The Relationship Between Money Supply and Price Movements from A Structural Perspective

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Abstract. This paper examines the impact of money creation and flow on prices, including house prices and financial asset prices, from a structural perspective. By analyzing central bank monetary statistics, the study highlights the relationship between money supply and price changes, emphasizing long-term effects on consumer prices and short-term effects on incremental household deposits. Furthermore, the study emphasizes the importance of monitoring changes in the money supply, both domestically and internationally, with specific attention to the PPI (Producer Price Index) changes. The real estate market is identified as a significant driver of money creation, particularly through deposits in non-bank financial institutions. Additionally, deposits in non-bank financial institutions are found to be an important indicator of stock market volatility. The paper recommends that asset prices be included as a key target of monetary policy and advocates closely monitoring trends in international commodity prices.

Keywords: Money supply, Prices, Real estate market.

1. Introduction

The world is currently facing an unprecedented pandemic. In response to its impact, major economies have implemented large-scale monetary easing measures. According to the traditional monetary quantity theory, a significant increase in the money supply should lead to a corresponding rise in the overall price level. However, despite the noticeable surge in stock market, property market, and commodity futures market prices, the increase in money supply in most economies has not resulted in a substantial rise in the overall price level. This structural price volatility phenomenon not only exists between traditional price indicators and asset prices but is also observed within the CPI (Consumer Price Index) and PPI. The CPI and PPI primarily reflect the price volatility of food and resource commodities, while the price volatility of other commodities and services remains relatively stable. During the pandemic, these structural characteristics of price movements have garnered significant attention from various sectors. Previous research has discussed the causes of this dual structural feature of price movements since the international financial crisis in 2008. However, this paper focuses on the impact of money creation and flows in different sectors on prices, specifically house prices and financial asset prices. The analysis is conducted from the perspective of money creation, considering the balance sheet and credit balance sheet of the monetary authority and the commercial banking system.

2. Literature Review

The classical literature typically characterizes price increases as inflation and price decreases as deflation, often recommending either tight or expansionary monetary policies to combat inflation or avoid deflation. However, this formulation is not entirely accurate. Inflation, defined as a generalized and sustained rise in prices resulting from excessive currency issuance, has three key points worth noting. First, excessive currency issuance is essential for price increases to fall into the category of inflation. Second, price increases must be generalized, rather than caused by price increases in a few commodities. Lastly, inflation implies a sustained rise in prices, not a short-term phenomenon. In reality, various factors contribute to price movements, such as supply and demand imbalances, changes in resource-based product prices, seasonal fluctuations, and adjustments in tax policy. These

factors are generally unrelated to currency issuance or monetary policy. Consequently, it is inaccurate to use inflation or deflation to characterize all price increases or decreases.

Currently, the People's Bank regularly publishes several monetary statistics statements, notably the balance sheet and statement of credit receipts and disbursements. These statements offer a comprehensive overview of monetary fund flows between the central bank, commercial banking system, and the real economy. In China, after the international financial crisis in 2008, scholars have utilized central bank monetary statistics to study macroeconomic issues. Regarding money creation, representative literature includes Li Zhiguo and Zhang Xiaorong (2009), Wu Ge (2010), and Wu Ge and Li Bin (2012). Examining the operation mechanism of monetary policy, scholars have focused on the flow of money between the central bank system and the real economy. Representative literature in this area includes Wang Guogang (2012, 2013), Sheng Songcheng and Zhai Chun (2015), among others. Additionally, scholars have described and applied the compilation of monetary statistical statements, with representative literature featuring Qu Qing (2011), Wang Jian (2016), Liu Shengfu, and Han Yong (2019).

While these studies provide valuable insights into the base money injections by the central bank and the broad money derivation of the commercial banking system, they face challenges in capturing the flow of monetary funds among households, non-financial corporations, government entities, and foreign sectors. To better understand the flow of money in the real economy, two imperfect remedies are currently employed. The first approach estimates the flow of money between the real sectors of the economy using the money flow tables published annually in the China Statistical Yearbook, which include both financial and non-financial transactions. However, this approach has limitations, such as potential biases when estimating high-frequency monthly and quarterly data based on low-frequency annual data. Additionally, the data in the fund flow tables of the Statistical Yearbook typically have a two-year lag, making them less relevant when economic operations are affected by significant external shocks. The second approach estimates the flow of monetary funds in the real economy using data on total investment in fixed assets, total retail sales of consumer goods, total imports and exports, as well as residents' income and expenditures, published by relevant institutions.

