October 2023

Research Report

Development Potential of Offshore Mainland China REITs in Hong Kong

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SUMMARY

A real estate investment trust (REIT) is a collective investment scheme that aims to deliver recurrent income to investors through focused investments in a portfolio of income-generating properties.

REITs are usually listed and traded on exchanges. They are an alternative to equities and bonds for investment diversification, offering investors exposure to a wide range of underlying properties of different types that could have different valuations and investment returns. They can be attractive to passive income investors because of their potential for dividend yield. Compared to direct investment in physical properties, the advantages of REIT investments include ease of portfolio diversification, liquidity, flexible scale of investment and cost effectiveness.

The market size and development pace of REITs vary across the world's major listed markets. However, listed REIT markets are still relatively small compared to the respective sizes of the physical property and stock markets. Regulatory regimes may explain why some REIT markets are at different development stages. REIT-specific regulations can include caps on leverage, investment restrictions, dividend payout ratios and tax treatments.

The growth of the global REIT market has promoted the active development of a product ecosystem, including REIT indices and exchange traded funds (ETFs), and this in turn supports the further development of the REIT market.

In Mainland China, the REIT market is at an early development stage, but growing rapidly. The first batch of onshore REITs were listed on the Mainland exchanges in June 2021 under a pilot scheme for public infrastructure REITs. By the end of June 2023, the number of listed REITs had risen to 28. As there are, as yet, no governing laws in the Mainland for REITs, the 2021 pilot scheme serves as a formal REIT regime for the regularised development of the sector. Further ahead, it is expected that the Mainland regulatory regime for REITs will continue to develop to address issuers' concerns, including asset restructuring and acquisitions, constraints on refinancing and tax treatment.

Strong demand from issuers and investors indicates potential upside for the development of Mainland REITs in both onshore and offshore markets. On the issuer side, REITs can provide an alternative funding source for Mainland real estate developers. On the investor side, REITs are attractive investment tools for both global and Mainland investors seeking portfolio diversification and passive income.

The first offshore Mainland REIT was issued in Hong Kong in 2005. Compared to onshore Mainland REITs, offshore Mainland REITs offer greater flexibility of property types and financial leverage for asset owners and diversified exposure to Mainland properties for global investors.

In addition, Hong Kong's well-developed regulatory regime for REITs provides clarity in market regulation and operation for issuers and investors. Recent government initiatives to support the listing of REITs in Hong Kong include subsidies to cover up to 70% of eligible professional services expenses for listing REITs in Hong Kong.

In 2023, Mainland and Hong Kong regulators disclosed that they have started to explore the expansion of market connectivity to include REITs. Referencing the success of the inclusion of ETFs in Stock Connect, mutual market connectivity in REITs is expected to boost product liquidity in both markets as a result of the widened investor base and increased supply as more issuers are attracted to offer REITs in the two markets. This would increase Hong Kong's attractiveness as a global REIT hub and promote the further internationalisation of the Mainland capital market.

1. WHAT ARE REITS?

A real estate investment trust (REIT) is a collective investment scheme that aims to deliver recurrent income to investors through focused investments in a portfolio of income-generating properties. REITs are usually listed and traded on exchanges, similar to stocks and exchange traded funds (ETFs)[1].

1.1 Product types

There are three major types of REIT in the global market — equity REITs, mortgage REITs and hybrid REITs. Equity REITs own and manage the underlying properties while mortgage REITs own the debt securities backed by properties but not the properties themselves. Hybrid REITs are a combination of the two. Equity REITs are also classified according to the type of property owned by the REIT. Table 1 shows the key types of REIT.

<table>
<tr><th colspan="3">Table 1. Types of REIT under GICS classification</th></tr>
<tr><th>Type of REIT</th><th>Property type</th><th>Engagement</th></tr>
<tr><td>Health care REITs</td><td>Properties serving the health care industry, including hospitals, nursing homes and assisted living properties</td><td rowspan="7">Acquisition, development, ownership, leasing, management and operation</td></tr>
<tr><td>Hotel and resort REITs</td><td>Hotel and resort properties</td></tr>
<tr><td>Industrial REITs</td><td>Industrial properties, includes companies operating industrial warehouses and distribution properties</td></tr>
<tr><td>Office REITs</td><td>Office properties</td></tr>
<tr><td>Residential REITs</td><td>Residential properties including multifamily homes, apartments, manufactured homes and student housing properties</td></tr>
<tr><td>Retail REITs</td><td>Shopping malls, outlet malls, neighbourhood and community shopping centres</td></tr>
<tr><td rowspan="2">Specialised REITs</td><td>Properties not classified elsewhere, including trusts that operate and invest in storage properties</td></tr>
<tr><td colspan="2">Including REITs that do not generate a majority of their revenues and income from real estate rental and leasing operations.</td></tr>
<tr><td>Diversified REITs</td><td colspan="2">Trusts with significantly diversified operations across two or more property types</td></tr>
<tr><td>Mortgage REITs</td><td colspan="2">Trusts that service, originate, purchase and/or securitise residential and/or commercial mortgage loans, including trusts that invest in mortgage-backed securities and other mortgage-related assets.</td></tr>
</table>

Source: "Global industry classification standard (GICS) methodology", published on MSCI's website, January 2020.

1.2 Product characteristics

REITs are an alternative to equities and bonds for investment diversification. REITs provide investors with exposures to the real estate market and a steady stream of rental income generated from the underlying properties. Like bonds, the stable dividend payouts of REITs are attractive to passive income investors. Like equities, REITs offer potential price appreciation from underlying properties.

1 Certain markets do not require REITs to be listed. In the US, unlisted REITs are open to a limited number of investors, require a high minimum investment amount (e.g. US$25,000), and are subject to less disclosure requirements than listed REITs. (See "Best-performing REITs: How to invest in real estate investment trusts", webpage on *nerdwallet.com.*)

Compared to direct investment in physical properties, REIT investments offer a number of advantages, which can be complementary to those offered by direct investments in the underlying properties:

(1) Potentially better returns: It is often not easy to earn short-term profits from physical properties given the holding costs (e.g. repair and renovations). It was reported that, in the United States (US), about 40% of short-term real estate investors who typically try to sell a property within 6 to 12 months, sell at either a breakeven or loss[2]. In comparison, the average annual return of US REITs was 12.4% over the period 1978 to 2010, higher than the 10.9% for S&P 500 Index and 6.4%-8.7% for US private real estate funds[3].

(2) Portfolio diversification and return opportunities otherwise not available: Given the relatively high value of real estate, general investors may only afford to buy a very limited number of properties. In contrast, the minimum investment amount for REITs is much lower than that for physical properties. This allows investors to gain exposure to a portfolio of properties from one or more REITs, offering the advantage of risk diversification. Moreover, certain underlying assets of REITs would not be available for direct purchase by investors but can offer income streams to the REIT holders, e.g. shopping malls and infrastructure such as roads and bridges.

(3) Liquidity and flexible scale of investment: Listed REITs are traded on exchanges and REIT units can be purchased or sold at any time during the exchange's trading session at the investor's preference, irrespective of short-term or long-term investment horizons. In contrast, physical properties may not be bought or sold instantly at the investor's preferred timing. Additionally, as REITs are traded in relatively small trading units compared to the large lump sum payments needed for physical properties, investors have the flexibility to choose the investment size for their exposures in the underlying properties.

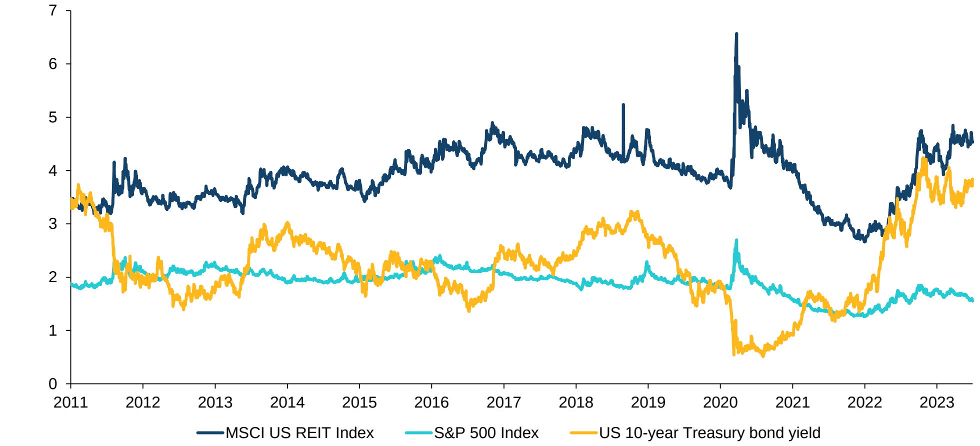
(4) Cost effectiveness: The management of the properties held in REITs is handled by a professional team, thereby helping investors to save on administrative costs, including time and money that would otherwise be needed for direct investment in the properties.

REITs are attractive to passive income investors due to their characteristic of carrying relatively high and steady dividend yields. REITs are required by regulations to distribute a minimum share of income (e.g. 90% in the US) generated from the underlying properties to unitholders. In the US, the dividend yield from REITs has stayed above those of equities and bonds for a long period of time (see Figure 1). In addition, tax concessions are usually given at the REIT/investor level to promote the issuance and investment efficiency of REITs. However, high dividend payouts from REITs may reduce retained earnings and increase the need for borrowings for new investments, which may slow capital appreciation and income growth in the long-term.

[2] Source: "Data proves REITs are better than buying real estate", published on Forbes' website, 19 July 2017.

[3] The return of REITs was denoted by the FTSE NAREIT Equity REIT Index while those of private real estate funds were denoted by the National Council of Real Estate Investment Fiduciaries (NCREIF) Property Index, the NCREIF/Townsend Opportunistic Index, the Open-End Diversified Core Equity (ODCE) Index and the NCREIF/Townsend Value Added Index. (Source: "The global listed real estate market", published on NAREIT's website, September 2010.)

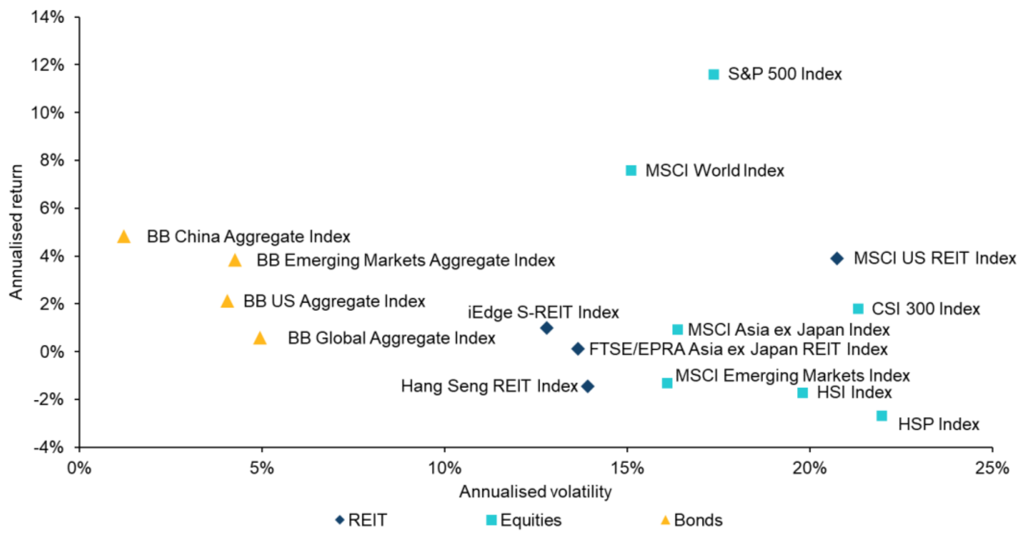
Figure 1. Dividend yields of REIT index and equity index and long-term bond yields in the US (2011 – Jun 2023)



Source: Bloomberg.

The different risk-return performance of REITs from equities and bonds may offer portfolio diversification opportunities. From a selected group of indices for different asset classes, REIT indices are found to exhibit different risk-return performances from indices on equities and bonds over the long term (see Figure 2). Compared to bonds, REITs typically have higher price volatility but have the potential for higher returns. Compared to equities, REITs could have lower price volatility than equities of comparable returns, and higher returns than equities of comparable volatility. Having said that, the risk-return performance is product-specific and this finding may not apply to the entire classes of REITs, equities and bonds.

Figure 2. Risk-return performance of REITs, equities and bonds (2011 – Jun 2023)



Note: Annualised return is the annual compound rate of return. Annualised volatility is calculated as the standard deviation of daily returns times the square root of 252. “BB” refers to Bloomberg indices.

