



Asia Pacific Real Estate Association

November 2018

GPR/APREA AsiaPac Performance Snapshot

...your guide to listed real estate returns in AsiaPac



What is the GPR/APREA snapshot?

The **GPR/APREA AsiaPac Performance Snapshot** tracks the dynamics of listed real estate securities (including REITs) across 12 AsiaPac countries/regions and eight sectors, over multiple time horizons.

The following asset classes are covered:

- Listed real estate (including REITs): GPR/APREA Composite Index
- REITs: GPR/APREA Composite REIT Index
- Equities: MSCI Asia Pacific Equities Index
- Bonds: JPM Govt Bonds – Asia Pacific

All data in this **Snapshot** is calculated on a USD denominated basis. The GPR/APREA series is separately available in a country local currency format.

Overview – November 2018

Eleven months into the year, the November edition report reveals the following results:

All Asset Classes: AsiaPac REITs the strongest long-term performer

- All asset classes posted positive total returns in November – listed real estate was the strongest asset class performer during the month.
- REITs were the top-performing asset class over a one-year, five-year and 10-year horizon.

Listed Real Estate: the Indonesia and Residential sector outperform

- Indonesia (22% total return) was the top performing listed real estate market.
- Listed real estate companies in the residential sector recorded the highest total return - 9.4%.

REITs: Hong Kong was the top-performing REITs market

- Hong Kong (5.0% total return) recorded the strongest regional performance in November.
- Retail REITs (4.5% total return) were the top sector performer in November.

Asia versus the World: Asian REITs are least volatile

The **GPR 250 REIT Index** provides a benchmark for comparing global performance based on larger cap stocks. (Please note that this series represents a different sample of funds compared to the GPR/APREA indices and also separates Asia from Oceania)

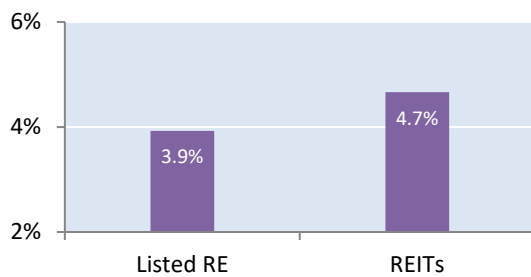
- Asian REITs posted a total return of 5.3% in November, compared to 4.9% in the USA and negative 4.4% in Europe.
- Asia remains the least volatile region with a 36-month volatility of 7.0%, compared to the global average of 10.0%.

November 2018 Results – total returns

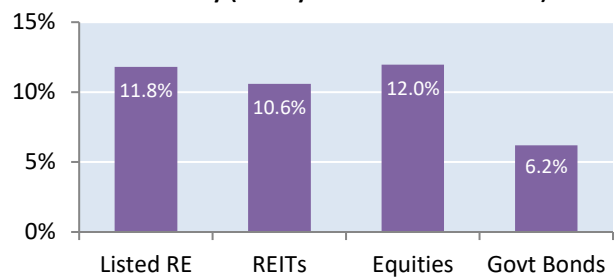
% Total Returns (USD)	Nov-18	1yr	3yrs*	5yrs*	10yrs*
GPR/APREA Listed Real Estate	6.1	-1.7	8.6	4.6	11.4
GPR/APREA REITs	3.9	5.3	10.1	7.5	12.4
MSCI Asia Pacific Equities	2.9	-7.4	8.1	4.3	9.3
JPM Govt Bonds – Asia Pacific	3.7	-0.7	3.6	2.0	4.8

*Annualised compound growth

Dividend yield as at November 2018



Volatility (three years to November 2018)

