

Analysis of the International Real Estate Financial Investment of Chinese Real Estate Enterprises

Jianjin Deng^{1, †}, Qi Rui^{2, *, †} and Heming Xu^{3, †}

¹Department of Humanities and Management, Guangdong Medical University, Dongguan, China

²Department of Engineering, Shanghai Second Polytechnic University, Shanghai, China

³Department of Jiangsu Saint Polytechnic, Jiangsu Normal University, Xuzhou, China

*20191113923@stu.sspu.edu.cn

†These authors contributed equally.

Abstract. With the relatively tight policy adjustment of the government's outbound investment in the general environment and the impact of COVID-19, Chinese real estate enterprises have been challenged and international investment has lost money for a while. In the fierce competition, real estate companies represented by Wanda and Vanke Group successfully used the transformation and upgrading of enterprises to survive, while some of real estate companies (e.g., Evergrande Group) faced a crisis of collapse due to failure of adjusting their business strategies in a timely manner. This paper studies the investment status and development trend of Chinese real estate enterprises in international markets, and analyze the risks and countermeasures of major Chinese enterprises in international real estate financial investment in the past six years. Wanda Real Estate's decision to shift from asset-heavy to asset-light is worth learning. Vanke's business strategy conforms to the green environmental protection requirements of social development and is worth looking forward to in the future development prospects. The enlightenment given to us by Evergrande is that when facing international investment, we must adapt measures to local conditions and choose investment methods suitable for our own enterprises in order to develop steadily in international markets. These results shed light on guiding further exploration of international investment for real estate companies.

Keywords: International real estate; financial investment; investment status and development trend; risk and countermeasure analysis.

1. Introduction

Real estate finance is a general term for a series of financial activities of financing and related financial services carried out through money circulation and credit channels in the process of real estate development, circulation and consumption [1]. Its basic task is to use a variety of financial methods and tools to raise and finance funds to ensure the smooth progress of the real estate reproduction process. This paper focuses on commercial real estate finance for profit. There are three basic characteristics of real estate finance: using real estate as collateral to ensure the repayment of loans; the nature of "no transfer mortgage" and the "leverage effect". The characteristics of real estate tools are concentration, long capital turnover period, fixed capital movement, capital appreciation and risk. The role of real estate finance in the national economy is becoming increasingly prominent. For real estate developers, it provides financial security for development activities. For ordinary buyers, it supports the improvement of residents' housing consumption capacity. For real estate enterprises, it can also adjust the financial attributes of the enterprise itself [2]. It can be seen that financial instruments, as one of the main macroeconomic control tools, have an inevitable impact on the real estate industry. As collateral, the price trend of real estate will also affect the quality of financial assets. The real estate market and the financial market are interdependent and directly or indirectly [3]. Therefore, the study of real estate financial behavior has direct and significant helped significance for the operation of real estate enterprises.

Contemporarily, in order to curb the overheating of real estate, the government has set the main tone of housing and living without speculation, and introduced policies such as limiting purchases,

limiting sales, increasing the down payment ratio, and increasing loan interest rates [4]. Therefore, most of the market has entered a stable area, a new pattern of diversified financing in the real estate financial market is taking shape, and more and more innovative financial instruments and entities have begun to emerge. According to the previous scholars, it can be understood that with the influence of objective factors, China's international real estate investment has ushered in a period of rapid growth [5]. However, under the rapid development of new real estate financial financing tools and the impact of the new crown epidemic, innovation and beauty also bring certain risks. Owing to the background of international real estate finance, there are unknown challenges for Chinese enterprises in investment [6].

