The Promoting Effect of Government Transfer Payments on the Consumption Upgrade Rate

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Abstract. Consumption upgrade is not only an important engine of economic growth, but also a crucial way to achieve high-quality economic development, improve people's livelihoods, and promote sustainable development. This paper uses the panel data of the China Family Panel Studies (CFPS) from 2020 to 2022 to deeply explore the impact of transfer payments on consumption upgrade at the household level, and analyzes its heterogeneous effects under different marital statuses, health conditions, and regions. The research results show that: (1) The benchmark regression indicates that government transfer payments significantly promote household consumption upgrade, and this conclusion remains valid after dealing with endogeneity and conducting robustness tests. (2) The heterogeneity analysis reveals that the promoting effect of government transfer payments on consumption upgrade is particularly significant in unmarried households, households with good health conditions of family members, and households in the central and western regions. (3) The mechanism analysis shows that government transfer payments promote consumption upgrade through two paths: increasing pension income and enhancing family responsibility. The former provides a stable economic guarantee for households, reducing the need for precautionary savings, while the latter prompts households to be more inclined to make long-term plans and increase spending on development-oriented and enjoyment-oriented consumption. This research not only reveals the multi-dimensional impact mechanism of government transfer payments on consumption upgrade, but also provides important empirical evidence and policy implications for optimizing government transfer payment strategies and promoting the upgrading of the consumption structure.

Keywords: Transfer Payments; Consumption Upgrade; Mechanism Analysis.

1. Introduction

At the current crucial stage of economic development, consumption, as the core driver of economic growth, has become increasingly important. The Central Economic Work Conference in 2024 clearly stated that it is necessary to implement a special action to boost consumption, promote income growth and burden reduction for low-and middle-income groups, and enhance their consumption capacity, willingness, and level. As the core approach to boosting consumption, consumption upgrading mutually promotes the upgrading of the industrial structure and the transformation of the economic growth model. It can effectively unblock the domestic and international economic cycles and inject strong endogenous impetus into economic growth. However, in recent years, the household consumption rate in China has shown a downward trend, and the process of consumption structure upgrading has also slowed down. According to the "Report on Chinese Consumers' Consumption Intention in the Fourth Quarter of 2024", the consumption intention index of Chinese consumers in the fourth quarter of 2024 was 119.3. Although it was within the prosperity range, it showed a continuous downward trend, and the future consumption intention is expected to decline significantly. At the same time, according to the "2024 China Consumption Trend Research", consumers' expected growth rate of their own consumption is 2.2%-2.4%. Their consumption capacity has increased slightly, but their savings intention remains strong. This indicates that the consumption potential in China has not been fully unleashed. Consumption upgrading is not only related to the improvement of people's living quality but also the key to promoting the upgrading of the industrial structure and the transformation of the economic growth model. Against the backdrop of the economy shifting from

high-speed growth to medium-high-speed growth, how to stimulate the consumption demand of residents has become the core issue in the transformation of the economic development mode.

Optimizing income distribution is the key to enhancing consumption willingness. Low-income groups have a higher marginal propensity to consume. Reasonable redistribution policies can effectively promote consumption (Li Zhenlin & Yue Ximing, 2023; Blinder, 1975; Musgrove, 1980). In addition, adjusting income distribution also plays a positive role in increasing overall social consumption (Wang Songtao & Wu Chaolin, 2021). The widening of the income gap will suppress consumption, while narrowing the gap can increase total consumption. Therefore, the old model of relying on inflation to stimulate domestic demand should be abandoned, and a new model centered on adjusting the income distribution pattern and improving the policies to enrich the people should be adopted to release consumption potential (Yang Canming et al., 2010). Transfer payment is one of the important ways to adjust income distribution, and its effect is more significant than that of taxes (Cai Meng & Yue Ximing, 2024). In 2024, China continued to make efforts in transfer payments such as subsistence allowances and social security. By increasing the basic pensions for urban and rural residents, raising the financial subsidies for medical insurance, and expanding the coverage of subsistence allowances, the social security system was further improved. According to the National Bureau of Statistics, at the end of 2024, 6.25 million people received urban subsistence allowances, 33.62 million people received rural subsistence allowances, 4.39 million people received assistance and support for rural extremely poor people, and 7.72 million person-times received temporary assistance throughout the year. Reasonably optimizing transfer payment policies can effectively reduce income inequality among regions (Doerrenberg & Peichl, 2014), and transfer payments play a positive redistributive role in both urban and rural areas[1-6].

The Chinese government attaches great importance to the role of transfer payments in consumption upgrading and continuously increases investment in areas such as social security and social assistance. The large-scale intervention of public finance has played a strong backup and important supporting role in promoting the consumption of rural poor households (Zheng Bingwen, 2018). In 2024, among the national general public budget expenditures, the expenditure on social security and employment reached 4,211.4 billion yuan, exceeding the education expenditure for the first time and becoming the largest expenditure item. The government further enhanced the consumption capacity and willingness of low-and middle-income groups by increasing the pension and medical insurance financial subsidy standards. The cash transfer payments to low-income families also significantly promoted total household consumption (Wu Min, 2020). In international experience, cash transfer payment programs can also significantly improve household consumption levels, especially in basic needs such as food and education (Attanasio & Mesnard, 2006). In view of this, this paper focuses on exploring the impact of government transfer payments on consumption upgrading. Through theoretical analysis and empirical research, it explores whether they can effectively promote the upgrading of the consumption level and the optimization of the consumption structure[7-8].

