REAL ESTATE SENTIMENT INDEX

4th Quarter 2022

About Real Estate Sentiment Index (RESI)

With effect from 1Q 2020, National University of Singapore (NUS) Real Estate (NUS+RE), which collectively represents Department of Real Estate (DRE) and Institute of Real Estate and Urban Studies (IREUS) at NUS, will independently publish the Real Estate Sentiment Index (RESI) to provide an alternative measure of the private real estate market performance. The data collection, analysis and reporting will be independently conducted by NUS+RE. [Note: The index jointly developed by NUS Real Estate and the Real Estate Developers' Association of Singapore (REDAS) was first introduced in 2010.]

The quarterly structured questionnaire survey is based on the sentiments of senior executives of real estate firms. RESI measures the perceptions and expectations of real estate development and market conditions in Singapore. RESI comprises a Current Sentiment Index and a Future Sentiment Index, tracking changes in sentiments over the past and the next 6 months respectively, and a Composite Sentiment Index which is the derived indicator for the current overall market sentiment. RESI scores range from 0 to 10, reflecting the extent of pessimism or optimism of the survey respondents. A "net balance percentage" approach is adopted to derive the scores for key determinants of the real estate market sentiment.





National University of Singapore

Institute of Real Estate and Urban Studies / Department of Real Estate 20 Heng Mui Keng Terrace Singapore 119613

URL: https://ireus.nus.edu.sg/ Tel: 6516 8288 | Fax: 6774 1003

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"The overall sentiment has been positive in 4Q2022, but the future outlook is still uncertain amid rising interest rates, high inflation, and looming economic risks. By market sector, hotel and serviced apartments have seen the biggest jump in performance."

Professor Sing Tien Foo

How would you compare the conditions of the overall Singapore real estate market (commercial, residential, hospitality etc.) over the time periods indicated?

Current Sentiment Index*:

The Current Sentiment Index declined from 5.4 in 3Q 2022 to 5.3 in 4Q 2022.

Future Sentiment Index#:

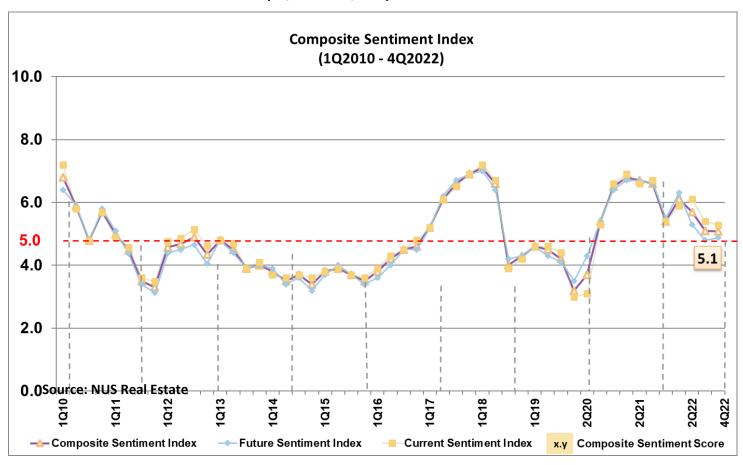
The Future Sentiment Index increased to 4.9 in 4Q 2022 from 4.8 in 3Q 2022.

Composite Sentiment Index*:

The Composite Sentiment Index score remained at 5.1 in 4Q 2022.

In the wake of the September 2022 property cooling measures, rising interest rates and global uncertainty, current market sentiment continued to slide downwards.

Exhibit 1: Real Estate Sentiment Index (1Q 2010 – 4Q 2022)



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How would you rate the general performance (rental, price, occupancy, purchases etc.) of the sectors over the time periods shown?

Current net balance

Most real estate sectors maintained a positive net balance in the 4Q2022 survey, while Biz Park/Hi-tech Space & Industrial/Logistics had a neutral net balance. The Hotel/Serviced Apartment sector maintained the highest current net balance of +94% while the Prime Retail sector had the second highest current net balance of +47%. However, average net balances fell by 20% since 3Q2022.

Future net balance

Most respondents remained cautious about the real estate market in the next six months. With the exception of the Hotel/Serviced Apartment sector recording a substantial significant positive future net balance of +69%, the other sectors were relatively muted. Prime and Suburban Residential had net balances of +16% each, while Prime and Suburban Retail had net balances of 22% and 9% respectively. At -6%, Biz Park/Hi-Tech Space marked the only sector with a negative future net balance.

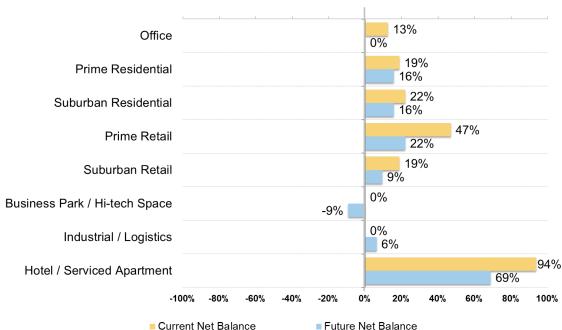


Exhibit 2: Real Estate Market Performance

Source: NUS Real Estate

"There are headwinds, but there are also opportunities. The resulting net effect may see some segments holding steady."

- Comments from Survey Respondents

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Do you foresee any potential risks that may adversely impact on market sentiment in the next 6 months?

In the 4Q 2022 survey, 100% of the respondents once again highlighted rising inflation/ interest rates as the top potential risk that may adversely impact market sentiments over the next six months. About 91% of respondents also indicated a slow-down (decline) in the global economy as a potential risk. Job losses / decline in domestic economy saw the highest increase, rising from 32.4% in 3Q 2022 to 56.3% in 4Q 2022. Concerns over supplies of development land and new property launches rose slightly from Q-o-Q from 0% to 6.3% and 9.4% respectively.