The research is mainly a case study of International investment of Chinese real estate enterprises. Specifically, three representative typical cases are selected, i.e., Wanda Group, Vanke Group and Evergrande Group. Combined with the analysis of real estate financial models and investment strategies of real estate developers in international developed countries, this study explores the financial and decision-making risks of international investment of China's real estate enterprises. Subsequently, we put forward effective preventive measures, predict the development prospect trend, and finally draw conclusions and put forward feasible suggestions and solutions [7]. The rest part of the paper is organized as follows. The Sec. 2, The Sec. 3 and The Sec. 4 take three enterprises as cases to discuss the major achievements of their international investment, and analyzes the development strategies of Chinese real estate enterprises in the international real estate financial market as a whole, as well as the challenges, risks and corresponding preventive measures encountered in investment. In the Sec. 5, we predict and prospects the development prospects and trends of international investment in real estate by Chinese enterprises in the next six years. The Sec. 6 presents the conclusions from three case studies and implications for international investment by Chinese real estate companies. Based on the case analysis of the international real estate finance investment of Chinese real estate enterprises, one can better understand the situation of China's real estate finance industry and the current situation of international investment market [8]. According to the analysis of the characteristics, causes, strategies and models of international investment of domestic real estate enterprises, the financial risks of enterprises can be better identified and timely preventive measures can be taken to avoid them. In this case real estate enterprises can develop healthily in the market economy under such a special social environment and economic period. Meanwhile, it discovers potential risks and problems in enterprise decision-making and operation, and better helps Chinese real estate enterprises invest international.

2. Wanda Group

2.1 Group Introduction

Founded in 1988, Wanda Group has become a large multinational enterprise group with total assets of more than RMB 900 billion and the world's largest commercial real estate company with total assets of more than RMB 900 billion, mainly in the modern service industry. The Group takes commercial hotels, cultural tourism, e-commerce and chain department stores as its four pillar industries. In 2020, Wanda Group completed the liquidation of international heavy assets, and deployed a large number of light assets in major first-tier cities in China. At present, Wanda Hotel's business model has been transformed from heavy to light, focusing on the cultural tourism industry and the main hotel business, which consists of four major businesses: commercial and residential property development and sales, commercial property leasing and management, hotel development, operation and hotel management services, hotel design and hotel construction management services. According to the 2021 financial report, Wanda Hotel now has six brands: Wanda Ruihua, Wanda Mandarin, Wanda Jiahua, Wanda Jinhua, Wanda Meihua and Yuehua, and its hotel grid covers 74 in China cities and Istanbul, Turkey.

2.2 International Projects

As China's real estate market approached saturation, Wanda's growth in China began to slow and Wanda tried to expand international. Wanda from 2012 started international investment "Buy buy buy" Business model, in which real estate projects have become a key area for expansion. "London ONE" is the Wanda Group's first international real estate project. U.S. construction includes luxury condominiums and Wanda Branded hotels. The Beverly Hills project as well as in Chicago Vista Tower Build a five-star hotel and high-end apartment project, which will become a new landmark in Chicago after completion. Australian Wanda acquired the famous Jewellery Three Towers project and Sydney One Project on the Gold Coast to build a comprehensive landmark project. The asset-light project includes the Wanda Mandarin Istanbul luxury hotel management output project, which is the first expansion of Wanda's international asset-light project; GOLDEN COAST Luxury hotel apartment project, which provides partners with solutions and services for the whole chain of hotel asset management. Domestically, Wanda mergers and acquisitions with Sunac and R&F, Transfer of multiple hotels and Cultural tourism Project.

2.3 Financial Analysis

Based on statistical analysis, in the early stage of Wanda's international expansion, the operating conditions were relatively stable, and its operating income from international projects increased significantly. However, in response to Wanda's proposal for further international expansion under the radical innovative development and operation model in 2017, the government was forced to intervene and identified Wanda as an irrational investor, resulting in the almost collapse of Wanda's capital chain. The main reason is that its large investment volume, insufficient control over capital, and a large number of international acquisitions led to capital outflow, which was not conducive to the effectiveness of monetary policy. The Group as a whole showed a trend of high leverage and high debt.

Table 1. Main financial indicators of Wanda Group in recent five years

year	2021	2020	2019	2018	2017
Total assets (HK\$100 million).	72.01	65.69	95.93	123.33	192.51
Operating cash flow (HK\$100 million).	5.43	-8.39	-8.18	-5.04	-16.59
Total debt (HK\$100 million).	33.54	37.82	69.50	91.26	161.97
Gearing ratio (%).	46.58	57.58	72.45	73.99	84.14
Gross profit (HK\$100 million).	4.62	3.91	5.39	7.18	1.52

So far, the financial situation of the enterprise is generally healthy. According to the financial report, the increase in commercial management services and leasing income in the main business is more obvious, and the steady growth of property management service income is still the main direction of enterprise development. As shown in Table.1, the group's overall asset-liability ratio is stable, the debt reduction is obvious, the interest-bearing liabilities have decreased sharply at the same time, and it has a good solvency, but it is still higher than the average level of housing enterprises. Meanwhile, the level of operating profit is steadily rising, the financial leverage ratio is low, the cash flow is abundant, the capital turnover is strong, and the assets continue to grow. Under the asset-light model, enterprises have greatly improved their viability against cyclical fluctuations and sudden shocks. Therefore, Wanda's optimization of capital structure and operation structure has achieved good results, which has greatly improved the operating capacity of enterprises. Finally, Wanda Commercial's existing prepaid houses to be developed are relatively abundant. Considering the subsequent construction investment, it can basically maintain the operating income settlement for the next three years, and the possibility of sudden outbreak of financial risks is low.