The remaining parts of this paper are arranged as follows: The second part is the literature review, the third part introduces the model setting, data, and variables, the fourth part is the empirical analysis, the fifth part is the further analysis, and the sixth part is the conclusion and policy recommendations.

2. Literature Review

Consumption is an important driver of economic growth (Zhang Xun et al., 2020; Ouyang Yao et al., 2016). However, China's economy still faces the problems of insufficient consumption and an irrational consumption structure. In terms of scale, China's household consumption rate dropped from 48.78% in 1978 to 38.79% in 2019. This situation of insufficient consumption is not only reflected in the total amount but also in the irrationality of the consumption structure. China's consumption is still mainly basic-type consumption, and the proportion of development-type consumption is relatively low (Nan Yongqing et al., 2023). In theoretical research, the reasons for insufficient consumption have long attracted the attention of scholars. Chen Binkai et al. (2023) pointed out that

the shrinkage of external demand is the direct cause of the economic growth slowdown, and the domestic market segmentation further amplifies the negative impact of the shrinkage of external demand. In addition, unequal income distribution, an imperfect social security system, and a lagging rural consumption market also restrict the growth of consumption (Li Jinchang et al., 2006). To solve these problems, scholars have proposed paths to promote consumption and consumption upgrading from different perspectives. From the perspective of external factors, digital inclusive finance is considered to be able to promote the improvement of residents' consumption levels, especially rural consumption, by enhancing the accessibility of financial services (Zou Xinyue et al., 2020). The development of science and technology, especially the improvement of Internet skills, also provides important support for consumption upgrading. By improving the accessibility of consumption channels and consumption information, it enhances residents' consumption capacity and willingness (Zhu Zhongkun, 2020). From the perspective of internal factors, financial literacy has a significant impact on the upgrading of residents' consumption structure and can effectively increase the proportion of development-type consumption (Nan Yongqing et al., 2023). In addition, social and cultural factors also play an important role in consumption upgrading. By shaping consumption concepts and demand preferences, they promote the optimization of the consumption structure (Guo et al., 2019; Wu et al., 2023). Fang Xian and Jin Gang (2020) further pointed out that the social learning effect promotes consumption upgrading through cultural consumption, reflecting the important role of cultural factors in consumption behavior[9-13].

Transfer payments, as an important tool for the government to adjust income distribution and alleviate poverty, occupy a core position in China's fiscal policy. Xie E (2018) pointed out that more than 90% of China's redistributive effects are achieved through public transfer payments. This shows that transfer payments play a leading role in China's redistribution mechanism. In terms of poverty alleviation, the role of transfer payments shows obvious duality. On the one hand, Lu Shengfeng et al. (2018) found that the "targeted poverty alleviation" measures in government-sponsored assistance have significant effects and are the best-performing policy tools among various poverty alleviation means. However, on the other hand, transfer payments may also bring some negative effects. Sun Bochi and Duan Zhimin (2020) pointed out that rural subsistence allowances may, to a certain extent, increase the poverty vulnerability of poor families. The research of Darity & Myers (1987) also shows that transfer payments may cause poor groups to fall into the "welfare trap", making them rely on welfare in the long term instead of getting rid of poverty. This indicates that the role of transfer payments in alleviating poverty and promoting fairness is not always positive, and their policy effects are restricted by many factors. In terms of promoting income distribution fairness, different transfer payment systems have significantly different effects on income distribution (Dastrup et al., 2007). Early studies pointed out that transfer income has not become an effective means to narrow the income gap (Huang Zuhui et al., 2003), and instead, it has, to a certain extent, aggravated income inequality. The redistributive effect of China's social security expenditure is relatively low, only 15% of the theoretical maximum value (Xu Jing et al., 2018). Government transfer payments have a certain inhibitory effect on the urban-rural income gap, but this effect is not significant. Guo Qingwang et al. (2016) proved that the income redistribution role of transfer expenditures in rural areas is relatively limited. In recent years, the situation has improved. Yang Sui and Zhao Xiaoman (2022) found that the overall redistributive role of China's social security has gradually increased, and social security income has played a positive role in narrowing the income gap. By adjusting the distribution method of existing transfer payments, reducing the degree of change in residents' income ranking, and increasing the progressivity, it is possible to move the actual transfer payments closer to the optimal plan (Yue Ximing et al., 2021)[14-19].

