

It's not as complicated as a “balance sheet recession”

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Abstract: “Balance sheet recession” is more a description of a macro phenomenon than a complete theory. Simply applying the concept is problematic, as China’s economic data do not meet many of the important characteristics. Overemphasizing “balance sheet recession” may mislead economic conclusions and policy choices. There could be a simpler and more traditional interpretation of China’s macroeconomy, which is based on three features: first, the neutral interest rate has been low. Second, the demand side was hit by large shocks in 2021 and 2022. Third, a more restrained macroeconomic policy has been adopted. The combined result of these three factors is a lack of demand, lower incomes, inflation, interest rates, and a lack of endogenous growth momentum through the traditional Keynesian economic mechanism. Therefore, we should be vigilant about three main risks, namely, the liquidity trap, debt deflation, and the paradox of deleveraging. The key to addressing these risks is achieving moderate inflation, which can also be set as the objective of policy options.



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I. “BALANCE SHEET RECESSION” CAN BE A PERSPECTIVE OF ANALYSIS

“Balance sheet recession” is not a complete theory. Instead, it describes a macro phenomenon where economic agents deleverage on a large scale and the economy enters into a recession.

According to Richard Koo, the main proponent of “balance sheet recession”, this phenomenon occurs when firms and households are forced to save more, consume and invest less, and repay their debts due to the severe damages to their balance sheets. A typical cause is the bursting of bubbles after excessive borrowing. The process generally starts with firms and households over-borrowing and investing in a particular asset, most commonly real estate and equity. The price of the asset then rises sharply, and a bubble forms. Thereafter, the bubble bursts. The value of assets shrinks severely and falls below that of liabilities, leaving the balance sheets of firms and households insolvent. To repair their balance sheets, firms and households minimize their debts. The massive deleveraging leads to declines in investment and consumption, and an economic recession ensues. Koo believes that the Great Depression, the bursting of the real estate bubble in Japan, and the subprime mortgage crisis in the United States are all consistent with the characteristics of a balance sheet recession. He has recently been using the same framework to analyze China’s economy.

The “balance sheet recession” framework is instructive. Last June, in their article *Macroeconomic Policy in Response to Damaged Balance Sheets*, several of my colleagues attempted to interpret certain phenomena with this framework. It should be noted that at that time, my colleagues did not fully subscribe to the notion of “balance sheet recession” and therefore used “balance sheet damage”. That article argued that household, corporate, and government balance sheets in China were all damaged to varying degrees from 2020 to 2022 and that as a result, the traditional transmission path of monetary policy might be rendered ineffective.

Specifically, under the “balance sheet recession” framework, monetary policy is traditionally transmitted in the following way: the central bank relaxes its monetary policy (either by lowering interest rates or increasing the supply of base money), which leads to an expansion of credit in the financial system and a corresponding increase in the liabilities of firms and households, pushing up aggregate demand in the process and eventually achieving economic recovery. In a balance sheet recession, the above transmission path can hardly work effectively because when firms and households are already insolvent and need to repair their balance sheets through debt repayment, easing monetary policy will not increase their debt, since they will not be willing to borrow more no matter how low interest rates are. Moreover, debt repayment by firms and households is a credit contraction process in which balance sheet shrinkage in the real economy leads to balance sheet shrinkage in the financial sector.

It seems the above predictions have reflections in reality, such as the lack of strong credit growth and early repayment of loans in the household sector. However, what my colleagues wanted to emphasize in *Macroeconomic Policy in Response to Damaged Balance Sheets* is that there are a lot of things macro policies can do in response to damaged balance sheets, as to which, they also came up with some preliminary ideas in that article.

In all, “balance sheet recession” provides more of an analysis perspective than anything else.

II. WE SHOULD NOT TRAP OURSELVES IN "BALANCE SHEET RECESSION"

Simply applying the notion of "balance sheet recession" may cause problems, mainly the following two.

First, China's economic data do not meet many of the key characteristics of a "balance sheet recession". For example, the economy is growing at a resilient pace instead of in recession; credit and aggregate financing to the real economy are growing and witness no widespread deleveraging; despite high debt faced by some residents, the balance sheets are generally healthy, with the household sector being a net saver and the balance sheet showing an overall net worth; despite difficult balance sheet situation faced by some firms, many firms are performing well and actually adding debts to their balance sheets (for more discussion, see our policy brief, *Has the Balance Sheet Repair Begun? --A Look at China's Cash Flows and Balance Sheets by Sector, Q2-2023*); the central government's debt ratios are at a safe level; and China is not experiencing a Japanese-style bubble burst. In short, a lot of inconsistencies prove that it's inappropriate to simply fit what is happening in China into the "balance sheet recession" framework. As many scholars have refuted from various perspectives: China is not experiencing a "balance sheet recession" as Japan was.