2.4 Corporate Strategy

Wanda has taken a series of measures to deleverage and improve cash flow. While carrying out asset-heavy divestitures at home and abroad, the Group has embarked on the road of asset-light export, focusing on hotel brand management and cultural tourism industry. Its business strategy is to shift to asset-light property service concept real estate: Wanda does not pay Wanda Plaza's funds, only exports brands, is responsible for design, construction, investment and operation, and shares the rights and interests proportionally. In terms of enterprise operation mode, it adopts two modes, i.e., entrusted management and leasing operation.

2.5 Summary and Enlightenment

As a leading enterprise in commercial real estate, Wanda Real Estate's decision to transform from an asset-heavy model to an asset-light model is worth learning from many real estate companies, and its own pricing power and market acquisition ability based on brand influence and strong resource integration ability are also one of the success factors. On the one hand, real estate enterprises should strengthen the management of sales collection and inventory under the asset-heavy model, shorten the receivables and extend the period of payables, so as to ensure the efficiency of capital recovery and the ability to create cash flow. On the other hand, since Wanda is no longer responsible for the construction of the project under the asset-light mode, it has higher requirements for Wanda's management and operation capabilities. Innovative development of diversified products and services, optimization of business mix methods, strict control of the qualifications of partners and infrastructure construction support are conducive to Wanda Real Estate's leading position in the industry competition. At the same time, Wanda should also carry out reasonable planning in the selection of investment projects, invest stably, and prevent investment risks caused by large fluctuations in investment returns.

3. Vanke Group

3.1 Group Introduction

Founded in 1984, Vanke entered China's real estate industry in 1988, and after 30 years of transformation, is now in a leading position in the domestic real estate industry and is recognized as a leading enterprise in the industry. At present, Vanke Group's main business includes real estate development and property services. The company focuses on the development of urban agglomerations. By the end of 2016, the company had settled in 66 cities in the mainland, with cumulative sales of 261.47 billion yuan, a year-on-year increase of 20.7%.

3.2 International Projects

Vanke's international real estate projects are distributed in San Francisco, New York, Seattle, London, Singapore and other places. Among them, the first project is a residential project located in the United States, followed by Singapore and London. Vanke's international investment is quite cautious, and the location requirements are very strict. In 2016, Vanke acquired RyderTower, a commercial property in St. James's in the heart of London, for £115 million from Henderson Real Estate Fund, which is also the London property of Vanke Real Estate's international listing platform. In 2017, Vanke cooperated with Galliard Homes, a well-known British real estate developer, to create the stage of Shoreditch Treasureland radiated by London's Science and Technology City. Amazon, the world's second-largest internet company, opened its European headquarters in 2017 and is also adjacent to The Stage. Vanke revealed at the 2016 interim results press conference that the company has established a property asset management platform Mingshi to promote international real estate financial business. In the UK, the company established a joint development platform with a European real estate private equity fund.

3.3 Financial Analysis

Vanke's asset-liability ratio has been at a high level. Although this percentage has decreased since 2013, it is still high. On the industry average, it is also higher than the appropriate level that Tongdi deems. It shows that Vanke Group is trying to improve the current situation by changing policies or seizing the market environment and national policy opportunities, so as to maintain a good position in the industry in terms of long-term solvency. However, the fact that it is still unable to repay its total liabilities is unreasonable, i.e., the possibility of financial risk in Vanke Group is high. It should strengthen the management of various forms of investment and improve investment efficiency. In terms of financing management, the principle of leniency and moderation should be adopted, and the financing principle should be adjusted in a timely manner according to changes in macroeconomic and market conditions. Reasonable allocation of time, using financing sequence theory and balance theory. At the same time, since the enterprise is already in the mature stage, it should not adopt an aggressive capital opening strategy nor adopt a moderate negative goods operation. According to the financial statements of Vanke in 2021 (seen from Table. 2), one can get the current situation of its assets: from the composition of assets and liabilities in 20-21, it is generally good, with assets growing year by year, and operating income growing steadily. Although the profits are not as good as last year, the general trend is good.

