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RESEARCH ARTICLE

Navigating the Ripple Effects of Purchase Restriction Policies on Real Estate Investment and Taxation in Hainan

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ARTICLE INFO ABSTRACT This study utilizes a Systematic Literature Review (SLR) approach to Received: Aug 11, 2024 determine the impacts of Purchase Restriction Policies on domestic and Accepted: Nov 29, 2024 foreign investment. It is based in the context of the Hainan real estate market. The study will analyze how Purchase Restriction Policies affect local developers and investors. The aim is to understand the impact on speculative investments and sustainable growth. The analysis will extend Kevwords to foreign investors and whether they are encouraged or discouraged to Systematic Literature Review invest in Hainan in the presence of the policies. This will explain whether the restriction policies fit into Hainan's international investment goals. **Purchase Restriction Policy** Furthermore, the policies also impact government revenue from real Real Estate Investment estate taxes. The study will analyze whether it stabilizes tax revenues or reduces them by limiting transactions. It will also provide an account of **Taxation** the various adjustments in tax policies that the government might have Hainan made to balance restrictions and promote investment. *Corresponding Author: zxy1516379481@gmail.com

INTRODUCTION

Real estate markets around the world are often susceptible to volatility posed by speculative investments. Speculation contributes to booms and busts cycles and its impact is dominated by the effect of price elasticity of supply (Malpezzi & Watcher, 2005). These can lead to sharp fluctuations in prices which in turn may destabilize economies. The government interventions in the form of policies such as purchase restrictions entail significant insights into these situations. In the context of China, Lan et al. (2023) found that a sudden reduction in opportunities for future sale that have been imposed by purchase restrictions, significantly alter speculations. It decreases prices of house transactions and reduces trading volumes. These are crucial for maintaining market stability. One such region where such policies have been implemented is Hainan. It is an island province in the southern most part of China (Falkenheim, 2024). Hainan recently converted into an international Free Trade Port (FTP) due its geographical location as evident from Figure-1. However, in 2010, the largest housing bubble occurred in this province that was almost 40% of the equilibrium volume as determined by market fundamentals (Qiu, 2022). Hainan's real estate future was dim, yet the province managed to recover and uphold itself. Purchase restriction policies had a significant role to play in this regard.



Figure 1: Hainan Province Location

Foreign Direct Investment (FDI) in Hainan grew gradually over the years after a consistent lull from 1996 until 2012, as shown in Figure 2. As of 2021, Hainan received FDI worth US \$3.52 billion which increased since 2018 when the province received about us \$740 million only (Interesse, 2022). Thus, the impact of the purchase restriction policies that were imposed in Hainan have left ripple effects across its economy. This study aims to analyze these ripple effects and their impacts. For this purpose, it will adopt a Systematic Literature Review (SLR) approach, which will assess how these policies impact domestic and foreign investors. The introduction of purchase restrictions ought to have implications for developers and investors in terms of market liquidity, price dynamics, and long-term profitability. Moreover, foreign investors may either be encouraged or discouraged by the policies. Foreign investors have consistently considered legal and regulatory frameworks across nations as one of the key factors that determine their decision-making (Kher & Eltgen, 2020). Therefore, based on whether the investors seek speculative return or perhaps long-term investments that are stable, they usually make their choice. In this context, understanding Hainan's broader international investment goals are crucial to evaluate whether they have been successful in achieving them.

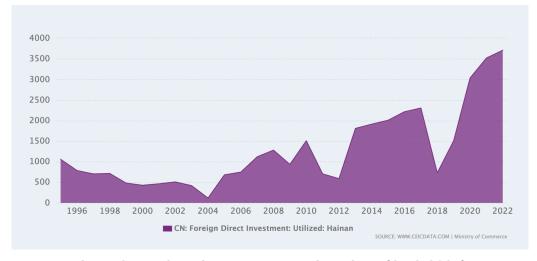


Figure 2: Foreign Direct Investment in Hainan (CEIC, 2024)

It is important to note that one of the most significant components of this study is to analyze speculative investments. The housing marketization in this nation has developed its real estate industry which is primarily driven by speculative demand (Yang et al., 2017). Such demand breaks the equilibrium in demand and supply that causes housing prices to deviate from their basic value. Therefore, this study will determine whether purchase restrictions have effectively reduced speculative activities. This improvement would in turn drive sustainable growth. Additionally, the impact of these policies on government revenue will also be examined especially in regard to real estate taxes. This is because real estate transactions contribute significantly to local tax revenues. They restrict such transactions as they can potentially reduce these inflows. This study will analyze whether the purchase restriction policies have stabilized tax revenues over time, or whether they reduced it due to limited real estate activity.

The study has been divided into these sections: Literature Review, Methodology, Finding, Discussion, and Conclusion. The focus on the real estate market across Hainan enables the study to provide a comprehensive understanding of how purchase restrictions influence investment dynamics and taxation. The purpose of this study is to offer insights into the broader implications of such policies with respect to sustainable growth and economic stability. It will contribute to the ongoing debate regarding the role of government intervention in moderating the real estate markets.