3. Credit Money Creation Mechanism and Flow Path Analysis

This section discusses and analyzes the flow of monetary funds among commercial banks, the non-financial corporate sector, the household sector, non-bank financial institutions, and the government.

The primary sources of funds for the non-financial business sector are as follows. First, through the provision of goods and services to the household sector, the government, and non-bank financial institutions, resulting in unit deposits. According to the flow of funds table and land grant estimates, the average annual amount over the past three years has been approximately 65 trillion yuan. Second, by applying for loans from commercial banks for investment and daily operations, with the current stock of loans to the corporate sector amounting to 113 trillion yuan. The average annual increment over the past three years has been 9 trillion yuan. Third, through the issuance of bonds and stocks in the capital market, with the current stock of non-financial corporate bond and stock financing amounting to 28.2 trillion yuan and 8.5 trillion yuan, respectively. The average annual increments over the past three years have been 3.5 trillion yuan and 0.5 trillion yuan, respectively. Fourth, foreign exchange earnings from exporting goods and services and settling with commodity banks for RMB. During the epidemic, China's foreign exchange earnings grew at a faster pace. Expenditures of funds mainly include the payment of wages and the purchase of commodities from the household sector, resulting in a decrease in unit deposits. Additionally, payments of taxes and fees to the government, such as the 2020 corporate income tax of about 4 trillion yuan, and dividends, principal repayments, and interest payments to commercial banks, the household sector, and non-bank financial institutions, for which statistics are currently difficult to obtain.

The main sources of funds for the household sector are as follows. First, remuneration earned by workers from the non-financial business sector, financial institutions, and government departments,

estimated to be approximately 40 trillion yuan according to the flow of funds table. Second, obtaining consumer loans and business loans from commercial banks, primarily through housing mortgage loans. The current stock of loans to the household sector is close to 65 trillion yuan, with an average annual increment of 7.2 trillion yuan over the past three years, of which housing mortgage loans accounted for approximately 6 trillion yuan. Third, foreign exchange income from the export of goods, as well as interest income from purchasing insurance, wealth management products, and deposits. Statistics on this part are more difficult to obtain. The main capital expenditures include the purchase of corporate bonds, corporate stocks, government bonds, and other securities in the primary market. This includes households initially buying financial products and subsequently purchasing the aforementioned securities. Additionally, taxes are paid to the government, such as personal income tax amounting to about 1 trillion yuan in 2020.

Government fiscal expenditures exceed fiscal revenues. In recent years, China's fiscal revenues have been smaller than fiscal expenditures. To compensate for the fiscal deficit, the central government and local governments issue bonds in the bond market. The current stock of government bonds is approximately 47 trillion yuan, with an average annual increase of 6 trillion yuan over the past three years. Analyzing the government's revenue and expenditure activities in relation to broad money investment, 80% of the bonds issued by the government are held by commercial banks, including policy banks and credit unions. This can be considered as commercial banks ceding base money to the government. When the government disburses these base currencies to the non-financial enterprise sector, household sector, and non-bank financial institutions, it results in an increase in deposits for these sectors. In essence, the government's issuance of bonds can be approximated as creating broad money. The government's fiscal activity can be analyzed by examining the item of (net) claims on the government in the overview of depository corporations (a consolidated form of the balance sheets of the central bank and commercial banks).

Changes in deposits of non-bank financial institutions refer to the deposits of brokerage firms, funds, trusts, and other financial institutions held in banks. This mainly includes customer deposits of securities firms, bank deposits of non-bank financial institutions for financial products, and bank deposits of non-bank financial institutions for their own funds. Households and non-financial enterprises use their deposits to invest in the secondary market of securities, forming margin deposits. They also purchase financial products, resulting in increased deposits of non-bank financial institutions. This phenomenon is known as "households and enterprises moving deposits." Non-bank financial institutions use their own funds to invest in the securities market or provide loans to the central bank and commercial banks. Commercial banks also use their own funds to purchase financial products from non-bank financial institutions. These activities lead to changes in the deposits of non-bank financial institutions. Historical experience has shown that the movement of deposits in non-bank financial institutions is closely related to the movement of the stock market.

