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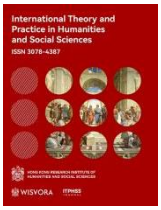

Analysis of the Impact of Stock Prices and House Price Fluctuations on Resident Consumption in China

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Abstract

The relationship between stock prices, house prices and resident consumption has long been a focus of the financial research with changes having an impact on the country's macroscopic stability and fiscal stability, as well as affecting some economic activities to some extent. Research has found that there is a significant wealth effect of stock price and house price fluctuations on resident consumption. The theoretical analysis of the effects of stock price and house price fluctuations on resident consumption is presented in this paper. In addition, an empirical analysis of the effects of house price and stock price fluctuations on resident consumption is conducted based on regression analysis using quarterly data from 2013 to 2021.

The results show that the negative crowding-out effect of stock prices and house prices on resident consumption is weaker than the positive boosting effect and the positive effect of stock prices on resident consumption is slightly weaker than that of house prices. Although the resident consumption is significantly affected by fluctuations in stock prices and house prices in the short term, the resident income is still the main influencing factor and driving force of resident consumption in the long term.

1. Introduction

1.1 Research Background

During periods of economic expansion, the rapid surge in stock prices has led to a significant increase in household wealth. Simultaneously, inflation has fostered a decade-long period of prosperity, albeit indirectly intensifying the pressure on household consumption. Subsequently, whether stock prices remain stagnant or decline, they have the potential to impede household spending, thereby contributing to a deceleration in economic growth. Building upon this

foundation, it can be anticipated that fluctuations in housing prices will exert analogous effects on households. The evolution of financial systems has simplified the conversion of housing assets into cash, introducing additional elements into this equation. In many developing nations, including China, it is widely acknowledged that shifts in asset values are interconnected with changes in consumption patterns. Stock markets exhibit rapid fluctuations, and once residents channel their assets into these markets, they become highly volatile, resulting in instability in resident spending. Conversely, the housing market tends to display relative stability over shorter timeframes, affording residents the option to consider it a form of tangible asset acquisition. As previously outlined, we have compelling reasons to believe that the trends in resident consumption in response to fluctuations in stock prices differ from those in response to fluctuations in house prices. Stock prices and house prices serve as vital barometers of people's livelihoods, and their ebb and flow have gradually become a matter of widespread concern across society. While both housing and stock prices exhibit increasing volatility, their relationship with resident consumption has remained largely elusive. Empirical evidence from around the world suggests that the development of house and stock prices is contingent on fundamental economic principles, with the wealth effect in stock markets stimulating consumer expenditure. With the reforms in equity distribution, stock prices have begun to exhibit more significant volatility, while housing prices have experienced substantial fluctuations in tandem with housing system reforms. In the absence of a consensus on the primary mechanisms driving capital markets, there is currently no unanimous conclusion regarding the role and impact of these two common asset classes, stocks, and housing, in economic development. However, these conclusions are pivotal when addressing macroeconomic issues in financial markets. Hence, understanding the precise impact of stock prices and house prices on resident consumption emerges as a highly meaningful subject of inquiry.

1.2 Research Significance

In the first aspect of theoretical significance, it's undeniable that the academic community has made substantial progress in understanding the relationship between financial assets and resident consumption. Numerous books, research projects, and scholarly articles have been dedicated to this subject, many of which offer insights and recommendations aimed at advancing the development of all three elements. Therefore, investigating the impact of stock prices and house prices on resident consumption holds theoretical significance, as it contributes to the ongoing discourse and understanding of this intricate relationship.

In the second aspect of practical significance, this research paper's examination of how stock prices and house prices affect resident consumption enables individuals who engage in stock trading and real estate investments to gain a holistic understanding of their consumption behaviors. It allows them to identify any existing issues in their current consumption patterns, thereby facilitating improvements in the management of their assets. This paper will delve into and explore the interplay among house price fluctuations, stock price volatility, the impact of asset prices on resident consumption, optimization of asset structures, and enhancements in consumption perspectives. To some extent, this enriches the practical understanding of these dynamics. Simultaneously, the study of residents' assets reflects certain real-world issues related to financial asset management. It empowers residents to formulate short-term and long-term plans for their holdings, continually optimizing their asset structures. This research carries significant practical implications, aiding individuals in making informed decisions regarding their wealth management and financial well-being.