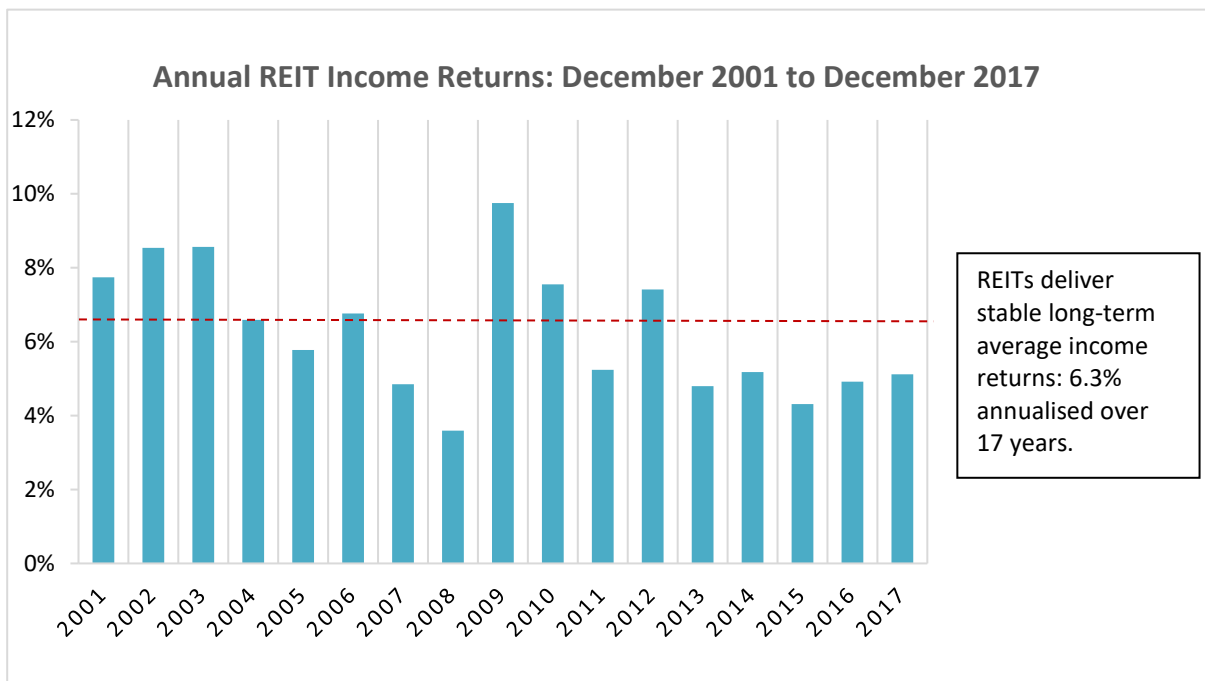
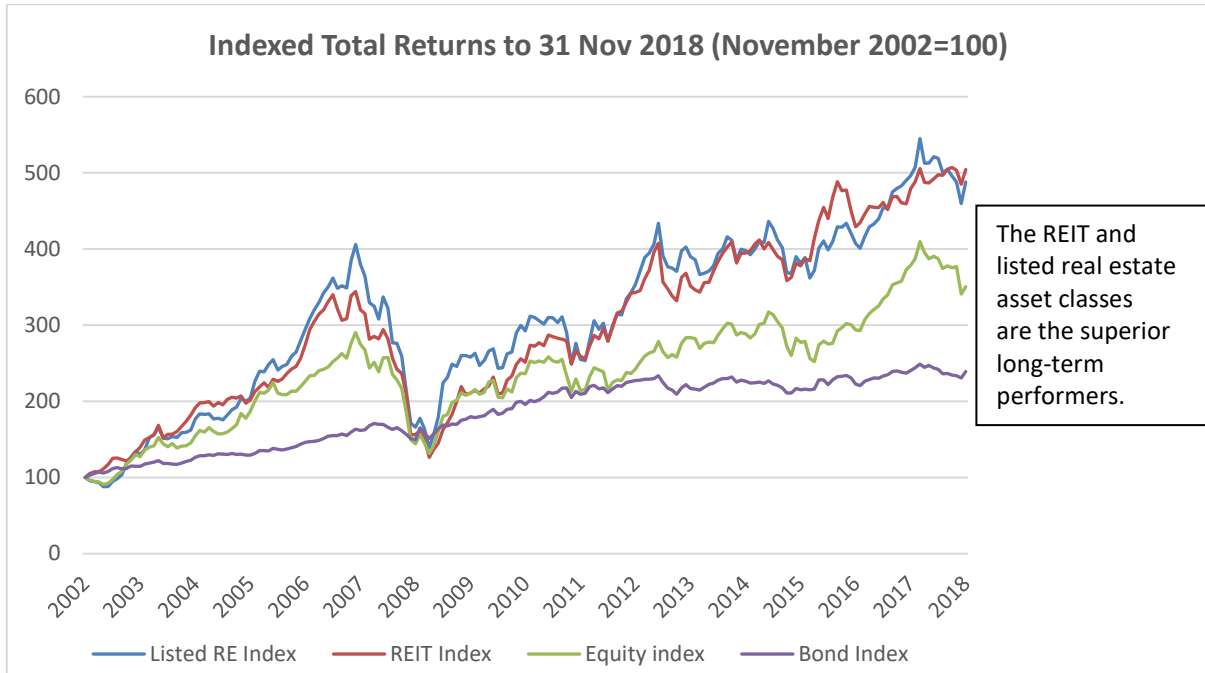


Correlation (three years to November 2018)

	Listed RE	REITs	Equities	Bonds
Listed RE	1.00			
REITs	0.84	1.00		
Equities	0.98	0.78	1.00	
Bonds	0.94	0.84	0.89	1.00

Total Returns – key results

- AsiaPac listed real estate was the top total return performer in November 2018.
- REITs remain the best performing asset class over a one-year, three-year, five-year and 10-year horizon.