Second, and more importantly, an overemphasis on "balance sheet recession" will mislead economic conclusions and policy choices. Of course, it is important to take balance sheets into account, which is a vital dimension of economic analysis, and my colleagues and I will continue to monitor the balance sheets of various economic sectors in the future. But if, as Koo claims, only fiscal policy is effective under a balance sheet recession, not only might one be prescribing the wrong medicine, but one might also be overlooking more fundamental and common problems of macroeconomic operation, such as the liquidity trap, the debt-deflation loop, and the issue of nominal interest rates declining slower than nominal growth rates. Just like when treating a patient with a cough and fever, the doctor should not jump to the conclusion that this is pneumonia and prescribe pneumonia treatment because the cough and fever are most likely to be the symptoms of a cold.

On closer analysis, many of China's short-term economic problems can be compared to a cold. A bad cold left untreated might turn into pneumonia, but a bad cold is not pneumonia and does not need to be medicated as such.

III. A SIMPLER AND MORE TRADITIONAL EXPLANATION IS NEEDED

A basic, traditional, and relatively standard macroeconomic interpretation of China's macroeconomy over the past period has three basic parts:

Part 1: China's neutral interest rate has been at a low level. One representative view holds that China remains one of the major economies with the highest growth rates, with a potential growth rate of around 5%, much higher than that of other major developed economies. According to the golden rule of interest rates that the real interest rate is roughly equal to the real economic growth rate, China's neutral interest rate should be higher. My colleagues and I studied the theoretical literature and empirical data a while ago and drew a different conclusion. Specifically, the following three main factors make China's neutral interest rate no higher than that of major developed countries despite its higher potential growth rate. First, China's savings and investment rates are much higher than those of other countries. Savings over investment depresses interest rates and a high investment rate

reduces the marginal return on capital, which also depresses interest rates. Second, China's aging rate and its corresponding demographic structure further depress interest rates. Third, productivity gains in China have slowed in recent years and thus have not been able to lift interest rates significantly. Therefore, China's neutral interest rate may have already been at a low level even before 2020. The implication is that the economy suffers from an endogenous lack of demand, growth drags, and low inflation.

Part 2: The demand side of China's economy was hit by large shocks in 2021 and 2022. Some were exogenous and some caused by policy adjustments, especially the major changes in real estate supply and demand. These shocks mainly affected the demand side, making insufficient aggregate demand more prominent.

Part 3: China has adopted a relatively restrained macroeconomic policy. In recent years, China has not adopted strong stimulus policies that would have had an economy-wide impact. Instead, the growth rate of credit and social financing has remained steady and gradually declined. Nominal interest rates have declined in an orderly manner, while real interest rates have remained stable due to low inflation with a slight rise this year. Nominal fiscal spending has maintained its strength despite the tight balance of revenues and expenditures, which is hard to achieve, with nominal spending growth slightly below nominal GDP growth. This policy mix has played a crucial supportive role for the economy, but given the large demand-side shocks, it has not yet been able to close the demand gap (for more discussion, see our policy brief "Where is the Money?" Maybe the Wrong Question).

The combined result of these three parts is a lack of demand, falling incomes, lower inflation, lower interest rates, and a lack of endogenous growth momentum through the traditional Keynesian economic mechanisms. This negative Keynes economic cycle is further reinforced and amplified by two additional endogenous policy mechanisms: one is the slowdown in fiscal spending growth due to the pressure on fiscal revenues, which is somewhat pro-cyclical, and the other is the lack of incentives for firms and households to increase leverage because market interest rates are higher than neutral interest rates, as reflected in the slowdown in the credit growth rate. The negative Keynes economic cycle and the pro-cyclicity of policies have hindered economic recovery, and the economic phenomenon generated by the above mechanism seems more in line with the characteristics of China's economy.