LITERATURE REVIEW

Purchase restriction policies have become a widely adopted strategy across the world. This is true for several goods ranging from houses to tobacco. The former has been implemented in the US (Tennekoon, 2023), whereas the latter has been found in China (Cao et al., 2015). In the context of the real estate market, housing purchase restrictions play a crucial role in curbing speculative investments. As the increased household debt raises concerns for real estate bubbles, nations such as China fear a sub-prime crisis (Chen, 2022). In this regard, purchase restriction are significant policies. They impact the land supply market as well as observed across the western regions of China (Wang et al., 2024). This reduces the volume of sales and price of land sold. Therefore, the aim of these policies is religiously fulfilled. According to Banerjee et al. (2023) when speculators have access to free disposal, prices tend to be volatile. Such situations make the strategic seller worse off and the consumers better off. In this context, price appreciations reduce that prevent the formation of bubbles and promote sustainable growth. The negative impacts of housing purchase restrictions are not driven by house price or income risks, instead it is risk aversion which drives the same (Sha et al., 2024). Therefore, the corresponding policies have proven to limit speculative decision-making driven by risk behavior. According to Shin (2015), the regions in China that have transformed from a planned economy to a market driven one, the decommodification of real estate properties are crucial. this will make them amenable to investment and increase growth across those regions. The case of Hainan is no different. Housing purchase restriction policies cool down markets that are overheated. This in turn stabilizes housing prices and fosters long-term stability across real estate sectors.

Moreover, by influencing speculative investments, purchase restrictions alter domestic and foreign investment behavior as well. As more and more cities begin to implement housing restriction policies, the prices of local prices drive up (Zhang et al., 2021). Investors' attention plays a vital role in this process as well. Moreover, investors often exhibit herd behavior (Bikhchandani & Sharma, 2001). As a few investors find a certain market appealing, other investors begin to follow. Now as purchase restrictions limit the number of properties that can be bought, the lending requirements become strict. This often discourages short-term investments that entail high risks. These investments usually encompass profits via price appreciation (Haryanto, 2024; Akhtar et al., 2011). Therefore, markets shift towards long-term investment strategies. Here, investors as well as developers seek stable returns instead of speculative gains. Therefore, in regions such as Hainan such shifts are

particularly relevant. Here, the government was aiming for a sustainable and balanced real estate market. It is also important to note that purchase restriction policies also impact taxation. In economies where the market is driven by real estate, the reliance on government revenues on property transaction and land sales are particularly important. Cao et al. (2018) found similar results. If the volumes of speculative transactions reduce, the policies may cause short-term decline in tax revenues. However, the long-term impact might be positive due to stable property values and consistent tax receipts. Therefore, policymakers ought to aim to establish a balance between short-term fiscal loss and long-term sustainability.

METHODOLOGY

This study employs a Systematic Literature Review (SLR) approach to examine the impact of purchase restriction policies. The dependent variable that are to be analyzed include real estate investment and taxation. The SLR method provides a structured and comprehensive way of reviewing academic literature. Mengist et al. (2020) states that the usual method has four basic steps: search, appraisal, synthesis, and analysis. It is also called SALSA. This study follows the same guidelines. They ensure that the relevant studies are evaluated thoroughly. It also facilitates proper synthesis of the articles to produce clear insights into the ripple effects of the purchase restriction policies. The data source for this study included SCOPUS, JSTOR, and Google Scholar. The distribution of the number of articles found from each source is shown in Figure 3. There were 22 articles found in total that were relevant for the research objective.

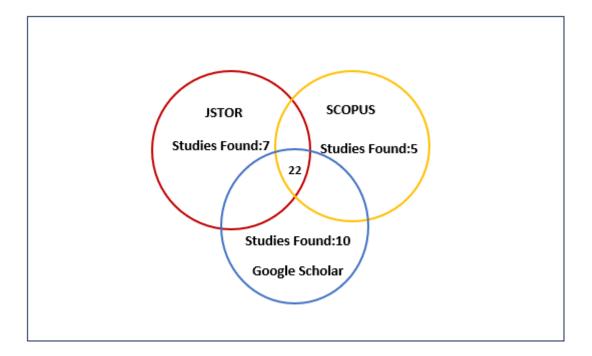


Figure 3: Articles found on each source

The articles were published between 2010 to 2024 to ensure that the inclusion criteria include the most up-to-date works. The search strategy used specific keywords and their combinations. These are stated below:

- Purchase restriction policies
- Real estate investment
- Speculative investment

- Housing market in Hainan
- Real estate taxation
- Government revenue
- Property taxes

These keywords were combined using Boolean operators "AND" and "OR". This helped in refining search results and ensured that are pertinent studies were captures.

