

ANNUAL UPDATE ON THE SIZE OF THE
PROFESSIONALLY MANAGED GLOBAL REAL
ESTATE INVESTMENT MARKET

Real Estate Market Size 2019/20



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estimates in 2019

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MSCI market coverage
and global transparency

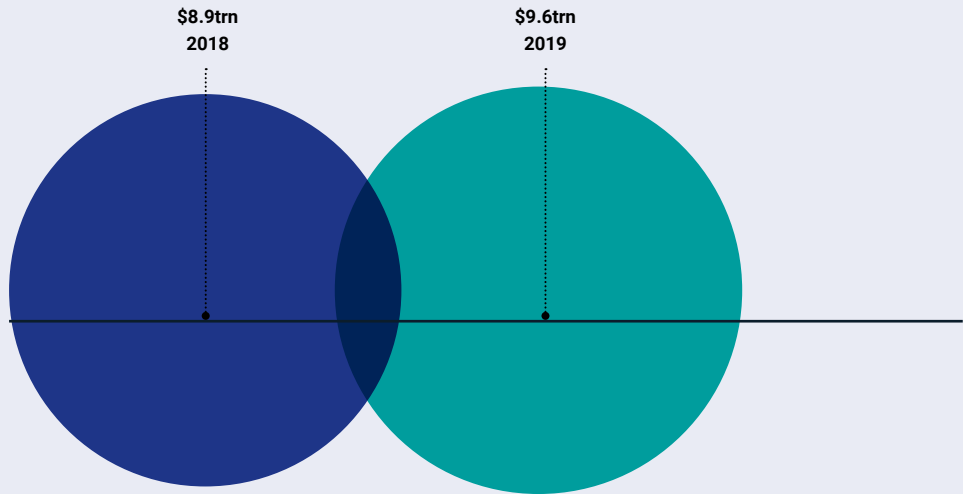
MSCI 

Overview

Key takeaways

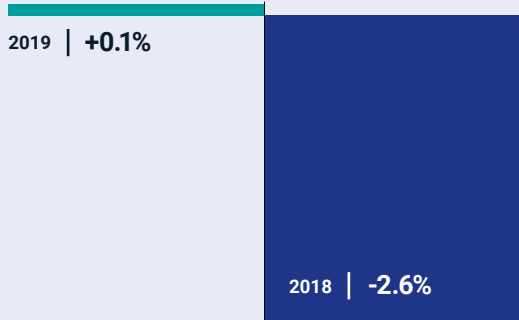
MARKET SIZE INCREASED IN 2019

The size of the professionally managed global real estate investment market increased from \$8.9 trillion in 2018 to \$9.6 trillion in 2019.



CURRENCY MOVEMENTS HAD MARGINAL IMPACT AS COMPARED TO LAST YEAR

Currency movements marginally impacted the size of the global real estate investment market by approximately +0.1% in US Dollars (USD), in contrast to the negative impact in 2018 (-2.6%). Asset value growth and transaction activity of already existing portfolios, newly identified portfolios and new developments in the market, such as new construction and sale and leaseback transactions, also contributed to the growth in market size.



CHINA CONTINUES TO BE THE FOURTH-LARGEST MARKET FOR THE SECOND CONSECUTIVE YEAR

China ranked as the fourth-largest national market, behind United States, Japan, United Kingdom for the second consecutive year having overtaken Germany in 2018.

UNITED STATES WEIGHT INCREASED

The relative weight of the United States within the MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size) increased further from 40.9% in 2018 to 41.3% in 2019.

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DRIVERS OF MARKET
SIZE CHANGES
IN 2019

About the estimates

MSCI began systematically estimating the size of professionally managed real estate investment markets in 2004. These estimates are fundamental to the creation of the MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size) and a range of other multinational indexes, and they provide insights into the coverage of MSCI's direct property indexes. This paper sets out the 2019 market size estimates and explains the main changes that occurred between 2018 and 2019.