Source: Calculated based on the daily closings of individual indices from Bloomberg.

Moreover, the average correlation coefficients of daily returns between selected indices on REITs and equities/bonds were found to be lower than those within the same asset class during the period 2011 to Jun 2023 — 0.42 between REIT indices and equity indices and 0.13 between REIT indices and bond indices, compared to 0.52 between different equity indices and 0.30 between different bond indices (see Table 2). This implies that the inclusion of REITs in equity/bond portfolios may potentially offer diversification benefits.

Table 2. Average correlation coefficients of daily returns between asset types (2011 – Jun 2023)

Asset class	REITs	Equities	Bonds
REITs	0.47	0.42	0.13
Equities	—	0.52	0.07
Bonds	—	—	0.30

Note: Average correlation coefficient is calculated as the simple average of the correlation coefficients between indices in the applicable segment in Table A1 in the Appendix.

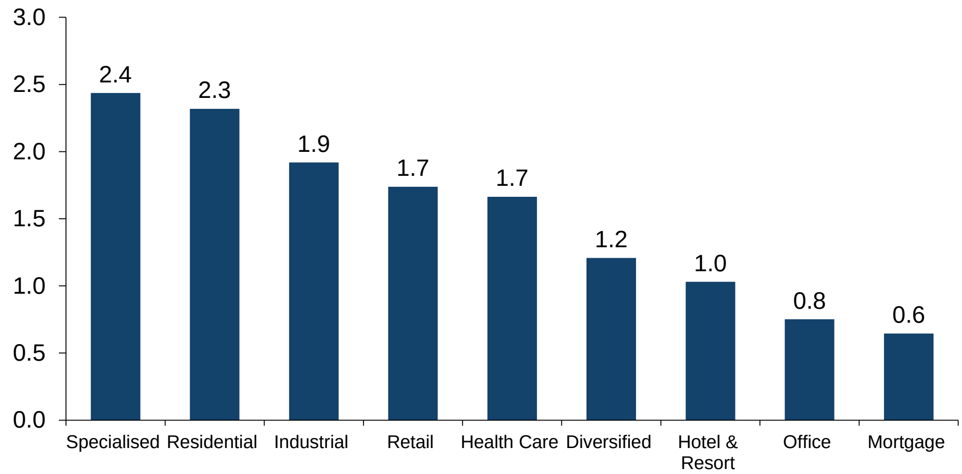
Source: Calculated based on the daily closings of individual indices from Bloomberg.

1.3 Product performance by property type

The availability of REITs on a variety of properties of different categories offer a diverse range of choices to investors. The US market offers the widest range of choices for REITs, covering all of the nine types of REITs in Table 1, and the valuation of REITs was found to vary across different types.

At the end of June 2023, the median price-to-book (P/B) ratio was the highest for specialised REITs, which held some special types of property, e.g. infrastructure facilities and data centres. These were followed by residential REITs, industrial REITs and health care REITs (see Figure 3).

Figure 3. Median P/B ratios of listed REITs in the US by type of REIT (end-Jun 2023)

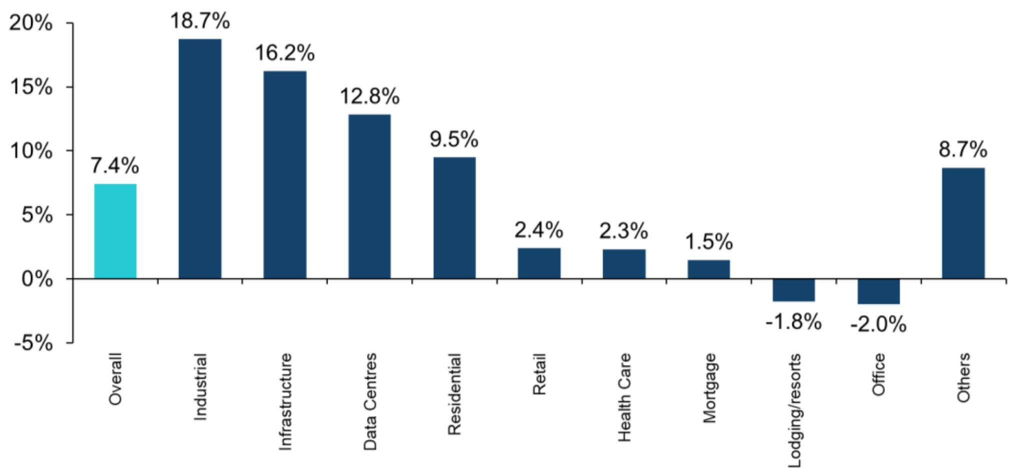


Source: Calculated based on the P/B ratios of individual REITs from Bloomberg (data downloaded on 13 July 2023).

Valuations should reflect investment returns. In fact, the average annual total returns[4] of REITs during the period 2017 to 2022 were the highest for industrial REITs, specialised REITs (including infrastructure and data centres) and residential REITs (see Figure 4), reflecting the better valuations of these REIT types.

[4] Total return is the combined return from capital gains and dividends.

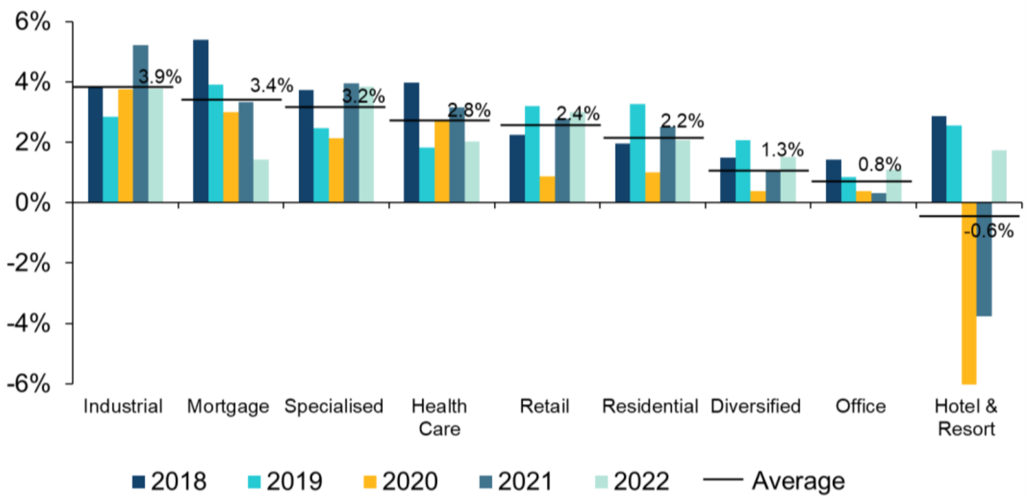
Figure 4. Average annual total returns of listed REITs in the US by type of REIT (2017 – 2022)



Source: Calculated based on the annual total returns of the indices for the respective REIT types from *REITWatch* (similar but slightly different from GICS classification), published on the National Association of Real Estate Investment Trusts (NAREIT)'s website, January issues of 2018 to 2023.

By the nature of REITs, their investment returns are backed by their steady income streams, as reflected in their return on assets (ROA). During the period 2018 to 2022, industrial REITs had the highest median ROA, and specialised REITs ranked third (see Figure 5).

Figure 5. Median ROA of REITs listed in the US by type of REIT (2018 – 2022)



Source: Calculated based on data of individual REITs from Bloomberg.

2. GLOBAL LANDSCAPE OF REITS

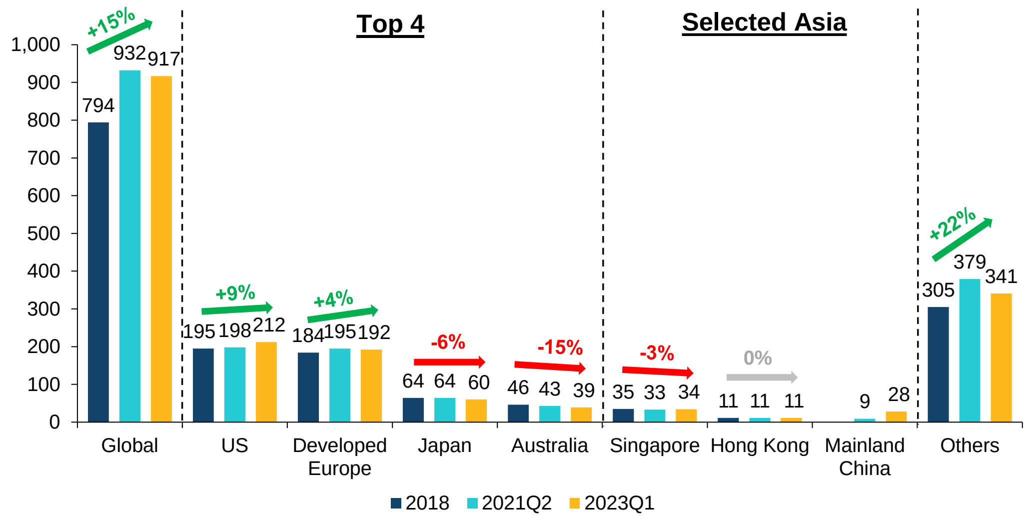
Among major capital markets, REIT markets have been developed, though at different starting points, to serve the financing/investment needs of issuers and investors.

The first REIT was issued and listed in the US in the 1960s and REITs debuted in Europe and the Asia-Pacific subsequently. Now, more than 39 markets have adopted legislation for the issuance of REITs[5]. The rules and regulations of these markets may have their own specific provisions or requirements in terms of leverage, investment restrictions, dividend payout ratios and tax treatment.

Across global listed markets, the market size and development pace of REITs vary, depending on the individual market's characteristics.

In terms of quantity, the total number of listed REITs in the global market has grown from 794 in 2018 to 917 in the first quarter of 2023 (2023Q1) (see Figure 6). Among all issuance markets, the US had the largest number of listed REITs at the end of 2023Q1, followed by Developed Europe[6], Japan and Australia. In Mainland China, the first batch of nine onshore REITs were listed in June 2021 and the total number had grown to 28 by the end of 2023Q1. Before that, a number of REITs focused upon onshore properties in Mainland China have been listed offshore in Singapore and Hong Kong. During the period 2018 to 2023Q1, while both US and Developed Europe recorded an increase in the number of listed REITs, the Hong Kong market remained at a low level compared to a decrease recorded in the selected Asian markets of Japan and Singapore.

Figure 6. Number of listed REITs by selected market (end of 2018, 2021Q2 and 2023Q1)



Note: The first batch of REITs in the Mainland were listed in June 2021.

Source: "Global real estate total markets table", published on European Public Real Estate Association (EPRA)'s website, 2018Q4, 2021Q2 and 2023Q1 issues; the websites of the Shanghai Stock Exchange and the Shenzhen Stock Exchange for Mainland China; HKEX's website for Hong Kong,

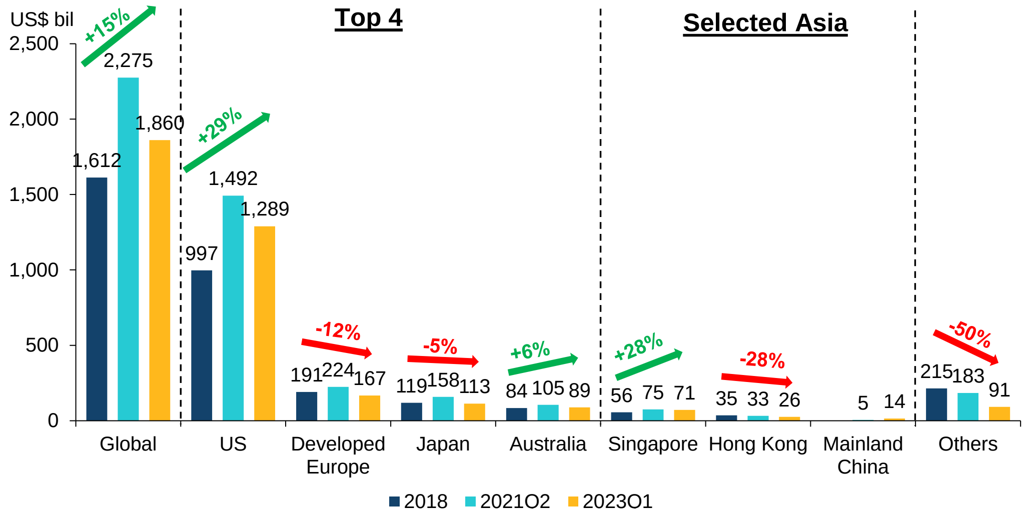
In terms of value, over the period 2018 to 2023Q1, the market value of global listed REITs has grown by 15% from US$1.6 trillion to US$1.9 trillion (see Figure 7). REITs listed in the US (referred to as "US REITs") dominated the world's listed REITs by market value, contributing about 69% of the total as of end-2023Q1, followed by Developed Europe, Japan and Australia.