The selection criteria for the study has been stated below:

- 1. Study should focus on the impact of purchase restriction policies on either real estate investment or taxation.
- 2. The study should examine the Chinese real estate market or any related market. Emphasis should also be given to Hainan or other comparable regions.
- 3. The study should be published in peer-reviewed journals or other credible sources.
- 4. One articles that are written in English are to be included

After the initial screening was conducted, the data was extracted from the papers. This has been captured in Tabke-1. The data includes the objective of the studies, the key findings, and the relevance of the findings to the research objective of this study. The studies were then analyzed to assess the direct as well as indirect impact of purchase restriction policies in the Hainan economy.

FINDINGS

The purchase restriction policies significantly impact real estate investment and government taxation. For this section, please refer to Table 1. There is a decline in speculative investment due to purchase restriction policies. This in turn stabilized the real estate market. Li and Xu (2015) show that purchase restrictions have effectively controlled speculative buying. This is particularly relevant via measures such as restrictive housing purchases and restrictions on bank loans. This in turn contributed to stable housing prices which was the major objective of such policies. Similarly, Chen and Wen (2017) found that speculative investments drove price growth across housing markets in China previously. However, the introduction of restrictive measures curtailed these trends. This led to a more controlled market environment. The stabilization of housing prices encompasses a twofold impact. It prevents the formation of price bubbles while diminishing the short-term profitability for domestic and foreign investors who are looking for speculative gains. Additionally, Mak et al. (2012) posit that restrictive policies have reduced speculative investments across 31 regions in China. Therefore, the policies have fostered a sustainable real estate market. This is particularly useful for developers and investors. The market for these agents becomes less volatile. However, the SLR also reveals that the volume of real estate transactions has declined. This could potentially affect the liquidity of the real estate market. Therefore, foreign investors would be discouraged as they seek high returns across dynamic markets. Additionally, the impact of purchase restrictions on foreign investors is more nuanced. Tantri (2012) and Mak et al. (2012) highlight that purchase restrictions may attract long-term investors as well, although they discourage speculative capital. Thus, the restrictions would help in reducing uncertainty. They would limit sudden fluctuation in prices that would appeal to investors who are looking for less risk. Yet the decline in volumes of transactions and speculative profits may deter foreign investors who prioritize short-term returns that are high.

The recurring theme of purchase restrictions and their impact on reduced speculative behavior has been further supported with evidence. Fang et al. (2015) found that speculative demand drove unsustainable price appreciations. However, purchase restrictions have mitigated this effect, particularly across urban centers. Tantri (2012) further adds to this context. She analyzes how speculative investments were curbed by the Chinese government across Special Economic Zones (SEZs). In the case of Hainan, it was extremely crucial to reduce speculative investment through purchase restrictions. As the government aimed to position this region as an international trade hub,

it was vital to establish restrictions to make sure that this development aligns with long-term sustainable economic goals. However, curbing speculative practices does encompass certain trade-offs. Although speculative investments contribute to short-term volatility in price, they also generate substantial tax revenues. This is possible via property sales and land transfers, especially across markets that are overheated. Thus, as speculative activities decline, so do taxable transactions. This leads to a short-term drop in tax revenue for the local government.

Thus, purchase restrictions also impact tax revenues. Wu et al. (2018) and Pan et al. (2015) explore this effect via the channel of real estate transactions. The reduction in speculative investments alongside the stabilization of housing prices is further accompanied by fewer property transactions. Now as transaction taxes form a significant portion of government revenue, this leads to a short-term decrease in tax revenue. Wu and Li (2017) show that is particularly true for the first and second-tier cities. The purchase restrictions cause a sharp decline in housing prices and volumes of transactions. Furthermore, the SLR emphasizes the long-term implications of the policies for the property tax revenue aspect. In this regard, purchase restrictions stabilize prices and promote sustainable growth. This in turn prevents extreme price fluctuations that could undermine the tax base. However, Crowe et al. (2013) and Wei et al. (2014) stated that financial instability may arise from speculative activities, despite the short-term revenue boosts that they entail. The former is often unsustainable. It strains government resources. Thus, the long-term fiscal health of regions like Hainan ought to benefit from a more stable and less dynamic real estate market. The taxes across these markets need to be drawn from steady property values instead of volatile and speculative interactions.