GPR/APREA Composite Listed Real Estate Index – November 2018

% Total Returns (USD)	Nov-18	1yr	3yrs*	5yrs*	10yrs*	Volatility**
Australia	3.2	0.2	9.8	7.7	11.9	12.9
China	13.7	-1.3	19.7	11.1	16.8	25.3
Hong Kong	8.2	-5.0	9.7	6.8	12.6	17.2
India	12.9	-27.4	12.9	9.1	4.1	29.8
Indonesia	22.0	-22.0	-3.9	0.0	14.8	23.1
Japan	3.5	2.8	4.1	0.5	8.4	9.5
Malaysia	3.2	-15.9	-0.2	-4.7	8.4	14.5
New Zealand	9.4	14.2	10.7	9.4	15.2	14.4
Philippines	4.0	-13.0	1.2	4.5	21.6	20.9
Singapore	4.4	-7.2	9.4	3.6	13.9	13.5
Taiwan	3.1	11.7	10.2	1.6	16.5	13.8
Thailand	-1.8	1.8	15.6	9.1	23.8	13.0

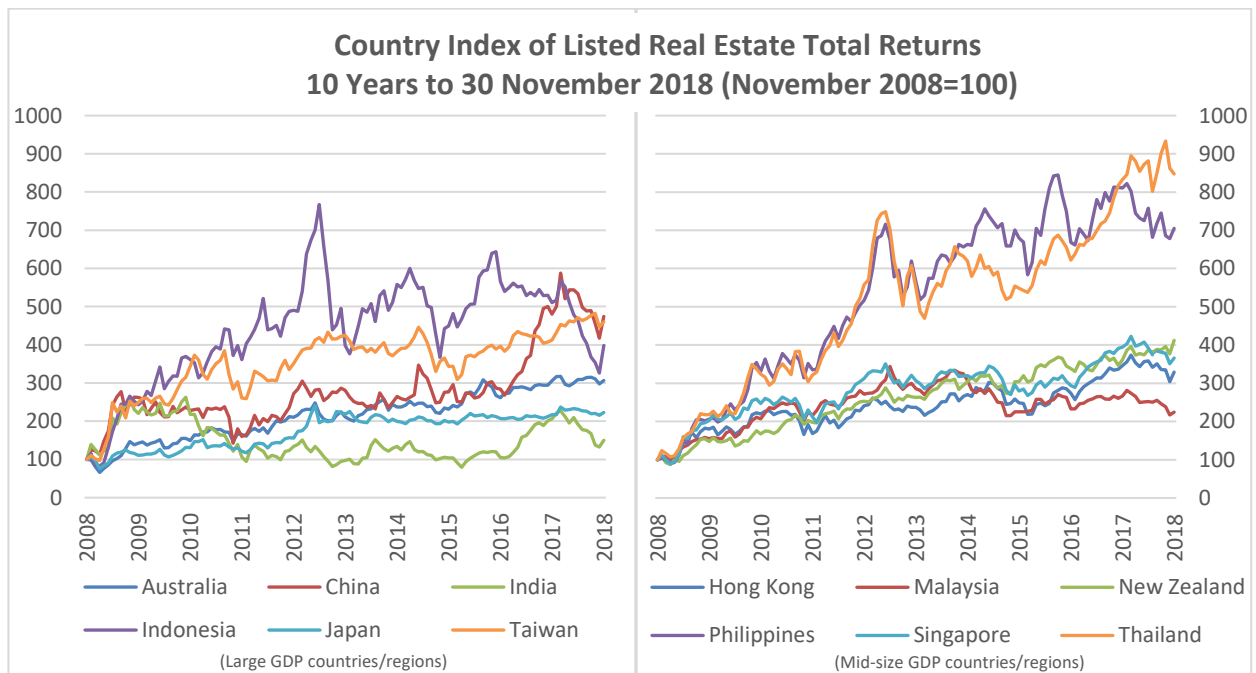
*Annualised compound growth

** Volatility is the 36-month standard deviation of total returns expressed as a percentage

Listed Real Estate – key results by country/region

- November’s pacesetter for listed real estate was Indonesia.
- New Zealand was the top performer during the past 12 months.
- China stood out on a three-year and five-year basis.
- Thailand posted the best performance over a 10-year horizon.

GPR/APREA Composite Listed Real Estate Country Index over the Long-Term



GPR/APREA Composite Listed Real Estate Sector Index – November 2018

% Total Returns (USD)	Nov-18	1yr	3yrs*	5yrs*	10yrs*	Volatility**
Diversified	6.8	-4.9	9.1	4.6	11.3	13.3
Office	4.4	11.2	8.5	2.3	10.6	8.9
Residential	9.4	-2.1	10.6	7.4	13.2	17.4
Retail	3.7	2.1	8.5	7.0	13.2	11.2
Industrial	2.7	-0.9	9.9	4.3	14.2	11.6
Hotel	-1.1	-6.0	8.8	6.0	15.3	11.1
Healthcare	-0.1	-3.4	10.8	9.7	-***	11.3
Other	2.4	2.3	11.2	9.1	12.5	10.1