Table 2. Financial Statements of Vanke Group in 2021

year	2021	2020	Increase/decrease over the previous year	2019
Operating income (RMB)	452,797,773,974	419,111,677,714	8.04%	367,893,877,538
Operating profit (RMB)	52,530,997,237	79,958,642,103	-34.30%	76,613,136,041
Total profit (RMB)	52,222,631,202	79,675,752,923	-34.46%	76,539,289,517
Total assets (RMB million)	1,938,638.12	1,869,177.09	3.72%	1,729,929.45
Total liabilities (RMB million)	1,545,865.35	1,519,332.62	1.75%	1,459,350.33
Gearing ratio	79.74%	81.28%	Decline 1.54%.	84.36%

3.4 Measures

As the direction goal of the real estate industry, Vanke, an enterprise with a long-term vision, was back on 2013 years on proposed "Light assets, heavy operation, ultimate service" slogan. The financial characteristics of enterprises under the asset-light operation mode presented as follows. First, large cash reserves, many current assets, and few heavy assets such as equipment and plant inventory; Secondly, earn Profitability mainly depends on light assets such as brand and technology, so R&D investment is high; Third, most of its liabilities are interest-free, mainly from commercial credit. Such as the accounts of upstream and downstream customers. In terms of asset structure, Vanke has also made adjustments. The transfer of asset-heavy business through related party transactions has increased other accounts receivable year by year, which has a significant negative impact on financial performance. The implementation has reduced asset-heavy investment and accelerated asset liquidity. This adjustment had a significant positive impact on its financial performance.

3.5 Summary and Enlightenment

At present, Vanke Group's international expansion is slow, and the overall investment style is quite cautious. International market demand has always existed, which is also a development opportunity for Vanke Group. In the long run, with the steady development of China's economy, the acceleration of the internationalization of the RMB, and the people's yearning for a better life, the international

real estate market will continue to develop. According to public information, Vanke has been deployed in 8 core cities international, helping customers achieve global asset allocation. As a leading enterprise in the real estate industry, Vanke's medium- and long-term development plan should be high-quality growth. It is not only necessary to improve the return on capital and human resources, but also to enhance customer loyalty to the Vanke brand and enhance product and service innovation. In order to implement this plan, it put forward three enterprise development strategies: one is the customer segmentation strategy, the other is the focus strategy of urban circles, and the third is the product innovation strategy. Vanke's business strategy can only be expected in the future development prospects if it meets the requirements of social competitors for green environmental protection.

4. Evergrande Group

4.1 Group Profile

China Evergrande Group is a Fortune 500 enterprise group integrating real estate, finance, health, tourism and sports. In 1996, Evergrande Group was established in Guangzhou, starting from scratch and attacking against the market in the Asian financial storm. With the strategy of "small area, low price, low cost" to seize the opportunity, after three years of efforts, in 1999, Evergrande Real Estate stood out from more than 2,000 real estate enterprises in Guangzhou and became one of the top 10 real estate enterprises in Guangzhou. In 2009, Evergrande Group was successfully listed in Hong Kong, further achieving a major leap forward for the group. In the following ten years, Evergrande Group formulated a comprehensive development strategy, deepened basic management, improved system construction, and improved the comprehensive quality of management teams and employees at all levels. Evergrande Group has developed rapidly, the annual growth rate has increased year by year, and Evergrande real estate has spread all over the country. On the basis of further consolidating the main real estate business, Evergrande Group has expanded diversified industries (e.g., cultural tourism, sports, health and wellness, actively promoted diversified development), and ranked among the world's top 500 in 2016, becoming one of the top three real estate enterprises in China.

