

The Impact of MBS on Chinese Real Estate

Yipeng Niu^{1,a,*}, Tony Chow^{2,b}, Kaicheng Zheng^{3,c}, Chengze Yu^{4,d}

¹*Ritsumeikan University, Osaka, 567-8587, Japan*

²*Canadian International School of Hong Kong, Hong Kong, SAR,*

³*Dulwich College Singapore, Singapore*

⁴*The MacDuffie School, Massachusetts, U.S.*

a. 520master150@gmail.com, b. Tony.chowjx@gmail.com,

c. kaichengzheng20050102@gmail.com, d. yuc8348@gmail.com

**corresponding author*

Abstract: In the context of the global economic contraction, predicting the future development of China's economy has become one of the key research fields. Real estate, one of the driving forces of China's development, has slowed down in recent years, triggering a series of economic chain reactions. The development of asset securitization is constantly becoming the direction of global financial innovation. Asset securitization has become one of the financial businesses that financial institutions are competing to expand due to its characteristics of dispersing risks and enhancing fund liquidity. Housing mortgage-backed securitization is one of the earliest and most highly regarded models of asset securitization, and its emergence has provided new vitality for the development of the real estate industry in the United States, it also brought about a terrifying crisis. This paper mainly deals with the introduction of MBS, the impact of MBS on banks, and the future trend of real estate under the influence of MBS. The article provides concrete data to support the argument.

Keywords: MBS, Banks, Swap, Future Interest, Mortgage

1. Introduction

1.1. Background Information of MBS

With the continuous evolution of the financial market, various financial innovation tools have emerged, among which Mortgage-Backed Securitization (MBS), as an important financial tool, has attracted wide attention and application in the world.

Mortgage-backed securitization is a financial practice that is financed by pooling home mortgages from many individuals or businesses into a portfolio, then dividing that portfolio into different securities, and then selling those securities. Specifically, financial institutions package a series of home mortgages into an investment product called a mortgage-backed security, then sell those securities to investors. Investors who buy these securities will receive interest and principal repayments from the borrower's mortgage payments. This approach allows financial institutions to diversify risk, improves market liquidity, and provides investors with diversified investment options.

1.2. The development of MBS

Mortgage-backed securitization (MBS) has experienced continuous evolution since its development in the 1960s. At first, MBS was dominated by government-backed agencies such as the FHA and GNMA. In the 1980s and 1990s, MBS gradually innovated, covering areas such as commercial lending. However, in the early to mid-2000s, the subprime mortgage crisis triggered a financial crisis that revealed the risks in the MBS market. After the crisis, regulation was strengthened, market reforms were implemented, and transparency and risk management were emphasized. Since the 2010s, with technological advancements, the MBS market has explored digital innovations such as blockchain-based securitization. The development of MBS echoes the changes in the financial market and real estate, emphasizes the balance between supervision and innovation, and provides an important platform for capital financing and risk diversification. Mortgage-backed securitization (MBS) is not limited to the original mortgage-backed securities, but also generates a variety of financial derivatives related to real estate for risk management and portfolio diversification. Here are some real estate derivatives linked to MBS: Mortgage-Backed Bonds, Mortgage-Backed Derivatives, Mortgage-Backed Interest Rate Swaps and Mortgage-Backed Forward Contracts, among others. These derivatives provide investors with more ways to invest in real estate, while also providing financial institutions with tools for risk management and portfolio diversification.

1.3. Source of MBS

Commercial banks are the main providers of mortgages, and MBS allows them to package those loans into securities and sell them. This securitization provides a financing channel for commercial banks, so that they can continue to issue more loans and promote the development of the real estate market and the economy. Commercial banks can obtain more funds by securitization of mortgages, which can be used to expand their business and improve liquidity.