While this negative Keynes economic cycle may self-adjust and recover, we should be wary of three risks in the presence of both low neutral interest rates and low inflation: **First, liquidity trap.** The combination of low neutral rates and low inflation implies a high likelihood of triggering the zero lower bound, and thereafter a liquidity trap. **Second, debt-deflation loop.** In a low-inflation environment, many economic agents may face price drops, for example, a lot of companies will see their earnings greatly affected when the producer price index stays low. If enough economic agents are caught in a situation where their earnings fall sharply and their cash flows tighten, while debt services remain as usual, the debt-deflation loop will be triggered. **Third, the effort of deleveraging leading to a higher leverage ratio, which is also known as the paradox of deleveraging.** When market interest rates are above the neutral rate and inflation is low, the gap between market interest rates and nominal growth rates will be smaller, and nominal growth rates may be lower than nominal market interest rates. If so, the amount of outstanding debts will grow faster than the economy. In this case, even if new debt is contained, debt as a share of GDP will continue to rise, that is, leverage will keep climbing (for more details, see our policy brief, *Deleveraging may Require More Leverage (at Lower Interest Rate)*).

Low inflation is present throughout the above analysis, appearing to be sometimes a cause and sometimes a consequence, and indeed it is. This is because the main variables in the macroeconomy are endogenous. If we are looking for a solution, low inflation is both the starting point and a key indicator of outcome. Indeed, the focus on avoiding the three risks mentioned above, as well as on breaking the negative Keynes economic cycle, may lie in a key macro variable: inflation.

IV. IMAGINE A MODERATE INFLATION

Imagine, if the inflation is moderate (when the GDP deflator is between 2.5% to 3%, that is, when the nominal GDP growth rate is 2.5 to 3 percentage points higher than the real GDP growth rate, rather than the current situation where nominal growth rate and the real growth rate are basically the same), it will be hard for the three risks mentioned earlier to materialize, it will be easier to break the negative Keynes economic cycle, and a "balance sheet recession" (if it exists) will be less likely.

Moderate inflation keeps away the liquidity trap, debt-deflation loop, and paradox of deleveraging. I won't delve too deep into the economic reasons here. To put it simply, when inflation is far away from 0, there is no deflation and naturally no debt-deflation. At this point, the neutral nominal interest rate should also be greater than 0, and therefore the economy is not prone to falling into a liquidity trap. With moderate inflation, nominal GDP would also grow faster, and we are unlikely to experience the paradox of deleveraging. In other words, moderate inflation is almost by definition incompatible with liquidity trap, debt-deflation, and the paradox of deleveraging. If we already see liquidity trap, debt-deflation, and the paradox of deleveraging, the inflation will not be moderate. And if inflation is moderate, we are unlikely to see liquidity trap, debt-deflation, and the paradox of deleveraging.

Moderate inflation helps boost domestic demand and thus break the negative Keynes economic cycle. There are many possible mechanisms underlying this phenomenon. Here I'll list a few. First, moderate inflation helps improve corporate earnings. As is shown in theoretical and practical data, corporate profitability and inflation are highly positively correlated. After all, the profit margin is higher when prices can be increased. Second, moderate inflation helps improve fiscal revenues. Fiscal revenues grow as nominal income grows, and moderate inflation can bring about nominal income growth, and therefore improve fiscal revenues, helping mitigate the pro-cyclicality inherent in fiscal policy. Third, moderate inflation helps reduce real interest rates. Once real interest rates are lowered, the trade-off between leveraging or deleveraging will undergo a significant marginal change: more firms and households will be motivated to add leverage, while fewer will be eager to deleverage, changing the aggregate demand. Fourth, moderate inflation helps increase residents' nominal incomes. When wage incomes keep rising, as opposed to when they are stagnant, even a monetary illusion will have a short-term positive impact on consumption behaviors. One might say, aren't these mechanisms just movements along the Phillips curve? Well, pretty much, they're ordinary Keynesian economic mechanisms.

Moderate inflation helps improve balance sheets, thereby reducing the likelihood of a "balance sheet recession". Again, the possible underlying mechanisms are many and I'll only list a few here. First, moderate inflation reduces the real value of nominal debt, which is the opposite process to debt-deflation, as moderate inflation will gradually reduce the real debt burden of debtors and their pressure to deleverage. Second, moderate inflation raises the nominal price of real assets. With moderate inflation, the nominal price of real assets will rise, and for



a given nominal debt, the balance sheets of economic agents will improve significantly. Third, moderate inflation improves the cash flows of governments, firms, and households. Even if deleveraging is required, with moderate inflation, economic agents will have significantly better cash flows and become more capable of maintaining the intensity of their spending while deleveraging. Fourth, moderate inflation promotes relative price adjustment, which is perhaps a mechanism most relevant to the current situation. With the real estate market under pressure, if the adjustment in house prices relative to other commodities is achieved by reducing house prices, the pressure on the real estate market will inevitably be further exacerbated. But if this adjustment is realized through the rise of other commodity prices, that is, moderate inflation, the impact on the real estate market will be much smaller, and right now the real estate market happens to be one of the most important factors affecting the balance sheets of governments, firms, and households.