The role of transfer payments in promoting consumption has been widely recognized. It can not only effectively narrow the urban-rural consumption gap (Bian Shu and Zhang Mingzhi, 2021) but also indirectly promote consumption growth by optimizing income distribution (Guo Nianzhi, 2018; Wan Guanghua, 2022). Wu Min's (2020) research further pointed out that cash transfer payments have a significant promoting effect on the consumption-type and welfare-type expenditures of low-

income families, although their impact on enjoyment-type consumption is limited. International experience also shows that conditional cash transfer payments can not only increase the education and health consumption of beneficiary families (Attanasio & Mesnard, 2006) but also drive the consumption growth of surrounding people through the community effect, showing significant externalities (AngelucciDe & Giorgi, 2009). The research of Chen Dian et al. (2022) shows that rural subsistence allowances have significantly increased the expenditures of poor families on household equipment services, education, culture and entertainment, and medical and health care, and have a more prominent positive impact on multi-dimensionally poor families. The results of the heterogeneity analysis further show that rural subsistence allowances have a more obvious promoting effect on the medical and health care expenditures of elderly and sick families, and a more significant effect on promoting the education and cultural entertainment expenditures of families with minor children and families with low educational levels[20-25].

Previous studies focused on the direct impact of different types of transfer payments on consumption but insufficiently explored the impact mechanism of transfer payments on the consumption structure and the heterogeneity among different groups. Based on this, the marginal contributions of this paper are as follows. First, based on theoretical analysis and empirical tests, this paper systematically reveals the impact of transfer payments on the consumption upgrade rate. Second, it is found that transfer payments mainly promote the upgrading of the consumption structure by increasing pension income and enhancing family responsibility. Finally, this paper reveals the heterogeneous impacts of transfer payments among different marital groups, health groups, and different regions, and finds that they have a more significant effect on the consumption structure upgrade of unmarried and healthy groups and residents in the central and western regions. These findings not only provide a theoretical basis for optimizing transfer payment policies but also provide policy implications for narrowing the consumption gaps among regions and groups.

3. Model Specification, Data, and Variables

3.1. Model Specification

The model mainly used in this paper is the fixed-effect model (FE). The specific model is shown in equation (1):

$$Upgrade_{it}=\beta_0+\beta_1 lnTransfer_{it}+\beta_2 X_{it}+T_{it}+\pi_{it}+\varepsilon_{it} \quad (1)$$

Here, the explained variable $Upgrade_{it}$ represents the consumption upgrade rate of the i-th household at time t. The explanatory variable $lnTransfer_{it}$ is the government transfer payment received by the i-th household at time t (the subsidy is distributed in the form of cash, in-kind, or bank transfer). Of course, to discuss the robustness of the conclusion, later in the paper, \(enjoyment-type\ consumption/(survival-type\ consumption + development-type\ consumption)\), namely consumption upgrade rate 1, and the proportion of enjoyment-type consumption are also used for further investigation. X_{it} is the control variable affecting the household consumption upgrade rate, including net assets, net income, age, male gender, educational attainment, agricultural household registration, durable consumer goods, and time deposits. T_{it} is the time-dummy variable, which is used to control the potential impact of the sample time trend on the research conclusion. π_{it} is the dummy variable for each household, controlling the household fixed effect. ε_{it} is the random disturbance term. β_1 is the coefficient of interest in this paper, representing the impact of government transfer payments on the consumption upgrade rate.

3.2. Data

The data used in this paper are from the China Family Financial Surveys conducted by the China Family Panel Studies (CFPS) nationwide in 2020 and 2022. This is household-tracking data. The CFPS collects data at the individual, household, and community levels, covering financial

information such as household assets, liabilities, income, and expenditures, as well as socioeconomic information such as individual demographic characteristics, employment status, mobility, and insurance coverage. In 2020 and 2022, the CFPS carried out the sixth and seventh national surveys respectively. The sample distribution scales were 19,000 and 19,500 households, and the final effective sample sizes exceeded 22,000 and 23,000 households respectively. Affected by the epidemic, both surveys mainly adopted the form of telephone interviews. The cross-sectional response rates at the household level were 62% and 58% respectively, and the cross-wave response rates were 77% and 78% respectively. Through multi-stage, implicit stratification, and systematic probability sampling proportional to population size, the CFPS ensures the national representativeness of the sample.

3.3. Variables

3.3.1. Dependent Variable: Consumption Upgrade Rate

As the dependent variable, the consumption upgrade rate is a key indicator for measuring the optimization and upgrading of the household consumption structure. It is measured by calculating the weighted ratio of a household's expenditures on survival-type, development-type, and enjoyment-type consumption. Referring to relevant research (Si Chuanning et al., 2022; Xu Jia and Wei Xin, 2021), the three types of consumption are classified as follows. Specifically, survival-type consumption includes expenditures on food, clothing, housing, and daily necessities. Development-type consumption includes expenditures on transportation, communication, and education. Enjoyment-type consumption includes expenditures on culture, entertainment, and medical and health care. Using the benchmarking analysis method, by collecting and comparing domestic and foreign consumption data, it is found that the change trend of China's consumption structure has some similarities with that of some developed countries. It is predicted that in the future, the proportion of survival-type consumption in the consumption structure of Chinese residents will decline, and the proportions of development-type and enjoyment-type consumption will increase. That is, an increase in the proportions of development-type and enjoyment-type consumption will contribute more to the increase in the consumption upgrade rate (Wu Bin et al., 2023). The calculation formula for the consumption upgrade rate in this paper is: proportion of survival-type consumption + 2×proportion of development-type consumption + 3×proportion of enjoyment-type consumption. Among them, the proportion of survival-type consumption is the proportion of expenditures on food, clothing, housing, and daily necessities in total consumption. The proportion of development-type consumption is the proportion of expenditures on transportation, communication, and education in total consumption. The proportion of enjoyment-type consumption is the proportion of expenditures on culture, entertainment, and medical and health care in total consumption. Total consumption is the sum of all the above-mentioned consumption expenditures. By assigning higher weights to development-type and enjoyment-type consumption, the consumption upgrade rate can more accurately reflect the degree of optimization of the household consumption structure. A higher consumption upgrade rate indicates that a household has increased its investment in development-type and enjoyment-type consumption, and the consumption structure tends to be upgraded. In this paper, by analyzing the changes in the consumption upgrade rate, the dynamic evolution of the household consumption structure and its influencing factors are revealed, providing an empirical basis for understanding household consumption behavior and its response to economic policies[26-30].