2. Literature Review

2.1 Theoretical Research Review

Previous literature predominantly explored the interplay between stocks and housing from an asset allocation perspective. In recent foreign studies, Alex et al. (2021) conducted empirical analyses using data on house prices and stock prices from 13 different countries. The results indicated that there exists a certain degree of long-term correlation between stock prices and house prices, while short-term correlations were not significant. Excluding inflationary factors, it was found that the per capita consumption and short-term government bond yields were the primary driving forces for both stock and house prices[1].

Many households may perceive the increase in different forms of measurable wealth as temporary or uncertain. This can lead to the emergence of bequest motives in some households, especially when tax laws support the holding of appreciated assets until death, thereby strengthening bequest motives to a greater extent. Lewis et al. (2021) suggests that unrealized capital gains held by a family in the asset markets may be temporary, but in markets with numerous active traders, they can be more accurately measured[2]. Karina et al. (2021) concluded through her research that psychological factors may determine that certain assets are more suitable for current expenditure, while others are specifically designated for long-term savings[3]. Each of these asset consumption concepts mentioned above highlights the differences in the impact of house prices and stock prices on consumption. People may have entirely different motivations for bequeathing their portfolios of stocks and their other fixed assets to heirs.

Most people may not have a clear understanding of short-term changes in their property wealth in the real world because the periodic updates of its value are not readily presented to them. Wealth in the form of stocks can be tracked daily in newspapers. In Mayer et al.'s (2020) experiments, various forms of wealth were shown to have different effects on consumption. For instance, windfalls in the form of lottery winnings were found to have a significant impact on resident consumption[4]. It follows that there are ample reasons to believe that the impact of housing wealth on consumption is fundamentally different from that of stock wealth. The long-term and specific effects of housing wealth on consumption have not been extensively studied. Comprehensive data, such as that presented by Ohmura (2022), which integrates consumer spending, financial wealth, and non-financial wealth, indicate that changes from a consumer spending perspective do play a role in consumption[5]. Research shows that assets with substantial practical utility, such as houses, cars, furniture, and appliances, have a much larger significance in the household than other forms of consumption capacity. Peter et al. (2020) and Thomas (2020) raised questions about how non-financial assets are estimated[6]. Recently, Sercin (2021) conducted a comprehensive study using data from the New England region and found that rising house prices at the end of 2018 had a significant impact on consumers, as well as changes in consumer attitudes toward this change[7].

Utilizing data from individual households in the *Resident Income Dynamics Analysis*, Umme et al. (2021) argued that the value of real estate has only a minimal effect on consumption expenditure and does not exert substantial influence on consumption[8]. Javier (2021) pointed out that continuously rising prices could lead to higher deposits for renters, as they would face higher security deposits and become more cautious in their subsequent consumption. However, their team found that the data was highly unstable. Javier (2021) conducted a direct test of the relationship between stock price increases and residents using the PSID method. He found that

the marginal spending tendency of individuals with real capital income is roughly around 0.3, but this trend varies among individuals. Additionally, he observed that households with stable incomes did not exhibit significant changes in consumption expenditure, whereas households experiencing capital losses reduced their consumption expenditure. This suggests that house prices do indeed have an impact on consumption[9].

2.2 Empirical Research Review

In the late 1990s and into the early 21st century, personal savings, as measured by national income and accounts, experienced a sharp decline to nearly zero. However, research suggests that if household income and savings include not only unrealized capital gains from housing but also other income not generated during the housing process, then personal total savings would be significantly higher according to the Haig-Simons standard.

Lin Jingxin et al.'s (2018) domestic research findings point to macroeconomic conditions and policies as the most influential factors affecting house prices[10]. Li Jiangyi (2018) suggests that fluctuations in housing prices can communicate crucial signals about economic growth and inflation to society[11]. In recent years, foreign experts have increasingly approached the role of stocks in the housing market from the perspective of "The Wealth Effect." Their empirical analyses across various regions have revealed noticeable variations in the impact of different economic and geographical factors on house prices. However, in China, due to the early-stage underdevelopment of the financial system and its relatively smaller scale, stocks have not traditionally been trusted as a source of wealth. Consequently, this subject has not garnered sufficient domestic attention, resulting in limited literature examining the correlation between the stock market and the housing market from this viewpoint. During the evolution of securities and fund investments, many scholars believe that the wealth effect of such investments has been continuously strengthening, which also has an impact on the stock market. Wang Yubing et al. (2021) and others assert that the housing market exhibits "The Wealth Effect"[12]. Xie Wenjia et al. (2019) and colleagues conducted empirical analyses using new models to assess the impact on Chinese stock prices, with results showing that the influence of wealth has shifted from weakening to strengthening. Similar empirical results have been reported by various other scholars as well[13]. Wang Xinglu's (2019) theoretical analysis suggests that China's stock exchanges also have a certain "wealth" effect. Based on this, they have developed a generalized equilibrium theory rooted in randomness. Looking ahead, as China's financial system inevitably becomes more sophisticated and mature, its impact on the housing market will grow, consequently magnifying its influence on stock prices[14].