The MSCI Global Annual Property Index weighs real estate investment returns across 25 countries. While MSCI's national indexes for Japan and Korea are included in the MSCI Global Annual Property Index, our market data for seven other Asian countries – China, Hong Kong, Indonesia, Malaysia, Singapore, Taiwan and Thailand – are excluded from that index. In this report, all national market sizes are based on bottom-up, portfolio-specific estimates, and these are converted into US Dollars using the year-end currency conversion rate.

Explaining the main changes between 2018 and 2019

MSCI captures a large amount of information on individual real estate investment portfolios around the world, which forms the foundation of our market information products ([MSCI Real Estate Global Intel](#)) and [MSCI Real Estate Enterprise Analytics](#) for direct real estate holdings at the asset level. By the end of 2019, the value of these directly measured real estate investment portfolios was \$2.2 trillion. However, despite this high level of coverage, MSCI does not directly measure all portfolios in the market. While MSCI's data is useful for understanding how the market is changing, additional data sources are needed to build up definitive estimates of market size. MSCI does this by combining bottom-up, portfolio-specific in-house information with data obtained from the public domain, including pre-existing databases, annual and quarterly reports from companies and data from company websites. This approach aims to identify all direct real estate holdings in each country on a portfolio-by-portfolio basis, following the MSCI methodology, which seeks only to capture the value of professionally managed real estate owned for investment purposes.

Invested real estate stock is defined as property owned for the primary purpose of benefiting from investment returns, as distinct from owner-occupied and non-investment leased real estate. The owner-occupied part of the market comprises real estate that is both owned and occupied

by private and public companies, real estate owned by governments and used for governmental purposes, and residential buildings owned by private homeowners. In addition, there are organizations that own and lease real estate to tenants but whose primary objective something other than generating an investment return. These include social housing organizations and municipalities, which in some countries have substantial real estate portfolios (see Appendix 1 for more information about the methodology used).

MSCI uses the total estimated size of the professionally managed real estate stock owned for investment purposes in each market to reweight national indexes that contribute to the generation of multinational indexes, including but not limited to the MSCI Global Annual Property Index. For this purpose, all country-level market size estimates are converted to US Dollars at year-end currency conversion rates. Due to differences in MSCI index coverage levels nationally, the indexes are reweighted to provide a more representative balance between markets in the multinational indexes to which they contribute. The market size estimates are used for reweighing the MSCI Global Annual Property Index, the MSCI Nordic Annual Property Index (Unfrozen) and the MSCI Europe Annual Property Index (Unfrozen; Weighting: Market Size), as well as other regional indexes and bespoke or custom indexes. ■

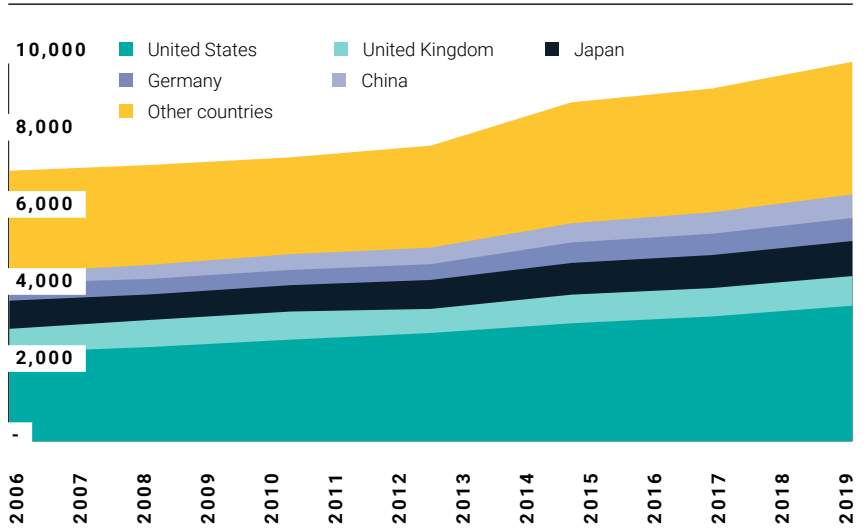


Market size estimate change

The size of the professionally managed global real estate investment market increased by 7.8% from \$8.9 trillion in 2018 to \$9.6 trillion in 2019. The growth was higher as compared to 2018 when the market grew by 4.1%.