3.3.2. Core Control Variable: Government Transfer Payments

Government transfer payments are an important indicator for measuring various types of transfer income that a household receives from the government. The subsidy distribution forms are diverse, including cash, in-kind, or bank transfer. As a key component of a household's disposable income, government transfer payments not only directly increase the household's economic resources but also reflect the policy implementation effects of the government in areas such as social security, poverty alleviation and assistance, and public service provision. From a theoretical perspective, the transfer

payment system is a core element of the tax-sharing fiscal system, aiming to achieve macro-economic regulation and control, alleviate regional economic imbalances, and meet the spillover demand for public services through the transfer of financial resources among governments. When processing the data, this paper takes the logarithm of government transfer payments to mitigate the right-skewed distribution of the data and avoid problems caused by zero or negative values. By introducing the variable of government transfer payments, this paper will deeply explore its potential impact on household economic behavior and consumption upgrading, and further reveal the mechanism of government transfer payments in promoting the improvement of household welfare and the optimization of the consumption structure.

3.3.3. Other Control Variables

Table 1. Descriptive Statistics of Variables

Variable Name	Sample Size	Mean	Standard Deviation	Minimum Value	Maximum Value
Consumption Upgrade Rate	4332	1.366	0.241	1.000	2.808
Transfer Payments	4332	2.448	3.419	0.000	11.912
Net Assets	4332	12.778	1.515	4.615	17.560
Net Income	4332	11.418	0.868	0.000	16.248
Age	4332	23.303	5.904	16.000	71.000
Male	4332	0.539	0.499	0.000	1.000
Educational Attainment	4332	12.618	3.154	0.000	23.000
Agricultural Household Registration	4332	0.705	0.456	0.000	1.000
Durable Consumer Goods	4332	9.628	2.631	0.000	16.118
Time Deposits	4332	0.081	0.177	0.000	3.401
Pension	4332	2.460	3.959	0.000	12.226
Sense of Responsibility	4332	1.528	0.367	1.000	2.236
Marital Status	4332	0.195	0.396	0.000	1.000
Health Status	4332	0.503	0.500	0.000	1.000
Consumption Upgrade Rate 1	4332	0.098	0.276	0.000	8.791
Proportion of Enjoyment-type Consumption	4332	0.068	0.100	0.000	0.898

Other control variables in this paper can be roughly classified into the following categories. First, household economic characteristic variables reflect the economic situation and wealth level of a household, including net income, the value of durable consumer goods, and the proportion of time deposits. Net income is the logarithm of the household's net income level after deducting all necessary expenditures over a certain period. The higher the household income, the higher the expenditures on development-type and enjoyment-type consumption (Sun Hao and Hu Angang, 2013). The value of durable consumer goods is also logarithmically transformed, reflecting the household's wealth accumulation level, which is significantly related to the upgrading of the consumption structure (Jiang Lu et al., 2019). The proportion of time deposits reflects the household's financial asset allocation, and its level directly affects the household's expenditures on development-type and enjoyment-type consumption (Jiang Lu et al., 2019). Second, individual demographic variables include age, gender, and educational attainment. Age reflects the differences in consumption behavior at different life-cycle stages. Younger households tend to prefer enjoyment-type consumption, while older households pay more attention to survival-type consumption (Zhang Jihai et al., 2023). Gender reflects the influence of gender differences in consumption decision-making. Women show a higher tendency towards development-type consumption such as education and medical and health care (Zhu

Zhongkun, 2020). Educational attainment is assigned a value according to the educational level. Individuals with a higher educational level have more confidence in future income and are more inclined to engage in development-type and enjoyment-type consumption (Sun Zao & Xu Xuelu, 2018). Third, household social-attribute variables include whether the household has an agricultural household registration. There are significant differences in the consumption structure between urban and rural households. Households with agricultural household registration face more challenges in consumption upgrading due to limited income sources and insufficient public services (Luo Yongming and Chen Qiuhong, 2020)[31-38].