The divergence between monetary policy in the financial markets and various policies in the capital market has been a persistent issue. Those who believe that these contradictions don't significantly affect the market assert that the primary concern of monetary policy is inflation. Given that asset fluctuations are influenced by a multitude of individual factors, they stress the importance of addressing this matter. In contrast, proponents of these contradictions argue that the prolonged policy conflicts within China's housing market send a latent inflation signal that demands attention(Wang, 2021). By anticipating and responding to capital market volatility in advance, it is possible to effectively mitigate asset losses caused by overly rapid capital market reactions. Han Baoqing et al. (2021) has argued that there is a certain synergy between economic growth and stock prices, necessitating the inclusion of stock prices in monetary policy to enhance regulatory oversight[16]. Building on the foundation of a DSGE model, Cheng Meilin (2021) posits that macroeconomic regulation should not solely focus on capital pricing[17]. Zhu Shi'e (2021) suggests that housing market fluctuations are primarily driven by speculative demands and that an excessive emphasis on this aspect can disrupt normal market operations[18]. Liu Jing et al.

(2021) and colleagues highlight that, from the perspective of the housing market, adjusting various facets of the housing market can better facilitate its recovery and contribute to stable economic development[19]. Historically, most surveys have treated housing and stock values as the values of the same asset when analyzing the entire market[20]. However, one of the primary research objectives of this paper is to determine whether the housing market can remain stable and whether monetary policy should be guided by stock prices alone or influenced by a variety of different factors. In this regard, research in this field in China remains relatively unexplored. Ye Jingjing et al. (2021) discovered that rising house prices can stimulate an upgrade in resident consumption and elevate consumption levels[21]. Using the Two-Step System-GMM method, Zhang Na et al. (2020) found that 'The Wealth Effect' primarily exists in the central and western regions, while the 'crowding-out effect' is mainly prevalent in the eastern region[22]. Zhang Zhixin et al. (2020) proposed an interaction between house prices and income disparity, indirectly impacting consumption[23]. However, Zhanuan Huang (2020) believes that rising house prices pose a significant hindrance to increased consumption levels[24]. Yan Dan et al. (2017) found that certain irrational investments can lead to imbalances in one's consumption structure[25]. Liu Yi et al. (2015) conducted empirical analysis and concluded that for every one-unit change in the stock price index, per capita consumption expenditure in urban areas decreases by 0.0272848 units[26]. Luo Chuiliang et al. (2020) suggests that fluctuations in the housing market have the most significant impact on inequality in resident consumption[27]. Xiang Guocheng et al. (2021) empirically tested and found that investments in the digital economy can enhance resident consumption levels[28]. According to Yang Bo et al. (2022), improper purchases of corporate stocks can negatively impact consumption[29]. Zhou Lili et al. (2020) determined that the impact of rising house prices varies among different residents[30].

In conclusion, scholars both domestically and internationally have varying views on the impact of stock prices and house price fluctuations on resident consumption. Some argue that the fluctuations in stock and house prices stimulate consumer spending, while others contend that these fluctuations do not have such an effect and may even exert a contrary inhibitory influence on resident consumption. The divergence in research findings can be attributed to differences in the development processes and timelines of resident consumption at the national and international levels. None of the existing studies have thoroughly delved into how stock prices and house prices specifically affect resident consumption in China, highlighting the need for a more detailed analysis. This paper aims to address this gap by conducting a comprehensive analysis of the impact of stock prices and house price fluctuations on resident consumption in China. It does so by selecting quarterly data from 2013 to 2021 and carefully choosing data variables and model specifications to provide a more in-depth understanding of this important topic.