In contrast, the concern over rising construction costs and tightening of financing/liquidity in debt market, while still significant, fell sharply from 81.1% in 3Q 2022 to 53.1% and 68.8% in 4Q 2022 respectively. Concerns over government intervention also saw a notable decline Q-o-Q, from 37.8% to 25.0%.

Exhibit 3: Potential Risks 86.5% Slow-down (decline) in the global economy 90.6% 32.4% Job losses / decline in domestic economy 56.3% 100.0% Rising inflation / interest rates 100.0% 0.0% Increased supply of new development land 6.3% Excessive supply of new property launches 9.4% 81.1% Rising costs of construction 53.1% 81.1% Tightening of financing / liquidity in debt market 68.8% Real estate price bubble / excessive speculative 2.7% activities 6.3% 37.8% Government intervention to cool the market 25.0% 3Q22 4Q22

Source: NUS Real Estate

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What are your expectations regarding the number of new residential units to be launched in the next six months?

In 4Q 2022, about 47% of developers expected a moderately or substantially higher number of units to be launched in the next six months, recording an increase of 19 percentage points Q-o-Q. A similar number of developers expected the number of launches to be maintained, while a minority of 6% expected a moderately lower number of launches.

What are your expectations on the pricing of new residential launches in the next six months?

In 4Q 2022, 29% of the developers expected unit prices of new launches in the next six months to be moderately higher and 71% expected the prices of new launches to maintain at the same price level. This represented substantial changes of -27 and 38 percentage points respectively, suggesting the developers were turning more conservative in 4Q.

What is your level of concern on development cost over the next six months?

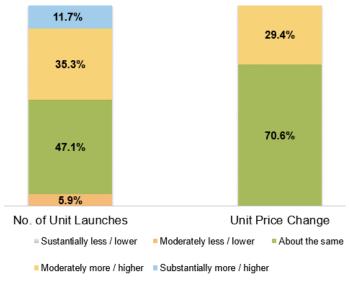
About 53% of developers highlighted labour as the top concern in 4Q 2022, up from 48% in 3Q 2022. The proportion of respondents very concerned financing and building materials fell by 26 and 23 percentage points Q-o-Q respectively, while the proportion of respondents very concerned over land and professional services fell by 22 and 14 percentage points Q-o-Q respectively.

"Low levels of unsold inventory and higher development costs would allow developers to hold on to asking prices."

"Buyers are expected to turn more price-sensitive and prudent in the face of headwinds, rendering it challenging for further price hikes. Prices are likely to hold firm with marginal gains possible for projects with exceptional locational and product attributes."

- Comments from Survey Respondents

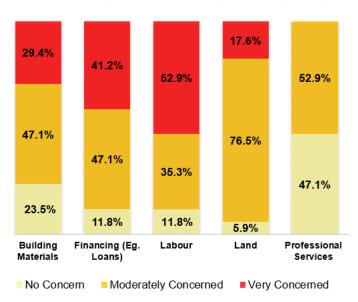
Exhibit 4: Residential Launches & Prices



Source: NUS Real Estate

Exhibit 5: Level of concern relating to development costs

8. Development Cost (Developers)



Source: NUS Real Estate

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For enquiries, please contact:

Alistair Drew Ingham Research Assistant drew.i@nus.edu.sg

Wong Wei Chen Manager weichen@nus.edu.sg

Sing Tien Foo Provost's Chair Professor of Real Estate bizstf@nus.edu.sg 6516 4553

Explanatory Note

The RESI is an objective and comprehensive measurement specifically gauging the confidence of senior executives in the Singapore real estate and development industry. The survey measures respondents' perceptions and expectations of current and future real estate market conditions. Respondents assess relative market conditions between now and in the past six months, as well as their expectations for the next six months. A standard format questionnaire is mailed out electronically to industry experts. Respondents include developers, consultants, financial institutions, professional firms, and service providers. The survey is thus representative of the overall Singapore real estate industry. The survey is conducted quarterly, in March, June, September, and December.

A "net balance percentage" is used to indicate the overall direction of change in sentiment. This is the difference between the proportion of respondents who have selected the positive options ("better" and "increase") and the proportion of respondents who have selected the negative options ("worse" and "decease"). A "+" sign in the scores denotes a net positive sentiment (optimism), and a "-"sign indicates a net negative sentiment (pessimism). The derived net balance scores are not weighted by the size of the respondents' business.

About NUS Real Estate (NUS+RE)

The NUS Real Estate (NUS+RE) collectively represents Department of Real Estate (DRE) and Institute of Real Estate and Urban Studies (IREUS), at

Department of Real Estate (DRE) established in 1969 is part of the School of Design and Environment. With the mission to develop leaders and advance knowledge for the global real estate industry. DRE offers broad-based real estate education covering the areas of real estate investment and finance, urban planning and urban economics DRE has strong links with the local real estate industry and public agencies, and it has been in the business of producing industry leaders for the real estate industry in Singapore and beyond for more than 50 years.

'Institute of Real Estate Studies (IRES)' was established on 1 June 2006 as a university-level research institute with the mission to advance multidisciplinary research in real estate and urban fields. The Institute has been renamed as the Institute of Real Estate and Urban Studies (IREUS) with effect from 9 March 2018. The adding of 'Urban' to the institute's name appropriately reflects the realities of the Institute's multidisciplinary nature. It underscores the importance of staying relevant to our changing urban environment. The Institute promotes multidisciplinary collaboration and high-impact research on broad real estate issues in relation to, amongst others, finance, economics, urban development, wealth accumulation, demography, and environmental policies.

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