4. Empirical Analysis of the Relationship between Money and Price Changes: Prices, Housing Prices, and Financial Assets

4.1. The Impact of Money on Consumer Prices

The monetary explanation for the long-term rise in consumer prices remains valid. Currently, the analysis of the price situation focuses on studying changes in consumer prices based on the fundamentals of supply and demand (the physical perspective). This analytical method closely reflects reality because, in the short term, consumer prices are more susceptible to disturbances in food and energy supply. However, in the medium to long term, under the condition that supply and demand for commodities remain in equilibrium, money becomes an important factor driving up prices. Currency affects not only the interest rate end of social financing costs but also the quantitative end of overall social profits. Since 2011, China's broad money supply M2 has doubled, while the CPI has only increased by 25.5%, indicating a low rate of increase. Considering the structural nature of broad money creation and the fact that some of the money created is locked up in the real estate market or

flows to the capital market, we calculated the money supply by excluding real estate loans and deposits from non-banking financial institutions from M2. We found that since 2011, there has been a 1.4-fold increase in this adjusted money supply. It can be argued that the 25.5% increase in the CPI over the past 10 years has been mainly driven by this 1.4 times increase in money, rather than solely due to the 2 times increase in money. In summary, the growth of the money supply in the medium and long term can indeed push up consumer prices, but it is difficult to detect from statistical indicators in the short term. As stated by Mr. Xue Muqiao in his memoirs, "The fundamental way to stabilize prices is to control the monetary aggregates."

The increase in household deposits in the early stages of the COVID-19 outbreak suppressed consumer prices. At the beginning of the outbreak, consumer investment in the household sector sharply declined, and household deposits significantly increased due to the severe situation of epidemic prevention and control. Table 2 presents the sources and flows of additions to M2 in the first quarter of recent years. The lower part of Table 2 indicates the sources of new M2. Out of the 8.8 trillion yuan of incremental M2 in the first quarter of 2020, the main source of derivation was broad credit to non-financial firms, with 6.3 trillion yuan derived from loans and 1.2 trillion yuan from bond purchases, totaling 8.7 trillion yuan, roughly equivalent to the incremental M2 over the same period. These derived currencies circulate in society. For example, banks lend money to businesses, businesses use the loans to pay their employees, and employee deposit account balances increase. As a result, the distribution of M2 end-of-quarter balances may significantly differ from the sources of derivation. The distribution of new M2 is presented in the upper part of Table 2. In the composition of new M2 in the first quarter of 2020, household deposits experienced the highest increase, reaching 6.5 trillion yuan. Deposits from non-financial enterprises (demand and term) increased by 2 trillion yuan, resulting in a total of 8.5 trillion yuan, which aligns closely with the increase in M2 during the same period. Deposits from non-financial institutions at the central bank (mainly provisions for third-party payment platforms) and deposits from non-bank financial institutions showed relatively little change, with a seasonal increase in currency in circulation.

The significant increase in household deposits is both a cause for concern and a potential opportunity. The top and bottom halves of Table 1 illustrate that in the first quarter of 2020, commercial banks lent 7.5 trillion dollars to non-financial corporations through broad credit. However, non-financial corporations retained only 2 trillion dollars, with the remaining 5.5 trillion dollars going to the household sector. Household sector deposits increased by 6.5 trillion yuan, of which 1.2 trillion yuan were loans from commercial banks, and the remaining 5.3 trillion yuan were obtained from non-financial enterprises, which essentially matches the net spending of 5.5 trillion yuan by non-financial enterprises. Based on residents' consumption and investment data, along with historical data on monetary growth during the same period, we can conclude that in the first quarter of 2020, due to epidemic prevention and control measures and efforts to resume work and production, the government increased financial support to enterprises, resulting in a record high in loans from commercial banks to non-financial enterprises. The funds obtained by enterprises were used for normal production and loan repayment, primarily for paying wages to residents to sustain their normal lives. During the epidemic, restrictions on people's movement led to a significant decline in year-on-year growth rates of sales for new homes and total retail sales of consumer goods. As a result, deposits in the household sector did not quickly flow back to the non-financial enterprise sector, leading to a significant increase in household deposits. With overall improvements in epidemic prevention and control and the resumption of production, distribution, and consumption, consumption in the household sector has resumed, and consumer prices have gradually increased, while deposits in non-financial enterprises have rebounded.