3. Methodology and Theoretical Basis

3.1 Methodology

Building on existing theories and focusing on stock prices, house prices, and resident consumption, this paper aims to explore the impact of stock prices and house price fluctuations on resident consumption within the context of the new era. The research begins by conducting data surveys and background analyses to determine the development trends and prospects of these three factors. Subsequently, the paper analyzes government policies related to stock prices, house prices, and resident consumption, which serves as a basis for discussing the impact of stock prices and house price fluctuations on resident consumption.

The study involves a comprehensive review and summary of the literature to collect information on the extent of the impact of stock prices and house price fluctuations on resident consumption, as well as the various effects of different assets on resident consumption. Deepening our understanding of how stock price and house price fluctuations affect resident consumption, investments, output, inflation, and the central bank's monetary policy response is crucial. The primary research objective is to investigate the degree and factors of influence on resident consumption by stock prices and house prices, identify existing issues, and propose solutions. The main research content consists of a mechanistic analysis of the potential impact of stock prices and house prices on resident consumption, empirical analysis based on the current situation in China, drawing conclusions, and providing corresponding recommendations.

Comparative Analysis: This method involves analyzing and comparing domestic and international literature to identify differences and gaps. The goal is to propose strategies and recommendations based on the insights gained from the comparative analysis. Theory Applied to Practice: This method entails analyzing relevant theories concerning the impact of stock prices and house prices on resident consumption and aligning them with the practical context in China. It involves proposing practical measures for improvement and implementing these measures in accordance with the specific circumstances. Literature Review: Extensive literature review is a foundational step. It is essential to read a substantial amount of literature to understand the current state of the research topic. This method involves analyzing and summarizing the progress made in the field based on various information sources. This comprehensive literature review is a prerequisite for conducting further research.

3.2 Theoretical Basis

The Wealth Effect: proposed by Gottfried Von Haberler and Arthur Cecil Pigou, suggests that changes in asset prices can influence consumer spending. Pigou argued that alterations in asset prices would impact consumer expenditures, while Haberler emphasized that a decrease in the prices of consumer goods, representing an increase in the real value of money, would allow consumers to purchase more goods at the same price. The premise of this effect is that rising asset prices lead to an increase in individuals' wealth and disposable income. Many other economists argue that resident consumption is closely tied to income and remains relatively unaffected by external factors. Economists from various schools of thought hold differing opinions. Pigou's research indicated that consumption is also influenced by additional factors, including fluctuations in asset prices. Although these fluctuations may appear to be superficial, residents perceive themselves as wealthier, prompting changes in their consumption patterns. This shift is manifested through IS on high-consumption goods, resulting in an adjustment in the overall consumption level from a macroeconomic standpoint.

The crowding-out effect: referred to the reduction in individual consumption caused by various government investment expenditures. The consumption effect primarily revolves around the rise in high asset prices, leading to decreased resident consumption directed at purchasing such assets. This, in turn, affects the spending of renters and, ultimately, leads to an overall decline in consumption. This theory closely mirrors real-world situations. As house prices surge, families intending to buy a home may adjust their consumption plans. In their pursuit of homeownership, they may cut back on current consumption to bolster savings. Meanwhile, renters may encounter additional options, such as trimming their daily spending or searching for more affordable rental accommodations. Western economists hold different views on the "crowding-out effect," mainly divided into two camps. Supporters of state intervention argue for a case-by-case analysis, suggesting that the "crowding-out effect" only exists in situations of full

employment and cannot occur during economic downturns. On the other hand, opponents firmly believe in the undeniable existence of the "crowding-out effect." They assert that increased public spending exerts monetary pressure, leading to a decrease in private investment.

The Permanent Income Hypothesis: proposed by American economist Milton Friedman in 1956, suggests that in the long run, the consumption function differs from short-term circumstances. Rational consumers plan their consumption based on their permanent income rather than temporary income, as this approach maximizes utility. Permanent income refers to the income level that consumers can maintain for an extended period, such as a fixed salary income, while temporary income refers to occasional windfalls like bonuses. Friedman also introduced a three-year threshold to distinguish between temporary and permanent income. Income not exceeding three years is considered temporary, while income exceeding three years is categorized as permanent. Therefore, the Permanent Income Hypothesis posits that it is the permanent income that truly affects people's consumption levels. It also implies that even when experiencing diminishing marginal consumption, overall lifetime consumption remains relatively stable.