Table 1: Findings and Relevancy of the Shortlisted Studies

Author 9			
Author & Year	Objective	Key Findings	Relevance
Li and Xu (2015)	Evaluates the efficiency of three restrictive measures (restricted bank loan, restricted sale price, restricted housing purchase) in containing housing prices across 35 major cities in China.	The study finds that restricted housing purchase (Xiangou) is more efficient at containing housing prices compared to restricted bank loans (Xiandai) and restricted sale prices (Xianjia).	The analysis of restrictive policies on real estate investment and housing prices is directly relevant to understanding how similar policies might impact the Hainan real estate market.
Chen and Wen (2017)	The paper investigates China's prolonged housing boom and its driving factors, including speculative demand and labor reallocation.	High housing prices in China, driven by speculative demand, outpaced income growth due to high capital returns and resource reallocation. The housing bubble is expected to lose steam as surplus labor diminishes.	The study's focus on speculative demand and the unsustainable housing bubble aligns with the impact of Purchase Restriction Policies on real estate investment and speculative behavior in Hainan.
Mak et al. (2012)	The paper investigates the determinants of real estate investment	Real estate investment is influenced by demographic factors, interest rates, construction costs, housing prices, and land use	The paper provides empirical data on how regional factors affect real estate investment, which is relevant to understanding

	differentials across 31 regions in China.	constraints. Population growth has a positive effect on investment, while high interest rates and construction costs have a negative impact.	how similar policies may impact Hainan. It also highlights the role of government constraints, aligning with the study's focus on Purchase Restriction Policies.
Tantri (2012)	The paper critically examines China's Special Economic Zones (SEZ) policies and their role in driving economic transformation, focusing on internal and external factors that made them successful.	China's SEZ policy facilitated foreign investment and industrial growth through infrastructure development, incentive structures, and labor reforms. SEZs in China, like Hainan, benefited from decentralized governance and foreign capital, but also faced challenges such as speculative real estate investment.	The paper is relevant as it discusses the economic impact of restrictive policies on real estate, focusing on Hainan as a Special Economic Zone, which aligns with the analysis of purchase restriction policies in this study.
Yang (2017)	Explores the new market failure theory to analyze asset bubbles and financial crises, specifically addressing the 2015 stock market crash in China.	The stock market crash was driven by speculative investments and financial liberalization. The study emphasizes the importance of government regulation to prevent speculative bubbles and protect economic stability.	The analysis of speculative investments and the need for regulatory policies directly relates to understanding how restrictive policies can stabilize real estate markets and prevent speculative behavior in Hainan.
Wang et al. (2019)	Analyzes the relationship between money supply growth and the housing boom in China, using a wavelet-based methodology.	There is a strong positive correlation between money supply growth and housing price increases, especially in the short and medium term. Policy interventions are necessary to stabilize the real estate market and prevent speculative bubbles.	This study highlights the effect of monetary policy on housing prices, which is relevant for understanding how purchase restriction policies might stabilize real estate investment in Hainan by controlling speculation.
Fang et al. (2015)	The paper investigates the housing boom in China from 2003 to 2013, analyzing housing price indices and mortgage borrower data across 120 major cities.	Despite enormous price appreciation, supported by income growth, China's housing market differs from U.S. and Japanese bubbles due to high down payment ratios and stable participation of low-income households.	The study's focus on speculative demand and housing price appreciation offers relevant insights for understanding how restrictive policies might stabilize Hainan's real estate market.

An et al. (2019)	The paper evaluates the effectiveness of China's property-purchasing limitation policy in controlling housing prices at national, provincial, and city levels.	The policy significantly curbs housing prices at the national level, particularly in first-tier cities, but is less effective at the provincial level and in second-tier cities.	The analysis of purchase restrictions and their effect on housing prices in major Chinese cities, including their regional variations, aligns closely with the research focus on Hainan's real estate market.
Wei et al. (2014)	Investigates the effects of monetary policy on real estate investment across different regions of China, analyzing regional disparities.	The study finds that eastern coastal regions are more dependent on bank credit for real estate investment compared to inland regions. It also identifies that bank loan supply is a more effective policy tool than interest rates for managing real estate investment.	The analysis of regional differences in the impact of monetary policies on real estate investment is relevant for understanding how similar policies might influence Hainan's real estate market and taxation.
Liu et al. (2018)	Analyzes the impact of the purchase restriction policy on housing prices in Haikou, China, using grey correlation and regression models.	The purchase restriction policy can effectively regulate housing prices in the short term, but its long-term impact is limited. Key influencing factors include real estate investment, CPI, construction area, and completion area.	The study is highly relevant as it examines the effectiveness of purchase restriction policies in Hainan, which aligns directly with the research focus on Hainan's real estate market.
Yu and Zhang (2017)	Examines the impact of monetary policy and housing-purchase restrictions (HPR) on housing prices and volatility in China.	Monetary policy (benchmark lending rates, reserve requirement, money supply) significantly affects housing prices, particularly in Tier 1 cities. Housing-purchase restrictions have a negative effect on housing price growth, but their impact on price volatility varies across city tiers.	This study is directly relevant to analyzing the effects of purchase restriction policies on housing markets, aligning closely with the research focus on Hainan.
Du and Zhang (2015)	Evaluates the effects of home-purchase restrictions and property taxes on housing prices in Beijing, Shanghai, and Chongqing using	Purchase restrictions reduced the annual growth rate of housing prices in Beijing by 7.69%, while property taxes in Chongqing reduced it by 2.52%. Property taxes in Shanghai had no significant effect on housing prices.	This study is highly relevant as it directly assesses the impact of purchase restriction policies and taxation on housing prices, which aligns with the research on Hainan's real estate market.

