

An Overview of the Impact of Residential Balance Sheet Recession on Consumption

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Abstract

In the past two years, China's post-epidemic economic recovery has been weak, and with the general decline in housing and land prices, the balance sheet of the residential sector has been damaged. The macroeconomic level is showing a situation of low growth, low inflation, and low market interest rates, which has triggered concerns in the community about China's "balance sheet recession." The executive meeting of the State Council on January 28, 2023, pointed out that it is necessary to put "address the outstanding contradiction of insufficient demand, promote the accelerated restoration of consumption "as the main driving force of the economy, to reasonably increase consumer credit. This paper analyzes the current situation of domestic residents' balance sheet and consumption, and finds that domestic residents' balance sheet has already shown signs of "downsizing". In view of this, analysing the impact of residents' household assets and liabilities on household consumption has certain theoretical and practical significance on how to tap residents' consumption demand and unleash their consumption potential.

Keywords

Residents' Balance Sheet; Consumption; Consumer Credit.

1. Introduction

Since 2020, affected by the impact of the epidemic, China's residents' household balance sheet as a whole has shown certain characteristics of contraction and damage. On the asset side, the decline in the value of real estate and other stock of physical assets has made the scale of residents' total assets face the risk of shrinkage, superimposed on an increase in the risk of fluctuations in the net value of wealth management products. This factor has led to the de-allocation of financial assets such as wealth management and resulted in the contraction of the scale of the balance sheet. On the liability side, affected by the pessimistic expectation of the micro-entities, residents' demand for home purchase and willingness to increase leverage have both declined, and consumption growth is not sufficiently driven. During the recent three years, the total retail sales of consumer goods grew at an average annual rate of 2.6%, 6.5 percentage points lower than in the three years before the epidemic. With the optimization of epidemic prevention and control, the broadening of consumption scenarios, as well as the upward curve of economic recovery and the in-depth implementation of the national strategy of expanding domestic demand, the positive factors for the recovery of residents' consumption are gradually increasing. But uncertainty about the recovery of consumption still exists, the "scar effect" of the epidemic has not yet faded, and the transformation of residents' excess savings into consumption faces constraints, with big-ticket spending not flourishing. In the medium to long term, the important support of the consumption engine is indispensable to realizing the 2035 economic development vision. At this stage, China's consumption-driven economic growth still has more room for improvement, in 2022 China's per capita GDP (\$12,700) is close to the threshold of high-income countries (\$13,200), but China's final consumption rate (final consumption/GDP) is too low is an established fact. Currently, China's final consumption rate

is 56%, much lower than the general developed countries' final consumption rate is 80%, further analysis, compared with developed countries, China's government consumption accounts for a higher proportion, but the proportion of residents' consumption is lower. In 2019, China's residents' consumption rate is 38.8%, much lower than the same level of per capita GDP in Argentina (63%), Poland (53.6%), Spain (51%), and Thailand (48.5%). As China's urbanization enters the second half of the process, the marginal return on capital tends to decline, and the real estate development model evolves, the sustainability of rapid investment expansion is facing challenges, and the achievement of the goal of GDP per capita to reach the level of middle-developed countries in 2035 will require that residents' consumption play a more important role. The research method used in this paper is mainly the analysis method combining inductive and deductive methods. Based on the research of scholars at home and abroad, this paper summarizes the theoretical basis, characteristics and international experience of the recession of residents' balance sheet, and provides research ideas and theoretical support for clarifying the current situation of domestic residents' balance sheet and consumption.