5 See "REIT industry timeline", webpage on NAREIT's website, viewed on 11 July 2023.

6 As defined in the source material, "Developed Europe" comprise Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Luxembourg, Netherlands, Norway, Poland, Portugal, Spain, Sweden, Switzerland and United Kingdom. See "Global real estate total markets table", published on European Public Real Estate Association (EPRA)'s website, 2023Q1 issue.

These markets and the selected Asian markets — Singapore, Hong Kong and Mainland China — experienced diverse growth rates in the market value of their listed REITs.

Figure 7. Market values of listed REITs of global and selected markets (end of 2018, 2021Q2 and 2023Q1)



Note: The first batch of REITs in the Mainland were listed in June 2021.

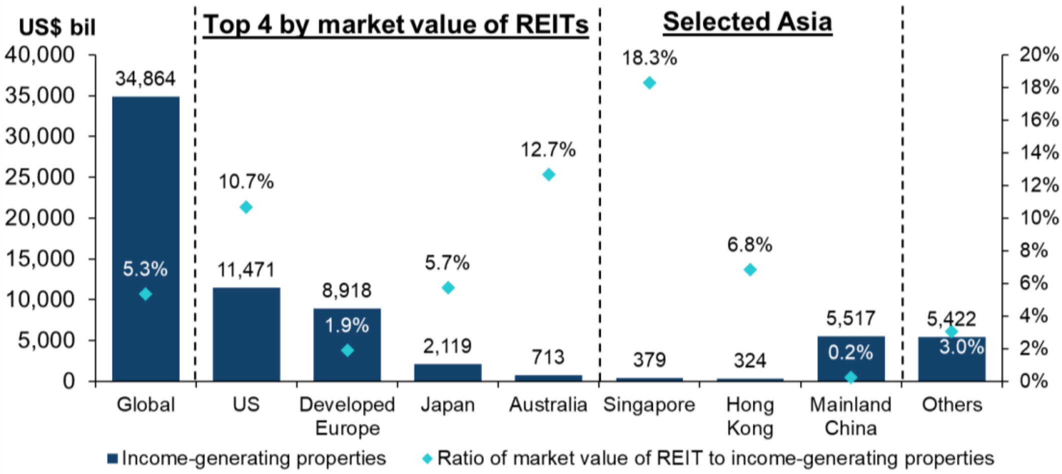
Source: "Global real estate total markets table", published on EPRA's website, 2018Q4, 2021Q2 and 2023Q1 issues. The market values of Mainland and Hong Kong are calculated based on the market values of individual REITs (as identified in Figure 6) obtained from Bloomberg.

Despite the growth in global REITs in terms of number and market value, the listed REIT market is still relatively small compared to the respective sizes of the physical property and stock markets. This is illustrated by the cases for the US, Europe, Japan and selected REIT markets in Asia-Pacific, as described below.

Regarding the physical property market, only income-generating properties are suitable for securitisation into REITs. Income-generating properties are those that are used exclusively for business-related purposes or to provide workspaces[7], rather than as residential real estate. The size of an income-generating property market is usually proportional to the size of the corresponding economy. At the end of 2022, the US had the largest income-generating property market in the world, followed by Developed Europe and Mainland China. However, the market value ratio of listed REITs to income-generating properties was only 10.7% in the US, 1.9% in Developed Europe and 0.2% in Mainland China. It should be noted that while REITs listed in Mainland China have onshore properties as their underlying assets, REITs listed in international markets like the US and Developed Europe cover global properties. That said, Singapore and Hong Kong, as international markets in Asia, recorded market value ratios of 18.3% and 7.5% respectively. (See Figure 8.)

[7] Income-generating properties are therefore also referred to as "commercial real estate". See Mehrhoff, J., "What is 'commercial property'?", paper for International Finance Corporation (IFC)-National Bank of Belgium Workshop on "Data needs and statistics compilation for macroprudential analysis", published on the website of Bank for International Settlements, May 2017.

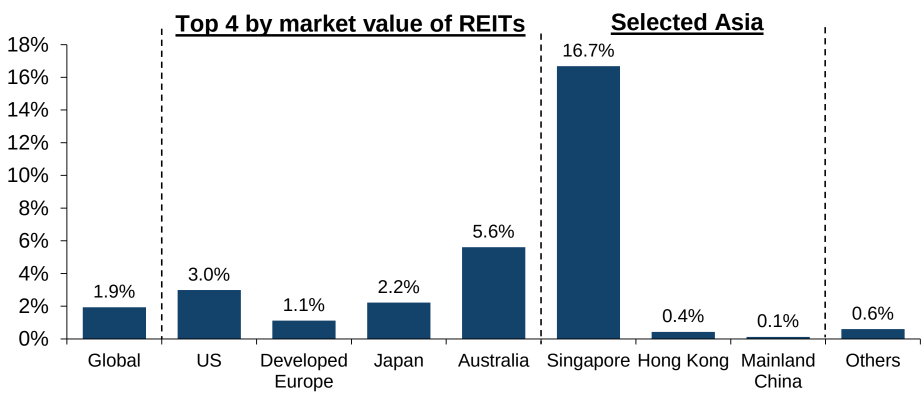
Figure 8. Market values of global and selected income-generating property markets and the ratio of listed REITs to income-generating properties (end-2022)



Source: Market values of the property markets were obtained from "Global real estate total markets table", published on EPRA's website, 2022Q4 issue; for calculating the ratios, the market values of REITs were from Bloomberg.

When compared to the size of the stock market, the relative size of the REIT market (as measured in terms of the market value of listed REITs as a percentage of stock market capitalisation) at the end of 2022 was 1.1%-3.0% for the major stock markets of the US, Developed Europe and Japan, and 16.7% for Singapore, compared to 0.1% for onshore Mainland REITs and 0.4% for Hong Kong respectively (see Figure 9). These figures suggested considerable potential upside for the Mainland and Hong Kong REIT markets.

Figure 9. Ratio of market value of listed REITs relative to the stock market in selected markets (end-2022)



Source: Stock market capitalisation data were obtained from "Global real estate total markets table", published on EPRA's website, 2022Q4 issue; for calculating the ratios, the market values of REITs were from Bloomberg.

The development of the REIT market, in fact, depends very much on the regulatory regime governing the issuance of a REIT (including requirements on product structure and tax treatment) which varies across global markets. The regulatory requirements on product structures include the minimum ratio of distributable income, the minimum proportion of assets invested in real estate and the maximum leverage ratio. Tax treatments for REITs include the tax rate at REIT level and that at investor level, which may differ between domestic and foreign investors.

The design of the regulatory regime affects the supply and demand of REITs in a market; for example:

- In the US, REITs are exempted from profit tax at REIT level but REIT investors need to pay income tax on dividends at about 30%[8]. Property owners in the US are therefore incentivised to securitise their property holdings into REITs in order to reduce tax liabilities on income generated from the properties.
- In Singapore, the distributable income of REITs listed in Singapore are not subject to income tax and tax on dividends is exempted for certain kinds of investors (e.g. individuals)[9].

Given the relatively large scale of the income-generating property market in Mainland China (ranked 3rd in the world[10]) and the currently very small size of its REIT market relative to its stock market (see Figure 9), Mainland REITs can potentially become a new growth driver for the global REIT market.

While Mainland REITs have been issued in the offshore market since 2005, REITs were officially launched in the Mainland only as recently as 2021, starting with "infrastructure REITs"[11]. Some of these infrastructure REITs in the Mainland can be classified as industrial REITs and specialised REITs in accordance with Global Industry Classification Standard (GICS)[12].

Table 3 presents the number of REITs by type listed in the US, Singapore, Mainland China and Hong Kong. The US offers a diverse range of different types of REITs in considerable numbers. The majority of Singapore-listed REITs (S-REITs) are retail and industrial REITs. A number of onshore Mainland REITs do not have a clear classification under GICS. The number of REITs in Hong Kong is still relatively small but the types of REIT are quite diverse.

Along with the growth of the global REIT market, the product ecosystem of REITs has been actively developing. Major global index providers have launched a wide range of REIT indices covering various geographical exposures and different types of REITs[13]. REIT indices for local markets have also been developed by local index providers. These include the TSE REIT Index on Japan-listed REITs; the iEdge S-REIT Leaders Index or S-REITs in Singapore and the CES REIT Index on Hong Kong-listed REITs (H-REITs). In addition, related ETFs and index futures have been launched to meet the diversification and risk management needs of REIT investments.

8 See *EPRA Global REIT Survey 2022*, published on EPRA's website

9 See *IRAS e-Tax Guide: Income Tax Treatment of Real Estate Investment Trusts and Approved Sub-Trusts (Ninth Edition)*, issued by Inland Revenue Authority of Singapore (IRAS), 5 April 2022.

10 Source: "Global real estate total markets table", issue of 2023Q1, published on the EPRA's website.

11 In the Mainland, infrastructure REITs refer to REITs holding infrastructure facilities. Publicly offered infrastructure REITs are standardised financial products listed on exchanges that distribute most of the revenue generated from infrastructure facilities (including consumption facilities) to investors. See "Notification on Further Advancing the Related Work on Normalising the Issuance of Infrastructure REITs" (《關於進一步推進基礎設施領域不動產投資信託基金（REITs）常態化發行相關工作的通知》), the China Securities Regulatory Commission (CSRC), 7 March 2023; and "Introduction of Infrastructure REITs" (〈基礎設施公募 REITs 介紹〉), webpage on SSE's website, viewed on19 July 2023.

12 Certain infrastructure REITs are "business trusts" which hold the rights to the distributable profits (or beneficiary rights) of properties, instead of equity ownership in the underlying assets.

13 See "Real estate indexes", webpage on MSCI's website; "FTSE EPRA Nareit Global Real Estate Index Series", webpage on FTSE Russell's website; and "Property & REIT - Indices | S&P Dow Jones Indices", webpage on S&P Global's website.

Table 3. Number of REITs in selected market by type (end-2023Q2)

GICS Sub-Industry Name	US	Singapore	Mainland China	Hong Kong
Retail REITs	29	12	—	2
Specialised REITs	27	2	2	—
Office REITs	28	6	—	3
Residential REITs	21	—	—	—
Diversified REITs	19	3	—	4
Hotel & Resort REITs	16	6	—	1
Health Care REITs	16	2	—	—
Industrial REITs	11	10	4	1
Mortgage REITs	3	—	—	—
Others	3	0	22	—
Total	173	41	28	11

Source: Sample identified by Bloomberg's definitions and classified in accordance with GICS classification from Bloomberg.

3. DEVELOPMENT POTENTIAL OF MAINLAND CHINA REITS

The potential upside for the development of Mainland China REITs, including those issued in onshore and offshore markets, is believed to be very substantial in the light of strong issuer and investor demand. On the issuer side, the financing environment of Mainland real estate developers has been challenging[14] and REITs can provide an alternative funding source complementary to bank loans and bonds. On the investor side, REITs are attractive investment tools for both global and Mainland investors seeking portfolio diversification and passive income.

The first Mainland REIT was issued offshore in Hong Kong in 2005. Since then, a number of offshore Mainland REITs[15] have been issued in Hong Kong and Singapore. These REITs are mainly diversified REITs and retail REITs. However, as discussed in Section 2, the size of offshore Mainland REITs is still very small compared to the respective sizes of the Mainland income-generating property and stock markets.

In the onshore market, REITs emerged as an innovative way of enterprise financing through asset securitisation. The pilot programme of asset securitisation began with credit asset securitisation through banks in 2005, then moved on to enterprise asset securitisation. A number of REIT-similar products (quasi-REITs)[16] were issued in the few years after the issuance of the key set of regulations promoting asset securitisation in November 2014[17]. Quasi-REITs were in the form of private funds holding asset-backed securities on underlying Mainland properties, which included residential mortgage-backed securities and commercial mortgage-backed securities for quasi-REITs. Also included were infrastructure projects in the construction stage and/or without stable income streams. Some of these products are listed as funds on the Shanghai Stock Exchange (SSE) and Shenzhen Stock Exchange (SZSE) but

14 See "Brief analysis series on the liquidity crisis and restructuring of real estate developers — No.3: Analysis of recent policies and trend study of real estate sector" (〈淺析房企流動性危機及重組系列 — 第三篇： 房地產行業近期出台政策解析及趨勢研究〉), published on Deloitte's website, March 2023.

