependent variable is the net transfer amount received from children to parents. The major independent variable is the pre-

<sup>4</sup> For details, see Wang, Sun, and Wang (2019).

transfer income of elderly people. The 25th, 50th, and 75th percentiles of the pre-transfer income are used as the thresholds.

Regardless of the thresholds, the pre-transfer income plays a significant and negative role both below and above the threshold. It means that poorer parents receive more transfers from their children, pointing to the existence of the altruistic motive. In other words, children care about their parents' well-being. When parents' poor financial strength cannot guarantee their quality of life, their children show more concern and provide more support to them. All coefficients of the pre-transfer income are negative and significant, showing a clear and strong altruistic motive. Moreover, when the pre-transfer income crosses the threshold, its negative effect weakens, and the higher the threshold, the larger the coefficient of the pre-transfer income both below and above the threshold. This indirectly shows that when the parents' income is at a higher level, the children's concern for parents' well-being becomes weaker. It shows that the altruistic motive dissipates. On the other hand, results show no positive transfer derivative below or above the threshold, meaning no evidence to support the exchange motive.

In addition to the altruistic motive and the exchange motive, other transfer motives are explored. The self-interest motive assumes that children make transfers to their parents to increase the chance of getting the inheritance. In families with multiple children, every child needs to compete with the siblings; in contrast, there is no competition in only-child families. The interaction term between household wealth per capita and the dummy variable "only child" could reflect this motive. Results show that the coefficient of the interaction term is negative, implying that the effect of parents' wealth on transfers received is weaker in only-child families. The direction seems to support the self-interest motive, but the coefficients are significant only in a few estimations. Thus, not enough evidence is found in support of the self-interest motive.

Another possible transfer motive is social norm motive. In Chinese tradition, people believe in "raising sons to support older parents." If social norm is behind the transfers, the variable "having a son" would be positively correlated with the transfer amount. The results show the opposite as the variable "having a son" is significantly correlated to smaller transfer from the children. One explanation is son preference in China. Parents are more likely to support their sons financially when they are in need. This may lower the net transfers received from the children. Another possible explanation is that "raising sons to support older parents" is not true, and daughters provide more financial support to their parents.

The demonstration effect motive suggests that children are more likely to transfer money to their parents if their parents also support their own elderly parents. In this study, the opposite result was shown. The more that elderly people transferred to their own parents, the less they received from their own children. A possible explanation is that elderly people transferring money to their own parents is a signal. It indicates that they can take care not only of themselves but also their own parents, so that they have less need for monetary support from their own children. One should note that, even though the variable transfers to one's own parents carried a negative sign, it was significant only in some cases.

In addition to testing the motives of intergenerational transfers, the magnitude of the effect of some variables was large and thus worth attention. Variables like co-reside, education, and the number of children played significant and positive roles in affecting the net transfers. Elderly parents living with their children would receive more transfers than would those who live separately from their children. This suggests that living together and transferring money were complements but not substitutes for each other. It may also show the division of labor among the adult children. One of the children lives with the parents, and other children would be responsible for monetary support. Results also showed that more educated elderly people got more transfers from their children. Much literature has found that parents' education level is positively correlated with children's education level. Children with a higher education level are likely to have higher income. Literature shows that transferors with higher income are associated with higher transfer amounts. The results in this paper are consistent with those in the previous literature. The number of children could be considered as the number of the sources of transfers. Elderly parents with more children could thus receive

a larger transfer. A positive relationship between the number of children and the transfer amounts was found. In addition, whether elderly people live in rural areas was negatively correlated with the transfers they received from their children, and it was significant in many cases. In general, people who live in rural areas are poorer than those who live in urban areas. The financial strength of their children may not be solid, and it will be difficult for them to afford as many transfers as the urban children can afford.

**Table 3.** Full regression estimates of the net transfer amount received from children to parents (pre-transfer income with adjustment for medical expenditure).