Table 1: Distribution and Sources of Incremental Broad Money Supply M2

Incremental money supply	2015Q1	2016Q1	2017Q1	2018Q1	2019Q1	2020Q1	2021Q1
Money in circulation	1690.3	1434.6	301.2	2047.0	1733.2	5832.7	2229.1
Unit demand deposits	-12536.2	9193.2	1911.7	-22297.1	5843.5	6791.6	-11696.9
Time deposits per unit	11133.6	12382.7	9193.8	12409.7	18836.6	26788.9	17469.4
Household deposits	35815.5	34782.2	39774.2	43222.2	60917.6	65117.4	67072.3
Deposits of non-financial institutions with the central bank	0.0	0.0	0.0	2162.6	3547.6	917.2	1677.2
Deposits with Non-Bank Financial Institutions	10854.7	-3872.9	-1638.0	13393.6	-10411.9	-2330.7	13551.3
Total	**46958.0**	**53919.9**	**49542.9**	**50938.0**	**61684.2**	**87699.6**	**90302.3**
Foreign exchange account	-2520.5	-10171.8	-3215.8	163.7	-20.0	-238.2	326.8
Loans to Non-Financial Enterprises	27732.2	30844.1	26013.4	29245.9	43910.0	62595.7	54500.8
Loans to households	8773.5	12365.1	18307.6	17421.7	17946.7	12258.6	25456.1
Purchase of non-financial corporate bonds (including equity)	4282.7	-5136.0	-7705.8	3447.2	1718.2	12017.1	-1130.7
Claims on non-bank financial institutions	17642.7	47440.1	12546.8	1337.3	955.2	13833.8	5143.9
Claims on government (net)	1128.6	7000.3	3917.1	10088.8	9223.1	15133.3	7478.0
Paid-in capital	1300.8	993.5	632.5	79.6	608.7	1635.4	260.1
Other	-11382.0	-29415.2	-952.9	-10846.2	-12657.6	-29536.1	-1732.8
Total	**46958.0**	**53919.9**	**49542.9**	**50938.0**	**61684.2**	**87699.6**	**90302.3**

Note: M2 does not include money market funds.
Source: The People's Bank of China, organized by the author

4.2. The Impact of Currency on Production Prices of Industrial Goods

The mechanism of the role of currency in the production price of industrial goods is as follows: China, being the world's manufacturing center, experiences a significant influence on the production price of industrial goods from both internal and external demand. When external demand is strong, foreign exchange obtained through exports becomes the base currency and an important channel for broad money. As a result, domestic households, non-financial enterprises, and the government sector may not significantly increase leverage or may experience only a slight increase while the economy rapidly grows. This situation promotes an increase in the price of industrial production. Conversely, when external demand shrinks and internal demand cannot compensate in the short term, there may be a structural overcapacity situation in industrial capacity, leading to continuous decreases in industrial production prices. There are three main methods to address structural overcapacity internally: government assistance in accelerating market clearing, increased leverage by the internal sector (e.g., expanding credit) to boost effective demand and alleviate overcapacity, and a combination of the aforementioned methods. Once both the supply and demand sides begin to address structural overcapacity internally, the money supply will grow rapidly, effective demand will pick up, and industrial production prices will recover.

Following the outbreak of the COVID-19 pandemic, major economies implemented large-scale accommodative monetary and fiscal policies to revive the real economy and stabilize financial markets. The macro leverage ratios of the United States, Japan, and Germany significantly increased from 249.7%, 363.8%, and 172.9% in the fourth quarter of 2019 to 280.4%, 401.8%, and 191.7% in the third quarter of 2020, respectively. The rapid rise in macro leverage was accompanied by

substantial growth in the broad money supply in major economies and notable improvements in commercial bank credit. Furthermore, the U.S. fiscal borrowing, heavily directed towards the household sector, did not lead to a sharp decline in national purchasing power; in fact, it may have even increased. The rapid recovery of effective demand in major economies directly drove the continued rise in international prices of crude oil, copper, aluminum, non-ferrous metals, and other industrial raw materials, as well as global housing prices. Influenced by this imported inflation and improvements in domestic demand, China's industrial production sector experienced continued growth, leading to a rapid increase in the Producer Price Index (PPI).