2. Literature Review

Mao Zhenhua and other scholars have raised the need to be vigilant about the risk of a contraction of China's balance sheet under the impact of the epidemic, and a number of scholars have conducted research on the causes and experiences of Japan's 'balance sheet recession'. Koo thought if China's property bubble bursts, the country could face the risk of a 'balance sheet recession'. Zhang Tao conducted a simulation based on China's actual situation and pointed out that the Chinese economy will face a certain risk of 'balance sheet recession' when asset prices continue to fall, and that the Chinese economy will face a certain risk of 'balance sheet recession' when asset prices continue to fall. Qian Yating and Huang Shaoqing summarise the transmission pathways of 'negative shocks' among residents, enterprises and financial institutions. When the balance sheet of households is damaged, the reduction of consumption expenditure directly affects the income of the enterprise sector, and the prudence of saving and investment behaviour makes it more difficult for financial institutions to raise funds and reduce other business income. Mishkin emphasises that when exogenous shocks lead to a sharp deterioration of the balance sheet, households' willingness to consume and invest decreases and aggregate macroeconomic output shrinks. Regarding how assets affect residents' consumption, most scholars believe that income is the long-run mechanism that affects consumption, and that excessive saving affects the level of spending on consumption. Wang Kaili (2017) argues that there is a wealth effect in both the stock market and the real estate market, and that fluctuations in house prices and valuations affect the property income of urban residents, which in turn causes changes in consumption. Huang Yi (2014) analyzes the reasons for the decline in the proportion of residents' consumption in the gross domestic product in the process of real estate price increases over the past decade, and concludes that China's real estate price increases on residents' consumption is mainly manifested as a pull-out effect. Housing loans are a major component of China's household indebtedness and have an important relationship with residents' lives, and scholars' research on housing loans has led to two different conclusions, one of which is that housing loans have a positive stimulating effect on household consumption, the other is that housing loans have a negative impact on household consumption. Jiang Zhenghe and Zhang Dian (2015) analyze the impact of housing loans on urban household consumption from the perspective of the housing wealth effect, and find that housing loans will have a positive effect on the consumption of risk-averse households and contribute to the wealth effect. Xu Guihua (2013) adds the household debt variable to the life-cycle-durable income model and concludes that household debt has a focused and persistent

impact on consumption, and that an increase in household debt stimulates consumption growth more.

Despite the large number of relevant studies exploring the impact of household assets and debt on household consumption, there is a relative paucity of similar studies on residents' consumption expectations based on a balance sheet perspective. Based on the research of scholars at home and abroad, this paper summarises the theoretical basis, characteristics and international experience of residents' balance sheet recession, and provides research ideas and theoretical support for clarifying the current situation of domestic residents' balance sheet and consumption.

3. Theoretical Background and International Experience

3.1. Theoretical Background

The theory was pioneered by Nomura Research Institute's chief economist, Koo, and originated from the study of the Great Depression and Japan's 'Lost Thirty Years', which was proposed by Fisher in his study of the Great Depression. When asset (stock and real estate) prices fell sharply, the private sector's economic behavior from the pursuit of 'profit maximization' to the pursuit of 'debt minimization', enterprises and households will be most of the income used to repay debts, not for reinvestment and consumption. Consumption, stagnant or reduced demand for credit across society, the credit cycle has come to a standstill, economic activity has shrunk, private sector incomes have declined, and a vicious circle has formed, with the financial economy and the real economy experiencing a 'financial accelerator' effect, which has led to the economy falling into a deep recession. The Government needs to play a macro-control role in fiscal and monetary policy, expanding aggregate demand with proactive fiscal policy, leading to the repair of the private sector's balance sheet, and pushing the economy out of the recession. The Government needs to play a macro-control role in fiscal and monetary policy, expanding aggregate demand with proactive economic policies, leading to the repair of the private sector's balance sheet, and pushing the economy out of the recession. As balance sheet recession often goes hand in hand with financial crisis, which in turn reinforces the endogeneity of recession, thereby continuously magnifying the negative effects. As a result, the impact of balance sheet recessions on the real economy is large, long-lasting and wide-ranging.

3.2. Characteristics and International Experience

There are four main stages in the evolution of a balance sheet recession: first, large private sector participation in capital market and real estate market investments leads to irrational increases in asset prices, and the economic boom gives rise to asset price bubbles. Secondly, there was a revaluation of assets, and the massive shrinkage of the asset side led to balance sheet damage, aggravated and rapidly spreading liquidity risk, affecting all types of market entities. Third, expectations continue to weaken, coupled with macroeconomic control policies have little effect, the private sector large-scale deleveraging, triggering a continuous contraction of the balance sheet until the recession. Fourthly, under the impact of the continued downturn in consumption and investment, prices continued to weaken, the economy was plunged into a prolonged downturn, and the entire economy and society were plunged into a liquidity quagmire.