Variables	Regression 1	Regression 2	Regression 3
Threshold Used	25%: 0	50%: 2750	75%: 9400
Pre-transfer income below threshold	-0.782*** (0.021)	-0.760*** (0.020)	-0.677*** (0.018)
Pre-transfer income above threshold	-0.146*** (0.007)	-0.140*** (0.007)	-0.129*** (0.007)
Household wealth per capita (thousands)	0.204 (0.218)	0.192 (0.218)	0.185 (0.219)
Household wealth per capita (thousands) × only child	-5.885** (2.757)	-5.554** (2.756)	-4.172 (2.763)
Taking care of grandchildren	613.181* (355.742)	553.475 (355.657)	516.247 (356.653)
Co-residing	374.790 (426.505)	568.229 (426.518)	814.943* (428.076)
Living in rural area	-1205.555*** (376.620)	-1430.285*** (376.217)	-2009.269*** (377.305)
ADL	-421.668** (176.896)	-468.177*** (176.904)	-541.859*** (177.552)
Household size	-37.035 (126.438)	-14.809 (126.434)	-58.360 (126.710)
Age	297.825 (233.079)	274.519 (233.011)	210.013 (233.693)
Age square	-2.177 (1.901)	-2.060 (1.900)	-1.614 (1.905)
Married	581.420 (544.032)	505.107 (543.848)	327.537 (545.371)
Male	-494.650 (1324.397)	-510.764 (1323.941)	-613.088 (1327.479)
Education	58.882 (94.239)	104.341 (94.151)	231.392 (94.396)
Having a son	-743.097 (519.012)	-719.343 (518.821)	-678.322 (520.204)
Number of children	586.223*** (151.277)	531.038*** (151.267)	431.784*** (151.829)
Housing wealth (thousands)	-0.029 (0.105)	-0.029 (0.105)	-0.028 (0.105)
Transfers to own parents	-0.165** (0.079)	-0.156** (0.079)	-0.131* (0.079)
R <sup>2</sup>	0.1421	0.1427	0.1380
Sample Size	12,302	12,302	12,302

**Note:** Standard errors are reported in parentheses, \*\*\*statistical significance at the 1% level, \*\*statistical significance at the 5% level, \*statistical significance at the 10% level.

To check the robustness of the results, other variations of analysis are estimated. The general result does not change substantially. Following the method by Wu and Li (2014), the pre-transfer income is replaced by the pre-transfer income with adjustment for medical expenditure. The whole set of estimation is repeated with this change. As suggested by Wu and Li, after excluding medical expenses, the remainder of the pre-transfer income is more likely to be used for household consumption. After this adjustment, the results still support the altruistic motive. Consistent with the findings of Wu and Li, the absolute values of the coefficients of the adjusted pre-transfer income below the threshold become smaller, meaning a weaker altruistic motive. This suggests that part of the children's transfers is a response to their parents' medical needs. Results are summarized in Table 3.

To further investigate the motives of intergenerational transfers, results are estimated separately on rural households and urban households. Around 70% of the sample respondents lived in rural areas. The rural-urban gap in economic development is very significant. In the sample, the mean pre-transfer income of urban households was 12,442.14 yuan, whereas the mean of rural households was only 40% of that. The difference between the two subsample was also substantial in household wealth per capital and in housing wealth. However, the difference in the net transfers received by elderly people was small, as the urban households mean was 1,004 yuan and the rural households mean was 891 yuan. In other words, the rural households mean of the net transfers reached nearly 90% of the urban

households mean. Given the large rural-urban gap in income and wealth, elderly people in rural households have a higher degree of dependence on intergenerational transfers.

The regression results of rural-urban comparison are summarized in Table 4. The results support the altruistic motive in both rural households and urban households, because all the income coefficients are significant and negative.

Table 4. Key regression estimates of the net transfer amount received from children to parents: Rural vs. urban.