4.3. Relationship between Currency and House Price Changes

The interaction mechanism between money and house prices is as follows: under the influence of expansionary fiscal and monetary policies, inflation expectations in the household sector increase. To counteract inflation, the household sector typically leverages real estate purchases, primarily residential properties, which drives up residential property prices. Residential properties have both commodity and financial attributes, and if residential prices rise too rapidly, it triggers the early release of pent-up demand and fuels investment and speculative demand, resulting in a spiral of increasing personal housing loans and house prices. In China, urban construction land is entirely supplied by local governments. When the property market is hot, real estate development companies leverage their resources and competitively bid at land auctions to obtain limited land development opportunities. The rising land premiums increase the cost of housing, further supporting high housing prices. As land premiums serve as a primary source of revenue for local governments, efforts to stabilize housing prices in key cities often involve implementing demand-side policies to suppress the property market. For instance, current measures in northern, Guangzhou, and Shenzhen involve strict investigations into illegal capital flows into the market, while there has been minimal relaxation of land supply-side policies.

Real estate serves as a significant driver of money creation. State-owned land concessions, real estate development, and real estate mortgages involve commercial bank credit operations. Although state-owned land concessions enable the treasury to absorb substantial currency deposits, the government uses these funds to benefit the public, ultimately leading to real estate credit creation that contributes to deposits in the household sector and non-financial enterprises. By the end of 2020, China's real estate loan balance reached 49.6 trillion yuan (including 34.5 trillion yuan of personal housing loans), accounting for 22.7% of the proportion of the broad money supply M2. When considering real estate development enterprise bond issuance, it can be estimated that more than 22.7% of China's M2 is created by real estate. Therefore, the prevailing view in society that real estate functions as a massive monetary "reservoir" is debatable.

4.4. The Relationship between Currency and Price Changes of Financial Assets

The mechanism of interaction between money and financial asset prices is as follows: when the majority of the sector anticipates a rise in the financial market, household deposits and deposits from non-financial corporation’s flow in. This leads to an increase in commercial banks' proprietary funds, which are then used to purchase financial products by non-bank financial institutions. Consequently, non-bank financial institutions borrow more from commercial banks, and deposits in non-bank financial institutions increase, thereby pushing up the price of financial assets. Rising financial asset prices attract more capital inflows, further driving up deposits in non-bank financial institutions and supporting the continuous increase in financial asset prices. However, when the growth of deposits in non-bank financial institutions encounters a bottleneck, the market capitalization may not sustain previous trading volumes, resulting in a lack of liquidity and a decline in financial asset prices. In order to limit losses, sector funds tend to flee the market, further reducing deposits in non-bank financial institutions and causing financial asset prices to decline. When the market experiences a sharp decline, non-bank financial institutions may turn to the central bank for refinancing to maintain day-to-day operations.

The outbreak of the COVID-19 pandemic subjected the stock market to a stress test. At the beginning of the epidemic outbreak, market participants expressed concerns about the stock market, particularly the three major stock indices in the U.S., which experienced significant declines. In March 2020, deposits in non-bank financial institutions decreased by 1.4 trillion yuan, with the household sector and non-financial enterprises withdrawing 2.5 trillion yuan. In the second half of 2020, due to effective epidemic prevention and control measures in China and the boost provided by proactive fiscal and loose monetary policies, investor sentiment rebounded, resulting in a significant increase of 1.7 trillion yuan in deposits of non-bank financial institutions in July. Although there was a subsequent decrease in the growth momentum of deposits in non-financial institutions, the CSI 300 index continued to rise. This was primarily driven by funds embracing leading stocks in sectors such as consumer goods, pharmaceuticals, and technology, which contributed to the continued increase in the stock index. Before the Chinese New Year in 2021, enticed by the market's potential for profit, the household sector and non-financial enterprises invested heavily in the market, resulting in an influx of 1.5 trillion yuan in February and further driving the stock market's upward trajectory. However, following the Chinese New Year, as the trend of "holding stocks" dissipated and the source of deposits from non-bank financial institutions proved inadequate, the stock market began to retrace.