4. Current Analysis and Mechanism Analysis

4.1 Significant Impact of Stock Price Fluctuations on Resident Consumption

In recent years, China's stock market has experienced significant instability, leading to substantial challenges for resident consumption. This instability, coupled with issues related to market irregularities, has hindered the proper functioning of the stock market and has limited the wealth of many individuals who have invested in stocks. The fluctuations in asset prices have the potential to reduce the wealth of residents, which has attracted widespread attention from both the government and society. Moreover, there is a considerable risk of financial instability associated with the relationship between the stock market and resident consumption. This is especially concerning in the case of extreme stock price fluctuations, which could trigger an economic crisis. As a result, this issue has become a matter of great urgency and importance, drawing the attention of Chinese government officials, researchers, and even the general public. Therefore, researching the impact of stock price fluctuations on resident consumption has become an imperative task.

According to findings by scholars from Dalian Ocean University using correlation analysis, over the past five years, stock prices have exhibited significantly more pronounced fluctuations with a standard deviation over six times that of house prices. House price fluctuations, on the other hand, have shown a relatively milder trend, and resident consumption has remained relatively stable. This analysis suggests that the impact of stock price fluctuations is far more substantial than that of house prices and has a more significant effect on resident consumption. These three factors are interrelated and display certain characteristics of a pro-cyclical relationship. Establishing a positive relationship between them is not only beneficial for macroeconomic regulation by the government but also provides substantial guidance for effective resident investments. The substantial impact of stock price fluctuations on resident consumption emphasizes the importance of regulating the stock market as a matter of urgency. The average price per square meter for commercial housing is now around 10,000 RMB. According to a research report from Renmin University of China, as of 2017, China's overall macro leverage ratio was as high as 290%, with the leverage ratio for residents at 48.4%. However, as time has progressed, by the first half of 2020, the leverage ratio for residents in China had increased to 59.7%. With such high house prices, residents often need to take out loans to purchase homes. According to industry experts, for every 1% increase in household debt in China, the

consumption rate typically decreases by 0.3%. Based on this analysis, we can conclude that the consumption intent of residents can decrease due to excessively high house prices.

A critical aspect of China's economic growth is the concept of economic circulation within the country. Excessively high house prices can weaken the consumption capacity of residents, thereby inhibiting economic circulation and potentially causing it to slow down. This is detrimental to China's economic development. To achieve a robust economic circulation, it is essential to promote consumption. This, in turn, requires increasing people's willingness to consume and raising income levels, particularly for ordinary citizens and those with middle to low incomes. Therefore, China needs to implement regulatory measures to bring house prices back within a range that the real economy can afford. This will contribute to healthy economic development and an improvement in the consumption levels of residents.

4.2 The impact of stock price and housing price fluctuations on low-income residents' consumption

China's housing market has been developing at an accelerating pace, with a more mature system. However, recent house price fluctuations have become apparent. While long-term house price growth has been relatively stable, in some highly sought-after core areas, house prices have surged. In Shanghai's Pudong New Area, for instance, house prices briefly exceeded ¥100,000 per square meter, a price range unattainable for ordinary residents. In the Qianhai area of Shenzhen, it's not uncommon to see house prices at ¥300,000 per square meter. Among low-income residents, the "Permanent Income Hypothesis" is more pronounced compared to high-income residents. This means that most low-income residents are reluctant to take on significant bank loans to purchase overpriced properties, making housing in core areas unaffordable for them.

Scholars from Shanghai University of Finance and Economics conducted a study based on nearly 25 years of data and found that low-income groups exhibit a significant "Wealth Effect" in terms of the assets they hold. However, due to their slow income growth, the rate of increase in resident consumption lags far behind that of stock prices and house prices. While the "Wealth Effect" can explain the relationship between house prices and consumption effectively, the "crowding-out effect" within it also receives substantial attention from researchers. Despite the stock market's instability and continuous house price growth, it has not had a substantial impact on the consumption of low-income residents. The majority of low-income residents do not allocate significant expenses toward purchasing stocks and real estate. Consequently, changes in stock prices and house prices do not significantly affect the consumption levels of low-income residents. Therefore, the "crowding-out effect" of stock prices and house prices on resident consumption is not pronounced within low-income groups, and their overall impact on these groups is quite limited.

5. Empirical Analysis

5.1 Data and Variable Description

Considering data timeliness and availability, this paper utilizes quarterly data from 2013 to 2021 in China. The data primarily comes from the National Bureau of Statistics and the Wind database, and Eviews 8.0 software is employed to process the relevant data.