4. Empirical Analysis

4.1. Benchmark Regression

Table 2 shows the results of the regression analysis of the impact of government transfer payments on the residents' consumption upgrade rate. In column (1), no control variables or fixed effects are included. In column (2), individual and time fixed effects are added to the model to control for the potential interference of unobservable individual heterogeneity and time trends on the results. In column (3), control variables are further introduced, including household economic characteristics (net assets, net income, durable consumer goods, time deposits), individual demographic characteristics (age, gender, educational attainment), and household social attributes (agricultural household registration). The results show that government transfer payments have a significant promoting effect on the residents' consumption upgrade rate, significant at the 1% level. This indicates that the government directly increases residents' disposable income through transfer payments (such as social security, subsistence allowances, pensions, etc.), increasing the proportion of households' expenditures on development-type and enjoyment-type consumption. From the perspective of the consumption structure, transfer payments provide a stable income source for low-income families, enabling them to shift from basic survival-type consumption to higher-level consumption. Secondly, government transfer payments enhance residents' expectations of future income, thus increasing their consumption expenditures in areas such as education, medical and health care, and culture and entertainment in future planning[39].

4.2. Robustness Tests

First, in the regression analysis, this paper uses cluster-robust standard errors at the household level, assuming that different samples within the same household are subject to the same shocks, while samples from different households are subject to different shocks. According to the regression results in column (1) of Table 3, the promoting effect of transfer payments on consumption upgrading remains significant. Second, this paper further tests the impact of transfer payments by replacing the explained variable with enjoyment-type consumption/(survival-type consumption+development-type consumption), that is, the consumption upgrade rate. According to the regression results in column (2) of Table 3, the promoting effect of transfer payments on consumption upgrading remains significant. Finally, this paper replaces the explained variable with the proportion of enjoyment-type consumption and once again verifies the significant promoting effect of transfer payments on consumption upgrading. According to the regression results in column (3) of Table 3, the promoting effect of transfer payments on consumption upgrading is still significant. The above results show that, regardless of the measurement method used, the positive impact of transfer payments on consumption upgrading is robust, thus verifying the reliability of the conclusions of this paper.

Table 2. Benchmark Regression Results

	(1)	(2)	(3)
	Consumption Upgrade Rate	Consumption Upgrade Rate	Consumption Upgrade Rate
Transfer Payments	0.0120*** (0.0011)	0.0063*** (0.0014)	0.0062*** (0.0014)
Net Assets			0.0208*** (0.0039)
Net Income			-0.0268*** (0.0065)
Age			-0.0003 (0.0009)
Male			-0.0129 (0.0079)
Educational Attainment			0.0003 (0.0017)
			-0.0054 (0.0102)
Durable Consumer Goods			-0.0027 (0.0019)
Time Deposits			-0.0245 (0.0223)
Constant	1.3366*** (0.0042)	1.3505*** (0.0046)	1.4319*** (0.0648)
Household Fixed Effects	No	Yes	Yes
Time Fixed Effects	No	Yes	Yes
N	4332	4332	4332
Adjusted R^2	0.0286	0.1729	0.1817

Note: *** , ** , * indicate significance at the 1%, 5%, and 10% levels respectively; values in parentheses are robust standard errors.

4.3. Endogeneity Tests

When studying the impact of transfer payments on consumption upgrading, the endogeneity problem is a key consideration. Specifically, there may be a two-way causal relationship between transfer payments and household consumption behavior. On the one hand, transfer payments provided by the government can directly affect the consumption structure of households, providing additional economic resources for households and thus promoting consumption upgrading. On the other hand, the consumption behavior and economic situation of households may in turn affect the likelihood and amount of transfer payments they receive.

To address the above-mentioned endogeneity problem, this paper uses the instrumental variable method. The annual average of transfer payments at the district and county level is selected as the instrumental variable for the regression analysis of transfer payments of individual households. According to the results in column (1) of Table 4, the annual average of transfer payments at the district and county level has a significant correlation with the transfer payments of individual households, significant at the 1% level. This indicates that the selected instrumental variable meets the correlation condition. At the same time, as a macro-variable, the transfer payment policy at the district and county level is relatively independent of the consumption decisions of individual households, so it meets the exogeneity condition. To ensure the effectiveness of the instrumental variable, this paper conducts a weak instrumental variable test. The value of the Cragg-Donald Wald F statistic is 222.77, and the value of the Kleibergen-Paap Wald rk F statistic is 196.58, both far higher

than the critical value of 16.38 under the 10% maximal IV size. Therefore, there is no weak instrumental variable problem. According to the regression results in column (2), after using the instrumental variable method, the positive impact of transfer payments on the consumption upgrade rate remains significant. This shows that even after considering potential endogeneity problems, the promoting effect of transfer payments on consumption upgrading still exists robustly.

Table 3. Robustness Test Results

	(1)	(2)	(3)
	Consumption Upgrade Rate	Consumption Upgrade Rate 1	Enjoyment-type Consumption Proportion
Transfer Payments	0.0062***	0.0062***	0.0030***
	(0.0018)	(0.0016)	(0.0006)
Net Assets	0.0208***	0.0038	0.0045***
	(0.0074)	(0.0042)	(0.0017)
Net Income	-0.0268***	-0.0025	-0.0049**
	(0.0072)	(0.0079)	(0.0025)
Age	-0.0003	0.0023**	0.0013***
	(0.0009)	(0.0010)	(0.0004)
Male	-0.0129*	-0.0084	-0.0060*
	(0.0068)	(0.0074)	(0.0033)
Educational Attainment	0.0003	-0.0026	-0.0012
	(0.0017)	(0.0018)	(0.0007)
Agricultural Household Registration	-0.0054	0.0028	-0.0038
	(0.0113)	(0.0083)	(0.0041)
Durable Consumer Goods	-0.0027	-0.0030	-0.0018**
	(0.0018)	(0.0019)	(0.0008)
Time Deposits	-0.0245	-0.058**	-0.0205**
	(0.0234)	(0.0208)	(0.0093)
Constant	1.4319***	0.0774	0.0668***
	(0.0772)	(0.0711)	(0.0258)
Household Fixed Effects	Yes	Yes	Yes
Time Fixed Effects	Yes	Yes	Yes
N	4332	4332	4332
Centered- R^2	0.1817	0.3270	0.1425