15 Offshore Mainland REITs are REITs issued outside Mainland China where the underlying assets are mainly Mainland properties.

16 See "China REITs: Property landlords to shine", published on DBS' website, May 2018.

17 *Administrative Rules of Asset Securitisation of Business of Securities Companies and Subsidiaries of Fund Management Companies* (《證券公司及基金管理公司子公司資產證券化業務管理規定》), issued by the CSRC, 19 November 2014.

liquidity remains limited as the number of holders are limited to 200[18]. An exit channel for the issuers of these products can be through conversion into a publicly offered REIT (publicly offered REITs are referred to as "public REITs" in short hereinafter) listed on an exchange.

Since 2020, a number of regulations have been issued to support the development of infrastructure REITs[19]. The introduction of the infrastructure REIT is designed to effectively serve the real economy through the capital market, vitalise assets in repository and enrich the financing/investment product suite. The pilot scheme for infrastructure REITs focuses on publicly offered REITs, on market-driven principles, for issuance and listing on exchanges. The underlying infrastructure assets target quality infrastructure assets in focal geographical regions and industries (details to be given in Section 3.1). As there are not yet governing laws in the Mainland for REITs, this pilot scheme of infrastructure REIT serves as a formal REIT regime for regularising development of the sector.

In light of financial uncertainties in the Mainland property market, the issuance of REITs is regarded as a means to vitalise the asset pool of property enterprises to provide financing support.

3.1 Development of onshore Mainland REITs

The launch of a new regime for publicly offered infrastructure REITs listed on exchanges has marked a milestone in the development of the onshore Mainland REIT market.

A series of policies have been introduced to support the development of public infrastructure REITs under the new regime:

- The National Development and Reform Commission (NDRC) expanded the scope of underlying infrastructure projects for REITs from certain regions to nationwide application in June 2021[20].
- The SSE and SZSE issued their respective pilot business guidelines in May 2022 for new acquisitions of underlying infrastructure assets, which cover re-financing, information disclosure and approval processes[21].
- The CSRC and NDRC have added protective-type housing rental REITs to the pilot scheme of public REIT issuance in May 2022 while the SSE and SZSE issued their respective guidelines in July 2022[22]. In March 2023, the NDRC also expanded the eligible

[18] See *Law of the People's Republic of China on Funds for Investment in Securities* (《中華人民共和國證券投資基金法》), issued by the Central Government of People's Republic of China, 28 December 2012; *Interim Measures on the Supervision and Management of Private Investment Funds* (《私募投資基金監督管理暫行辦法》), issued by the CSRC, 21 August 2014.

[19] *Notice on the Work Related to Promoting the Pilot Program of Real Estate Investment Trusts (REITs) in the Infrastructure Field*《關於推進基礎設施領域不動產投資信託基金（REITs）試點相關工作的通知》by the CSRC and the National Development and Reform Commission (NDRC), 24 April 2020; *Notice on Further Effectively Completing the Work of the Pilot Program of Real Estate Investment Trusts (REITs) in the Infrastructure Field* (《關於進一步做好基礎設施領域不動產投資信託基金(REITs) 試點工作的通知》), issued by the NDRC, 29 June 2021.

[20] See *Notice on Further Effectively Completing the Work on the Pilot Programme of Real Estate Investment Trusts (REITs) in the Infrastructure Field* (《關於進一步做好基礎設施領域不動產投資信託基金(REITs)試點工作的通知》), issued by the NDRC, 29 June 2021.

[21] *Notice on Shanghai Stock Exchange Publicly Offered Infrastructure REITs Business Guidelines No.3 — New Acquisition of Infrastructure Projects (Pilot Scheme)* (〈關於就《上海證券交易所公開募集基礎設施證券投資基金（REITs）業務指引第 3 號——新購入基礎設施專案（試行）》的通知〉), issued by the SSE, 31 May 2022; *Shenzhen Stock Exchange Publicly Offered Infrastructure REITs Business Guidelines No.3 — New Acquisition of Infrastructure Projects (Pilot Scheme)* (《深圳證券交易所公開募集基礎設施證券投資基金業務指引第 3 號—新購入 基礎設施項目（試行）》), issued by the SZSE, 31 May 2022.

[22] See *Notice on Related Work on Regulating and Developing the Pilot Issuance of Protective-type Rental Housing* (《關於規範做好保障性租賃住房試點發行基礎設施領域不動產投資信託基金（REITs）有關工作的通知》), issued by the CSRC and NDRC, 27 May 2022; *Publicly Offered Infrastructure REITs Business Guidelines No.4 — Protective-type of Rental Housing (Pilot Scheme)* (《公開募集基礎設施證券投資基金（REITs）業務指引第 4 號——保障性租賃住房（試行）》), issued by the SSE and SZSE respectively, 15 July 2022.

assets for public REITs into consumer-related infrastructure assets (e.g. shopping malls)[23].

- The NDRC issued a policy opinion in October 2022 to support the development of REITs with underlying assets of privately-owned investment projects[24].
- The Ministry of Finance and the State Administration of Taxation introduced policies in January 2022[25] to offer corporate income tax waivers for the process of asset restructuring. This process involves (1) the transfer of infrastructure assets from the original asset owner to a project company before the launch of a REIT, and (2) the transfer of ownership of the project company from the original asset owner to a special purpose vehicle (SPV) held by the REIT when it is established. Under the new rules, the tax on the unrealised gains will be exempted for the transfer of infrastructure in step (1) above while the payment of tax on gains from the transfer of ownership in the project company to REIT in step (2) can be deferred to the time when the REIT's fund-raising process and the transfer payment are completed.
- According to a notice issued by the China Banking and Insurance Regulatory Commission (CBIRC) in November 2021[26], insurance companies are allowed to invest in public REITs.

In 2021, the first batch of nine infrastructure REITs under the new infrastructure REIT regime were listed in the Mainland. By the end of June 2023, a total of 28 REITs were listed on SSE or SZSE (19 on SSE and nine on SZSE) with a total market capitalisation of RMB 87.2 billion, a size that was still negligible compared to the onshore A-share market's total market capitalisation of RMB 64.2 trillion[27].

Of these REITs, most of the original asset owners of underlying infrastructure assets were state-owned enterprises (SOEs) — about 86% by number and 88% by total market value (see Figure 10).

[23] See *Notice on Further Effectively Completing the Work on the Project Reporting and Promotion of Real Estate Investment Trusts (REITs) in the Infrastructure Field*《關於規範高效做好基礎設施領域不動產投資信託基金（REITs）項目申報推薦工作的通知》, issued by NDRC, 1 March 2023.

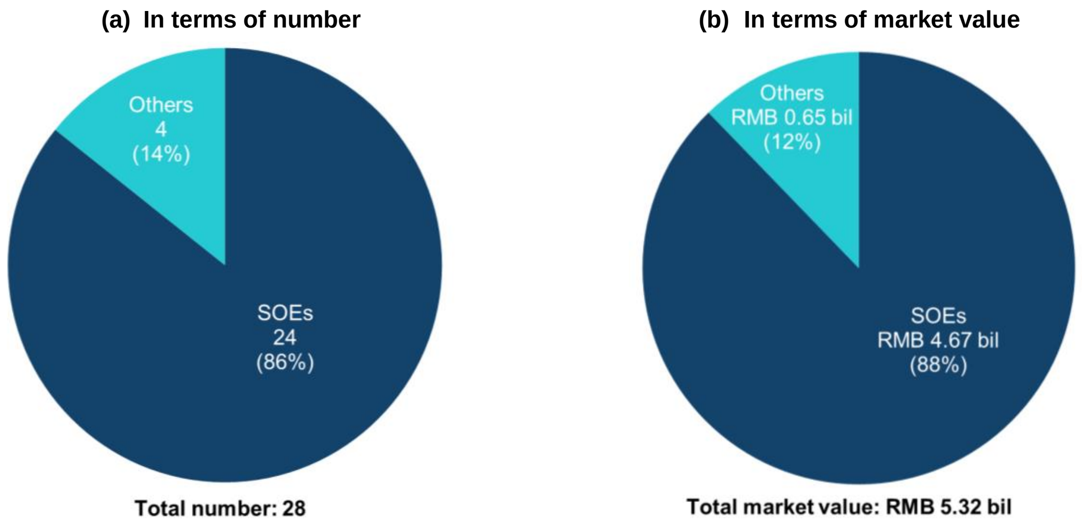
[24] See *Notice on Further Improving the Policy Environment to Strengthen the Support to the Development of Private Investments* (《關於進一步完善政策環境加大力度支持民間投資發展的意見》), issued by NDRC, 28 October 2022.

[25] *Announcement on the Tax Policies of Infrastructure Real Estate Investment Trusts (REITs) Pilot Scheme*《關於基礎設施領域不動產投資信託基金（REITs）試點稅收政策的公告》, issued by the Ministry of Finance and State Taxation Administration, 26 January 2022.

[26] *Notice on Related Issues of Investment of Insurance Capital in Publicly Offered Infrastructure Securities Investment Funds* (《關於保險資金投資公開募集基礎設施證券投資基金有關事項的通知》), issued by the CBIRC, 10 November 2021.

[27] Source: Official statistics from the websites of the SSE and SZSE.

Figure 10. Composition of onshore Mainland REITs by type of original asset owner (end-Jun 2023)

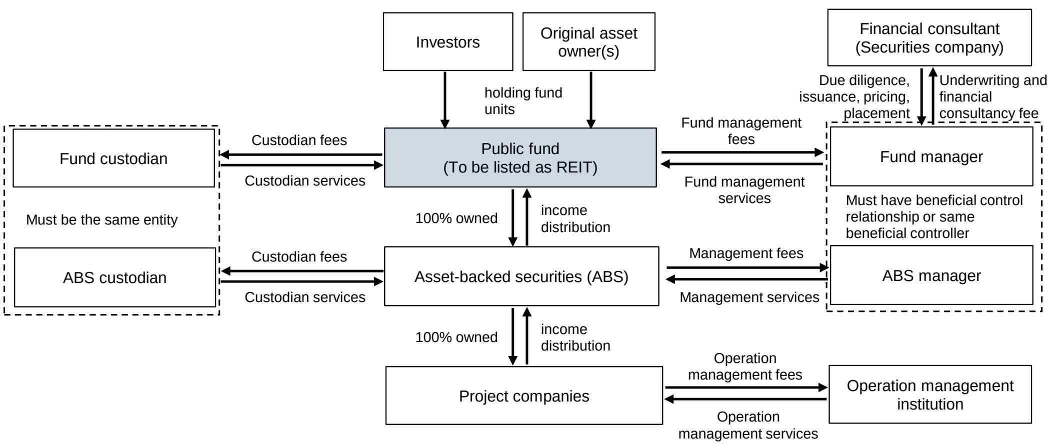


Note: The classification of original asset owners is based on Wind's definitions.

Source: The list of REITs is obtained from Wind. Market values are calculated based on the data of individual REITs obtained from Bloomberg.

The public infrastructure REITs are issued in the form of publicly-offered funds holding asset-backed securities (ABSs) on infrastructure assets held through project companies (see Figure 11). These funds will be listed and traded on stock exchanges.

Figure 11. Illustrative diagram of the structure of public infrastructure REITs in the Mainland

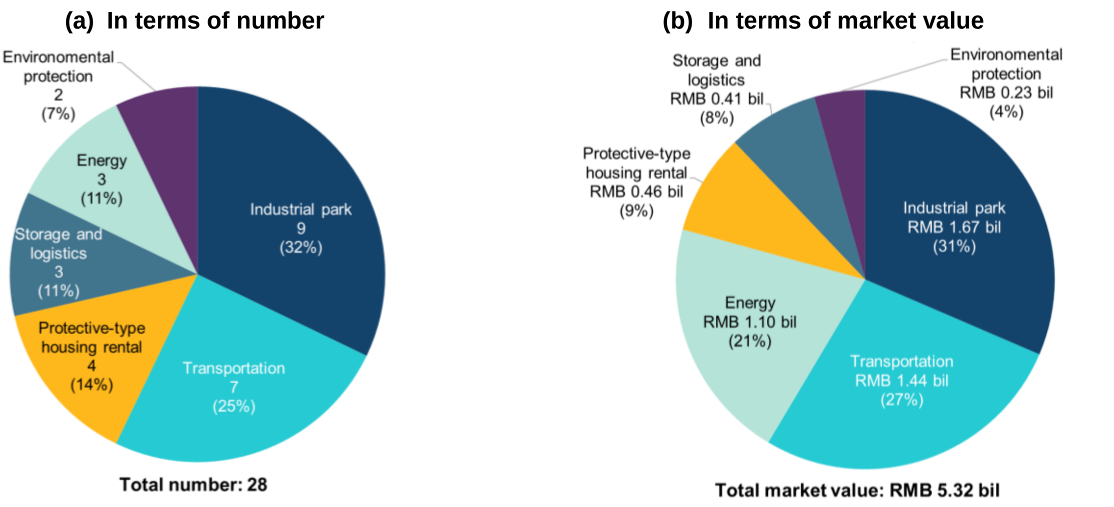


Source: "Introduction of public infrastructure REITs" (〈基礎設施公募 REITs 介紹〉), webpage on the SSE's website, viewed on 19 July 2023.