MBS allows commercial banks to spread large amounts of mortgages across multiple investors, reducing the risk of a single borrower or portfolio of borrowings. This helps banks reduce credit risk and improve stability. Through the MBS market, commercial banks can turn the interest spread on mortgages into income on securities, improving their chances of making a profit. In addition, commercial banks can earn income from securities sales and services. At the same time, commercial banks, as the main institutions providing mortgage loans, can continue to provide loans to support the development of the real estate market through MBS, thus promoting economic growth. The development of MBS encourages commercial banks to innovate financial products, such as MBS products with different risk levels, interest rate swaps and other financial derivatives, to meet the needs of different customers.

2. The Role of Banks in China's Real Estate Sector

2.1. The Pivotal Role of Commercial Banks in China's Real Estate Market

Chinese commercial banks hold a critical function within the real estate market, providing pivotal financial support that facilitates transactions between property developers and homebuyers. The progression of China's real estate market has been noteworthy since its economic reforms. This evolution owes much to the substantial role played by commercial banks, injecting vital financial resources into the industry. In the late 1980s and early 1990s, China's housing landscape was undergoing a transition, with a significant number of individuals residing in housing provided by employers. Private homeownership was a nascent concept during this period. The market economy's rise brought with it a growing desire for personal property ownership. It was during the early 1990s that commercial banks entered this scene by offering housing loans to the general public. This move

was a catalyst for the rapid expansion of the real estate sector. Within a decade, this sector achieved incredible growth, spanning both urban and rural commercial banks. By 2012's close, China boasted 144 urban commercial banks and 337 rural commercial banks, operating through an extensive network of over 10,000 branches that spanned almost every province [1]. On May 1, 2015, China introduced reforms to its banking sector through the issuance of the "Deposit Insurance Regulations" by the State Council. This mandated financial institutions to remit premiums to funds overseen by entities designated by the State Council, thus involving them in the deposit insurance system. The underlying goal of this reform was to further advance market mechanisms within the banking industry. It also signaled that in the event of bank defaults, the government might not universally extend comprehensive support to all commercial banks. In cases of bank insolvency, deposit insurance would cover individual deposits up to an upper limit of 500,000 yuan or \$81,433 USD [1].

Through financial infusions, banks have emerged as the primary source of funds for both real estate firms and the general populace. This dynamic has empowered developers with opportunities for project initiation and growth, while simultaneously affording ordinary individuals the avenue of homeownership. Additionally, banks not only furnish funding to prospective homebuyers but also stimulate broad-based investments in real estate, encompassing commercial properties and various real estate ventures. This benefits not only individual purchasers but also property developers and real estate investors alike. Commercial banks' financial backing facilitates project execution and spurs investor interest in the real estate market, fostering market dynamism. Rigorous risk assessment and loan scrutiny procedures by commercial banks contribute to prudent risk management. This meticulous risk oversight helps curtail the risk of non-performing loans, thereby bolstering bank stability.

2.2. Case Study on the Industrial and Commercial Bank of China

As China's largest state-owned bank, the Industrial and Commercial Bank of China (ICBC) is poised to extend a cumulative 655 billion yuan in credit lines to major real estate enterprises. In conjunction with other significant state-owned and regional banks, the total credit lines furnished are anticipated to surpass 3.19 trillion yuan, aimed at upholding sector stability. These credit injections serve as a lifeline for the debt-laden real estate market, which wields substantial influence over China's economic growth. The People's Bank of China's infusion of 188 billion yuan is geared toward stabilizing investor confidence. While this near-term aid might offer relief, it also triggers considerations about the sector's long-term sustainability and its systemic financial repercussions. The support from state-owned banks is expected to bolster cash flow and improve market stability; however, the full extent of its implications for the heavily-indebted industry remains uncertain.