In this study, the level of resident consumption (CL) is chosen as the dependent variable for

analysis, aiming to explore its influencing factors. The explanatory variables include house prices (HP) and stock prices (STOCK).

5.2 Model Specification for HP, STOCK, and CL

In the paper, the explanatory variables include HP (house prices) and STOCK (stock prices), while the dependent variable CL represents the level of resident consumption. To investigate the factors influencing resident consumption, the regression model equation established is as follows:

$$LNCL = \alpha + \beta_1 LNHP + \beta_2 LNSTOCK + \gamma$$

In the above model, α represents the intercept, β_1 and β_2 are the regression coefficients, and γ stands for the residual term. To address the potential heteroskedasticity issues in time series data and mitigate their impact on the regression analysis, logarithms of the three variables were taken.

5.3 Empirical Process

Time series data is generally non-stationary. To enhance the reliability of empirical results and reduce the possibility of spurious regression in the data, thus further establishing the relationships among variables, the paper first conducted unit root tests on LNCL and the two explanatory variables. The paper employed the Augmented Dickey-Fuller (ADF) unit root test to assess the stationarity of these three time series. The test results are as follows:

Table 1 ADF Unit Root Test Results

Variable	ADF Statistic	1% Critical Value	5% Critical Value	P-value	Conclusion
LNCL	-0.404370	-2.653401	-1.953858	0.5284	Non-stationary
DLNCL	-3.962585	-2.653401	-1.953858	0.0291	Stationary
LNHP	0.081621	-3.653730	-2.957110	0.9592	Non-stationary
DLNHP	-5.541238	-4.273277	-3.557759	0.0004	Stationary
LNSTOCK	1.285517	-2.641672	-1.952066	0.9462	Non-stationary
DLNSTOCK	-4.534954	-2.656915	-1.954414	0.0001	Stationary

Based on the results presented in Table 1, it can be observed that the P-values for the unit root tests of LNCL, LNHP, and LNSTOCK are 0.5284, 0.9592, and 0.9462, respectively. All of these values exceed the significance level of 0.1. Consequently, it is deduced that DLNCL, DLNHP, and DLNSTOCK represent the first-order differenced time series of these variables. Moreover, the P-values for DLNCL, DLNHP, and DLNSTOCK are all less than 0.05, indicating that these differenced time series are indeed first-order integrated.

After verifying the stationarity of the data, as indicated by the unit root test results in the previous step, where all the series are first-order integrated stationary time series, meeting the prerequisites for cointegration testing. The next step is to perform cointegration tests on the

variables to examine if there exists a long-term stable equilibrium relationship among them. To determine if the explanatory variables, house prices (HP) and stock prices (STOCK), significantly influence the dependent variable, resident consumption level (CL), and to investigate whether there is a long-term stable equilibrium relationship between the two explanatory variables and the dependent variable, we employ a two-step procedure, namely, the Engle-Granger (EG) cointegration test. The framework is as follows:

$$LNCL = \alpha + \beta_1 LNHP + \beta_2 LNSTOCK + \gamma$$

First, cointegration regression is conducted using the OLS method on LNCL, LNHP, and LNSTOCK. Subsequently, the residuals are obtained and denoted as "resid." Finally, a unit root test is applied to assess the stationarity of the residual sequence "resid." The results of this test are as follows:

Table 2: Stationarity Test Results for the Residual Sequence "resid"

Sequence	ADF Statistic	1% Critical Value	5% Critical Value	P-Value	Conclusion
resid	-3.428122	-2.653401	-1.953858	0.0139	Stationary

Based on the unit root test results, the ADF statistic for the residual sequence "resid" is below the critical values at a 5% significance level, with a p-value of 0.0139, which is less than 0.05. This indicates that the "resid" sequence is stationary. As a result, it can be inferred that a long-term cointegrating relationship exists between LNCL and LNHP, as well as LNSTOCK.