United States continued to be the largest market, while Japan and United Kingdom remained at the second and third position respectively. China continued to be at the fourth position for the second year in a row while Germany was at the fifth position.

EXHIBIT 1:
Change in Global Market Size Estimate and for 5 largest countries, USD Billion

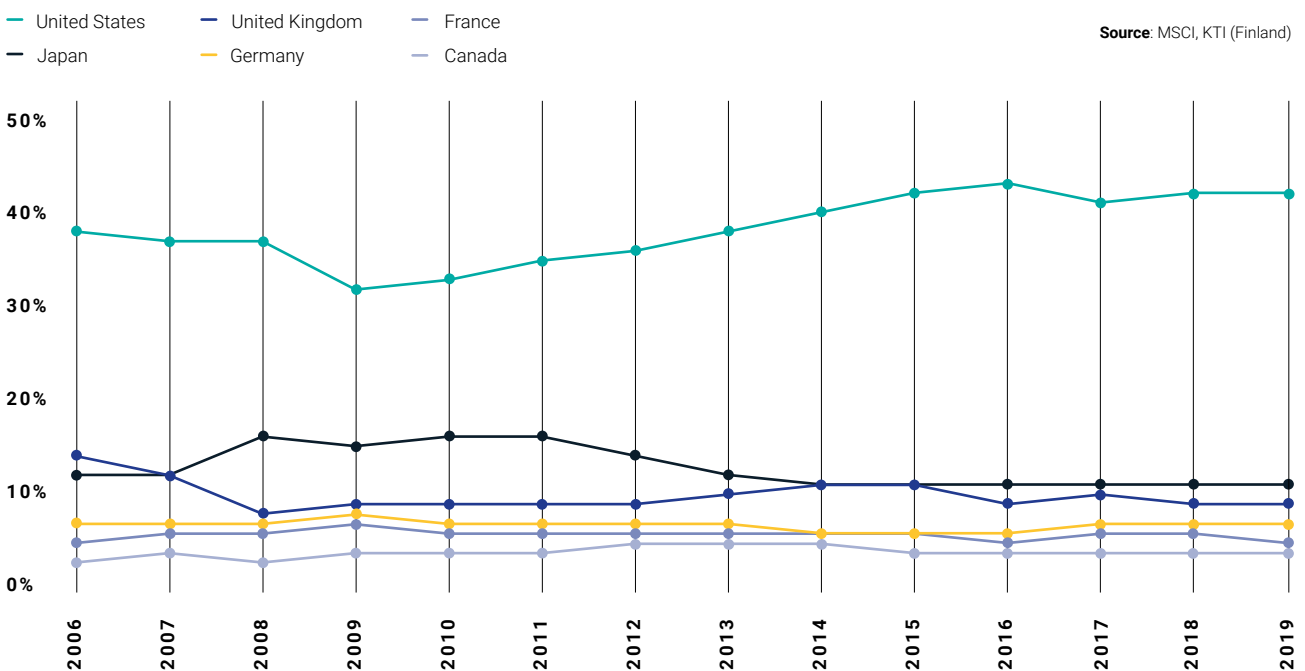


Longer term changes in market size weights

The relative weights of individual countries in the MSCI Global Annual Property Index have shifted over time, as shown in Exhibit 2. These changes have resulted from a combination of asset value growth, currency impact and a residual component. The weight of the United States market continued to increase year

on year, going from 31.0% in 2009 to 41.3% in 2019. Germany, France and Canada continued to be around 7.0%, 5.3% and 4.4% respectively. The weight of the United Kingdom was around 9.0% as compared to 2014 when it was over 11.0%. There was a decline in Japan from 15.3% in 2009 to 10.6% in 2019. ■