Significant dynamics are underway in China's real estate sector, with state-involved banks taking center stage. They've extended substantial credit support, surpassing 30 trillion yuan, to address financial challenges faced by real estate entities. The primary player, the Industrial and Commercial Bank of China (ICBC), has outlined plans to offer a sizable credit line of 655 billion yuan to twelve major recipients. When combined with other major financial institutions, the aggregated credit pool surpasses 3.19 trillion yuan. However, there are indications of market complexities, as evidenced by a significant 25.5% decline in housing sales for the top 100 firms in November, spotlighting market hurdles. A prominent real estate entity, Evergrande, grapples with an extensive debt exceeding \$300 billion USD. As a response, the Chinese central bank has injected a liquidity infusion of 188 billion yuan to cultivate investor reassurance. This example demonstrates the role of commercial banks in China's real estate market.

2.3. Mortgage-Backed Securities and Risk Evaluation

To attract investors in the financial market, banks strategically integrate their mortgage loans, creating a unique security known as Mortgage-Backed Securities (MBS). The core purpose of this integration is to transform loans from various sources with diverse risk levels into a multifaceted asset portfolio. By cleverly combining and subsequently promoting these securities, banks enhance the overall appeal of their financial products. Banks achieve several objectives through the use of these securities:

Banks strategically utilize Mortgage-Backed Securities (MBS) to attract investors within the financial market. Through this approach, they create a distinctive pathway for capital reinvestment. Successful MBS transactions rapidly yield returns, bolstering liquidity and establishing fresh channels for funding, thereby enhancing their ability to extend loans as required. Additionally, MBS serves as a risk diversification mechanism for banks. The transformation of mortgage loans into tradable securities permits them to shift credit risks to these security buyers. This mechanism plays a crucial role in diversifying risk, a significant consideration within the financial landscape. The issuance and trading of MBS introduce an avenue for banks to generate enhanced income. This revenue stream includes transaction and service fees, contributing to an improved financial inflow. Furthermore, MBS significantly contributes to strengthening the depth and liquidity of the financial market as it expands. This augmentation, in turn, offers investors a broader range of investment opportunities. Simultaneously, it equips banks with a versatile set of tools, enabling effective management of their assets and liabilities amidst evolving market dynamics.

When applying for real estate loans, banks conduct risk assessments to determine borrowers' credit risks. This involves a comprehensive evaluation of the borrower's income, liabilities, credit history, etc. Simultaneously, banks assess the value of the offered collateral to ensure sufficient assets are available for recovery in the event of loan default.

Regarding loan risk assessment, banks employ multiple methods to evaluate borrowers' credit and financial conditions. Initially, banks review applicants' credit scores to determine if they possess sufficient creditworthiness to fulfill loan commitments. For corporate borrowers, banks undertake financial analyses, delving into their economic state, including revenue, profit and loss, debts, and assets, to assess their repayment capacity. Furthermore, banks consider macroeconomic factors, including current economic conditions, market status, and real estate market dynamics, to formulate loan terms and amounts. Concerning collateral, banks typically require borrowers to provide assets as loan guarantees. In China, real estate serves as the most common form of collateral. Borrowers pledge their properties to ensure that the bank has the right to possess and sell the collateral to cover losses in case of repayment default. Apart from fixed assets, banks also accept other types of collateral like deposits, stocks, and bonds, providing additional security for loans. To ensure the collateral's value covers the loan amount, banks usually conduct independent collateral assessments, ensuring the collateral's value matches or exceeds the loan amount, safeguarding the bank's financial security.

3. Commercial Banks and Real Estate: Managing Risk and Boosting Liquidity

Commercial banks play a crucial role in the real estate market, acting as intermediaries that facilitate the flow of funds between savers and borrowers. Their involvement in real estate extends beyond mere lending; they provide services that help individuals and businesses realize their property ownership and investment goals. This essay explores three key aspects of commercial banks' engagement in the real estate sector: their role in real estate, the utilization of Mortgage-Backed Securities (MBS) to manage risk and enhance liquidity, and the intricacies of loan origination and underwriting.