Throughout the history of the development of 'balance sheet recession' in Japan and the United States residents, in line with the characteristics of balance sheet recession, summed up in three phases: First, the period of accumulation of asset price bubbles (Japan in the 1980s and 1990s, the United States in the 1920s), the impact of easing, the private sector leverage ratio continues to climb, the value of assets rapidly moved upwards. During this period, the market value of US stocks increased from \$2.5 billion to \$8.7 billion, the total market value of Japan's stock market

reached about \$4 trillion, accounting for nearly 45% of the global share, and commercial land prices in Japan rose by more than 80%, and land prices in major cities rose by more than 200%; secondly, it is the period of bursting of the bubble (during the 1990s in Japan, and in the 1930s and 1940s in the United States), when the bursting of the asset bubble resulted in the private sector. In 1933, the U.S. stock market collapsed by 80 percent, resulting in a 47 percent reduction in total bank loans to the U.S. private sector and a 98 percent drop in the total amount of corporate bonds, which triggered the Great Depression; and at the end of 1989, after the adoption of austerity policies by Japan, the Japanese stock market plummeted by more than 60 percent, and land prices in major cities rose by more than 200 percent. In late 1989, after the adoption of austerity policies in Japan, the Japanese stock market plummeted by more than 60 percent, and after the introduction of the 'land value tax' policy, the Japanese real estate industry entered a long period of decline; thirdly, there was a long period of recession (after the 1990s in Japan and in the United States), and the mismatch between the asset-liability structure triggered the private sector to substantially deleveraging, which had a serious negative impact on investment and liabilities. In 1992, the scale of capital losses in Japan's stock and land markets reached 87% of nominal GDP, and in 1994, the year-on-year growth rate of Japan's private consumption and private equipment investment plummeted to -4.31% and -9.8%, and the year-on-year growth rate of M2 fell to about 4% since 1993, far below the level of more than 10% for a long period of time before the bursting of the bubble. In 1940, total fixed asset investment in the U.S. bottomed out, and the unemployment rate was once close to 15 percent.

4. Domestic Balance Sheet and Consumption Status

At present, the risk of the global economy falling into a prolonged recession has risen, and the domestic residential sector, with its pessimistic expectations of future economic growth, is not taking the initiative to increase consumption and investment after obtaining income or profits, but rather is taking the initiative to pay off capital and interest, compressing expenditures and increasing savings. If this phenomenon continues, when all the resident sector no longer actively invest and consume, it means that the income and profits of enterprises will fall, leading to a decline in the wages of residents and government tax revenue, and ultimately, the economy will be trapped in a recessionary cycle, and asset prices will inevitably fall, with the risk of a 'balance sheet recession'. From the situation in 2022, the value of domestic residents' assets will decline, consumer demand will be low, housing loans and consumer loans will slow down significantly or even grow negatively, and there will be signs of "balance sheet contraction" in residents' balance sheets.

4.1. Decline in Fair Value of Assets Significantly Constrains Consumption Growth

Real estate and financial assets account for an extremely high proportion of China's residents' assets. According to the data of the National Balance Sheet of the Academy of Social Sciences, as of 2019, China's residents' housing assets accounted for about 40% of total residents' assets, and stocks and equity assets accounted for about 30%. In 2022, China's urbanisation rate of more than 64% has entered a deceleration phase, and the slowdown in the urbanisation rate superimposed on the decline in house prices has led to the fall in the growth rate of housing assets, and the year-on-year decline in the area of sales of commodities and sales of commercial properties reached 24% and 27% respectively, the price index of newly-built commercial housing in 70 large and medium-sized cities and the price index of second-hand housing were continuously negative, and the growth rate of residents' housing assets was only 0.4%, down 11% from 2017, and the decline in the growth rate of housing assets drove the growth rate of residents' assets down to 0.3% from 12% in 2017, meanwhile, the A-shares continued to be

weak, with the SSE Index and the SZSE Index falling to 0.3% compared with the end of 2021 fell by more than 15% and 20% respectively, and the growth rate of residents' total assets fell to the lowest in history since 2000. Asset depreciation will significantly constrain consumption and investment, and Chinese residents have begun to significantly reduce the proportion of allocations to real estate and equity funds. In 2022, the growth rate of per capita consumption and total retail sales of consumer goods will fall to 1.8% and -0.2%, respectively.