	counterfactual		
Wu et al. (2016)	analysis. The paper evaluates the risks in Chinese housing markets by analyzing supply and demand conditions, price growth, and the role of land values	The study finds that house price growth is driven by land value appreciation rather than construction costs. The housing markets in Tier 1 cities like Beijing show excess demand, while inland cities exhibit oversupply and price growth stagnation.	This study is relevant to understanding how land values and housing market dynamics in China are influenced by supplydemand imbalances, which can inform analysis of purchase restriction policies in Hainan.
Cao et al. (2015)	across 35 cities. The paper evaluates the effectiveness of China's Housing Purchase Restriction (HPR) policy in curbing speculative housing demand using a two-stage difference-in-difference approach.	The HPR policy significantly reduced property prices and transaction volumes, especially in cities dependent on real estate for fiscal revenue and economic growth. However, it did not impact the nationwide construction boom, indicating limited effectiveness in addressing the housing bubble.	The study is relevant to understanding the impact of restrictive housing policies on real estate prices and transactions, which aligns with the analysis of Purchase Restriction Policies in Hainan.
Sun et al. (2016)	Examines the effects of local home purchase restrictions (HPR) on housing prices, rent, and transaction volumes in Beijing using a regression discontinuity design (RDD) approach.	The HPR policy led to a 17-24% drop in resale home prices and a significant decrease in the price-to-rent ratio. There was no major change in rental prices or transaction volumes. The policy's effects were more pronounced in submarkets with lower supply elasticity.	This paper is relevant to understanding how restrictive purchase policies impact real estate prices and speculative behavior, directly aligning with the analysis of Hainan's purchase restriction policies.
Wu and Li (2017)	Evaluates the impact of the housing purchase restriction (HPR) policy on housing prices, transaction volumes, and construction activity across 97 cities in China.	The HPR policy significantly reduces housing prices and transaction volumes, particularly in first- and second-tier cities. However, the policy has little impact on housing investment and construction activity, showing limited effectiveness in curbing speculative demand.	This paper is highly relevant for understanding the effects of purchase restriction policies on real estate prices and speculative investments, aligning well with the research on Hainan.
Floetotto et al. (2016)	Analyzes the effects of U.S.	Homebuyer tax credits temporarily raise house	This paper's analysis of government interventions in

	government interventions in the housing market, such as homebuyer tax credits and the asymmetric tax treatment of owner-occupied vs. rental housing.	prices but reduce overall welfare. Removing the mortgage interest deduction increases welfare for most agents, while taxing imputed rents offers mixed welfare outcomes.	housing markets provides useful insights into policy effects on real estate prices and welfare, relevant for assessing Hainan's purchase restriction policies.
Wu et al. (2018)	The study examines factors affecting commercial housing prices in Haikou, Hainan, and evaluates the impact of policies, including purchase restrictions and tax implications, on real estate prices and market dynamics.	It shows the extent to which purchasing limitations, together with property tax regulations, affect housing prices. It talks about how taxation on property transactions and developer contributions affect market behavior in Hainan, as well as the impact of speculative investments.	This study focuses on taxes and real estate prices indirectly. Tax policy, which concentrates on curbing interest and speculates on the comprehensive impact of purchase restrictions in Hainan, Haikou, aims at stabilizing the market as well as its impact on government revenue.
Zhang et al. (2020)	To examine and relate the influence of land price and marketization with risk attitude, government intervention on local authorities' speculation, as well as taxation, through speculative investment affects tax revenue.	Prohibition of purchase, together with rising land prices, favors speculative investment. However, these limitations suppress transactional activity in real estate and thus reduce taxable transactions, leading to short-term losses of tax revenues. Land speculation leads to higher prices, influencing the local government's revenue from taxes on land transfers and some property-related ones.	This paper directly assesses how speculative investments that are driven by purchase restriction policies, impact tax revenue. It shows that while speculative behavior can increase land value, it reduces taxable transactions, that affects government's fiscal income.
Crowe et al. (2013)	To analyze the impact of real estate booms on financial stability. To explore policy tools, including fiscal policies and macroprudential regulations.	The paper discusses how speculative investments during real estate booms can increase leverage and lead to financial instability. Fiscal tools, such as property and transaction taxes, are suggested as mechanisms to curb speculative investment. However, the effectiveness of these tools is limited, and	This paper provides relevant insights into how purchase restriction policies, along with fiscal tools can control speculative investments and impact tax revenue by limiting housing transactions during speculative bubbles.