	Without adjustment for medical expenditure			With adjustment for medical expenditure		
<b>Rural</b>						
Threshold	(1) 25%: 150	(2) 50%: 3177.5	(3) 75%: 9822.223	(4) 25%: 0	(5) 50%: 2750	(6) 75%: 9400
Pre-transfer income below threshold	-1.821*** (0.054)	-1.643*** (0.50)	-1.095*** (0.039)	-0.475*** (0.029)	-0.473*** (0.028)	-0.431*** (0.025)
Pre-transfer income above threshold	-0.416*** (0.012)	-0.403*** (0.013)	-0.405*** (0.014)	-0.429*** (0.007)	-0.429*** (0.013)	-0.440*** (0.014)
<b>Urban</b>						
Threshold	(1) 25%: 150	(2) 50%: 3177.5	(3) 75%: 9822.223	(4) 25%: 0	(5) 50%: 2750	(6) 75%: 9400
Pre-transfer income below threshold	-1.544*** (0.033)	-1.396*** (0.030)	-1.109*** (0.023)	-1.039*** (0.029)	-0.960*** (0.027)	-0.810*** (0.024)
Pre-transfer income above threshold	-0.045*** (0.008)	-0.030*** (0.008)	-0.018** (0.008)	-0.041*** (0.008)	-0.032*** (0.009)	-0.022** (0.009)

Note: Standard errors are reported in parentheses, \*\*\*statistical significance at the 1% level, \*\*statistical significance at the 5% level.

However, for the pre-transfer income above the threshold, the absolute values of the coefficients for urban households are much smaller than those of the rural households. For urban households, the magnitudes of coefficients drop a lot when the pre-transfer income is above the threshold and the coefficients are close to zero. Due to the better financial situation for elderly people in urban households, their children’s altruistic motive for transferring money is more likely to become negligible. After adjusting the pre-transfer income for medical expenditure, the absolute values of the coefficients of the adjusted pre-transfer income below the threshold become smaller, and such changes are greater for rural households. This indicates that a large part of the children’s transfers responds to their parents’ medical need in rural households. In other words, parents’ medical need is more likely to arouse their children’s concerns in rural areas.

#### 4. CONCLUSION

The main objective of this study is to investigate how intergenerational transfers from adult children correlate with the pre-transfer income of the parents in China. Data from the China Health and Retirement Longitudinal Study (CHARLS) are used to analyze the transfers. The conditional least squares threshold model is used because it allows the transfer derivative to be different below and above the threshold. This enables the testing of the possible coexistence of the altruistic motive and the exchange motive.

The empirical results show that parents’ pre-transfer income is significantly and negatively related to children’s transfers. When the parents’ pre-transfer income level is below the threshold, children’s transfers and the parents’ pre-transfer income level are negatively correlated. A negative transfer derivative indicates the altruistic motive. When the parents’ pre-transfer income level is above the threshold, the transfer derivative is still negative, but the magnitude becomes smaller. The smaller magnitude shows that the altruistic motive dissipates when the parents’ income level is higher. Not enough evidence can be found to support the exchange motive. Other possible motives behind the transfers are also examined. Not enough evidence can be found to support other motives like the self-interest motive, the social norm motive and the demonstration effect motive. This study also conducts an analysis separately for urban households and rural households. Results show that the altruistic motive is stronger for rural households.



As suggested by past literature, private transfers based on the altruistic motive may be crowded out by public transfers. With the increasing old-age population, fulfilling the demand of old-age support will continue to be an enormous burden in China. The possible crowding out effect by public old-age support adds a layer of consideration. Increasing the public old age support is supposed to help the old-age population but the possible crowding out effect may neutralize the benefit of the public old age support. The crowding out effect arises because the public old age support increases the income of the elderly, and the increased income is correlated with smaller transfers from the children. A possible solution to minimize the crowding out effect could be nonmonetary public old age support like health care voucher or food voucher. Appropriate policy to provide old-age support without triggering the crowding out effect is an important issue, particular for elderly in rural areas.

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