3.1. The Bank's Role in Real Estate

The real estate sector plays a pivotal role in any economy, serving as a barometer for economic health and stability. Within this expansive and dynamic industry, commercial banks occupy a central position, serving as crucial contributors to its vitality. Their multifaceted involvement encompasses various financial products, services, and funding mechanisms, all of which collectively drive the real estate market's growth and stability.

3.1.1. Real Estate Financing

Commercial banks are the lifeblood of real estate transactions. They act as primary lenders, providing the necessary capital for individuals, businesses, and investors to acquire real estate assets. This financing takes the form of residential mortgages, commercial mortgages, and construction loans. Residential mortgages enable individuals and families to achieve homeownership dreams, while commercial mortgages facilitate business expansion and property acquisition. Construction loans, on the other hand, underpin new development projects, spurring economic growth.

By offering these diverse loan types, banks empower borrowers to enter the real estate market, catalysing property investments, urban development, and economic progress.

3.1.2. Real Estate Services

Beyond financing, commercial banks offer a spectrum of financial products and services tailored to the unique needs of the real estate sector. These services include:

- Real Estate Brokerage: Banks often have dedicated real estate divisions or partnerships with brokerage firms, facilitating property transactions for buyers and sellers. This adds convenience and expertise to the process.

- Escrow Services: Banks act as neutral third parties, holding funds and documents in escrow during property transactions. This ensures both parties fulfil their obligations, fostering trust and security in real estate deals.

- Title Insurance: Banks provide title insurance, safeguarding buyers and lenders against title defects or ownership disputes. This protection is crucial for a smooth transfer of property.

- Property Valuation: Banks employ appraisers who assess the value of properties. This valuation is essential for determining loan amounts, purchase prices, and taxation. Accurate valuations help maintain market stability.

1) Risk Mitigation:

Commercial banks play a pivotal role in risk management within the real estate sector. They meticulously assess borrowers' creditworthiness and evaluate the feasibility of real estate projects. By conducting due diligence and risk analysis, banks minimize the potential for loan defaults and financial crises.

2) Economic Growth Catalyst:

The bank's involvement in real estate is not just about financial transactions; it's about fostering economic growth. When banks provide loans to individuals and businesses, they stimulate property investment, job creation, and urban development. This, in turn, propels economic expansion, creating a virtuous cycle of prosperity.

3) Market Stability:

Banks contribute to the stability of the real estate market by providing liquidity. Even during economic downturns, banks continue to offer loans and financial services, preventing a collapse in property values and market stagnation.

In summary, commercial banks are the backbone of the real estate ecosystem. They provide the necessary financial resources, services, and expertise to enable property transactions, support

economic growth, and maintain market stability. By doing so, banks not only empower individuals and businesses but also play a critical role in shaping the overall economic landscape.

3.2. Utilizing Mortgage-Backed Securities (MBS) for Risk Management and Liquidity Enhancement

Mortgage-Backed Securities (MBS) are financial instruments that play a pivotal role in the real estate and banking sectors. They represent a creative and efficient financial solution that allows commercial banks to manage risk and optimize their liquidity while simultaneously providing investment opportunities for a wide range of investors.

One of the primary functions of MBS for commercial banks is risk management. Banks issue MBS by aggregating a diverse pool of individual mortgage loans, which could have varying characteristics such as interest rates, terms, and borrower credit profiles. By bundling these mortgages together and transforming them into securities, banks can achieve several risk management objectives:

3.2.1. Credit Risk Transfer

When a bank holds individual mortgages on its books, it carries the credit risk associated with these loans. If borrowers' default, the bank can face significant losses. However, through the issuance of MBS, banks transfer a portion of this credit risk to investors in the secondary market. Investors purchase MBS with the understanding that they will receive the cash flows from the underlying mortgage payments. In the event of defaults, the losses are shared among the MBS investors, thus reducing the bank's exposure to potential default and credit losses.