4.2 Status of the Group

In 2020, with the release of the new rules of the "three red lines" for real estate financing, Evergrande Group stepped on all three routes. In recent years, on account of the diversification of Evergrande Group's industry and the rapid development of all aspects, the group's large demand for funds has led to the high debt ratio of Evergrande Group. At the same time, Evergrande Group has large commercial bills of exchange overdue payment, and some areas have stopped work and production. A number of financial institutions and banks have carried out risk assessment and restrictive measures against Evergrande Group, and the capital chain of Evergrande Group has been seriously affected. Evergrande Group is facing an unprecedented storm crisis. The Table. 3 summarizes the financial reports of Evergrande Group in recent years. Evergrande Group's liabilities reached 1.519 trillion yuan in 2017 and 1.966 trillion yuan in 2021, and its liabilities are increasing. Evergrande Group's cash flow reached 1.52 trillion yuan in 2017 and 0.86 trillion yuan in 2021, and the cash flow is in a tight state.

Table 3. Evergrande's financial reports in the past five years

Year	Amount of liability (RMB million)	cash flow (RMB million)
2017	1,519,544	152,008
2018	1,571,402	129,364
2019	1,848,040	150,056
2020	1,950,728	150,056
2021	1,966,534	86,772

4.3 Financial Analysis

According to the financial reports released by Evergrande Group in recent years, it is found that in the past five years, Evergrande Group's liabilities have increased year by year. Besides, its cash flow has shown a downward trend. The reason behind this is that Evergrande Group has diversified its investments, acquired a large number of projects and assets, and made large-scale investments [9]. Nowadays, Evergrande Group has invested more in the non-real estate sector, but its income has become less and less. Since the outbreak of the COVID-19 epidemic, the domestic real estate market environment is not optimistic, and Evergrande's real estate business has developed slowly and the capital turnover has been slow, resulting in a slow return on real estate funds. Under the impact of the regulatory policy and "housing for investment", the purchasing power of real estate in the market has declined, which has also led to the serious impact of Evergrande Group's high-turnover business model. Evergrande Group's analysis of the market and policies was not in place, and it failed to make timely adjustments. It can be seen that Evergrande Group has now exposed its hidden dangers.

4.4 Actions

Recently, Evergrande Group held a meeting. Evergrande Group actively promotes the resumption of work and production, implements the work of "ensuring building and transportation, ensuring people's livelihood and ensuring stability", and strives to promote the continuous operation of various sectors. Evergrande Group further strengthens team building, and adopts a number of measures such as organizational streamlining and job consolidation to minimize costs and improve efficiency. Evergrande Group will continue to cooperate with the Independent Investigation Committee to further strengthen the construction of internal risk assessment management system, and promote daily operation and risk resolution in an orderly manner.

4.5 Summary and Enlightenment

Evergrande Group has fallen step by step from the top three real estate enterprises in the country to the "altar", exposing various problems of its own enterprises, which are also a microcosm of China's real estate. Under the influence of today's domestic real estate market and policies, Chinese real estate enterprises need to face difficulties and make joint adjustments. In the face of international real estate financial investment, Chinese real estate enterprises should learn the "lessons" of Evergrande Group, formulate a reasonable and timely development strategy, step by step, and do not blindly expand the scale of development. When facing international investment, Chinese real estate enterprises should also understand the market environment and policies for project site selection, conduct corresponding risk assessments, adapt measures to local conditions, and choose investment methods suitable for their own enterprises, in order to gain a firm foothold in international markets.

5. Analysis of Outlook Trends and Future developments

Since international and domestic real estate prices generally reflect the monetary phenomenon in recent years, this is very common in China, Canada, Australia and other countries, while some European countries have strict restrictions on real estate speculation, and it is difficult to obtain ideal income through purchase. Therefore, from a global perspective, the current house prices are generally at a high level, the space for real estate appreciation is significantly narrowed, and the yield will decline in the future. The Fed's three previous rate cuts, buybacks and expansions will spur the housing sector, but according to Robert Smith, a professor of economics at Yale University According to Schiller and others, they believe bubbles are everywhere, including housing bubbles. They believe that the risk of the market is relatively high. Real estate purchases by investors in China and some other countries were in decline last year and this year due to various reasons such as trade disputes. In recent years, the amount of real estate purchased by Chinese investors has fallen by more than 50% compared to last year, which can be said to be a significant decline. Although international investors

do not have a dominant influence on house prices, it also reflects the increasing risk of investing in real estate on the one hand. [10]