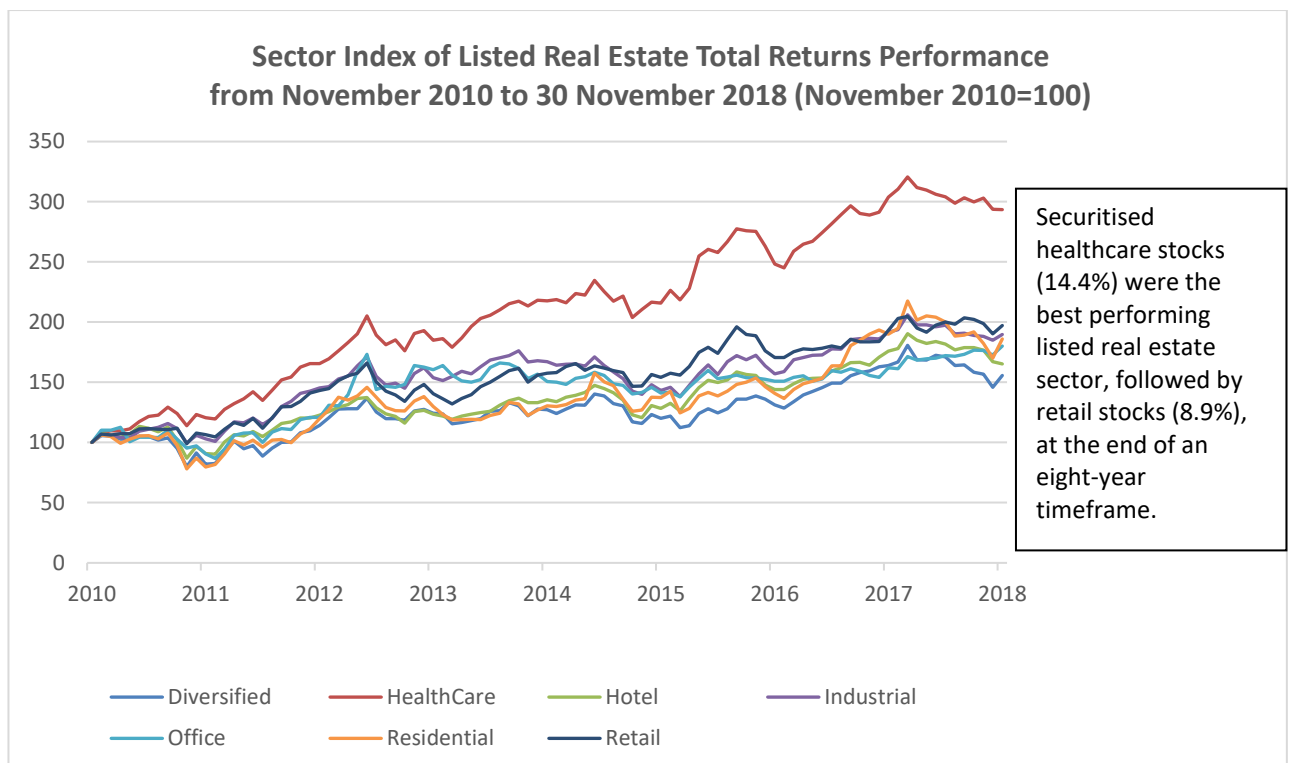
*Annualised compound growth

**Volatility is the 36-month standard deviation of total returns expressed as a percentage

***Note: As the minimum threshold of five constituent stocks was not met between November 2008 and November 2009, there will be no 10 years return metric until December 2019.

Listed Real Estate – key results by sector

- The residential sector was the top-performer in November.
- The office sector stood out during the past 12 months.
- Listed real estate companies in emerging sectors, including data centres, storage etc, recorded the highest total return over three years.
- The healthcare and hotel sector posted the best performance over a 5-year and 10-year horizon.



GPR/APREA Composite REIT Index – November 2018

% Total Returns (USD)	Nov-18	1yr	3yrs*	5yrs*	10yrs*	Volatility**
Australia	3.2	0.1	9.4	7.6	11.4	13.0
China***	-1.8	2.6	8.3	-	-	8.7
Hong Kong	5.0	-0.2	14.1	14.6	24.8	11.8
Japan	3.7	11.8	8.3	5.9	10.4	13.5
Malaysia	0.2	-2.2	7.5	1.9	11.4	13.8
Singapore	4.0	-1.0	12.0	6.3	17.4	12.3
Taiwan	0.7	10.1	3.8	0.4	10.3	8.1