The eligible types of properties for public infrastructure REITs include transportation infrastructure facilities, energy infrastructure facilities, municipal infrastructure facilities, environmental protection infrastructure facilities, storage and logistic infrastructure facilities, industrial park infrastructure facilities, innovative infrastructure facilities (e.g. data centres), protective-type housing rentals and other pilot sectors. Industrial park and transportation are the most popular types of infrastructure asset for public REITs in the Mainland (see Figure 12).

In addition, the market expects that the addition of REITs on retail properties (such as shopping malls) will support the development of the onshore REIT market[28].

Figure 12. Composition of onshore Mainland REITs by type of underlying asset (end-Jun 2023)



Note: The classification of underlying assets is based on Wind's definitions.

Source: The list of REITs is obtained from Wind. Market values are calculated based on the data of individual REITs obtained from Bloomberg.

Depending on the nature and operating model of the underlying properties, the risk-return characteristic of infrastructure REITs vary across types of underlying property. For REITs involving management rights of infrastructure properties (e.g. roads and railways, water and waste management, and energy plants), the income stream and management costs tend to be relatively stable. For REITs involving the operation of physical properties (e.g. logistics warehouses and industrial parks) which rely on active management to generate income and control costs, they would have less predictable dividend payouts and higher price volatility.[29]

The pilot scheme for public infrastructure REITs substantially revitalises the Mainland infrastructure asset market. The original owners of infrastructure assets can offload and regenerate their holdings to free up capital for new investments. In addition, this pilot scheme has opened up a new funding channel for companies holding certain infrastructure assets which often relied on debt financing in the past given the nature of the assets. For example, despite relatively stable cash flows from the operation of highways, the management rights of highways are subject to fixed tenures, such that the company owning the management rights will have their asset values (i.e. value of the cash flows) amortised to zero over time if there are no new assets added to their portfolio; the initial public offering (IPO) for this kind of company is therefore challenging[30]. The pilot scheme enables such companies to raise funds through the issuance and listing of public REITs.

However, the issuance of infrastructure REITs is not a panacea to address the financing problems of all types of infrastructure asset owners. Take REITs on highways as an example,

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28 See "Big announcement of two authorities! Department stores, shopping malls can also be the underlying of REITs, a big positive news for commercial real estate" (〈兩部委重磅發文！百貨商場、購物中心也可發行 REITs，商業地產迎重大利好〉), *Sina.com.cn*, 28 March 2023.

29 See "First article on the series of REITs' underlying assets — Different behaviours of seven types of underlying assets" (〈REITs 底層資產系列之開篇 —— 七大類底層資產的不同玩法〉), published on Jones Lang LaSelle's website, 27 April 2021.

30 See "Brief analysis of infrastructure REITs supporting the green and low-carbon development of highways" (〈基礎設施 REITs 支持高速公路綠色低碳發展簡析〉), published on the International Institute of Green Finance's website, 28 April 2023.

a class which accounted for about half of the dividend distribution of public infrastructure REITs in 2022[31]; challenges include:

- **Maturity mismatch between REITs and infrastructure assets:** The management rights related to highways usually remain in force for a specified period, such as for 25 or 30 years, but a REIT pays dividends regularly, as under a perpetual bond. The net asset value of a REIT on management fees of a given highway asset (i.e. the future income stream from the management fees) would be reduced every year down to zero by the time the management right expires and therefore would not be able to sustain the dividend payments perpetually unless new assets are acquired.
- **Uncertainty in acquiring new types of underlying assets:** In cases where a given REIT needs to acquire new infrastructure assets, the exchanges[32] require the "same type" of assets to be acquired. According to an analysis by Deloitte (referred to as "Deloitte Analysis")[33], original asset owners usually manage multiple types of infrastructure assets and the definition of "same type" of assets may need further clarification.
- **Transfer of state-owned assets:** Where highways are owned by the State, which is usually the case, the actual owner of these assets must not be changed in the asset restructuring process for creating the REIT so as to avoid the loss of the State's controlling rights on the assets. As this is not explicitly stipulated in existing rules, the issuance of the REIT will need to seek approval from local regulators.
- **Constraints on refinancing:** Financial leverage is subject to a cap of 140% on the ratio of total assets to net assets[34]. Moreover, there is still uncertainty over the time taken for the entire process of the issuance of new units for refinancing (involving application, registration, review and approval or other formalities). The first batch of refinancing took more than a year to complete after the refinancing rules had been implemented[35].
- **Management of the underlying real estate assets:** According to the Deloitte Analysis, a REIT fund manager is responsible for the management of the underlying infrastructure assets under the pilot scheme. As fund managers may have limited experience in managing real assets, they usually entrust the original asset owners to manage these assets. Furthermore, fund managers usually do not have the expertise to assess the performance of the original asset owners nor the network to seek other competent entities to be their asset managers. Such circumstances may limit the potential to improve the business performance and hence the valuation of the underlying real estate assets.
- **Uncertainty on tax treatment of asset restructuring:** Although the Mainland authorities have clarified the issues of corporate income tax applicable for original asset owners during the restructuring process[36], the Deloitte Analysis highlighted that this special tax treatment may apply to certain types of restructuring only and that the collection of taxes other than corporate income tax (e.g. value added tax) needs further clarification.

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31 Ditto.

32 *Notice on Shanghai Stock Exchange Publicly Offered Infrastructure REITs Business Guidelines No.3 — New Acquisition of Infrastructure Projects (Pilot Scheme)* (〈關於就《上海證券交易所公開募集基礎設施證券投資基金（REITs）業務指引第 3 號——新購入基礎設施專案（試行）》的通知〉), issued by the SSE, 31 May 2022; *Shenzhen Stock Exchange Publicly Offered Infrastructure REITs Business Guidelines No.3 — New Acquisition of Infrastructure Projects (Pilot Scheme)* (《深圳證券交易所公開募集基礎設施證券投資基金業務指引第 3 號——新購入 基礎設施項目（試行）》), issued by the SZSE, 31 May 2022.

33 See Deloitte, *Report on the Development of REITs in China* (《中國 REITs 發展報告》), published on Deloitte's website, July 2023.

34 See *Guidelines on the Publicly Offered Infrastructure REIT (Pilot Scheme)* (《公開募集基礎設施證券投資基金指引（試行）》), issued by the CSRC, 6 August 2020.

35 See "CICC: REITs — Review of the first refinancing of China public REITs" 〈中金 • REITs | 中國公募 REITs 首次擴募回顧與反思〉, *Sina.com.cn*, 13 July 2023.

36 See *Notice on the Tax Policies for the Infrastructure REITs (Pilot Scheme)* (〈關於基礎設施領域不動產投資信託基金（REITs）試點稅收政策的公告〉), jointly issued by the Ministry of Finance and the State Administration of Taxation, 26 January 2022.

For the future, it is expected that the Mainland REIT regulatory regime will continue on its development path. According to the CSRC, these developments will include improving the timeliness and accuracy of information disclosure, promoting investments of Mainland long-term capital (e.g. social security funds, pensions and corporate annuities) in REITs, as well as exploring the possibility of market connectivity for REITs between Mainland China and Hong Kong to further expand the investor base[37]. These will pave the way for legislation and subsequent laws governing REITs in the Mainland.

3.2 Potential opportunities for offshore Mainland REITs

Offshore Mainland REITs are complementary to onshore Mainland REITs for meeting the financing demand of Mainland asset owners and investment demand of global investors.

From Mainland asset owners' perspective, offshore Mainland REITs may cover a wide range of property types, not being limited to infrastructure projects as in the onshore market. In offshore markets, there are usually no specific requirements on the types of underlying properties eligible for securitisation. For example, Hong Kong and Singapore only require the underlying properties to be income-generating and there are no special listing or issuance requirements for specific types of REIT[38]. Therefore, the potential for the issuance of offshore Mainland REITs could be very high, given the market size of income-generating properties in the Mainland.

In addition, the financial leverage of onshore Mainland REITs is currently subject to a cap of 140% on the ratio of total assets to net assets[39] (equivalent to about 28.6% for gearing ratio, i.e. total liabilities to total assets). This is compared to a cap of 50% for the gearing ratio of REITs in Hong Kong and Singapore[40]. The greater flexibility of financial leverage for offshore Mainland REITs provides a larger potential financing capacity for the original property owners to acquire additional underlying properties.

From the perspective of global investors, Mainland REITs are attractive products for diversifying their portfolios with exposures to Mainland properties and RMB-denominated dividend income streams. While global investors only have limited access to onshore Mainland REITs[41], they are free to invest in a wide range of offshore Mainland REITs.

Currently, offshore Mainland REITs are mainly issued and listed in Hong Kong and Singapore[42]. In fact, the first Mainland REIT was an offshore REIT issued in Hong Kong in 2005. Hong Kong is one of the Asian markets with a long history of adopting REIT rules. By 2020, over 40 markets globally have established their own REIT rules, while Mainland China officially introduced its pilot rules on REITs only in 2020 (see Table 4).

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37 See "CSRC's Zhou Xiaozhou: The legislation on REITs will be accelerated and the introduction of company-based REITs is under study" (〈證監會周小舟：將加快 REITs 專項立法，研究推出公司型 REITs〉), *21st Century Business Herald*, 6 July 2023.

38 See Chapter 20, "Investment vehicles: Authorised collective investment schemes", in the *Main Board Listing Rules* of the Stock Exchange of Hong Kong and Chapter 4, "Investment funds", in the *Mainboard Rules* of the Singapore Exchange.

39 See *Guidelines on the Publicly Offered Infrastructure REIT (Pilot Scheme)* (《公開募集基礎設施證券投資基金指引（試行）》), issued by the CSRC, 6 August 2020.

40 See "Hong Kong REITs regime", published on the website of the Securities and Futures Commission (SFC), June 2021; "New measures to help REITs navigate operating challenges posed by COVID-19", news release on the website of the Monetary Authority of Singapore, 16 April 2020.

41 Currently, onshore Mainland REITs are only accessible by Qualified Foreign Institutional Investors (QFIIs) but not through Northbound Stock Connect.

42 See "Chinese domestic enterprises path to REIT offerings and listings in Hong Kong SAR", published on King & Wood Mallesons' website, 17 May 2021.