4.2. Residents' Leverage Ratio Falls Back

According to the Global Consumer Insights Research 2023 published by PwC, 51 percent of Chinese consumers are reducing spending on non-essentials. Residents' willingness to borrow and consume is weakening, and excessive savings and early repayment of loans are still continuing. At the end of September, the growth rate of household deposits reached 134 trillion yuan, a growth rate of up to 16.5%, significantly higher than the growth rate of deposits from enterprises and financial institutions, and significantly higher than the growth rate of household loans of 5.7%, indicating that residents' deposits are still continuing to 'raging'. In October, China's household loans decreased by 34.6 billion yuan, becoming one of the important signs that the residential sector has taken the initiative to reduce its liabilities. In 2022, the leverage ratio of the residential sector was 67.62 percent, 0.7 percentage points lower than the high point at the end of 2020, and according to the forecast of China Prudential International, the leverage ratio of the residential sector will drop to 67.4 percent in 2023.

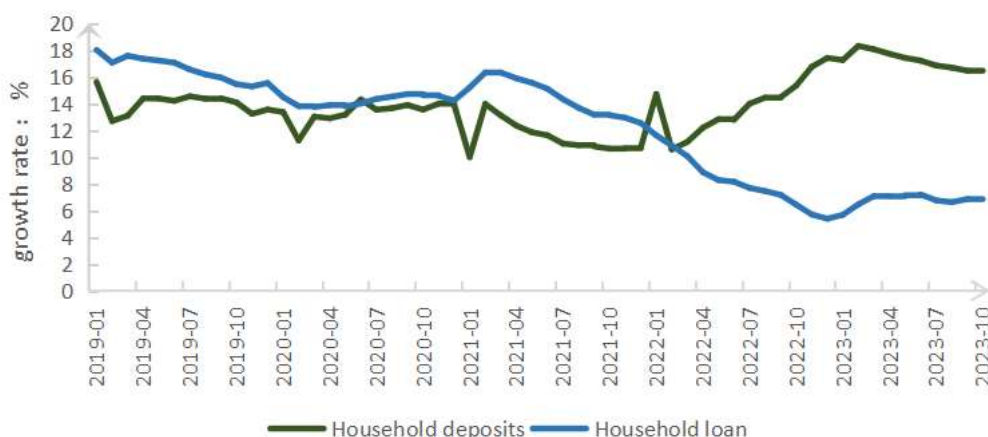


Figure 1. Chart of household deposit and loan growth rates in recent years

4.3. Low Marginal Propensity to Consume

Influenced by low income growth, residents' confidence has weakened, and the growth of disposable income of China's residents has slowed down. The nominal growth rate of per capita disposable income slips from an annual average of 8.9 percent in 2017-2019 to an annual average of 6.3 percent in 2020-2022. And while the three-year average growth rate of per capita consumption expenditure has slipped from 8 percent to 4.4 percent over the same period, a drop of 3.6 percentage points. Increased income volatility is a direct hit to consumer confidence. From the residential sector, the average propensity to consume of the nation's residents declined from 67.16% to 61.67% in 2017-2022, which is significantly low relative to the average propensity to consume of the United States, which fluctuated up and down by 90% during the same period. Some studies have pointed out that, compared with major developed countries at a similar stage of development when per capita GDP increased from US\$5,000 to US\$20,000, China's average propensity to consume is about 20 percentage points lower than that of these countries[1]. In June 2023, the index of residents' confidence in future incomes and

the index of future employment expectations dropped by 1.4 and 3.6 percentage points respectively from March to 48.5% and 48.7%. Against the backdrop of insufficient aggregate demand, residents are expected to be pessimistic and will tend to save more to reduce their liabilities, leading to a decline in the gearing ratio of the residential sector.