According to the International Real Estate Investment Environment and Risk Analysis Report, from 2013 to 2014, the international real estate investment boom of Chinese enterprises exceeded 14 billion US dollars per year. Taking the London property market as an example, Chinese companies invested more than £3 billion in London real estate from June 2013 to June 2014. In June 2013, Wanda Group took the lead in investing 700 million pounds to build a high-end hotel project in Jiuyushu in London. In July of the same year, Ping An China acquired the landmark Lloyd's Building in the City of London for £260 million. Subsequently, Greenland, Chinese Life, China Construction Bank, China Investment Co., Ltd., Poly Real Estate, China International Development, Vanke Real Estate, China Minsheng Bank and Hainan Airlines all purchased land or mature properties in the core areas of London. In 2014, the UK attracted \$4.9 billion in Chinese investment, topping the global property investment rankings. When Chinese enterprises invest in international real estate projects, while ensuring capital control capabilities, they should fully consider the economic objectives and macro policies of the Chinese government in the current year and in the next few years, as well as the economic situation of the international real estate industry. In order to effectively and accurately adjust the development strategy and project schedule, take systematic preventive measures to avoid risks, and timely adjust measures to enable enterprises to better adapt to China's deepening financial reform and maintain a favorable position in the competition of international investment industries.

6. Conclusion

In summary, international real estate investment is favored by Chinese companies because of its investment characteristics and high rate of return. Since 2013, the total amount of international real estate investment has shown a rapid growth trend. Meanwhile, the momentum of irrational investing is spreading. Some enterprises pursue profits too one-sidedly, underestimate investment risks, and endanger national financial security. At present, Chinese domestic investors are becoming more and more rational about international real estate investment. International real estate investment is expected to be a relatively stable period in 2019 and the coming years. To sum up, when facing international investment, Chinese real estate enterprises should understand the market environment and policies of project site selection, conduct corresponding risk assessment, adapt measures to local conditions, choose investment methods suitable for their own enterprises, and take systematic preventive measures to avoid risks, so as to effectively and accurately adjust the development strategy of enterprises. On this basis, enterprises can better adapt to China's deepening financial reform. It has always maintained a favorable position in the competition of international investment industry, so as to better establish itself in international markets. Nevertheless, this study only selects three representative large Chinese real estate companies as case studies. Besides, the reasons behind the survival of international investment by small and medium-sized enterprises is very different from that of large companies, which also leads to certain limitations of this article. In the future, big data can be used to track and analyze the international investment information of small and medium-sized enterprises, and put forward reliable suggestions suitable for the international development of small and medium-sized enterprises. Overall, these results offer a guideline for enterprises when encountering bottlenecks and difficulties in making choices in international investment, and serve as a positive and negative reference to help enterprises develop better and in the long term.

References

- [1] Guo J, Chen L, Gao G, et al. Simulation Model-Based Research on the Technology Support System for China's Real Estate Financial Risk Management. *Sustainability*, 2022, 14(20): 13525.
- [2] Wang H J. The performance and economic implications of real estate financial attributes: A case study of the US real estate market. *Shanghai Finance*, 2011, 2:117-119.

- [3] Sternik S G, Teleshev G V. The Impact of Real Estate as an Asset Class on the Stability of the Financial System: Monitoring, Forecasting, Management. *Global Economic Review*, 2018, 7: 851-864.
- [4] Dai G, Xiao L. Macroprudential management framework, experience and environment of EU real estate finance. *Shanghai Finance*, 2019, 10: 7.
- [5] Cincinelli P, Pellini E, Urga G. Leverage and systemic risk pro-cyclicality in the Chinese financial system. *International Review of Financial Analysis*, 2021, 78: 101895.
- [6] Montgomery N, Squires G, Syed I. The disruptive potential of real estate crowdfunding in the real estate project finance industry: a streamlined review. *Property Management*, 2018: 1.
- [7] Cai Z. Analysis of real estate financial operation. *China Economic Herald*, 2018, 1: 3.
- [8] Note 10. SWOT analysis of Chinese real estate enterprises' investment in the US real estate market. *New Economy*, 2015, 9: 52-54
- [9] Tang Y, Su Y. Analysis of liquidity risk under high leverage of Evergrande Group. *National Distribution Economy*, 2021, 33: 101-103.
- [10] Salisu A A, Rahim I D, Ndako U B. Inflation-hedging characteristics of gold, equities and real estate: a comparative analysis. *Resource Policy*, 2020, 66: 101605