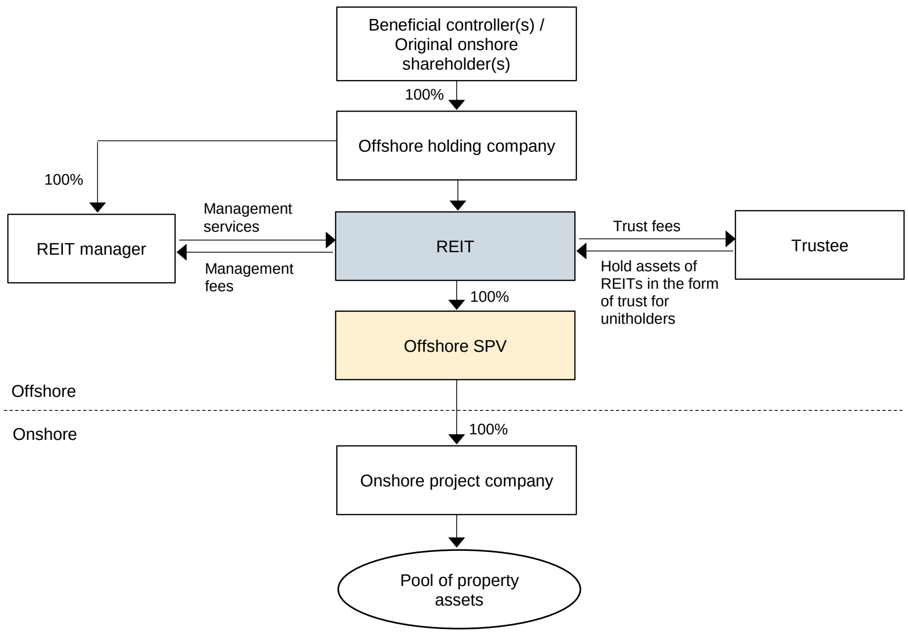
Table 4. Jurisdictions with REIT rules established

Year of establishment of REIT rules	Jurisdictions
1960 – 1969	Netherlands, New Zealand, United States
1970 – 1989	Australia
1990 – 1999	Belgium, Brazil, Canada, Greece, Singapore, Turkey
2000 – 2009	Bulgaria, Costa Rica, Finland, France, Germany, Hong Kong, Israel, Italy, Japan, Malaysia, Pakistan, South Korea, Spain, Taiwan, Thailand, United Arab Emirates, United Kingdom
2010 – 2019	Bahrain, Hungary, India, Ireland, Kenya, Mexico, Oman, Philippines, Portugal, Saudi Arabia, South Africa, Vietnam
2020	Mainland China, Sri Lanka

Source: "Revitalisation of Hong Kong's real estate investment trusts market — promoting liquidity", Financial Services Development Council (FSDC) *Paper No.48*, published on FSDC's website, May 2021.

The structure of an offshore Mainland REIT usually involves an offshore Special Purpose Vehicle Fund (SPV) held by the REIT, which in turn holds onshore project companies of the underlying properties (see Figure 13). An external management institution (the "REIT manager") is responsible for managing the underlying assets and it may charge management fees at a fixed ratio of net income/net assets[43].

Figure 13. Illustrative diagram of a common structure of offshore Mainland REITs



Source: King & Wood Mallesons, "Path for onshore enterprises to issue and list REITs in Hong Kong" (〈境內企業於香港發行REITs 及上市之路〉), *KWM Insights*, Issue 09, June 2021.

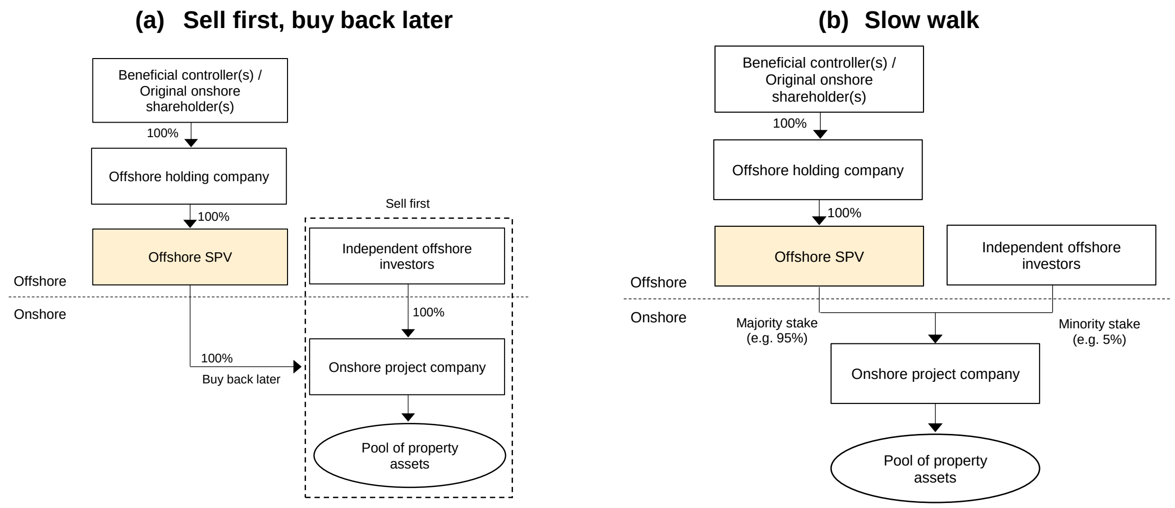
[43] See Deloitte, *Report on the Development of REITs in China* (《中國 REITs 發展報告》), published on Deloitte's website, October 2021.

The creation of an offshore Mainland REIT for issuance and listing involves an asset restructuring process to transfer the ownership of onshore assets to an offshore SPV. In Hong Kong, the costs of restructuring could be paid by the IPO funds raised after listing (instead of being paid before IPO for listing of equities)[44] and 70% of the issuance fees will be subsidised by the Hong Kong Government (see Section 3).

From the existing cases in Hong Kong and Singapore, there are two common ways for the restructuring — "sell first, buy back later" (「先賣出再買入」) and "slow walk" (「兩步走」) (see Figure 14):

- For "sell first, buy back later", the onshore project company is sold to an independent offshore entity to be bought back by an offshore SPV. A full payment of company value is required at the outset for the purchase of the onshore project company.
- For "slow walk", step one involves selling a minor stake to (with funds raised from) an independent offshore entity, with the onshore project company first becoming a joint venture of onshore and offshore entities. Step two involves selling the remaining stake of the onshore project company to the offshore SPV. As only a minor proportion of the shares of the onshore project company will be sold to independent offshore investors, the restructuring cost should be lower than the option to "sell first, buy back later", but the restructuring process may take longer to complete.

Figure 14. Illustrative diagrams of the common ways of asset restructuring for creation of offshore Mainland REITs



Source: King & Wood Mallesons, "Path for onshore enterprises to issue and list REITs in Hong Kong" (〈境內企業於香港發行 REITs 及上市之路〉), *KWM Insights*, Issue 09, June 2021.

Compared to the emerging REIT market in the Mainland, the well-developed regulatory regimes of REITs in the offshore markets provide clarity in market regulation and operation for the participation of issuers and investors (see Table 5).

[44] See King & Wood Mallesons, "Path for onshore enterprises to issue and list REITs in Hong Kong" (〈境內企業於香港發行 REITs 及上市之路〉), *KWM Insights*, Issue 09, June 2021.

Table 5. Brief comparison of the REIT regimes in Mainland China and Hong Kong / Singapore

Feature	Mainland	Hong Kong / Singapore
Structure	Public fund + ABS	Trust
Underlying asset	Infrastructure assets only (which include beneficiary rights)	Income-generating properties without specific restrictions on asset types
Manager of underlying asset	ABS manager or external management institution entrusted by the fund company	Usually a subsidiary of the original asset owner
Leverage (ratio of total liabilities to total assets)	Cap at about 28.6% (140% for the ratio of gross assets to net assets)	Cap at 50%
Holding by the original asset owner	At least 20%	No limits

Source: Deloitte, *Report on the development of REITs in China* (《中國 REITs 發展報告》), published on Deloitte's website, July 2023; *EPRA Global REIT Survey 2022*, published on the EPRA's website; "Revitalisation of Hong Kong's real estate investment trusts market — promoting liquidity", *FSDC Paper No.48*, published on FSDC's website, May 2021.

Moreover, a simple taxation system such as that in Hong Kong will be a strong supporting factor[45]. Clarity regarding taxation would increase the predictability of the tax impact on returns. Favourable tax arrangements for offshore Mainland REITs can contribute to reducing REITs' operating costs and increasing their distributable income, thereby increasing their attractiveness to investors. Therefore, exploration may be needed on further tax concessions for offshore Mainland REITs to support their development.

4. THE ROLE OF THE HONG KONG MARKET IN DRIVING THE DEVELOPMENT OF OFFSHORE MAINLAND REITS

Investors usually prefer assets with which they are familiar, and so REIT investors tend to focus on the underlying markets and property types familiar to them. Therefore, REITs covering domestic properties usually account for a large market share in a domestic REIT market. However, in cases where the domestic REIT market cannot adequately meet the financing demand of domestic property asset owners (as with the emerging REIT market in the Mainland), offshore issuance and listing of REITs will serve their needs.

Hong Kong and Singapore are examples of offshore markets for the listing of Mainland REITs. As far as is known, there were five offshore Mainland REITs listed respectively in Hong Kong and Singapore[46], with those listed in Hong Kong having a larger aggregate market value than those listed in Singapore (about US$2.9 billion versus US$2.4 billion[47]). Offshore Mainland REITs also accounted for a larger market share of the REIT market in Hong Kong than in Singapore — 13.2% of the total market value of H-REITs versus 3.3% for S-REITs[48].

For Hong Kong, the ratio of the REIT market value to stock market capitalisation is currently very small while the size of the domestic property market is limited, so there could be considerable growth potential to be driven by the issuance of offshore Mainland REITs.

[45] See "Revitalisation of Hong Kong's real estate investment trusts market — promoting liquidity", *FSDC Paper No.48*, published on FSDC's website, May 2021.

[46] The offshore Mainland REITs listed in Hong Kong (at the end of June 2023) are Yuexiu REIT, Spring REIT, CMC REIT, SF REIT and Hui Xian REIT (source: HKEX). Those listed in Singapore are CapitaLand Retail China Trust, Sasseur REIT, Dasin Retail Trust, EC World REIT and BHG Retail REIT (source: "Highlights of SGX's Five China-Focused REITs", published on SGX's website, 16 December 2020).

[47] The aggregate market values were calculated by summing the market values of individual offshore Mainland REITs listed in Hong Kong and Singapore as obtained from Bloomberg, as of end-June 2023.

[48] The total market values of REITs in the two markets were calculated by summing the market values of individual REITs listed in the respective markets as obtained from Bloomberg, as of end-June 2023.

In fact, with supportive policy measures alongside international and Mainland market connectivity, the Hong Kong market provides a favourable platform for the listing and trading of offshore Mainland REITs, as discussed in the following sub-sections.

4.1 Facilitating the offshore issuance of Mainland China REITs

In Hong Kong, REITs are required to be listed on the Stock Exchange of Hong Kong (SEHK) and distribute not less than 90% of net income after tax to unit holders as dividends. In December 2020, the Securities and Futures Commission (SFC) revised the regulatory regime for issuing REITs[49]. Key changes include:

- Allowing investments in minority-owned properties to be regarded as Core Rental Income Generating Investments;
- Relaxing the limit on investments in property development projects from 10% to 25% of total gross asset value (GAV); and
- Relaxing the limit on borrowings to its total gross asset value (i.e. the gearing ratio) from 45% to 50%.

The revised regime allows more flexibility for REITs to invest. In the down cycle of the real estate market, properties or development projects may become undervalued while the financing conditions are usually tight, as in the case of Mainland China. The revised regime allows REITs to increase financial leverage for making new investments in potentially undervalued properties or development projects. For Mainland real estate developers, H-REITs may serve as an alternative funding channel to meet their funding needs for new investments, especially in a down cycle.

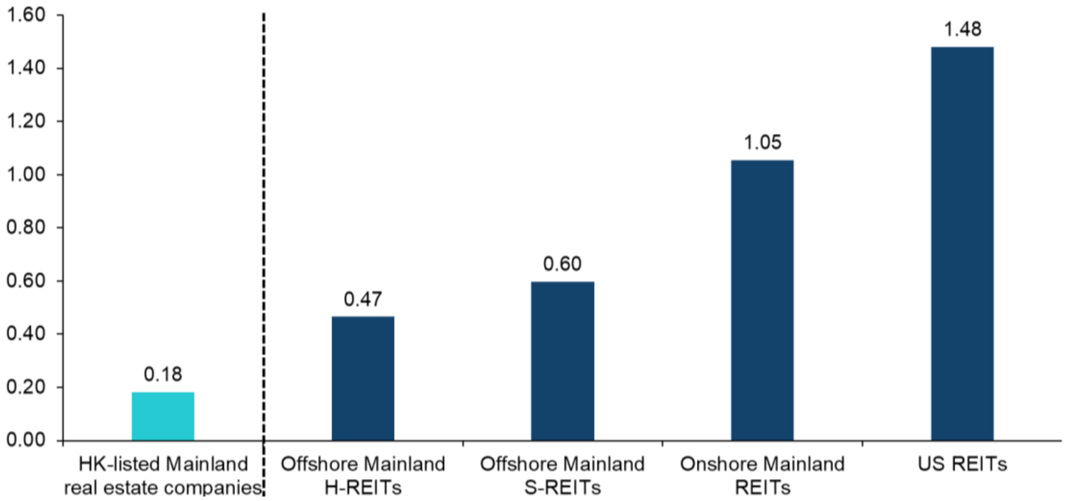
Restructuring costs are of particular concern for offshore Mainland REITs, as the costs of transferring the ownership from an onshore entity to an offshore entity can be significant. To promote the development of the REIT industry in Hong Kong, the Hong Kong Government will provide subsidies to REIT issuers until 2024 to cover up to 70% of eligible professional services expenses for listing REITs in Hong Kong. These expenses must be paid to Hong Kong-based service providers, including those offering legal and accounting services.