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		they primarily affect market liquidity and speculative behavior, indirectly influencing tax revenues.	
Pan et al. (2015)	The study examines the relationship between local government fiscal deficits, land finance strategies, and real estate markets in China. It explores how land leasing fees, real estate transactions, and fiscal policies are interrelated.	Land finance is critical for local governments that face high fiscal deficits, but a heavy dependence on such financing to make ends meet in several provinces with mismanaged finances causes the real estate transaction volume to shrink, which implies substantial revenue loss. Land finance activates the real estate market in deficit provinces and can significantly increase tax revenue.	This paper is relevant as it explains how land finance strategies that are influenced by purchase restrictions and speculative behavior, affect taxation through real estate transactions. It highlights the differential impacts of fiscal deficits on tax revenue depending on local government reliance on land finance.
Li et al. (2021)	This study evaluates real estate inventory management in China. It focuses on inventory performance, obstacles, and the impact of government policies. This includes destocking measures and fiscal policies.	The paper highlights that real estate inventory management policies have significant implications on local government revenue, particularly through land finance. These policies impact speculative investments by controlling land sales. This can influence taxation through reduced transaction volumes and long-term land appreciation.	This paper is relevant to the study as it provides insights into how purchase restriction policies affect taxation. This is possible via limiting speculative real estate transactions and influencing local government revenue from property taxes and land finance strategies.

DISCUSSION

The findings from the SLR results show that the implementation of purchase restriction policies for real estate investment and taxation in Hainan are likely to exert diverse effects. It is with these policies in place that some speculative behavior has begun to ease. That behavior was one reason the housing market had gotten into such a dangerous price bubble in the first place. The purchase restriction is an effective policy tool in curbing speculative purchases (Li & Xu, 2015; Chen & Wen, 2017). Such action is also critical to the market through restriction on property and bank loans. This sort of stabilization is key to having a long-term healthy market. It also stops price bubbles that might be able to convince priced protocol-on-chain decades with the ability framework. However, the fall in speculative investments has also led to a decrease in real estate sales (Wu et al., 2018; Mak et al., 2012). Less transaction leads to less tax revenue, especially those taxes that are related to transactions such as stamp duties and property transfer taxes. This immediate drop in tax revenues is a big dilemma for many local governments: whether it is Hainan or other places where real estate contributes significantly to fiscal revenue. Moreover, even though speculations are in the end destabilizing to all investments long haul, they can support costs over possibly prolonged periods

when there is no new inflow, however, as we have seen speculation criticism has known about a natural tidal stream which creates the most extreme not only an auxiliary interest in anything against currently existing pay last but rather also fixed capital and profit too. It is efficient for the government by way of many normal deals and rising property prices, this can be accomplished.

Although the short-term fiscal impacts are evident through the analysis, the long-term outcomes of these policies suggest a potential for more stable tax revenues. Hence, by controlling speculative behavior, purchase restriction policies might help in maintaining steady property values. These lead to sustainable property tax receipts over time (Crowe et al., 2013). As extreme price fluctuations remain absent, local governments can rely on consistent property tax revenue despite low growth rates during speculative booms. Furthermore, the restrictions on purchases also deter short-term foreign investors who are looking for high returns. They expect this from rapid price appreciation. However, long-term investors who prioritize market stability may find Hainan's controlled environment particularly appealing. Tantri and Mak et al. (2012) say that these policies create a predictable market. Such markets could attract foreign investors who prefer stability and not speculation.

The ripple effects if purchase restrictions on real estate investment and taxation are profound. They stabilize the market and promote sustainable growth. However, they also present short-term fiscal challenges as tax revenues from transactions reduce. For Hainan, the key to maximizing the benefits of these policies lies in balancing market stability with consistent fiscal revenues. This will encourage long-term investment both domestically and internationally.

CONCLUSION

The introduction of Hainan's purchasing restriction policy has greatly helped stabilize housing prices and combat speculation. This study, based on a Systematic Literature Review (SLR), clearly indicates that while these policies successfully control price bubbles and sustain long-term market stability, they come with short-term fiscal trade-offs. In particular, the slowdown in real estate transactions has reduced tax revenues from property sales and transactions, which are important for local governments. However, these short-term losses could be outweighed by long-term fiscal benefits if real estate values stabilize, promoting sustainable growth and predictable tax receipts over time. While restrictive policies pose challenges for foreign investors, they also present new opportunities. Short-term speculative investments may be limited, but the predictable and stable market environment such policies create could attract long-term investment. The success of these policies lies in balancing market stability with continued investment flows, both domestically and internationally. Ultimately, purchase restriction policies offer a feasible solution to promoting healthy growth in Hainan's real estate market, though ongoing tweaks may be needed to balance sustainability, financial discipline, and responsible investment attraction.

This study provides useful references for the research of real estate investment and taxation in Hainan, but several limitations need to be acknowledged. First, as a Systematic Literature Review (SLR), it aggregates from previously existing research without collecting data or conducting empirical analysis specific to Hainan. Therefore, the scope and coverage of the information extracted may not fully capture the local dynamics of Hainan's real estate market. Often, the reviewed studies focus on national trends rather than considering Hainan's unique position as a Free Trade Port. It may be valuable for future research to conduct empirical analyses, using real-time data to evaluate the introduction and impacts of purchase restrictions on both domestic and foreign investments. Additionally, further investigation into the long-term effects of these policies on tax revenue stability and sustainable development in Hainan is recommended. The study suggests exploring the impact on foreign investors and whether alternative fiscal tools could help offset potential revenue reductions from real estate transactions.