EXHIBIT 2:
Weight of the Six Largest Countries in the MSCI Global Annual Property Index



Source: MSCI, KTI (Finland)

Country Market Sizes

07



MARKET SIZE
ESTIMATES
IN 2019

09



RELATIVE MARKET
SIZE ESTIMATES



3,418.1

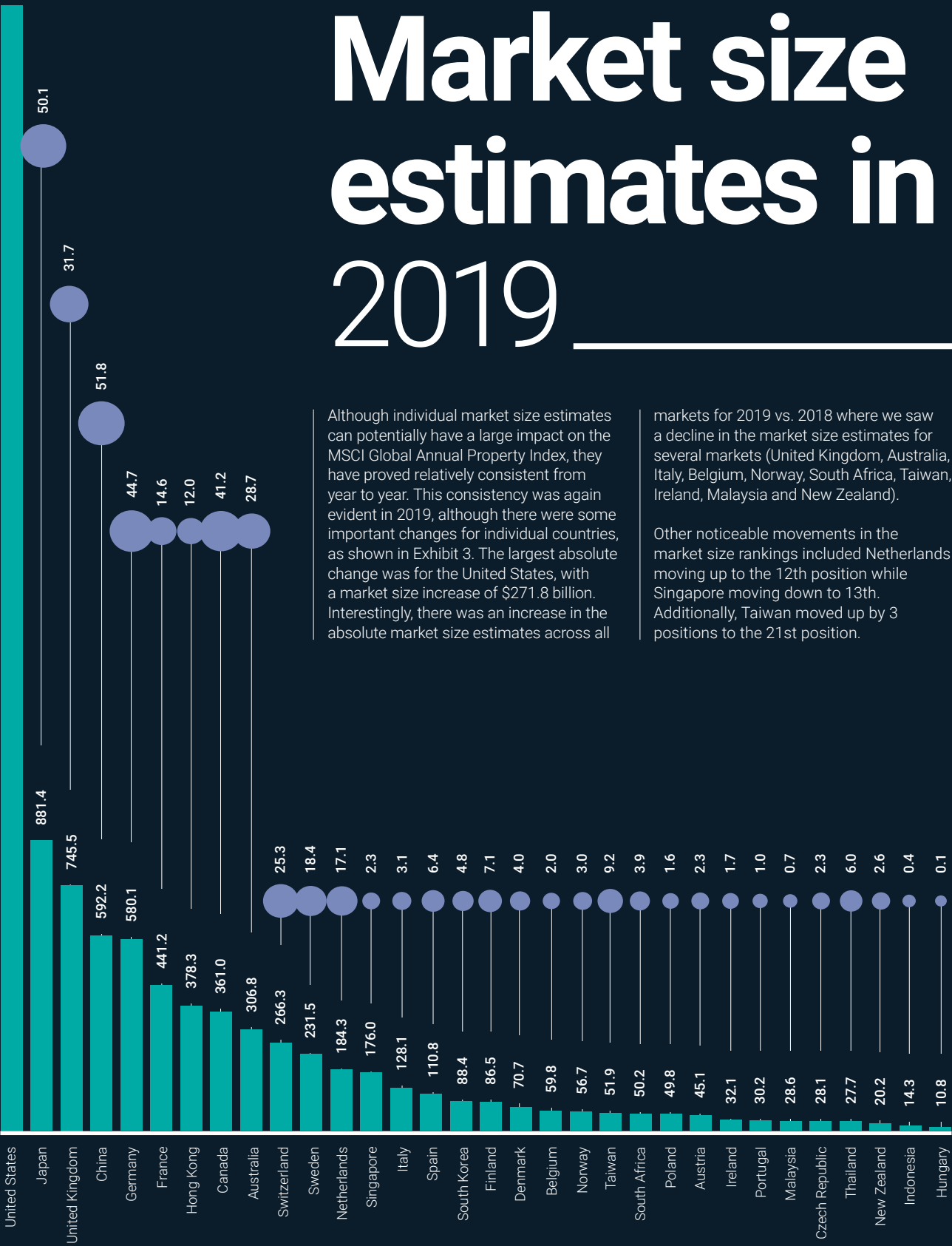


EXHIBIT 3:
Change in National Market Sizes between 2018 and 2019, USD Billion

■ Market size in 2019
● Net change from 2018

Source: MSCI, KTI (Finland)