The valuations and yields demanded by investors, and tax arrangements of REITs, may also have cost implications. That is because these aspects will affect the net amount of funds raised and the annual expenses to be paid by the issuer.

Valuation and yield are factors not readily controllable by the issuers, as they are highly sensitive to market conditions and the type of the underlying properties. In the midst of the recent down cycle of the Mainland properties market, the median valuation (measured by price-to-book ratio) of offshore Mainland H-REITs was relatively low at the end of June 2023, compared to that of other markets like offshore Mainland S-REITs and US REITs (see Figure 15). The Mainland valuation gap was also partly attributable to the difference in the composition of REITs by type across markets — offshore Mainland H-REITs are mainly retail REITs and office REITs which usually have lower valuation compared to other types of REITs (see examples for the US in Section 1). It is worth noting that the median valuation of Hong Kong-listed Mainland real estate equities was lower than that of offshore Mainland H-REITs at the end of June 2023.

49 See *Code on Real Estate Investment Trusts*, issued by the SFC, December 2020; "Hong Kong REITs regime", presentation material published on the SFC's website, June 2021.

Figure 15. Comparison of the median P/B ratios of Mainland REITs and US REITs with Hong Kong-listed Mainland real estate companies (end-Jun 2023)



Source: Calculated based on the P/B ratios of individual REITs/stocks as obtained from Bloomberg.

On the other hand, taxation costs are determined by the tax regime of the particular jurisdiction, so this is a factor that is controllable by the market regulator and/or the government which may impose tax incentives to encourage the issuance of REITs. The taxation costs include taxes related to the restructuring and acquisition of properties, taxes on capital gain and dividend income, and income/profit taxes.

The tax regime within the Hong Kong market is simple and does not impose capital gains tax and dividend tax at the REIT level, while the tax treatments of REITs in Hong Kong are comparable to those in Singapore[50].

In summary, flexibility in financing and investment, and competitive issuance costs, would be key attractions for Mainland property asset owners to issue offshore REITs in the Hong Kong market. There are also the added advantages offered by Hong Kong as an international financial centre providing professional services, international standards and a global investor base.

In addition, the Hong Kong REIT market's sustainable vitality is assured by continuous market innovations supported by a flexible regime. This is considered to be crucial for the development of offshore Mainland REITs. Indeed, the world's first RMB-denominated offshore Mainland REIT was launched in Hong Kong in 2011; and the first REIT ETF covering Asia-Pacific REITs was launched in Hong Kong in 2020, having dual trading counters in the Hong Kong dollar and US dollar. These have enriched the REIT-related product ecosystem in Hong Kong for investors' portfolio diversification and provided multiple currency exposures for meeting their needs. Another supportive initiative is the inclusion of REITs as eligible constituents of the Hang Seng Indexes starting from 2014 and featuring the Hang Seng REIT Index. The first REIT inclusion in the Hang Seng Index took place in November 2014, followed by the first REIT inclusion in the Hang Seng Composite Index in March 2015[51].

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50 See "Revitalisation of Hong Kong's real estate investment trusts market — promoting liquidity", *FSDC Paper No.48*, published on FSDC's website, May 2021.

51 See "Hang Seng Indexes announces index review results", news releases on Hang Seng Indexes Company's website, 7 November 2014 and 13 February 2015 respectively; "Hong Kong REIT seeks thumbs up from Hang Seng", published on Asia Asset Management's website, 7 November 2014.

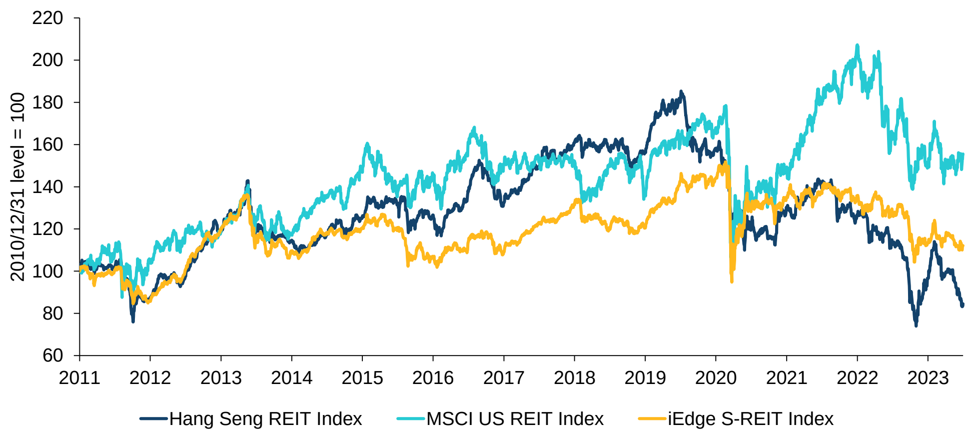
4.2 Facilitating the offshore investment in Mainland China REITs

From the investor perspective, offshore Mainland REITs provide another option for investment in the Mainland property market, in addition to onshore/offshore Mainland real estate equities and onshore REITs, to address their portfolio diversification needs.

As REIT investors tend to pursue long-term passive income (such as long-only funds), they are interested in long-term price returns and dividend yields. Brief analyses in respect of these performances have been carried out on the major indices of H-REITs, S-REITs and US REITs and the results are presented below.

- **Price performance**: Given the different business cycles and composition of REITs by type between the markets in the US, Hong Kong and Singapore, the price performance of REITs in these markets experienced different trends during the period 2011 to June 2023, as reflected by the daily movements of their respective, representative indices — Hang Seng REIT Index for H-REITs, MSCI US REIT Index for US-listed REITs and iEdge S-REIT Index for S-REITs (see Figure 16). The daily returns of the Hang Seng REIT Index was found to have very low correlation with those of the MSCI US REIT Index (a correlation coefficient of 0.15 for the period 2011 to June 2023) and only moderate correlation with those of the iEdge S-REIT Index (a correlation coefficient of 0.53 for the same period) (see Appendix).

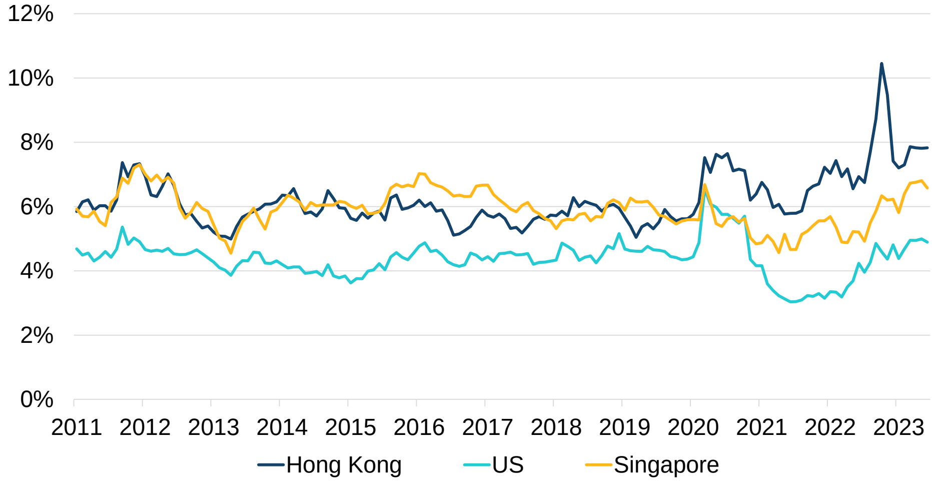
Figure 16. Daily movements of REIT indices on Hong Kong, Singapore and the US markets (2011 – Jun 2023)



Source: Bloomberg.

- **Dividend yield**: During the period 2011 to June 2023, the median dividend yield for H-REITs was consistently higher than that for REITs listed in the US, and also higher than that for S-REITs since 2020 (see Figure 17).

Figure 17. Median dividend yields of REITs listed in Hong Kong, Singapore and the US (2011 – Jun 2023)



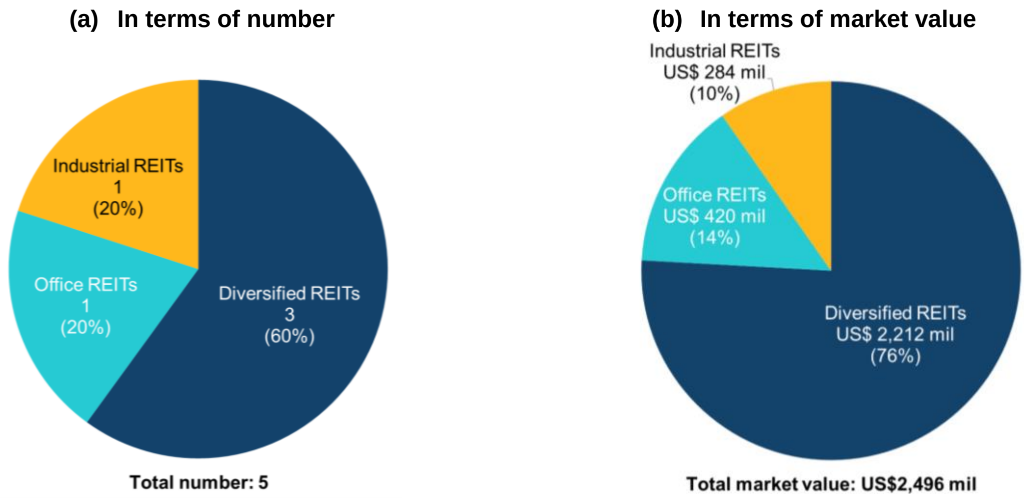
Note: Only REITs with available data are included in the analysis.

Source: Calculated based on the dividend yields of individual REITs from Bloomberg.

The different price movements of REITs in different markets and their relatively low correlations in fact represent the varying investment opportunities offered by the differing types of REITs listed in different markets. For passive income investors, dividend payout over time may be a more important factor than price return for consideration of investments in REITs. That said, the stable and relatively high dividend yield of H-REITs would be attractive to passive income investors. In addition, tax considerations provide another factor. While there is no dividend tax in Hong Kong and taxes on dividends are exempted for S-REITs, a tax rate of up to 30% is levied on the dividend income received by foreign investors in the US, subject to their eligibility for tax reduction or exemption[52]. This may explain why US REITs have persistently lower dividend yields when compared to H-REITs and S-REITs.

Taking a closer look at the offshore Mainland REITs listed in Hong Kong, there are three types of offshore Mainland REITs, namely diversified REITs, office REITs and industrial REITs (see Figure 18).

Figure 18. Composition of offshore Mainland REITs in Hong Kong by type (end-Jun 2023)

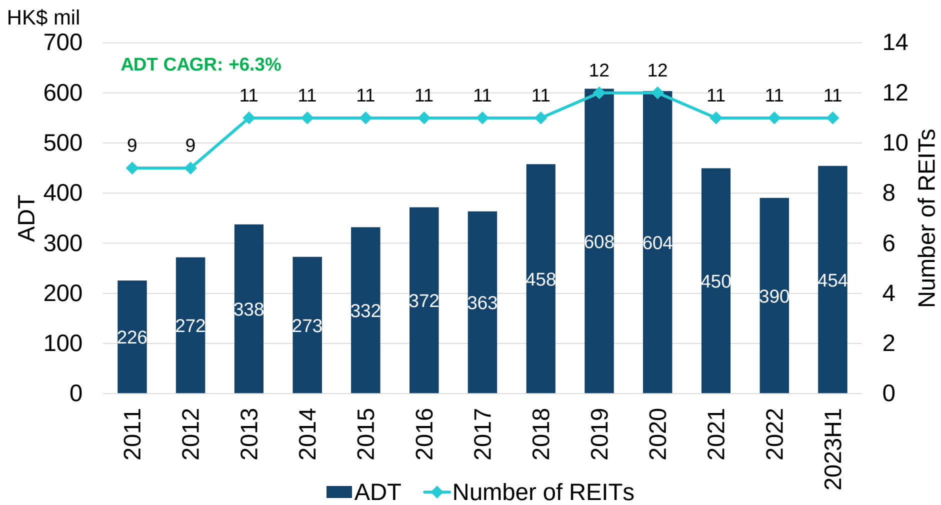


Source: The list of REITs is obtained from HKEX. Market values are calculated based on the data of individual REITs obtained from Bloomberg.