3.2.2. Diversification

MBS allows banks to diversify their mortgage portfolios effectively. By bundling mortgages from various geographic regions and with different characteristics, banks can spread risk across a wide range of assets. This diversification further reduces the impact of localized economic downturns or specific borrower defaults on the bank's overall portfolio.

3.2.3. Balance Sheet Optimization

By reducing the amount of mortgage-related assets held on their balance sheets, banks can optimize their capital allocation. This freed-up capital can be redirected towards other profitable lending activities or investments, thereby increasing the bank's overall efficiency and profitability.

MBS also serves as a vital tool for enhancing liquidity within commercial banks:

3.2.4. Conversion of Illiquid Assets

Traditional mortgages are relatively illiquid assets. Banks receive payments over extended periods, often spanning 15 to 30 years. However, by securitizing these mortgages and creating MBS, banks can transform these illiquid assets into highly liquid securities that can be traded in the secondary market. This liquidity enhancement is crucial for banks to meet their immediate funding needs.

3.2.5. Readily Accessible Funds

MBS offer banks a ready source of funds. They can sell MBS in the secondary market to quickly obtain needed cash. This cash can be used for various purposes, including making new loans, meeting regulatory liquidity requirements, or seizing investment opportunities that arise in dynamic markets.

3.2.6. Cash Flow Management

MBS enables banks to manage their cash flows better. Instead of relying solely on the irregular and unpredictable mortgage payments, banks receive a more consistent and predictable stream of cash flow from MBS. This helps banks ensure they have the necessary liquidity to cover operational expenses and respond effectively to changing market conditions, such as sudden shifts in interest rates.

In conclusion, Mortgage-Backed Securities are a versatile financial tool that enables commercial banks to mitigate risk, optimize their balance sheets, and enhance liquidity. By securitizing mortgage assets and distributing them among investors, banks can achieve a healthier financial position, allocate capital efficiently, and ensure they have the funds needed to support their ongoing operations and growth.

3.3. Loan Origination and Underwriting: Risk Assessment and Collateral

Mortgage-Backed Securities (MBS) are financial instruments that play a pivotal role in the real estate and banking sectors. They represent a creative and efficient financial solution that allows commercial banks to manage risk and optimize their liquidity while simultaneously providing investment opportunities for a wide range of investors.

One of the primary functions of MBS for commercial banks is risk management. Banks issue MBS by aggregating a diverse pool of individual mortgage loans, which could have varying characteristics such as interest rates, terms, and borrower credit profiles. By bundling these mortgages together and transforming them into securities, banks can achieve several risk management objectives:

3.3.1. Credit Risk Transfer

When a bank holds individual mortgages on its books, it carries the credit risk associated with these loans. If borrowers' default, the bank can face significant losses. However, through the issuance of MBS, banks transfer a portion of this credit risk to investors in the secondary market. Investors purchase MBS with the understanding that they will receive the cash flows from the underlying mortgage payments. In the event of defaults, the losses are shared among the MBS investors, thus reducing the bank's exposure to potential default and credit losses.

3.3.2. Diversification

MBS allows banks to diversify their mortgage portfolios effectively. By bundling mortgages from various geographic regions and with different characteristics, banks can spread risk across a wide range of assets. This diversification further reduces the impact of localized economic downturns or specific borrower defaults on the bank's overall portfolio.

3.3.3. Balance Sheet Optimization

Banks can optimize their capital allocation by reducing the amount of mortgage-related assets held on their balance sheets. This freed-up capital can be redirected toward other profitable lending activities or investments, increasing the bank's overall efficiency and profitability.

MBS also serves as a vital tool for enhancing liquidity within commercial banks:

3.3.4. Conversion of Illiquid Assets

Traditional mortgages are relatively illiquid assets. Banks receive payments over extended periods, often spanning 15 to 30 years. However, by securitizing these mortgages and creating MBS, banks

can transform these illiquid assets into highly liquid securities that can be traded in the secondary market. This liquidity enhancement is crucial for banks to meet their immediate funding needs.