REFERENCES

- Akhtar, M.N., Rehman, K., & Hunjra, D.I. (2011). Determinants of short-term investment decision-making. *Actual Problems of Economics*, *11*(11), 356-363.
- An, H., Zou, Q., Zhang, Y., & Gupta, R. (2019). Property Prices: How Effective is a Property-Purchase Limitation Policy for Managing Affordability. *International Real Estate Review, 22*(2), 197-229.
- Banerjee, S., Jagannathan, R., & Wang, K. (2023). *Price destabilizing speculation: The role of strategic limit orders*. https://doi.org/10.3386/w30828.
- Bikhchandani, S., Sharma, S., & International Monetary Fund. (2001). Herd behavior in financial markets. In *IMF Staff Papers* (Vols. 47–47, Issue 3). https://www.imf.org/external/pubs/ft/staffp/2001/01/pdf/bikhchan.pdf.
- Interesse, G. (2022, December 28). *Investing in Hainan: Industry, Economics, and Policy*. China Briefing News. https://www.china-briefing.com/news/investing-in-hainan-industry-economics-and-policy/#:~:text=Hainan's%20trade%20and%20investment&text=As%20its%20business%20environment%20continues,US%243.52%20billion%20in%202021.
- Cao, J., Huang, B., & Lai, R. N. (2015). On the Effectiveness of Housing Purchase Restriction Policy in China: A Difference in Difference Approach. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.2584275.
- CEIC. (2024, February 6). *China CN: Foreign Direct Investment: Utilized: Hainan*. https://www.ceicdata.com/en/china/foreign-direct-investment-capital-utilized-by-region/cn-foreign-direct-investment-utilized-hainan.
- Chen, K., & Wen, Y. (2017). The Great Housing Boom of China. *American Economic Journal: Macroeconomics*, 9(2), 73-114. Doi: 10.2307/26156451.
- Chen, Y. (2022). How does the home purchase restriction policy affect household debt? *Advances in Economics, Business and Management Research/Advances in Economics, Business and Management Research*. https://doi.org/10.2991/aebmr.k.220307.048.
- Crowe, C., Dell'Ariccia, G., Igan, D., & Rabanal, P. (2013). How to deal with real estate booms: Lessons from country experiences. *Journal of Financial Stability*, 9(3), 300–319. https://doi.org/10.1016/j.jfs.2013.05.003.
- Du, Z., & Zhang, L. (2015). Home-purchase restriction, property tax and housing price in China: A counterfactual analysis. *Journal of Econometrics*, 188(2), 558–568. https://doi.org/10.1016/j.jeconom.2015.03.018.
- Falkenheim, V. C. (2024, October 29). *Hainan | History, Climate, Population, & Facts.* Encyclopedia Britannica. https://www.britannica.com/place/Hainan.
- Fang, H., Gu, Q., Xiong, W., & Zhou, L. (2015). Demystifying the Chinese housing boom. *NBER Working Paper No. 21112*. https://doi.org/10.3386/w21112.
- Floetotto, M., Kirker, M., & Stroebel, J. (2016). Government intervention in the housing market: Who wins, who loses? *Journal of Monetary Economics*, 80, 106–123. https://doi.org/10.1016/j.jmoneco.2016.04.005.
- Haryanto, J. T. (2024). Short-Term versus Long-Term portfolio management strategies and the selection of securities. *Advances in Management & Financial Reporting*, *2*(1). https://doi.org/10.60079/amfr.v2i1.247.