The study employs the Ordinary Least Squares (OLS) method to estimate the model, yielding a comprehensive equation that outlines the relationships between the variables. This OLS regression analysis is instrumental in determining the impact of the selected factors on the resident consumption level. The regression model is presented as follows:

Table 3: OLS Regression Results of the Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNHP	0.391790	0.573028	0.683718	0.0498
LNSTOCK	0.677091	0.478309	1.415594	0.0166
C	1.321333	1.104150	1.196697	0.2400
R-squared	0.730858	Mean dependent var		3.587885
Adjusted R-squared	0.728183	S.D. dependent var		0.056951
S.E. of regression	0.054680	Akaike info criterion		-2.894993
Sum squared resid	0.098666	Schwarz criterion		-2.763033
Log likelihood	55.10988	Hannan-Quinn criter.		-2.848936
F-statistic	2.484244	Durbin-Watson stat		1.477621
Prob(F-statistic)	0.009885			

Based on the results in Table 3, the relationship between the variables can be expressed as follows:

$$LNCK = 1.321333 + 0.391790\,LNHP + 0.677091\,LNSTOCK$$

From the table, it is evident that $\overline{R^2} = 0.730858$, indicating a relatively good fit of the regression model. Both LNHP and LNSTOCK have coefficients that pass the statistical tests, demonstrating that stock prices and house prices have a significant impact on the resident consumption level.

5.4 Empirical Conclusions

Firstly, the model is examined based on the regression results. Judging by the p-values, the two explanatory variables, with p-values of 0.0498 and 0.0166 respectively, are both less than the critical value of 0.05 at the 5% significance level. This indicates that the coefficients are statistically significant and have economic meaning. Table 3 reveals that the accompanying probability of the F-statistic is close to 0, which implies that the impact of rising stock prices and house prices on the level of resident consumption is significant. In other words, the model as a whole is highly significant, passing the F-test.

Elasticity between variables represents the degree of their influence on each other. Analyzing the regression results reflects the elasticity relationship between the variables. The elasticity coefficient for house prices (HP) on the level of resident consumption (CL) is 0.391790. This means that for every 1% increase in house prices, the level of resident consumption (CL) will increase by 0.391790%. On the other hand, the elasticity coefficient of stock prices (STOCK) on resident consumption (CL) is 0.677091. This indicates that for every 1% increase in stock prices, the level of resident consumption (CL) will increase by 0.677091%.

It implies that rising house prices drive an increase in the level of resident consumption, and rising stock prices also lead to an increase in resident consumption, with stock prices having a greater impact.

6. Conclusion and Suggestion

6.1 Conclusion

This paper, based on a combination of theoretical and empirical methods, analyzed the factors affecting resident consumption levels. Using Eviews software and quarterly data from 2013 to 2021, and by establishing a multiple regression model, we studied the extent to which stock prices and house prices influence resident consumption levels. Summarizing the theoretical and empirical research conducted, as well as model estimation results and coefficient comparisons, we can draw the following conclusions: there exists a stable long-term equilibrium relationship between the two explanatory variables and the dependent variable. Therefore, the upward movement of stock prices and house prices has a significant positive impact on resident consumption levels, with different factors having varying degrees of influence. Stock prices have a greater impact than house prices. However, for the majority of residents, their income levels cannot keep up with the growth in consumption. Although the data and empirical analysis results suggest that rising stock prices lead to increased resident consumption, there are still many uncertain factors to consider. For example, most retail investors face potential losses when trading stocks. In such situations, the increase in stock prices may not necessarily lead to higher consumption levels for these investors. Similarly, an increase in house prices may not necessarily promote the consumption of potential homebuyers.

By analyzing the various aspects of the Chinese stock and housing markets, including “wealth changes,” it is apparent that stock market volatility has a significant impact on house

prices and, consequently, on resident consumption. Based on this analysis, it can be concluded that financial measures can be employed to regulate stock prices, house prices, and their impact on resident consumption. Fundamental factors in the stock market lead to an increase in future housing demand, accompanied by rising house prices as wealth grows. When other influencing factors remain constant, increasing government regulation of the stock market can effectively reduce house price fluctuations and income variations. However, it can also lead to price and interest rate fluctuations. Unquestionably, the holistic development of the financial system, including the maturation of the securities market, will exert an ever-increasing impact on the overall landscape of economic activities. Consequently, it is imperative for regulatory authorities to pay diligent attention to this phenomenon and to fully comprehend its root causes and underlying mechanisms. While considering an array of strategies for dealing with the stock market, specific interest rate control policies have shown a discernible impact and merit careful consideration. In practice, various policies and measures may entail certain conflicts, underscoring the importance for regulatory bodies to methodically define their objectives during the formulation and execution of financial policies. The balanced approach is essential for safeguarding the health and stability of stock and housing prices, ultimately fostering the steady development of resident consumption in China.