*Annualised compound growth

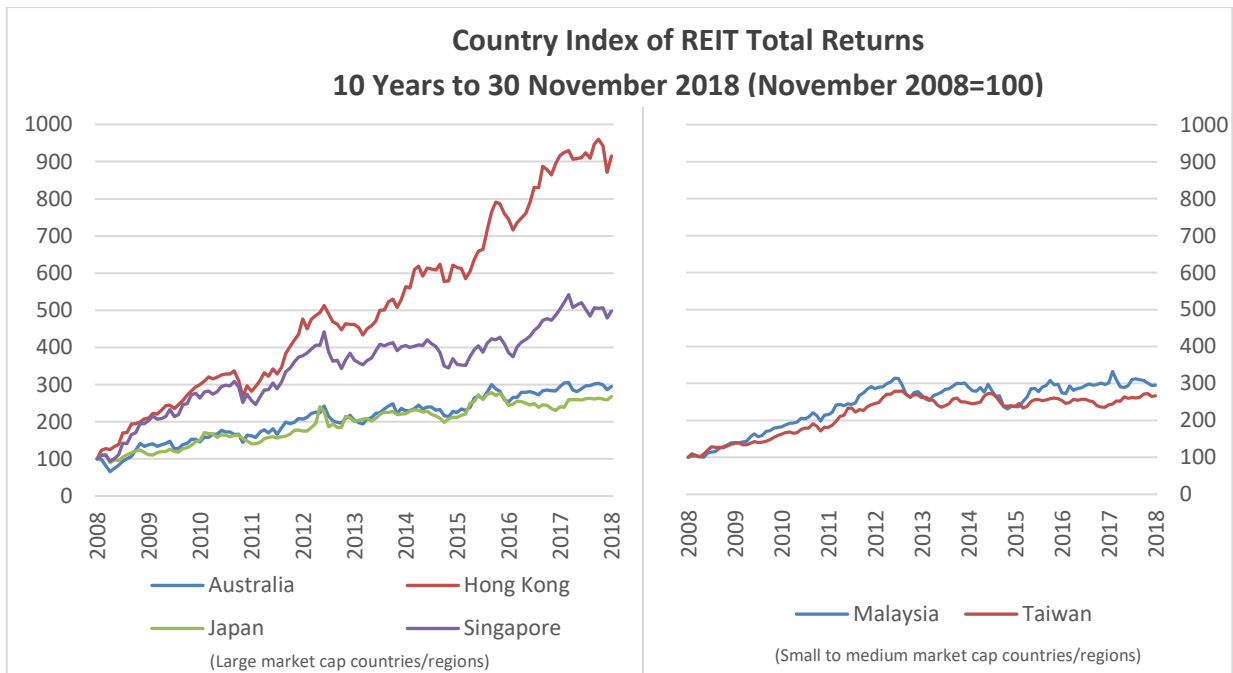
**Volatility is the 36-month standard deviation of total returns expressed as a percentage

***The China REIT index is an experimental addition to the series. It tracks seven REITs that hold income-generating assets that are entirely located in China – four of which are listed in Hong Kong and three in Singapore. The total free float market capitalisation of these seven REITs is USD 4.14 billion. At present, no entities listed on Mainland China bourses are included in the China REIT series as there is no mandated REIT code in the People’s Republic.

REITs – key results by country/region

- Hong Kong REITs topped performance rankings in November and on a three-year, five-year and 10-year basis.
- Japanese REITs ranked above rival regional markets during the past 12 months.

GPR/APREA Composite REIT Country Index over the Long-term



GPR/APREA Composite REIT Sector Index – November 2018

% Total Returns (USD)	Nov-18	1yr	3yrs*	5yrs*	10yrs*	Volatility**
Diversified	3.5	3.5	10.5	7.0	12.8	11.1
Office	4.4	11.1	12.3	7.3	10.8	10.8
Residential	3.8	9.0	10.3	8.4	17.9	12.8
Retail	4.5	4.9	9.1	8.2	14.1	11.3
Industrial	2.8	0.7	9.1	6.2	16.4	11.8
Hotel	1.2	-2.1	7.3	5.6	-	11.3
Healthcare	-0.1	-3.4	10.8	9.7	-***	11.3
Other	3.3	6.2	-	-	-	-