5. Conclusion

First, the long-term impact of money on consumer prices depends on the aggregate increase in household deposits in the short term. The monetary explanation for long-term consumer price increases remains valid. Over the past 10 years, China's broad money supply M2 has grown by 2 times. Excluding real estate loans and deposits from non-financial institutions, M2 has grown by 1.4 times, contributing to a 25.5% increase in the Consumer Price Index (CPI). While the impact of currency on CPI growth is subtle in the short term and difficult to identify through statistical indicators, it is important to consider both willingness and purchasing power (monetary factors) from an effective demand perspective in understanding price changes. At the beginning of the COVID-19 outbreak, blockages in China's production, distribution, and consumption links resulted in a significant increase in household deposits in the first quarter of 2020, suppressing consumer prices. As the situation improved, circulation improved, and residents' effective demand was gradually released, leading to a rebound in consumer prices.

Second, real estate plays a significant role in money creation. Contrary to the view that real estate is a huge monetary "reservoir," this paper argues that real estate is a massive money "creator." Processes such as state-owned land concessions, real estate development, and real estate mortgages involve commercial bank credit operations, generating a substantial amount of money. By the end of 2020, China's real estate loan balance reached nearly 50 trillion-yuan, accounting for 22.7% of the proportion of M2. This indicates a significant contribution of real estate to the creation of broad money. In China, there is a strong correlation between real estate loans and house price trends, with a correlation coefficient of 0.95 or higher. This suggests that Chinese residents predominantly choose to increase leverage through purchasing houses, and the leverage is particularly pronounced in high-priced first-tier cities.

Finally, deposits in non-bank financial institutions serve as an important ex-post indicator of stock market volatility. Non-bank financial institution deposits reflect the supply of capital in the capital market at a given moment. The ups and downs of the stock market are influenced by changes in deposits in non-bank financial institutions. For example, during the 2014 bull market and the subsequent stock market crash in mid-2015, funds from commercial banks, households, and non-financial enterprises flowed into the stock market, resulting in a significant increase in deposits in non-bank financial institutions. However, after the crash, sector funds quickly withdrew, leading to a significant decrease in non-bank financial institution deposits. Similarly, the outbreak of the COVID-19 pandemic was also a stress test for the stock market. At the beginning of the outbreak, concerns about the stock market led to a retreat, and deposits in non-bank financial institutions decreased by

1.4 trillion yuan in March 2020. However, as the epidemic was brought under control, the stock market rebounded due to accommodative macro policies, resulting in a jump of 1.7 trillion yuan in deposits in non-bank financial institutions in July.

6. Recommendation

First, monetary policy should closely monitor asset price volatility. Considering the structural perspective of money creation, money and credit play a crucial role in driving up real estate and financial asset prices. Under the commercial bank credit mechanism, the high-income class and real estate owners are more likely to access credit funds. With a low marginal propensity to consume but a strong inclination to financially invest, they contribute to driving up asset prices. On the other hand, middle and low-income groups have limited access to commercial bank credit, leading to persistent lack of effective demand. Focusing solely on the Consumer Price Index (CPI) without considering asset prices can exacerbate wealth inequality and distort the economic structure. Therefore, the current inflation target of monetary policy should incorporate asset prices.

Second, efforts should be made to maintain the supply and stabilize the prices of essential commodities. While long-term money supply significantly impacts the CPI, short-term CPI is primarily influenced by key essential commodities such as food, oil, meat, vegetables, eggs, milk, and fruits. Ensuring an adequate supply and price stability of essential commodities directly affects people's quality of life. Recommendations include accelerating the construction of production bases for high-quality agricultural products, improving the quality of monitoring data on agricultural products through increased investment in information networks, restoring the production capacity of key essential commodities, enhancing the cold chain system for storage, strengthening market supervision of essential commodities, and cracking down on quality and safety issues as well as price violations.

Third, close attention should be paid to international commodity price trends. The rapid increase in China's Producer Price Index (PPI) is mainly influenced by major economies significantly increasing leverage. Monitoring and early warning efforts should be intensified for key raw material prices such as crude oil, iron, steel, and non-ferrous metals. It is crucial to analyze the impact of major economies' macroeconomic policies, the progress of economic recovery, the situation of the COVID-19 pandemic, and exchange rate fluctuations on international commodity price trends. Specifically, focus on studying the mechanism, transmission paths, scope, magnitude, and speed of price conduction from upstream raw material prices to downstream industries. Strengthen the linkage between the commodity futures market and the spot market, attract real enterprises to participate in futures market transactions, improve the reserve system for important commodities, and enhance the emergency response mechanism for unforeseen events.

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