6.2 Suggestion

Firstly, effectively resolving the issue of high house prices in China necessitates a multifaceted strategy. It has been demonstrated that conventional monetary policies have had limited impact on curbing high house prices, highlighting the inadequacy of relying solely on monetary control measures. Reducing excessively high house prices has a positive effect on stimulating consumer spending, making it a critical socioeconomic concern. Since 2003, the growth of foreign exchange reserves has led to passive inflation of the country's base currency, eroding the independence of monetary policies. This has resulted in an excess of liquid assets that must find outlets in capital markets and commodities, as witnessed in the stock market boom of 2006. High house prices reflect imbalances within the housing market concerning value, liquidity, and internal and external factors. To effectively address the current issue of high house prices, a coordinated approach involving various policy measures is essential. Secondly, local authorities can restrict house prices by implementing measures such as increasing vacancy taxes and purchase limitations. Many regions do not currently impose vacancy taxes on unoccupied properties, allowing high-income individuals to purchase numerous properties as assets and leave them unused, which goes against the primary purpose of homeownership. Levying vacancy taxes on residents with excess properties can encourage them to sell surplus vacant houses, thereby increasing the housing supply and curbing the rapid growth of house prices. Additionally, implementing purchase restrictions in core areas can ensure that the quantity of housing remains sufficient and is not depleted due to the purchases of a minority, serving as another measure to address the issue of high house prices. Lastly, government departments need to improve the housing supply structure. In terms of housing supply, the government should enhance the supply structure by constructing more public rental housing and affordable housing units. It is crucial to employ different supply models for residents with varying income levels to ensure that the housing supply structure genuinely meets the needs of residents. It will alleviate the pressure of high house prices on low-income residents and allow them to allocate their spending to other areas.

Drawing from both theoretical analysis and empirical evidence, it becomes evident that the

pricing dynamics of the stock market exert a substantial influence on its overall development. Hence, China's central bank should duly acknowledge and manage the capital market. In the process of decision-making and implementation, monetary authorities must closely monitor variations in asset prices, monetary demand, money supply, and overall supply to forestall the impact of liquidity excess on stock prices and other asset valuations, averting the risk of undue demand-driven inflation. The latter could evolve into a long-term concern, demanding China's attention and holding immense importance for the safety of the financial system. Presently, the repercussions of inflation stemming from liquidity excess occupy a prominent place in the agenda of the country's financial regulatory authorities, calling for suitable adjustments and governance measures. Furthermore, the consequences of stock price fluctuations on bank lending warrant vigilant oversight, particularly in preventing immoderate credit expansion driven by excessive stock price surges. It is imperative to safeguard against financial crises and economic recessions triggered by precipitous stock price declines during the resurgence of prices.

China's price levels have displayed a notable lack of responsiveness to the demand gap in exports, indicating significant inertia and a sluggish response to economic fluctuations. This highlights the necessity of deeper reforms to the country's commodity market pricing system to render it more flexible and dynamic. This, in turn, should invigorate market pricing mechanisms to maximize the value of residents' income. Furthermore, there is a need for in-depth investigation and analysis of domestic consumer price index (CPI) and similar indicators, considering factors such as the potential sluggishness in these indicators' real-world impact due to theoretical data, among others. Both economic theory and empirical research suggest that actual income is the primary factor capable of enhancing consumers' quality of life. Many attempts to stimulate consumers through stock or housing markets, apart from being impractical, pose significant risks. In the face of the current slower pace of economic development in the country, the core solutions lie in steadily improving the level of economic development, narrowing the wealth gap, enhancing the social security system, and reforming the tax system related to consumption. As asset markets, including housing, continue to develop, the transmission conditions of traditional monetary policies have gradually weakened. In this context, monetary policy in the capital market will play a crucial role. To achieve this, it is essential to improve the relevant conditions for monetary policy in the capital market, thus unlocking the Tobin's Q Effect, balance sheet effects, and other effects that facilitate the transmission of monetary policy in the capital market. First, it is vital to promote the development of the mortgage loan market and the housing market to enable effective functioning of monetary policy in the capital market. Second, promoting interest rate liberalization and optimizing corporate structures are also critical focus areas. Third, the development of money and securities markets, coupled with the integration of the money market and capital market, should be emphasized, along with strengthening the development of financial legal systems and regulatory frameworks to improve the overall market environment.

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