Market size estimates in 2019

Although individual market size estimates can potentially have a large impact on the MSCI Global Annual Property Index, they have proved relatively consistent from year to year. This consistency was again evident in 2019, although there were some important changes for individual countries, as shown in Exhibit 3. The largest absolute change was for the United States, with a market size increase of \$271.8 billion. Interestingly, there was an increase in the absolute market size estimates across all

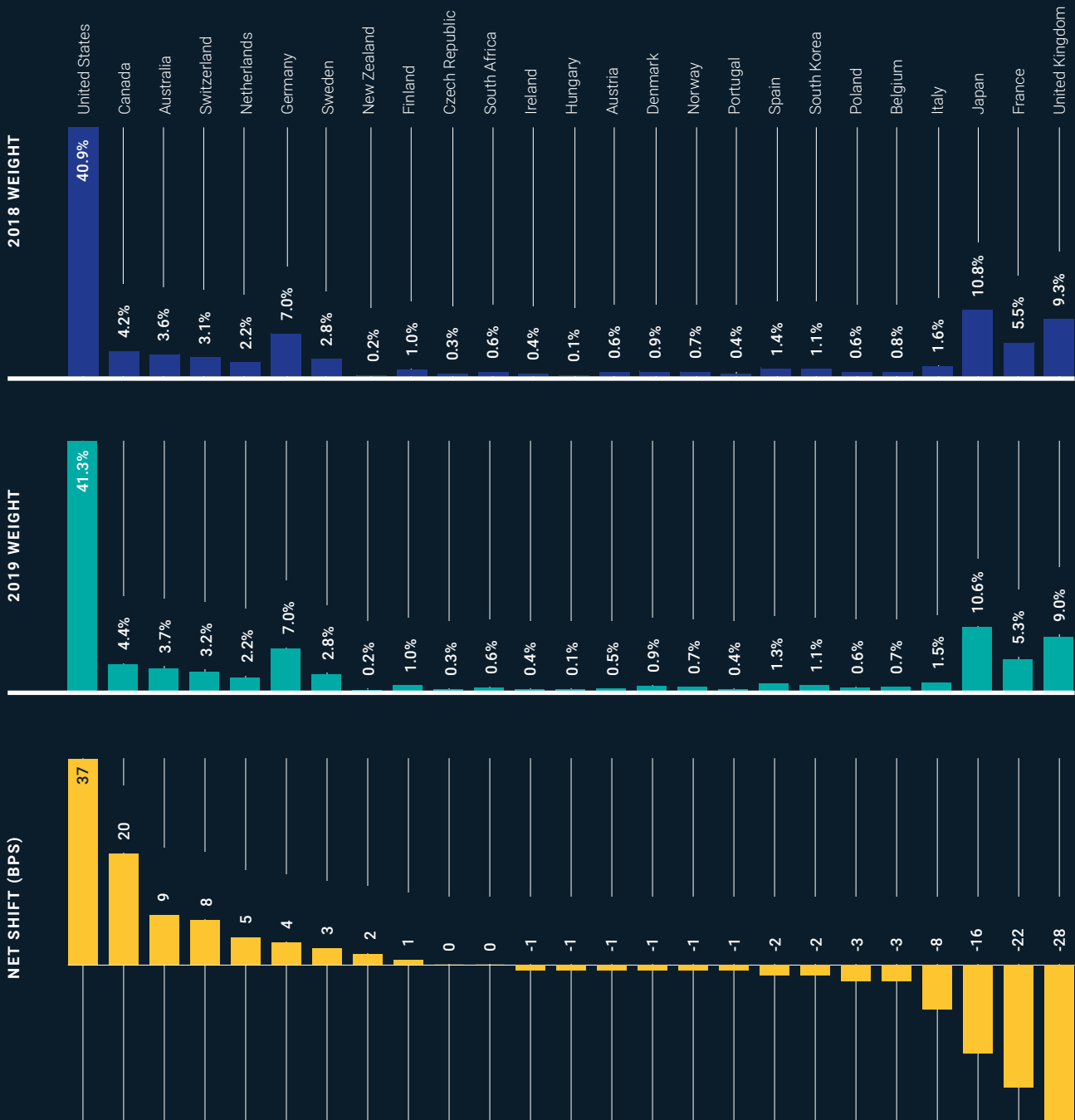
markets for 2019 vs. 2018 where we saw a decline in the market size estimates for several markets (United Kingdom, Australia, Italy, Belgium, Norway, South Africa, Taiwan, Ireland, Malaysia and New Zealand).