Note: *** , ** , * indicate significance at the 1%, 5%, and 10% levels respectively. The values in parentheses in column (1) represent clustered standard errors, and the values in parentheses in columns (2) and (3) represent robust standard errors.

5. Further Analysis

5.1. Heterogeneity Analysis

Examining the impact of transfer payments on the consumption upgrading of households with different marital statuses, health conditions, and regions has important theoretical and practical significance. On the one hand, such analyses help the government design differentiated policy measures to achieve precise support for household consumption upgrading. On the other hand, differential analyses enable the government and scholars to have a clearer understanding of the welfare redistribution effects brought about by transfer payment policies.

Table 4. Endogeneity Test Results

	(1)	(2)
	Transfer Payments	Consumption Upgrade Rate
Transfer Payments		0.0198***
		(0.0054)
Transfer Payments (IV)	0.8421***	
	(0.0601)	
Net Assets	0.0735	0.0193***
	(0.0470)	(0.0040)
Net Income	0.0976	-0.0279***
	(0.0749)	(0.0065)
Age	-0.0161	-0.0000
	(0.0097)	(0.0009)
Male	0.1484	-0.0147*
	(0.1006)	(0.0080)
Educational Attainment	0.0149	0.0003
	(0.0198)	(0.0017)
Agricultural Household Registration	0.3351**	-0.0114
	(0.1260)	(0.0105)
Durable Consumer Goods	-0.0437	-0.0021
	(0.0223)	(0.0019)
Time Deposits	-0.0565	-0.0239
	(0.2639)	(0.0220)
Household Fixed Effects	Yes	Yes
Time Fixed Effects	Yes	Yes
N	4332	4332
Centered-R^2		-0.0116

Note: *** , ** , * indicate significance at the 1%, 5%, and 10% levels respectively; values in parentheses are robust standard errors.

5.1.1. Marital Heterogeneity

With the development of the social economy and changes in the population structure, the impact of marital status on household consumption behavior has become increasingly significant. Married households bear more economic responsibilities such as raising children and supporting the elderly, which affects their consumption decisions. Therefore, this paper analyzes the impact of transfer payments on household consumption upgrading from the perspective of marital status. The results of the marital-status heterogeneity analysis in columns (1) and (2) of Table 5 show that the consumption upgrade rate of unmarried households increases significantly after receiving transfer payments, significant at the 1% level, indicating that they are more sensitive to transfer payments. For married households, however, the impact of transfer payments on the consumption upgrade rate is not significant. Due to the differences in economic responsibilities and consumption preferences between married and unmarried households, their responses to transfer payments also vary. Married households focus more on the long-term well-being of the entire family. Their consumption decisions often need to consider the needs of multiple family members and future plans, treating transfer payments as a form of long-term economic support for savings or investment. Unmarried households, on the other hand, pay more attention to personal immediate satisfaction and short-term consumption, with a higher marginal propensity to consume additional income.

Table 5. Results of Marital Heterogeneity Analysis

	(1)	(2)
	Married	Unmarried
Transfer Payment	0.0011 (0.0035)	0.0059*** (0.0016)
Net Asset	0.0248** (0.0108)	0.0207*** (0.0044)
Net Income	-0.0435*** (0.0144)	-0.0252*** (0.0073)
Age	0.0073*** (0.0025)	-0.0068*** (0.0013)
Male	0.0554** (0.0238)	-0.0229** (0.0089)
Education Level	-0.0058 (0.0054)	0.0052*** (0.0019)
Agricultural Household Registration	0.0086 (0.0255)	0.0018 (0.0120)
Durable Consumer Goods	-0.0067 (0.0057)	-0.0036* (0.0020)
Time-Deposit	0.0075 (0.0850)	-0.0255 (0.0234)
Constant	1.4180*** (0.1742)	1.5109*** (0.0752)
Family Fixed Effects	Yes	Yes
Time Fixed Effects	Yes	Yes
N	701	3424
Adjusted R^2	0.1686	0.2108

Note: ***, **, * indicate significance at the 1%, 5%, and 10% levels respectively; values in parentheses are robust standard errors.