- Kher, P., Eltgen, M. P., & World Bank Group. (2020). Investment rules in Developing Countries: Trends and approaches. In *World Bank Group*. https://documents1.worldbank.org/curated/en/624181620891812620/pdf/Investment-Rules-in-Developing-Countries-Trends-and-Approaches.pdf.
- Lan, H., Moreira, F., & Zhao, S. (2023). Can a house resale restriction policy curb speculation? Evidence from a quasi-natural experiment in China. *International Review of Economics & Finance*, 83, 841–859. https://doi.org/10.1016/j.iref.2022.10.024.
- Li, J., & Xu, Y. (2015). Evaluating restrictive measures containing housing prices in China: A data envelopment analysis approach. *Urban Studies*, *53*(12), 2654–2669. https://doi.org/10.1177/0042098015594594.
- Li, W., Weng, L., Zhao, K., Zhao, S., & Zhang, P. (2021). Research on the evaluation of real estate inventory management in China. *Land*, *10*(12), 1283. https://doi.org/10.3390/land10121283.
- Liu, B., Cao, X., Yang, Q., & Zhang, Y. (2018). The Commodity Housing Price Analysis Model--Take Haikou (China) as an example. *International Journal of Economics and Finance*, 10(8), 43. https://doi.org/10.5539/ijef.v10n8p43.
- Mak, S., Choy, L., & Ho, W. (2012). Region-Specific Estimates of the Determinants of Real Estate Investment in China. *Urban Studies*, *49*(4), 741-755.
- Malpezzi, S., & Wachter, S. (2005). The role of speculation in real estate cycles. *Journal of Real Estate Literature*, *13*(2), 141–164. https://doi.org/10.1080/10835547.2005.12090156.
- Pan, J., Huang, J., & Chiang, T. (2015). Empirical study of the local government deficit, land finance and real estate markets in China. *China Economic Review*, *32*, 57–67. https://doi.org/10.1016/j.chieco.2014.11.003.
- Qiu, C. (2022). Prospects of China's real estate market. *BCP Business & Management*, *34*, 296–300. https://doi.org/10.54691/bcpbm.v34i.3028.
- Sha, Y., Wang, Z., & Yin, Z. (2024). House purchase restriction and stock market participation: Unveiling the role of nonpecuniary consideration. *Journal of Economic Behavior & Organization*, 224, 390–406. https://doi.org/10.1016/j.jebo.2024.06.012.
- Shin, H. B. (2015). Economic transition and speculative urbanisation in China: Gentrification versus dispossession. *Urban Studies*, 53(3), 471–489. https://doi.org/10.1177/0042098015597111.
- Sun, W., Zheng, S., Geltner, D. M., & Wang, R. (2016). The Housing Market Effects of Local Home Purchase Restrictions: Evidence from Beijing. *The Journal of Real Estate Finance and Economics*, 55(3), 288–312. https://doi.org/10.1007/s11146-016-9586-8.
- Tantri, M.L. (2012). China's Policy for Special Economic Zone: Some Critical Issues. *India Quarterly*, 68(3), 231-250.
- Tennekoon, V. S. (2023). Purchase restrictions as a tobacco control policy: An analysis of the effect on adverse birth outcomes. *Economic Analysis and Policy*, *78*, 967–974. https://doi.org/10.1016/j.eap.2023.04.030.
- Wang, L., Zhou, J., Chen, K., & Zhang, W. (2024). The impacts of housing purchase restriction policy on residential land supply in China. *Habitat International*, *153*, 103175. https://doi.org/10.1016/j.habitatint.2024.103175.

- Wang, X., Hao, L., Tao, R., & Su, C. (2019). Does money supply growth drive housing boom in China? A wavelet-based analysis. *Journal of Housing and the Built Environment*, *35*(1), 125–141. https://doi.org/10.1007/s10901-019-09668-w.
- Wei, Y., Lam, P. T. I., Chiang, Y. H., & Leung, B. Y. P. (2014). The effects of monetary policy on real estate investment in China: a regional perspective. *International Journal of Strategic Property Management*, 18(4), 368–379. https://doi.org/10.3846/1648715x.2014.971087.
- Wu, J., Gyourko, J., & Deng, Y. (2016). Evaluating the risk of Chinese housing markets: What we know and what we need to know. *China Economic Review*, *39*, 91–114. https://doi.org/10.1016/j.chieco.2016.03.008.
- Wu, J., Zheng, W., & Zeng, X. (2018). Factors affecting the price of commercial housing in Haikou housing. *Applied Economics and Finance*, *5*(5), 59. https://doi.org/10.11114/aef.v5i5.3491.
- Wu, Y., & Li, Y. (2017). Impact of government intervention in the housing market: evidence from the housing purchase restriction policy in China. *Applied Economics*, *50*(6), 691–705. https://doi.org/10.1080/00036846.2017.1340569.
- Yang, N. B. (2017). Stock market crash, new market failure theory and extremely great economic and financial crises. *World Review of Political Economy*, 8(1). https://doi.org/10.13169/worlrevipoliecon.8.1.0004.
- Yang, X., Wu, Y., Shen, Q., & Dang, H. (2017). Measuring the degree of speculation in the residential housing market: A spatial econometric model and its application in China. *Habitat International*, *67*, 96–104. https://doi.org/10.1016/j.habitatint.2017.06.005.
- Yu, S., & Zhang, L. (2017). The impact of monetary policy and Housing-Purchase restrictions on housing prices in China. *International Economic Journal*, 33(2), 286–309. https://doi.org/10.1080/10168737.2019.1610901.
- Zhang, J., Yu, T., Li, L., Zhang, D., Zhao, G., & Wen, H. (2020). Marketization allocation, land price, and local government land speculation, China. *International Journal of Strategic Property Management*, 24(5), 335–347. https://doi.org/10.3846/ijspm.2020.13128.
- Zhang, W., Yu, C., Dong, Z., & Zhuo, H. (2021). Ripple effect of the housing purchase restriction policy and the role of investors' attention. *Habitat International*, 114, 102398. https://doi.org/10.1016/j.habitatint.2021.102398.