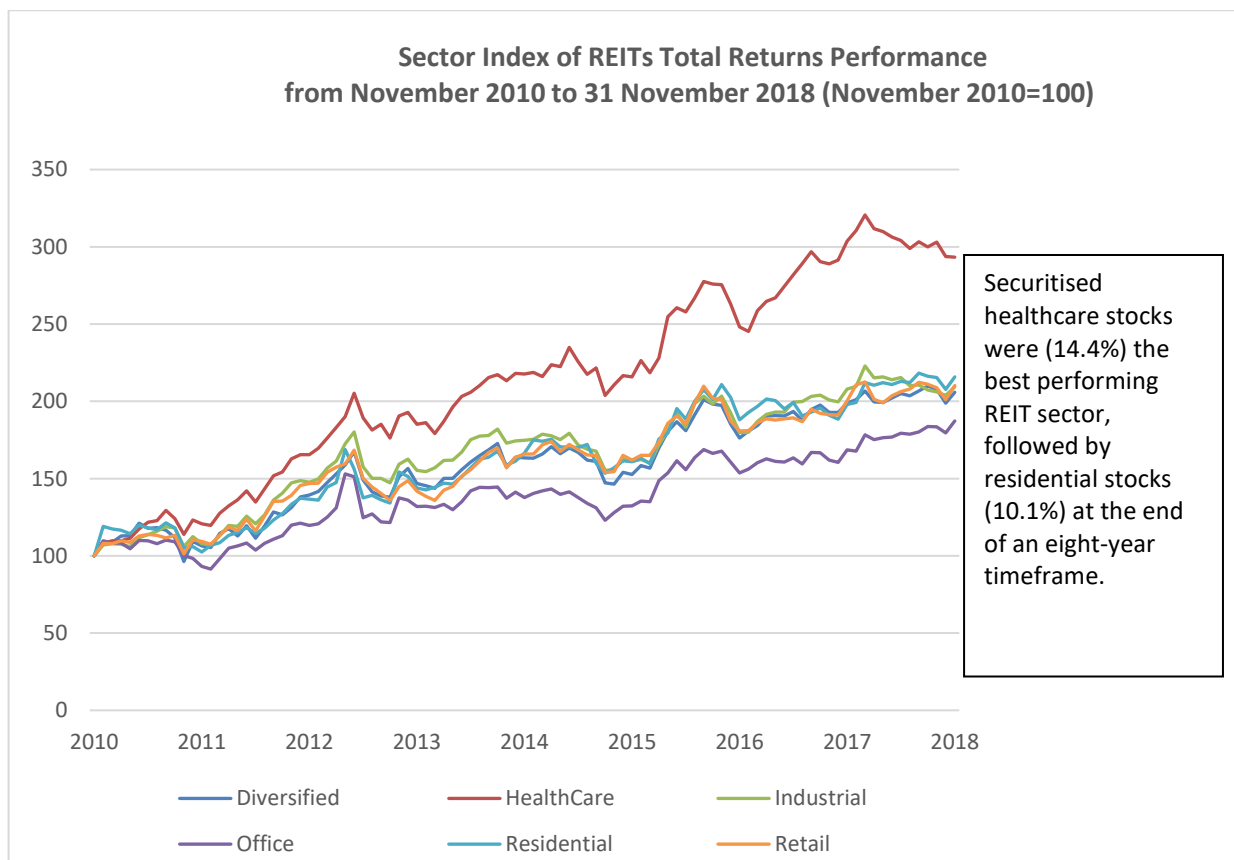
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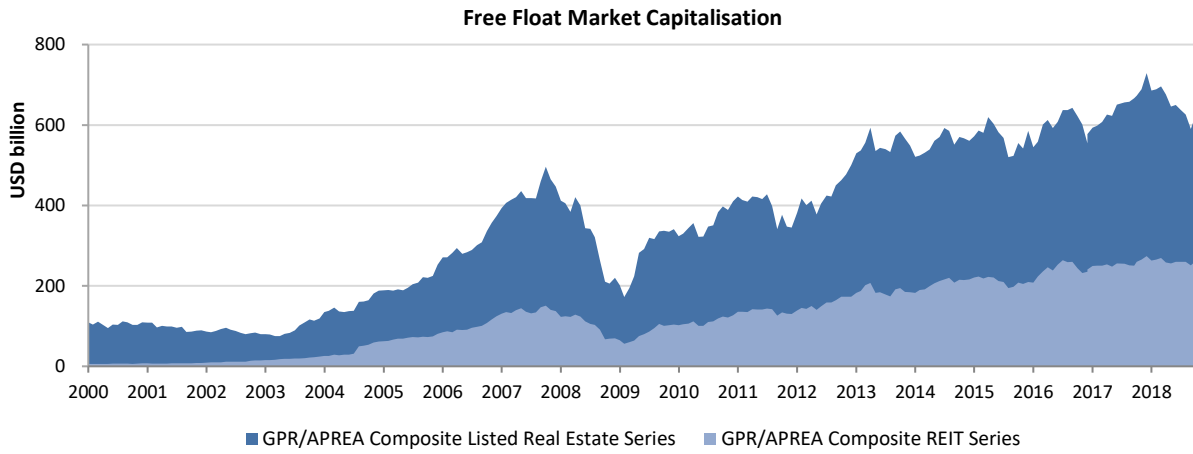
***Note: As the minimum threshold of five constituent stocks was not met between November 2008 and November 2009, there will be no 10 years return metric until December 2019.

REIT – key results by sector

- Retail REITs recorded the highest total return in November.
- Office REITs posted the best performance during the past 12 months and over three years.
- Healthcare sector was the top performer on a five-year basis.
- Residential REITs stood out over ten years.