5.1.2. Health Heterogeneity

With the intensification of population aging and the increase in chronic diseases, the impact of health status on household consumption behavior has become increasingly significant. When family members are suffering from diseases, due to the increase in medical expenses, consumption decisions may be restricted. Therefore, this article analyzes the heterogeneous impact of transfer payments on household consumption upgrading from the perspective of health status. Columns (1) and (2) of Table 6 show the results of the analysis of health status heterogeneity. For healthy households, the promoting effect of transfer payments on the consumption upgrading rate is significant at the 1% level, indicating that healthy households are more sensitive to transfer payments. In contrast, for unhealthy households, the promoting effect of transfer payments on the consumption upgrading rate is only significant at the 5% level, indicating a relatively weak response. This result may be related to the differences in economic situations, consumption preferences, and life planning between healthy and unhealthy households. Healthy households usually have better economic situations and more positive consumption preferences, so they are more inclined to use transfer payments for long-term consumption planning. Unhealthy households, on the other hand, may pay more attention to immediate medical economic needs, so their response to transfer payments is weaker.

Table 6. Results of the Analysis of Health Heterogeneity

	(1)	(2)
	Healthy	Unhealthy
Transfer Payment	0.0073***	0.0045*
	(0.0021)	(0.0024)
Net Asset	0.0229***	0.0228***
	(0.0056)	(0.0060)
Net Income	-0.0156*	-0.0406***
	(0.0082)	(0.0095)
Age	-0.0054***	0.0021*
	(0.0015)	(0.0012)
Male	-0.0246**	-0.0012
	(0.0119)	(0.0124)
Education Level	0.0072***	-0.0028
	(0.0025)	(0.0024)
Agricultural Household Registration	0.0054	-0.0053
	(0.0159)	(0.0152)
Durable Consumer Goods	-0.0020	-0.0030
	(0.0028)	(0.0027)
Time-Deposit	-0.0349	-0.0060
	(0.0302)	(0.0366)
Constant	1.2972***	1.5438***
	(0.0842)	(0.0926)
Family Fixed Effects	Yes	Yes
Time Fixed Effects	Yes	Yes
N	2013	1977
Adjusted R^2	0.1984	0.1732

Note: ***, **, * indicate significance at the 1%, 5%, and 10% levels respectively; values in parentheses are robust standard errors.

5.1.3. Regional Heterogeneity

With the intensification of the imbalance in regional economic development, the consumption behaviors of households in different regions show significant differences. Therefore, analyzing the heterogeneous impact of transfer payments on household consumption upgrading from the perspective of regional characteristics has great theoretical and practical value. Columns (1) and (2) of Table 7 show the results of the analysis of regional characteristic heterogeneity. For households in the eastern and northeastern regions, the promoting effect of transfer payments on the consumption upgrading rate is not significant. In contrast, for households in the central and western regions, the promoting effect of transfer payments on the consumption upgrading rate is significant at the 1% level. This indicates that households in the central and western regions are more sensitive to transfer payments, and their consumption upgrading rate significantly increases after receiving transfer payments. This result may be related to the differences in economic development levels, the degree of infrastructure perfection, and the social security system among different regions. The eastern and northeastern regions usually have a relatively high level of economic development, complete infrastructure, and a relatively sound social security system, so households have a relatively low dependence on transfer payments. In contrast, the central and western regions have relatively lagging economic development, infrastructure that needs to be improved, and a limited coverage of the social security system. Households in these regions have a higher dependence on transfer payments, and thus are more sensitive to transfer payments.

Table 7. Results of the Analysis of Regional Heterogeneity

	(1)	(2)
	Eastern Area	Middle and Western
Transfer Payment	0.0036 (0.0022)	0.0074*** (0.0018)
Net Asset	0.0218*** (0.0052)	0.0183*** (0.0058)
Net Income	-0.0168* (0.0095)	-0.0339*** (0.0081)
Age	0.0007 (0.0011)	-0.0009 (0.0014)
Male	-0.0318*** (0.0114)	0.0010 (0.0108)
Education Level	-0.0036 (0.0024)	0.0031 (0.0023)
Agricultural Household Registration	-0.0287** (0.0139)	0.0129 (0.0149)
Durable Consumer Goods	-0.0017 (0.0025)	-0.0034 (0.0027)
Time-Deposit	-0.0130 (0.0272)	-0.0352 (0.0383)
Constant	1.3182*** (0.0934)	1.5305*** (0.0850)
Family Fixed Effects	Yes	Yes
Time Fixed Effects	Yes	Yes
N	1932	2400
Adjusted R^2	0.1595	0.1789

Note: ***, **, * indicate significance at the 1%, 5%, and 10% levels respectively; values in parentheses are robust standard errors.

5.2. Mechanism Analysis

The promoting effect of transfer payments on consumption upgrading indirectly influences household consumption behavior through various mechanisms. This paper takes pension income and a sense of responsibility as the key mechanisms through which transfer payments affect the consumption upgrading rate. In this paper, pensions are regarded as a mechanism, and the question in the scale questionnaire is "How much in total did all the family members of your household receive in terms of retirement pensions or old-age pensions in the past 12 months?"