Other noticeable movements in the market size rankings included Netherlands moving up to the 12th position while Singapore moving down to 13th. Additionally, Taiwan moved up by 3 positions to the 21st position.

Among the constituents of the MSCI Global Annual Property Index (see Exhibit 4), the United States remained the largest market in the index with its weight increasing by 37 bps. Japan continued to be the second largest market in the index although there was an overall decline in its weight by 16

bps. The third largest market was United Kingdom which also saw a decrease of 28 bps. France was the only other market that declined by greater than 10 bps while Canada saw its weight increase by 20 bps. For the remaining markets the change was in the range of ±10 bps. ■

EXHIBIT 4:
Change in Market Size for constituents of the MSCI Global Annual Property Index, 2018 -2019



Source: MSCI, KTI (Finland)

9 Relative market size estimates

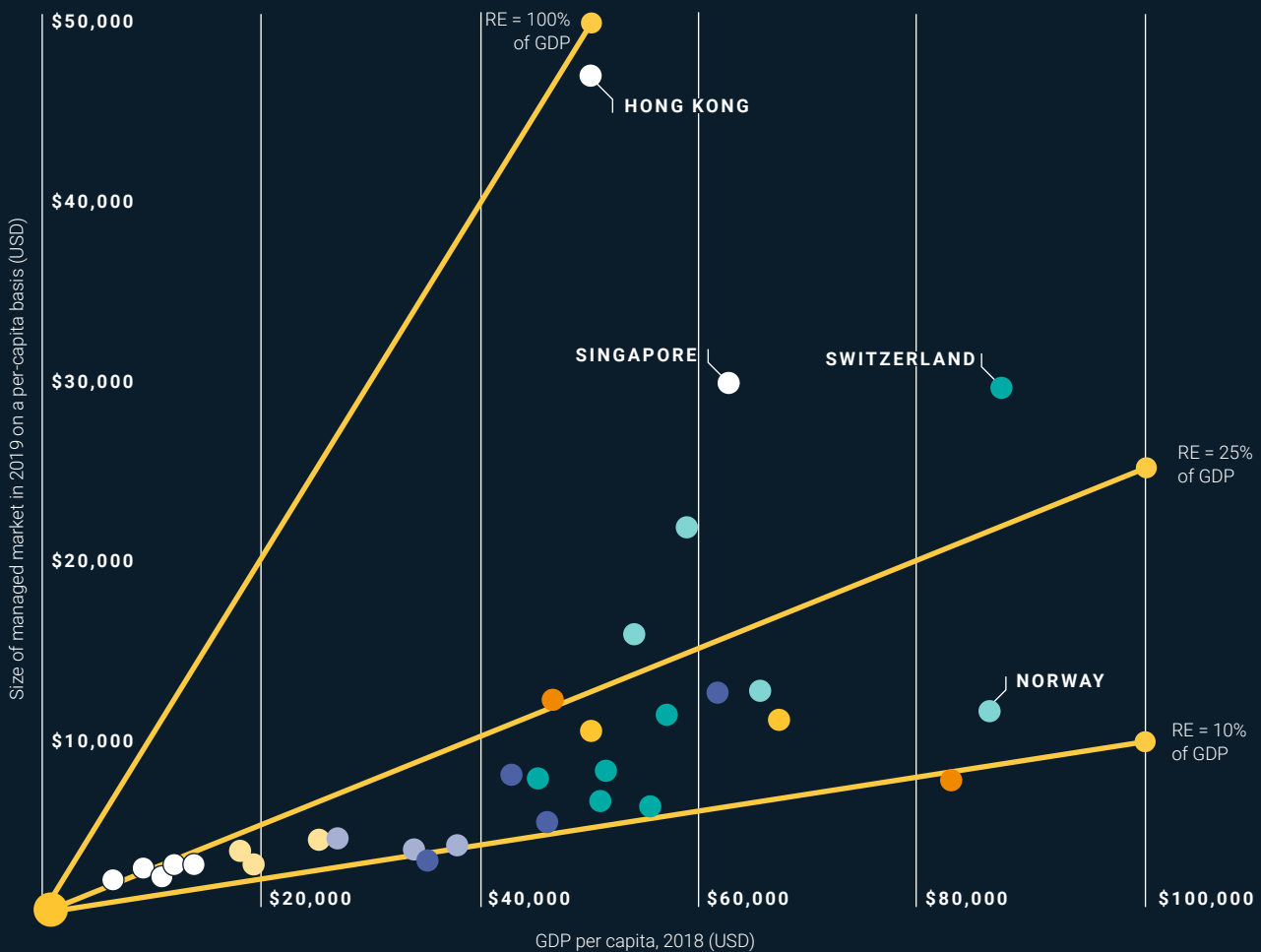
Exhibit 5 compares the national real estate market sizes with GDP per capita, with clear regional differences emerging. The wealthy city-states of Singapore and Hong Kong have the largest relative market sizes. The size of the professionally managed real estate investment market in Hong Kong was over 100% of its GDP per capita (2018),

a level driven up significantly by the high value per floor area. Switzerland and Sweden continued to have the largest relative real estate investment market sizes in Europe. However, Norway, Europe's second wealthiest country in terms of GDP per capita, continued to fall behind its Nordic neighbours in relative real estate market size. ■

EXHIBIT 5:
Relative Estimated Market Size by GDP per capita

Source: World Bank, MSCI, KTI (Finland)

- APAC
- E Europe
- Americas
- UK / Ireland
- Nordics
- S Europe
- W Europe
- Pan-Asia



Drivers of Market Size Changes in 2019

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MSCI MARKET COVERAGE AND GLOBAL TRANSPARENCY



MSCI's estimates of the size of the professionally managed real estate investment market are based on the most recent information available from public and private sources. The estimate changes are driven by national market changes, including local capital growth fluctuations, currency movements and structural changes within each market.

In a perfect world, all relevant information on known real estate portfolios would be updated to year-end for each national market, but in practice this is impossible. One reason is that not all the portfolios with available information report their year-end values by the dates when the market sizes are estimated. The timing question is particularly relevant to the investment portfolios of high net worth individuals, but also applies to some portfolios held by pension funds and sovereign wealth funds. These often have long lead times on the release of their annual reports, sometimes exceeding four months following period-end, while others have reporting years that deviate from calendar years. In general, listed companies do better, publishing their annual reports within three months of their reporting year end, often with quarterly or biannual reports as well. The information is also often regularly available for unlisted funds, particularly open-end funds, which tend to be more transparent than closed-end funds. To minimize the effect of the currency fluctuations resulting from lagging information, the vast majority of information is based on the value of the portfolio in local currency.