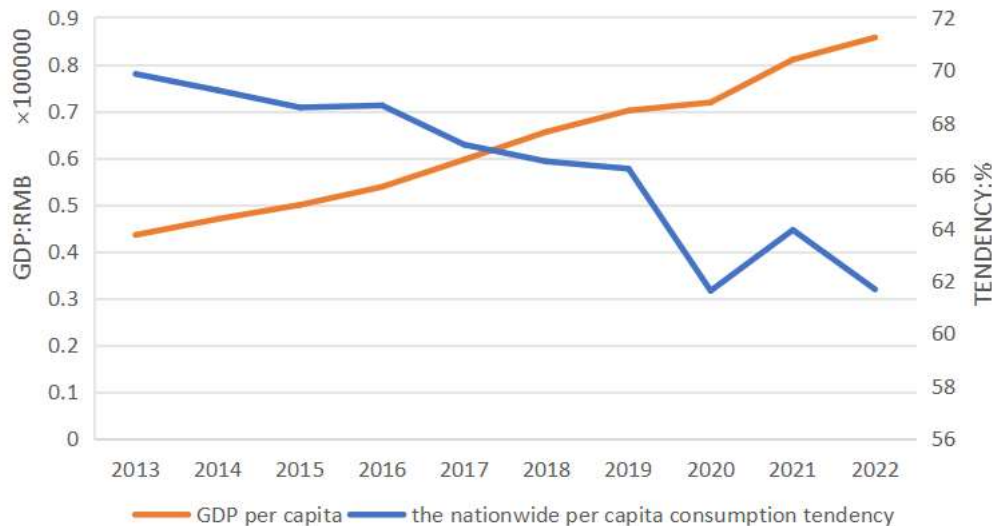


Figure 2. Trend of GDP per capita and average propensity to consume of the population

5. Conclusion

As a result of the above analysis, the country has shown signs of balance sheet recession. Assuming we exclude other factors and consider only assets and liabilities, we can conclude the following: the value of assets held by residents positively contributes to consumption in both the short and long run, and the level of residential indebtedness positively promotes residential consumption in the short term, but inhibits it in the long term. In order to better enhance the level of consumption of the population, we hereby put forward three policy proposals:

1) We should accelerate the improvement of the property market system. On the supply side, the housing security system combining rent and sale should be improved, the development of the housing rental market should be accelerated, and the supply of public rental housing should be increased and the degree of subsidy should be increased. In order to alleviate the burden of housing on the population and to further unleash the potential for consumption by the population, housing security modes such as shared property rights and public rental housing should be explored. On the demand side, for high-income groups, property consumption is appropriately controlled by means, such as regulating land supply and taxation. For low- and middle-income groups, support is provided by appropriately lowering lending rates and down payment ratios, and by appropriately adjusting public provident fund policies.

2) We are supposed to improve the allocation of residents' assets and expand the middle-income group. On the one hand, insisting on steady growth and promoting employment, continuously improving the public service system for employment, strongly supporting the development of new employment modes, and broadening the channels of residents' property income. On the other hand, increase the efforts to regulate the disparity in income distribution, continuously improve the redistribution adjustment mechanism with tax, social security, transfer payments as the major means, reduce the cost of asset realization, and ensure a reasonable proportion of household allocation of highly liquid assets, and advancing the social security systems for urban residents, such as old-age pension and medical care, to reduce the economic burden on residents' families.

3) We ought to formulate targeted credit policies to reasonably increase consumer credit. Differentiated consumer credit policies should be formulated for middle-income families, and by adjusting the structure of consumer credit, encourage financial institutions to launch diversified investment, credit, insurance, and other products, to provide residents with diversified choices. We should guide urban residents to change consumption idea, weakening residents' dependence on savings, stimulate consumer demand growth.

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