Original Research Article

Study on the impact of Chinese household stock assets on residents' consumption

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Abstract: With the deepening of capital markets and the transformation of household financial asset structures, the link between the stock market and household consumption has become increasingly prominent. Using China Household Finance Survey data for 2015–2021, this paper examines the impact of household stock assets on consumption. Stock assets exert a significant positive wealth effect, with the promoting effect on development- and enjoyment-oriented consumption significantly stronger than that on total consumption and the effect on subsistence consumption relatively weak. Wealth appreciation works mainly through the direct wealth effect, and the precautionary saving motive holds for high-uncertainty households. The effect is more pronounced for urban households in central China and for households with high assets and high consumption.

Keywords: stock market wealth effect; household consumption; development and enjoyment-oriented consumption

1. Introduction

Consumption upgrading is central to high-quality economic development. China's "15th Five-Year Plan" calls for enhancing the capital market's wealth effect, and the 2026 Central Economic Work Conference again stressed stabilizing market expectations to promote household consumption.

The wealth effect denotes the influence of wealth value changes on household consumption.[1] International work finds housing wealth effects exceeding stock market effects,[2-3] and separates a direct effect, in which rising prices expand stockholding households' budgets,[2-3] from an indirect effect operating through income expectations.[4]

Domestic research has moved from macro tests of existence to micro mechanisms. Luo (2004) found only a weak wealth effect,[5] Li and Chen (2014) showed that housing wealth effects exceed stock effects,[6] and Hu and Guo (2012) identified a signal transmission channel.[7] Qiao (2018) located the effect mainly in improvement-oriented consumption,[8] and Li et al. (2025) found that stock rises raise participating households' consumption propensity.[9] Using four CHFS waves and a QUAIDS model,[10] this paper measures the effect's structure, transmission and heterogeneity.

2. Theoretical analysis

The stock market wealth effect is the influence of stock price changes on household consumption and, in turn, on the national economy. Friedman's permanent income hypothesis[11] and Ando and Modigliani's life-cycle hypothesis[12] imply that consumption is planned over the life cycle, so only wealth perceived as permanent induces a lasting consumption adjustment. Hence:

Hypothesis 1: Stock assets have a promoting effect on total household consumption.

Consumption types respond differently. Subsistence consumption, such as food and clothing, is rigid, with an income elasticity below 1 and a falling share as income rises. Development- and enjoyment-oriented consumption, such as education and medical care, has an elasticity above 1 and human capital attributes, so wealth gains flow to it preferentially. Hence:

Hypothesis 2: The promoting effect of stock assets on development- and enjoyment-oriented

consumption is significantly stronger than that on total consumption, and its impact on subsistence consumption is weaker.

Two channels may transmit the effect. The direct wealth effect works because rising prices raise stockholding households' assets and expand disposable resources. The precautionary saving effect works because households save against uncertain future shocks, and higher stock wealth relaxes that motive,[13] a credit-constraint channel being unlikely in China. Therefore:

Hypothesis 3: The main mechanism of the stock market wealth effect is the direct wealth effect.

Hypothesis 4: Stock assets promote household consumption by reducing the uncertainty faced by households.

3. Research design

3.1. Data sources

The data are four waves of the China Household Finance Survey (CHFS) for 2015, 2017, 2019 and 2021. Retaining households present in all four waves with a household head as respondent and dropping missing values and outliers yields a balanced panel of 2,890 households and 11,560 observations. Asset variables are winsorized and log-transformed; provincial price indices come from the China Statistical Yearbook, deflated to a 2014 base, and regional data from CEIC.

3.2. Variables and model specification

The core explanatory variable is household stock assets (ln_stock), the total value of stock assets held (yuan), in logarithms. Following Li et al. (2020) and Xu et al. (2024),[10] a QUAIDS model estimates expenditure elasticities to classify consumption, with the median elasticity limiting extreme values; categories with an elasticity u_i above 1 are development- and enjoyment-oriented and those below 1 subsistence.[10] Food, clothing, household equipment and services, and transportation and communication count as subsistence consumption; the rest as development- and enjoyment-oriented consumption (**Table 1**).

Table 1. Expenditure elasticity of various consumer goods.