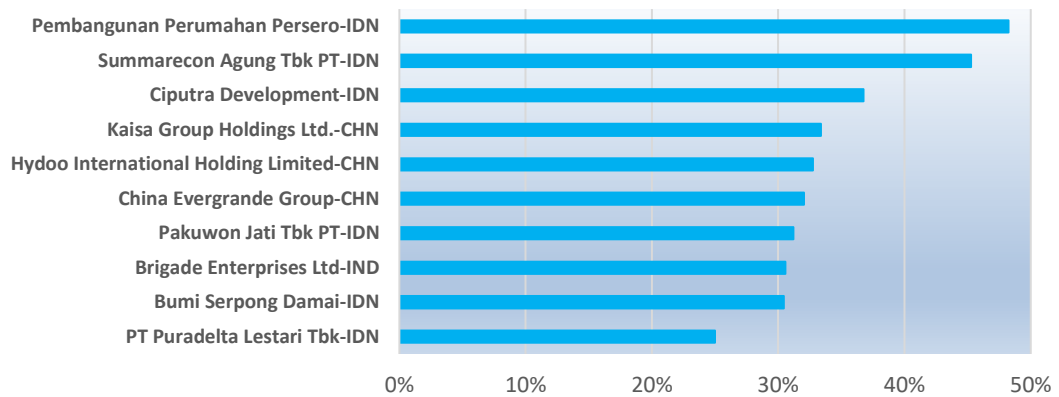
What's covered by the GPR/APREA Index



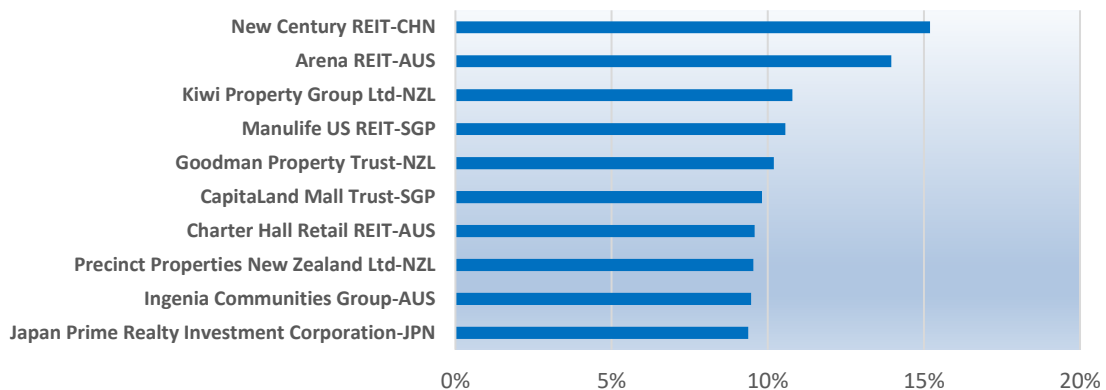
Market Cap in Numbers	Constituents	Free float in USD billion	Free float change (m-o-m)	Free float change (y-o-y)
Listed real estate index	421	624	5.8%	4.0%
REIT index	165	261	-7.3%	0.4%

Top performers in November 2018 – listed property companies and REITs

10 Top Performing Listed Property Companies (USD - November 2018)



10 Top performing REITs (USD- November 2018)



Methodology Q&A

Q. What sources of information underpin this report?

A. There are multiple sources, including GPR, APREA Research and Bloomberg.

Q. Which geographical markets are covered?

A. Australia, China, Hong Kong, India, Indonesia, Japan, Malaysia, New Zealand, the Philippines, Singapore, Taiwan and Thailand. Allocations are based on country of operation.

Q. Which sectors are covered and what comprises “other”?

A. Diversified, office, residential, retail, industrial, hotel, healthcare and other. Other can include, data centres, storage etc.

Q. What sort of companies are included in the listed composite index and why are REITs part of the series?

A. The listed composite index is representative of the AsiaPac property stock market and includes developers, landlords and REITs listed on one or more of the regional stock exchanges. REITs are included in the composite index as they comprise around 40% of the listed real estate landscape. The basic inclusion rules for stocks are:

- \$50mn minimum free float market capitalisation for two consecutive months
- 15% minimum free float factor
- at least 60% of operational turnover derived from investment activities and/or development activities

Q. What does the REIT index cover and what is a REIT for the purposes of this index?

A. The REIT index includes companies that comply with REIT legislation in their country of primary listing. Singapore business trusts are included in the REIT index only if they comply with both the following criteria:

1. the business trust derives at least 90% of operational turnover from investment activities; and
2. the business trust must formally commit to distribute at least 90% of income as dividends.

Q. How is a “total return” defined in this index?

A. Total return includes both the total of dividends received and the change in unit price over a period. This figure is expressed as a percentage over the beginning period price.

Q. What is the difference between “free float” and “value” or market capitalisation”?

A. Free-float market capitalisation is calculated by taking an equity's price and multiplying it by the number of shares available in the market. Instead of using the total of active and inactive shares, as with the full-market capitalisation method, the free-float method excludes locked-in shares such as those held by insiders, promoters and governments.

Q. Are the indices weighted? How?

A. Yes, the property stocks included in all indices are assigned a base weighting derived from their free float market capitalisation on a quarterly date of periodic adjustment. The country weights are the sum of weighting factors of eligible individual constituents in each country.

Q. How often are the weightings and selection of the component countries and property stocks adjusted?

A. The adjustments to the base weightings and selection of stocks and countries in the listed composite index occur quarterly in March, June, September and December.

Q. From where is the information on individual company performance sourced?

A. Bloomberg

Q. Why were the MSCI Asia Pacific Equities Index series and JPM Govt Bonds-Asia Pacific series chosen to represent equity and bond performance?