Therefore, in the array of variables affecting the macroeconomy at this moment, moderate inflation seems to be the key variable. Realizing moderate inflation may trigger chain reactions, but how can moderate inflation be realized in the first place?

V. IMAGINE MACRO POLICIES WITH MODERATE INFLATION AS KPI

Moderate inflation does not occur naturally, so perhaps a simple and straightforward approach would be to make moderate inflation the KPI of macro policy for the current and future periods. It's similar to inflation targeting, a systematic arrangement adopted by many central banks in which moderate inflation is the (only) KPI. This arrangement has helped many countries address hyperinflation. But what is envisioned here is not limited to monetary policy, but includes fiscal policy as well, and the aim is not to address hyperinflation, but rather to pull inflation up from a low level to a moderate one.

Aggregate demand policy is a key measure to achieve moderate inflation, but a macro policy with moderate inflation as a KPI can go beyond simply boosting domestic demand. Driving domestic demand can certainly help raise the inflation level, such as increasing residents' income by boosting consumption, supporting investment by expanding infrastructure construction, and supporting the expansion of spending by credit expansion. When the interest rate is low, fiscal policy works more effectively in boosting domestic demand. But policies to boost the inflation level play a bigger role than boosting domestic demand. More importantly, moderate inflation as a KPI may trigger a change in the entire mode of policy implementation, just as inflation targeting has fundamentally changed the mode of formulating and implementing monetary policy in many central banks.

Monetary policy with moderate inflation as a KPI should focus on not only the current monetary credit but also medium- and long-term expectation management. While current supply and demand balance affects the inflation level, it is more so affected by economic agents' expectations of future inflation, which are mostly determined by the expectations of future monetary policy. How to guide future expectations is a huge topic and deserves a whole article to itself, but when you boil it down, it's all about saying what you do and doing what you say. When clear communication is hard to achieve, holistic policies and measures that are hard to reverse (such as cuts of interest rates and required reserve ratios) may generate better policy effects than structural ones that can be changed in the short term (such as refinancing and open market operations). Central banks in developed economies have tried many unconventional monetary policy tools for guiding expectations in the past decade or so, and these tools can also be a good point of reference.

Moderate inflation as a KPI requires better synergy between fiscal and monetary policies. The policy mixes of developed countries after 2008 and after 2020 have provided us with plenty of materials to observe the synergy between fiscal and monetary policies. After 2008, the coordination between fiscal and monetary policies in these countries has been limited, and most of the time, monetary policy played a solo role, resulting in a "prolonged stagnation" in the past decade featuring low rates, low growth, and low inflation. After 2020, however, fiscal and monetary policies together have been one of the key drivers of the world's highest inflation in 40 years. These attempts, whether successful or not, tell us that how and how well fiscal and monetary policies are mixed can play a crucial role in determining the inflation level.

Moderate inflation as a KPI implies that important asset prices can be used as key channels and signals for policy transmission. In the past, house prices, commodity prices, or exchange rates have seldom been used as transmission paths for macro-control. They were generally managed and regulated out of entirely different policy considerations. Discussions a few years ago about whether house prices should be included in the CPI had begun to show some hints in the direction of macro-control, although the concern then was that house prices were too high. Under a policy framework with moderate inflation as the KPI, house prices, commodity prices, or the exchange rate can directly or indirectly affect the level of inflation, so it is conceivable to take these prices as key channels and signals for policy transmission.

Finally, notably, for policymakers, the potential benefits of moderate inflation as a KPI far outweigh the potential risks. After all, if the key to the problem is inflation as analyzed earlier, moderate inflation is a natural KPI. Even if the key is not inflation, pursuing moderate inflation will not do great harm. For market participants, an improvement in inflation, especially core inflation, is a significant indicator of economic fundamentals. Sustained improvement in core inflation would be a key signal of a sustained economic recovery.



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