52 See *EPRA Global REIT Survey 2022*, published on EPRA's website.

For trading activities, the turnover of H-REITs has been growing steadily over time, indicating increasing investor interest/demand. During the period 2011 to the first half of 2023 (2023H1), the average daily trading value (ADT) achieved a compounded annual growth rate (CAGR) of about 6.3% (see Figure 19).

Figure 19. Number and ADT of H-REITs (2011 – 2023H1)



Source: Data of 2011 to 2022 from HKEX Fact Book, issues of 2011 to 2022; data of 2023H1 are calculated based on the data of individual REITs from Bloomberg.

Further development of the investor base in Hong Kong in breadth (scale) and depth (sophistication) is expected to enhance the liquidity of H-REITs. In this regard, the investment cap of Hong Kong Mandatory Pension Funds (MPFs) on H-REITs was removed in 2020[53], facilitating the participation of MPFs in H-REITs.

Hong Kong has a developed REIT market with high investor awareness. According to a survey of Hong Kong investors in 2022[54], the Hong Kong REIT market registers the highest level of awareness at 75%, compared to the US (40%), the Mainland (34%) and others. The survey also noted that the key factors for investment in REITs include a high payout ratio, an optimistic outlook on the real estate market, and ease of buying and selling.

Offshore Mainland REITs can better leverage the Hong Kong market for attracting global investments to tap into China's property market.

4.3 Potential market connectivity between REIT markets in Mainland China and Hong Kong

In 2023, Mainland and Hong Kong regulators disclosed that they have started to explore the expansion of market connectivity into REITs[55]. In the meantime, the regulatory regime for REITs will be further developed in the Mainland and market enhancements (e.g. the addition of RMB counters for all H-REITs) will support the development of the Hong Kong REIT market.

53 See "MPFA blog – Strengthening MPF investment solutions to help increase retirement savings for scheme members", news release on Mandatory Provident Fund Schemes Authority's website, 7 June 2020.

54 See "A survey on REIT investors in Hong Kong", published on the Hong Kong REITS Association Limited's website, August 2022.

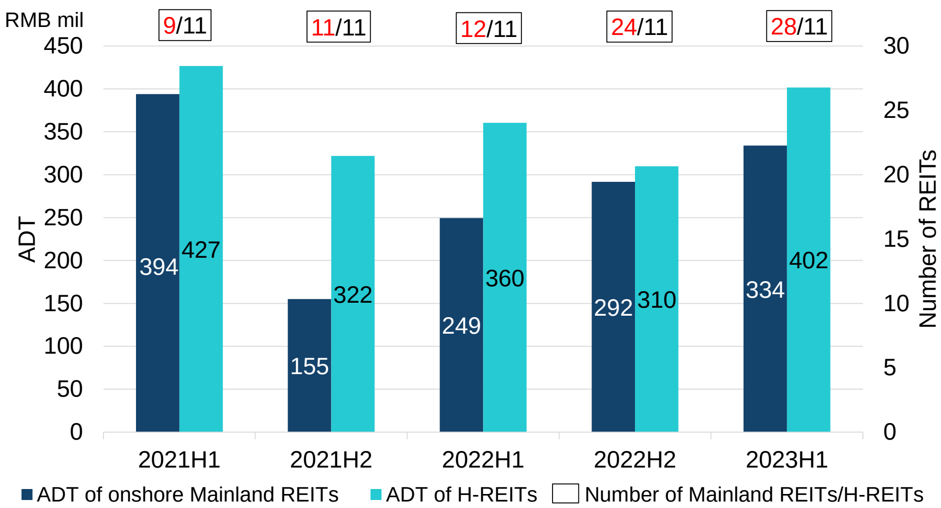
55 See "CSRC's Zhou Xiaozhou: The legislation on REITs will be accelerated and the introduction of corporate-type REITs is under study" (〈證監會周小舟：將加快 REITs 專項立法，研究推出公司型 REITs〉), *21st Century Business Herald*, 6 July 2023; "SFC: Continue to explore the market connectivity of REITs with the Mainland"〈證監會：續與內地探討 REITs 互聯互通〉, *Hong Kong Economic Journal*, 16 May 2023.

The Hong Kong market is an established investment hub for global and Mainland investors, with the role further strengthened by the Stock Connect schemes. According to a FSDC report[56], the inclusion of REITs into Stock Connect will not only increase the liquidity of REITs, but also facilitate the cross-border investment flows in REITs. Market connectivity is expected to widen the investor base in the respective markets. Along with the growth in liquidity, more issuers would be attracted to issue REITs in the Mainland and Hong Kong markets.

The ADT of both onshore Mainland REITs and H-REITs have been increasing since 2021H2 and reached RMB 334 million for onshore Mainland REITs and RMB 402 million for H-REITs in 2023H1 (see Figure 20). Over the period from 2021H1 to 2023H1, the ADT of H-REITs have stayed higher than that of onshore Mainland REITs. The number of onshore REITs has grown from nine at the end of 2021H1 to 28 at the end of 2023H1, while the number of H-REITs remained at 11 over the period. In other words, investors in Hong Kong have shown much stronger trading demand for REITs as measured by ADT per REIT — RMB 36.5 million per H-REIT versus RMB 11.9 million per onshore REIT in 2023H1, an increase of 25% for H-REIT versus a decrease of 16% for onshore Mainland REITs from the levels in 2021H2.

In particular, of the 11 REITs listed in Hong Kong at the end of June 2023, one is traded in RMB counter only. This single RMB REIT[57] constituted 5% of the total turnover value in RMB during 2023H1 of all RMB securities traded on HKEX (170 in total number at the end of June 2023)[58]. This suggests that there exists considerable investor demand for RMB REITs. Cross-border trading in REITs, if enabled under Stock Connect and accessible through RMB counters, is expected to drive up liquidity.

Figure 20. ADT of onshore Mainland REITs and H-REITs (2011H1 – 2023H1)



Note: The first batch of nine REITs in the Mainland were launched on 21 June 2021.

Source: For Mainland, calculated based on the turnover value of individual REITs as obtained from Bloomberg. For Hong Kong, calculated based on the turnover value in HKD of individual REITs (converted into RMB based on the daily average exchange rate of HKD/CNY in each period) as obtained from Bloomberg.

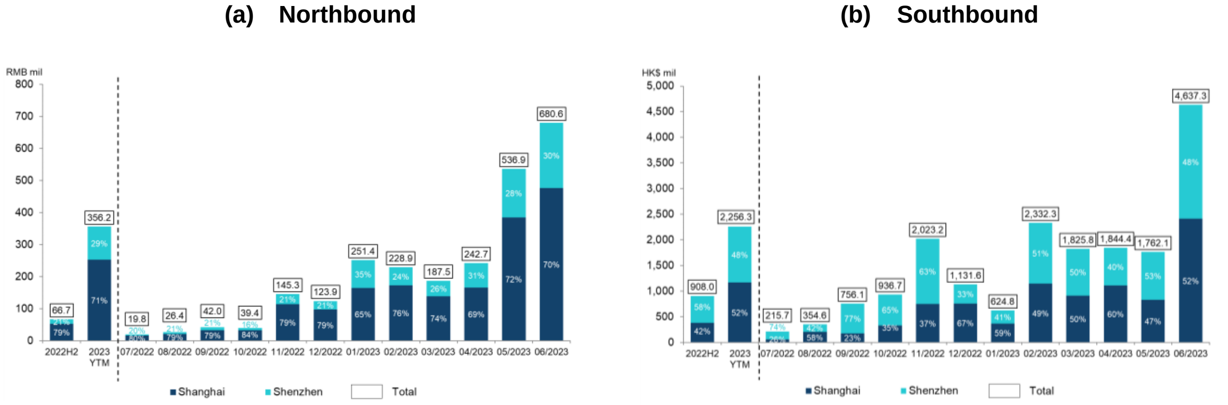
Stock Connect is a scalable mechanism, the scope of which can be expanded at suitable times to accommodate investor needs. In addition to equities, the scope of Stock Connect has been expanded to include ETFs since July 2022 and the turnover of ETFs in both Northbound and Southbound trading has picked up gradually (see Figure 21).

56 See "Revitalisation of Hong Kong's real estate investment trusts market — promoting liquidity", *FSDC Paper No.48*, published on FSDC's website, May 2021.

57 Hui Xian Real Estate Investment Trust (stock code: 87001).

58 Source: HKEX.

Figure 21. ADT value of ETFs in Northbound and Southbound trading under Stock Connect (Jul 2022 – Jun 2023)



Note: Trading value includes buy and sell; percentages are the respective shares of Shanghai and Shenzhen.
Source: HKEX.

With reference to the success of including ETFs in Stock Connect, the liquidity of REITs listed in the Mainland and Hong Kong markets is expected to be boosted over time (should REITs be included in the scheme) because of the expansion of the investor base for both markets.

Southbound, the resultant enhanced liquidity in the Hong Kong REIT market would increase Hong Kong's attractiveness as a global REIT hub, to better serve, for example, the infrastructure projects under the "Belt and Road" initiative. Northbound, the resultant increased foreign participation in the onshore REIT market would promote further internationalisation of the Mainland capital market.

5. CONCLUSION

REITs offer investors the exposure to a wide range of underlying properties of different types that may have different valuations and investment returns. They serve as an alternative to equities and bonds for investment diversification.

The active development of the REIT market relies very much on a supportive regulatory regime. In Mainland China, the pilot scheme for infrastructure public REITs has regularised the issuance and fund-raising activities of onshore REITs. In Hong Kong, the supportive policy and regulatory measures and its international and Mainland market connectivity offer a favourable platform for the listing and trading of offshore Mainland REITs.

The potential upside for the development of Mainland REITs, in both onshore and offshore markets, is believed to be very positive in the light of strong issuer and investor demands. Onshore and offshore Mainland REITs are complementary to each other to meet the financing needs of Mainland real estate developers and the investment needs of global and Mainland investors.

There could be synergies generated by connectivity between the Mainland onshore and the Hong Kong offshore markets. Referencing the success of the inclusion of ETFs in Stock Connect, mutual market connectivity in REITs is expected to boost the product's liquidity in both markets as a result of the widened investor base and increased supply as more issuers are attracted to offer REITs in the two markets. This would increase Hong Kong's attractiveness as a global REIT hub and promote the further internationalisation of the Mainland capital market.

Disclaimer

APPENDIX. CORRELATION COEFFICIENTS BETWEEN INDICES OF REIT, EQUITY AND BOND (2011 – JUN 2023)

Table A1. Correlation coefficient matrix of daily returns (2011 – Jun 2023)

Index type and name			REIT				Equity							Bond			
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
REIT	(1)	MSCI US REIT Index		0.30	0.15	0.26	0.73	0.34	0.75	0.22	0.08	0.13	0.13	0.14	0.35	0.04	0.01
	(2)	FTSE/EPRA Asia ex Japan REIT Index			0.65	0.92	0.42	0.65	0.27	0.65	0.30	0.55	0.55	0.24	0.48	0.02	0.01
	(3)	Hang Seng REIT Index				0.53	0.24	0.52	0.14	0.58	0.31	0.60	0.67	0.06	0.33	-0.04	-0.02
	(4)	iEdge S-REIT Index					0.33	0.54	0.22	0.56	0.27	0.47	0.46	0.08	0.43	0.01	0.01
Equity	(5)	MSCI World Index						0.60	0.95	0.46	0.20	0.34	0.29	0.12	0.40	-0.11	-0.04
	(6)	MSCI Emerging Markets Index							0.44	0.94	0.48	0.82	0.66	0.14	0.49	-0.07	-0.05
	(7)	S&P 500 Index								0.30	0.13	0.20	0.17	0.00	0.30	-0.14	-0.03
	(8)	MSCI Asia ex Japan Index									0.54	0.90	0.74	0.09	0.43	-0.04	-0.06
	(9)	CSI 300 Index										0.55	0.43	0.01	0.17	-0.03	-0.06
	(10)	Hang Seng Index											0.81	0.03	0.33	-0.06	-0.08
	(11)	Hang Seng Properties Index												0.02	0.30	-0.07	-0.06
Bond	(12)	Bloomberg Global Aggregate Index													0.48	0.67	0.08
	(13)	Bloomberg Emerging Markets Aggregate Index														0.49	0.00
	(14)	Bloomberg US Aggregate Index															0.07
	(15)	Bloomberg China Aggregate Index															

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