3.3.5. Readily Accessible Funds

MBS offers banks a ready source of funds. They can sell MBS in the secondary market to quickly obtain cash when needed. This cash can be used for various purposes, including making new loans, meeting regulatory liquidity requirements, or seizing investment opportunities that arise in dynamic markets.

3.3.6. Cash Flow Management

MBS enables banks to manage their cash flows better. Instead of relying solely on the irregular and unpredictable mortgage payments, banks receive a more consistent and predictable stream of cash flow from MBS. This helps banks ensure they have the necessary liquidity to cover operational expenses and respond effectively to changing market conditions, such as sudden shifts in interest rates.

In conclusion, Mortgage-Backed Securities are a versatile financial tool that enables commercial banks to mitigate risk, optimize their balance sheets, and enhance liquidity. By securitizing mortgage assets and distributing them among investors, banks can achieve a healthier financial position, allocate capital efficiently, and ensure they have the funds needed to support their ongoing operations and growth.

4. China's Real Estate Crisis in 2023

4.1. Background Information

China's real estate market has been a cornerstone of its economic growth for decades. However, recent challenges, including the collapse of major developers and a potential overinflated housing market, have prompted significant government interventions. This essay explores the hypothesis that while these interventions may stabilize the real estate market temporarily, they may not address underlying systemic issues. The combination of an overinflated housing market, shifting demographics resulting in reduced demand, and significant dependency of various industries on real estate creates a complex situation that could require more comprehensive reforms [2].

4.2. Chinese Government Reaction

The Chinese government's recent actions have been characterized by providing significant financial support to major developers, reducing borrowing costs, and offering temporary tax incentives. These measures were taken in response to the collapse of prominent developers like Evergrande and massive debt defaults that sent shockwaves through the market [3]. According to reports from CNBC [4], the government's change in tone and new details for real estate support signify a critical shift in policy aimed at stabilizing the market. China is shifting its stance on the struggling real estate sector, signaling potential policy support. The change in tone from top government officials indicates a shift from focusing on financial risks to recession risks. Recent statements from the Politburo meeting reflect a clearer understanding of the seriousness of the real estate slump and the overall economic slowdown. Analysts expect policies beneficial to the real estate market to be announced soon, possibly including easing requirements for buying an apartment, lower down-payments, and removing price caps. Following these indications, the Hang Seng Property Development and Management Index rose by 9.78%. In addition, China's housing ministry has revealed plans to ease property buying, including reducing restrictions for second-home purchases, and lowering down

payment ratios for first-time buyers. The move comes after Beijing signaled a shift from its crackdown on real estate speculation. The planned measures are seen as a quick and bold response to relax property policies, according to Jizhou Dong, a China property research analyst at Nomura. The changes reflect a greater focus on housing demand rather than supply, and Hong Kong-traded Chinese property stocks like Longfor and Country Garden traded higher following the announcement [4]. Bloomberg's future outlook on China's real estate market also highlights the reliance on the presales model and potential future trends that these interventions are trying to address [5].

Despite these interventions, underlying systemic issues persist. The housing market has seen unsustainable growth over the past 25 years, leading to an overinflated market. Debt defaults and declining new home sales are symptoms of this problem [6]. Additionally, demographic shifts marked by slowing rural-to-urban migration and decreasing birth rates are reducing future housing demand. Oxford Economics Research estimates that housing demand will reduce from 8 million units annually to 4.6 million units annually from 2021 to 2030 [2]. The South China Morning Post also explores China's economic structure and its dependency on real estate, considering the challenges of a rapidly aging population [6]. These factors collectively create a profound misalignment between supply and future demand.