Consumption category	Expenditure elasticity	Median share
Food consumption	0.8194	0.3926
Clothing consumption	0.9274	0.0221
Housing consumption	1.0919	0.0388
Household equipment and services	0.7843	0.0248
Transportation and communication	0.7272	0.0527
Education, culture and entertainment	1.5757	0.0178
Medical care	1.1275	0.1942

The explained variables are total, subsistence and development- and enjoyment-oriented consumption, each as the logarithm of the original value plus one. Controls cover the household head (age squared, gender, marital status, health, education), the household (income, size) and the region (per capita GDP, consumer price index). The model is a two-way fixed effects specification:

$$\ln_Consume_{it} = \beta_0 + \beta_1 \ln_stock_{it} + \beta_2 Controls_{it} + \alpha_i + \lambda_t + \varepsilon_{it} \quad (1)$$

where i and t index household and year; *ln_Consume* is replaced in turn by total consumption (ln_C), subsistence consumption (ln_SC) and development- and enjoyment-oriented consumption (ln_DC); ln_*stock* is log stock assets; *Controls* is the control vector; α_i and λ_t are household and year fixed effects; and ε is the disturbance.

4. Empirical results analysis

4.1. Baseline regression

Table 2 reports the baseline estimates. The coefficient on ln_*stock* is significantly positive at the 1% level for total consumption: A 1% rise in stock assets raises total household consumption by 0.0163%, confirming Hypothesis 1. The effect on development- and enjoyment-oriented consumption is also positive,

at 0.0178%, while subsistence consumption responds by only 0.0132%, so the promoting effect is strongest for development- and enjoyment-oriented consumption (Hypothesis 2).

Table 2. Baseline regression of household stock assets on consumption.

Variable	Total consumption (ln_C)	Development- and enjoyment-oriented consumption (ln_DC)	Subsistence consumption (ln_SC)
ln_stock	0.0163*** (0.00434)	0.0178** (0.00799)	0.0132*** (0.00457)
ln_income	0.0785*** (0.00645)	0.0991*** (0.0102)	0.0632*** (0.00637)
degree	0.0114 (0.0154)	-0.0053 (0.0273)	0.0157 (0.0147)
size	0.120*** (0.00718)	0.135*** (0.0125)	0.120*** (0.00695)
age2	-0.0056*** (0.00103)	-0.0052*** (0.00170)	-0.0061*** (0.00105)
marriage	0.0351 (0.0343)	0.0225 (0.0596)	0.0442 (0.0333)
gender	-0.0037 (0.0186)	0.0023 (0.0332)	0.0086 (0.0182)
health	0.0150* (0.00795)	0.0898*** (0.0138)	-0.0273*** (0.00781)
ln_GDP	-0.1060* (0.0576)	-0.0922 (0.100)	-0.0301 (0.0563)
CPI	-0.0154 (0.0118)	0.0328 (0.0207)	-0.0105 (0.0113)
_cons	12.26*** (1.407)	5.332** (2.468)	10.76*** (1.359)
Household fixed effects	Yes	Yes	Yes
Time fixed effects	Yes	Yes	Yes
N	11560	11560	11560
R2	0.691	0.552	0.722
adj. R2	0.587	0.402	0.629

Note: Robust t-statistics in parentheses; ***, ** and * denote significance at the 1%, 5% and 10% levels, the same below.

4.2. Robustness tests

Endogeneity is addressed by instrumenting stock assets with the average stock assets of other households in the same community.[15] Peer effects and information spillovers make the instrument relevant, and as a community-level variable it satisfies the exclusion restriction. Replacing the core variable with a binary stockholding indicator leaves the signs and significance of the coefficients unchanged (**Table 3**).

Table 3. Robustness tests: Instrumental variable estimation and replacement of the explanatory variable.

	Total consumption (ln_C)	Development- and enjoyment-oriented consumption (ln_DC)	Subsistence consumption (ln_SC)
Panel A. Two-stage least squares (IV: Community mean stock assets)			
ln_stock	0.1886*** (0.0271)	0.2353*** (0.0384)	0.1739*** (0.0262)
First stage: IV	2404.6*** (342.5)	—	—
Kleibergen-Paap rk LM	23.44*** (0.000)	—	—
Cragg-Donald Wald F	324.921 ([16.38])	—	—
Panel B. Replacing ln_stock with Participate_stock			
Participate_stock	0.144*** (0.0407)	0.225*** (0.0725)	0.105** (0.0417)
Control variables	Controlled	Controlled	Controlled
Household / time fixed effects	Yes	Yes	Yes
N	11560	11560	11560
R2	0.691	0.553	0.722

Note: Figures in parentheses for the Kleibergen-Paap rk LM statistic are p-values; figures in brackets for the Cragg-Donald Wald F statistic are critical values at the 10% level.