According to the regression results in column (1) of Table 6, transfer payments significantly promote the household pension income, and this result is significant at the 1% level. Specifically, there is a synergistic effect between the transfer payment policy and the pension system: The government provides additional economic support to low-income households through transfer payments, helping them meet the eligibility criteria for pension benefits, thus significantly increasing the likelihood of households receiving pensions. The increase in pensions provides households with a stable source of income, reduces the risk of future economic uncertainties, and decreases the demand for precautionary savings (Bai Chong'en et al., 2012), releasing more funds for consumption. At the same time, the increase in pensions directly raises the household's disposable income, enabling households to allocate more resources to high-quality consumption areas such as education, healthcare, culture, and entertainment (Yue Ai et al., 2013), and promoting the upgrading of the consumption structure from basic living needs to a higher level. This indicates that transfer payments,

by promoting the growth of pension income, indirectly drive the upgrading of household consumption, providing a micro-foundation for the high-quality development of the economy[40-44].

Taking the sense of responsibility as a mechanism, the "number of responses to the sense of responsibility scale" in the scale questionnaire is used to measure the sense of responsibility of residents. According to the regression results in column (2) of Table 6, transfer payments significantly enhance the household's sense of responsibility, and this result is significant at the 1% level. This is because the stability of economic support helps to reduce family conflicts, promote cooperation and a sense of responsibility among family members, and strengthen the bond of responsibility between generations. At the same time, government transfer payments alleviate poverty and social inequality, reduce social conflicts, and make people more willing to assume social responsibilities. The enhancement of the sense of responsibility makes households more inclined to carry out long-term planning and increase their expenditures in areas such as education, healthcare, and culture and entertainment, thus optimizing the household consumption structure (Wei Jing et al., 2018). Sheng Guanghua et al. (2018) have shown that the enhancement of the sense of responsibility makes consumers more inclined to choose green products. Buying green products usually requires a higher economic investment, but it also brings multiple benefits such as health and environmental protection, so it can be regarded as a development-oriented and enjoyment-oriented consumption behavior. This indicates that the enhancement of the sense of responsibility contributes to not only the economic well-being of households but also the overall consumption upgrading of society[45-47].

Table 8. Results of the Mechanism Analysis

	(1)	(2)
	Pension	Sense of Responsibility
Transfer Payment	0.0782***	0.0056***
	(0.0209)	(0.0018)
Net Asset	0.2988***	-0.0073
	(0.0520)	(0.0054)
Net Income	0.2369***	-0.0199***
	(0.0878)	(0.0076)
Age	-0.0019	-0.0275***
	(0.0155)	(0.0018)
Male	0.1270	-0.0307***
	(0.1193)	(0.0110)
Education Level	-0.0859***	0.0611***
	(0.0252)	(0.0028)
Agricultural Household Registration	-0.4525***	0.0470***
	(0.1700)	(0.0157)
Durable Consumer Goods	-0.0314	-0.0054**
	(0.0239)	(0.0023)
Time-Deposit	-0.2235	0.0710**
	(0.2821)	(0.0310)
Constant	-2.5534***	1.7337***
	(0.9387)	(0.0843)
Family Fixed Effects	Yes	Yes
Time Fixed Effects	Yes	Yes
N	4332	4332
Adjusted R^2	0.2968	0.3563

Note: ***, **, * indicate significance at the 1%, 5%, and 10% levels respectively; values in parentheses are robust standard errors.

6. Conclusions

Based on the data from the China Family Panel Studies (CFPS) during 2020-2022, this paper conducts an empirical analysis of the impact of government transfer payments on household consumption upgrading and its action mechanisms. The study finds that transfer payments have a significant positive effect on promoting household consumption upgrading, especially being more prominent in unmarried households, households with good health conditions of family members, and households in the central and western regions. The mechanism analysis shows that government transfer payments drive consumption upgrading through both micro and macro paths. At the micro level, government transfer payments increase the opportunities for households to obtain pensions and raise the level of pension income, providing households with stable economic security, reducing the motivation for precautionary savings, and thus releasing more liquid funds for consumption upgrading. At the macro level, government transfer payments maintain the economic stability of households, reduce family conflicts, and promote the formation of family and social responsibility. The enhancement of this sense of responsibility prompts households to be more inclined to carry out long-term and stable financial planning, increase expenditures in development-oriented and enjoyment-oriented consumption areas such as education, healthcare, culture, and entertainment, and further drive the transformation and upgrading of the social consumption pattern.

Based on the research conclusions, this paper puts forward the following policy recommendations: First, the intensity of transfer payments should be continuously increased, especially for low-income households and vulnerable groups. By increasing the pension coverage rate, increasing the subsidy amount, and other means, the economic stability of households should be enhanced, and more consumption potential should be released, so as to promote consumption upgrading. Second, policy design should focus on precision and differentiation. For unmarried households, special consumption subsidies or tax incentives can be provided to encourage them to increase development-oriented consumption. For households with good health conditions of family members, they should be guided to invest more resources in areas such as education, culture, and entertainment to optimize the consumption structure. For households in the central and western regions, it is necessary to increase the tilt of transfer payments, narrow the regional consumption gap, and promote the balanced development of consumption. Third, the government should further improve the pension system to ensure the timely and full payment of pensions and enhance the economic security of households. At the same time, through publicity, education, and social incentive measures, the sense of family responsibility should be enhanced, households should be encouraged to carry out long-term planning, and the expenditures on development-oriented and enjoyment-oriented consumption should be increased, so as to promote the overall upgrading of the social consumption pattern.

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