4.3. Possible Reforms

The complexity of the situation calls for more comprehensive reforms. Aligning the housing market with changing demographics and economic realities is essential. This might involve adjusting the economic structure to reduce dependency on real estate and finding alternative investment avenues. Social planning considerations, such as providing incentives for urbanization or supporting child-rearing, might also play a role [4]. The People's Bank of China's role in supporting the housing market and China's housing ministry plans to ease property purchase restrictions are examples of steps in this direction. However, these may not be enough [4].

Restructuring how wealth is accumulated and distributed in society could be a part of the solution. The current system, where many Chinese citizens view housing as the only effective way to get wealth, may need reevaluation. As reported by CNBC, temporary tax measures and financial support are helpful but may not address the root causes of the problem.

The Chinese government's recent interventions in the real estate market are crucial in stabilizing an overly leveraged and potentially overinflated housing market. However, these actions may only be a short-term remedy to more fundamental and structural issues. The combination of an overinflated housing market, shifting demographics, and significant dependency of various industries on real estate creates a complex situation that could require more comprehensive reforms [2]. These reforms might need to encompass broader economic and social planning to align the housing market with changing demographics and economic realities. The insights from the multiple sources highlight the multifaceted challenges and the need for a more holistic understanding and approach [6]. In addition, Beijing's promise to relax restrictive property policies has not reignited the speculative mentality among investors that once drove China's property market. While some analysts argue that the property sector can no longer be the robust growth driver it once was, others believe it will continue to be a vital part of the economy [6]. The shift in perception is evident among entrepreneurs like Steve Wang, who previously viewed real estate as both an investment and a financial safety net. The current sentiment reflects a broader debate over the potential economic risks and benefits of recent policy changes in China's property sector [6].

5. Conclusion

In conclusion, this paper briefly introduces MBS and discusses China's Real Estate Crisis in 2023. The Chinese real estate market's recent turbulence and the government's subsequent interventions have ignited a critical debate on the future of one of the country's most vital economic sectors. While the government's immediate actions, such as financial support to developers, easing buying restrictions, and temporary tax incentives, have been aimed at stabilizing the market, they may only serve as a temporary band-aid for more profound, systemic issues. The underlying challenges, including an overinflated housing market, shifting demographics, and the significant dependency of various industries on real estate, present a complex scenario that demands more comprehensive and long-term reforms. The current interventions may alleviate immediate pressures but do not address the profound misalignment between supply and future demand, nor the societal perspective of housing as the primary means of wealth accumulation. Moreover, the lack of speculative mentality among investors and the divided opinions among analysts further complicate the situation. The property sector's role as a growth driver is being questioned, and the need for a more holistic understanding and approach is evident.

References

- [1] Zhang, Dayong. "Full Article: Real Estate Investments and Financial Stability: Evidence ..." Taylor and Francis Online, 2016, www.tandfonline.com/doi/full/10.1080/1351847X.2016.1154083.
- [2] Oxford Economics Research. (2023). China's Housing Market Forecast. Oxford Economics. <https://www.oxfordeconomics.com/country/china/>
- [3] Cheng, E (2023a, July 26). China signals more support for real estate with a 'big change' in tone. CNBC. <https://www.cnbc.com/2023/07/26/china-signals-more-support-for-real-estate-with-a-big-change-in-tone.html>
- [4] Cheng, E. (2023b, July 28). China's housing ministry is getting 'bolder' about real estate support. CNBC. <https://www.cnbc.com/2023/07/28/chinas-housing-ministry-announces-new-details-for-real-estate-support.html>
- [5] Ren, S. (2023, July 31). What China's Real Estate Market Will Look Like in Five Years. Bloomberg. <https://www.bloomberg.com/news/articles/2023-07-31/what-china-s-real-estate-market-will-look-like-in-five-years>
- [6] Huifeng, H. (2023, July 31). China's property problems appear poised to improve, but can 'much more risky' real estate still drive economic growth? South China Morning Post. <https://www.scmp.com/economy/china-economy/article/3229305/chinas-property-problems-appear-poised-improve-can-much-more-risky-real-estate-still-drive-economic>