5. Mechanism tests and heterogeneity analysis

5.1. Mechanism tests

The direct wealth effect is tested with household assets as mediator: Column (1) of **Table 4** shows that stock assets significantly raise household assets. The precautionary motive is tested with the standard

deviation of expenditure as a proxy for uncertainty;[14] column (2) shows that stockholding significantly reduces income uncertainty. Both channels operate, supporting Hypotheses 3 and 4.

Table 4. Mechanism tests.

Variable	Household assets (ln_asset)	Uncertainty (sd)
ln_stock	0.0230*** (0.0076)	0.0073*** (0.0027)
Control variables	Controlled	Controlled
Household / time fixed effects	Yes	Yes
_cons	7.505*** (2.606)	1.615* (0.861)
N	11560	11560
R2	0.746	0.480
adj. R2	0.660	0.305

Splitting by median household assets, stock assets have no significant effect in the low-asset group but are significantly positive in the high-asset group, so wealth appreciation must reach a scale threshold before becoming consumption. Splitting by the standard deviation of expenditure, stock assets significantly raise consumption for high-uncertainty households but not for low-uncertainty ones (**Table 5**).

Table 5. Mechanism heterogeneity: Household assets and uncertainty.

	Total consumption (ln_C)	Development- and enjoyment-oriented consumption (ln_DC)	Subsistence consumption (ln_SC)
Panel A. Split by household assets			
Low assets	-0.0149 (0.0238)	-0.0429 (0.0475)	-0.0280 (0.0291)
High assets	0.0192*** (0.00442)	0.0191** (0.00841)	0.0168*** (0.00464)
Panel B. Split by uncertainty			
Low uncertainty	0.0029 (0.0109)	0.0001 (0.0259)	0.0087 (0.00834)
High uncertainty	0.0104*** (0.00374)	0.0160* (0.00859)	0.0072* (0.00413)

Note: All columns include controls and household and time fixed effects; N = 5,381 / 5,307 (assets) and 1,716 / 8,975 (uncertainty).

5.2. Heterogeneity analysis

Grouped by household registration, stock assets significantly raise all three consumption types for urban households but have no significant effect for rural households, which hold few stocks and whose consumption is dominated by rigid subsistence needs (**Table 6**).

Table 6. Urban–rural heterogeneity regression results.

	Total consumption (ln_C)	Development- and enjoyment-oriented consumption (ln_DC)	Subsistence consumption (ln_SC)
Rural households	0.0154 (0.0138)	0.0436 (0.0413)	0.0015 (0.0193)
Urban households	0.0158*** (0.0046)	0.0147* (0.0079)	0.0134*** (0.0047)

Note: All columns include controls and household and time fixed effects; N = 5,752 rural and 5,722 urban households.

Across regions, stock assets significantly raise total consumption in the central and western regions. For development- and enjoyment-oriented consumption only the central region is significantly positive, as it is accelerating consumption upgrading; for subsistence consumption the effect appears only in the east, where high living costs mean stock returns first meet food and transport expenditure (**Table 7**).

Table 7. Regional heterogeneity: Coefficient on ln_stock.

Dependent variable	Eastern	Central	Western	Northeastern
Total consumption (ln_C)	0.0091 (0.00562)	0.0196** (0.00891)	0.0333*** (0.0128)	0.0218 (0.0152)
Development- and enjoyment-oriented consumption (ln_DC)	0.00479 (0.0101)	0.0405** (0.0181)	0.0310 (0.0216)	0.00870 (0.0305)
Subsistence consumption (ln_SC)	0.0105* (0.00538)	0.0112 (0.0107)	0.0211 (0.0131)	0.0228 (0.0211)
N	3760	2012	4208	1580

6. Conclusions and policy recommendations

Chinese household stock assets have a significant positive wealth effect: They promote all consumption

types, but households direct stock gains preferentially to development- and enjoyment-oriented consumption, while subsistence consumption responds weakly because of its rigidity. The direct wealth effect dominates, the precautionary motive holds for high-uncertainty households, and the effect is stronger for urban households in central China and those with high assets and high consumption.

Two policy implications follow. First, capital market reform should enhance the sustainability and inclusiveness of the wealth effect: Deepening the registration-based issue system, raising the institutional investor share and curbing abnormal fluctuations would stabilize wealth expectations, and long-term funds such as pension and insurance capital would reduce short-term speculation. Second, expanding public health and education coverage would curb excessive precautionary saving, and raising labour remuneration and adjusting property income through taxation and transfers would strengthen low- and middle-asset households' resilience.

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