A. The two series are considered representative of regional equity and bond performance.

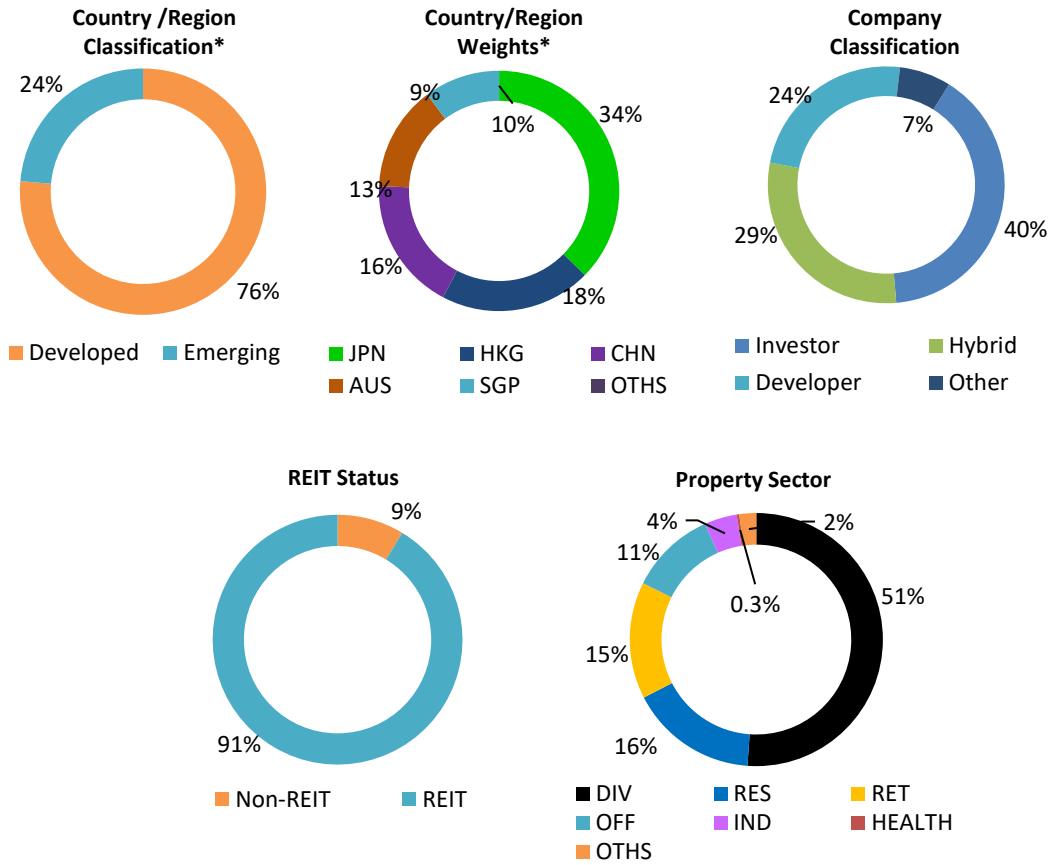
Q. What is GPR?

A. Global Property Research (GPR) provides services for leading financial institutions with top of-the-line benchmarks. All index products are based on an extensive and unique proprietary database of global listed property and infrastructure companies. GPR has a proven track record since 1995. For more on GPR, please contact Jeroen Vreeker at j.vreeker@gpr.nl or Floris van Dorp at f.van.dorp@gpr.nl

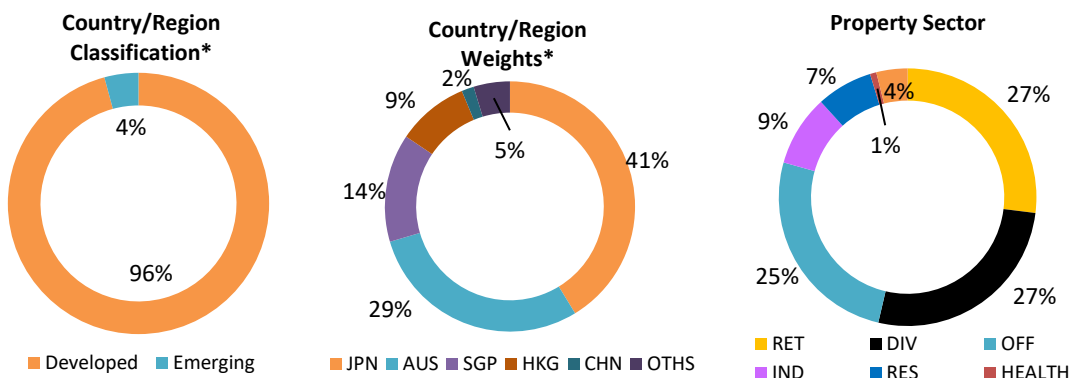
Q. How can I learn more about this index or APREA?

A. Please contact **Allan Zhang** at allan.zhang@aprea.asia, or visit APREA's website www.aprea.asia

Listed Real Estate - index constituents and profile (by free float market cap)



REITs - index constituents and profile (by free float market cap)



*Based on country of operations



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