Around 75% of the total estimated market size is based on 2019 real estate market values. The proportion of updated information varies between countries, but generally stands at between 70% and 90% of the total identified investment stock. The proportion of updated information was above 60% in each of the 25 markets covered in the MSCI Global Annual Property Index, and above 70.0% for the seven emerging markets in Asia.

The changes in the market size estimates between 2018 and 2019 are considered below, broken down into the contributions of currency impacts, capital growth in local currency and other changes. ■

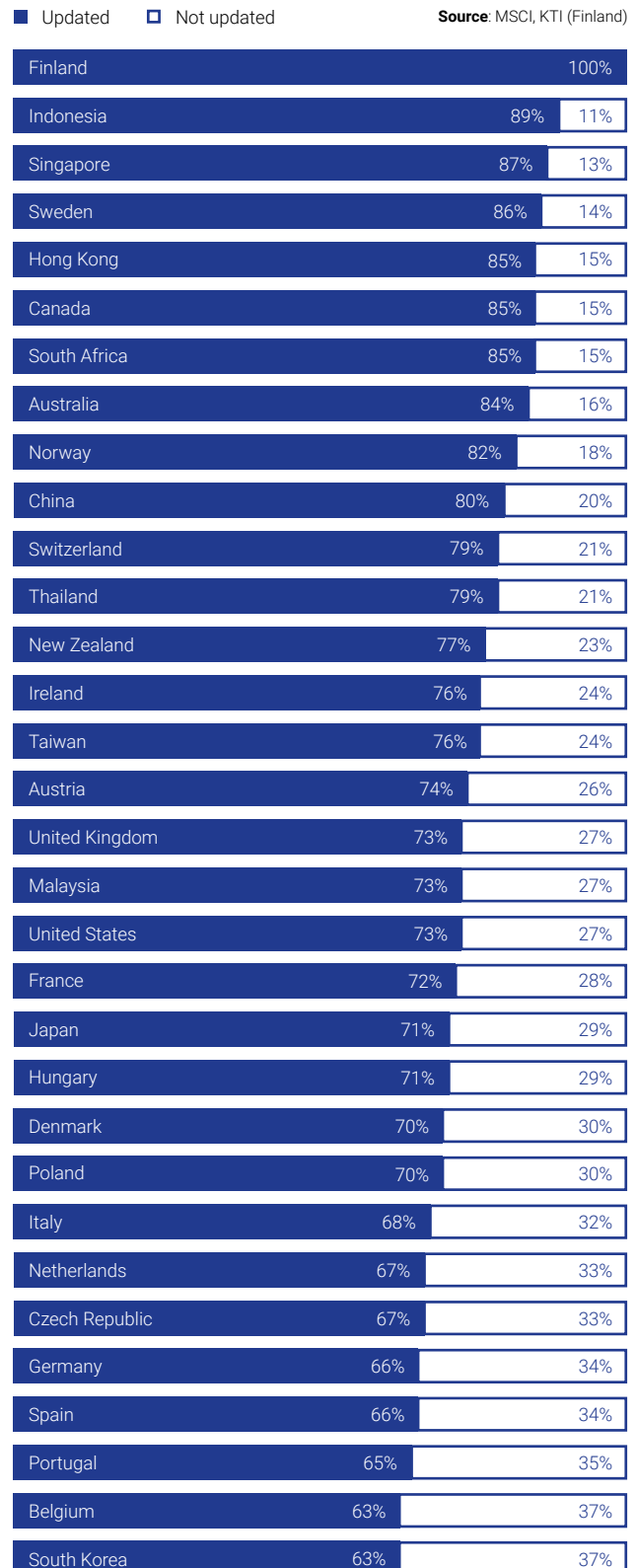
+0.1%

impact of currency movement on global real estate investment market size at global level

1.9%

capital growth for the MSCI Global Annual Property Index for standing investments

EXHIBIT 6:
Updated AUM by Country, 2019 Data



Currency impact

The impact of currency on the market size at a global level was +0.1% in 2019. Each country's currency impact expressed in terms of USD is shown in Exhibit 7.

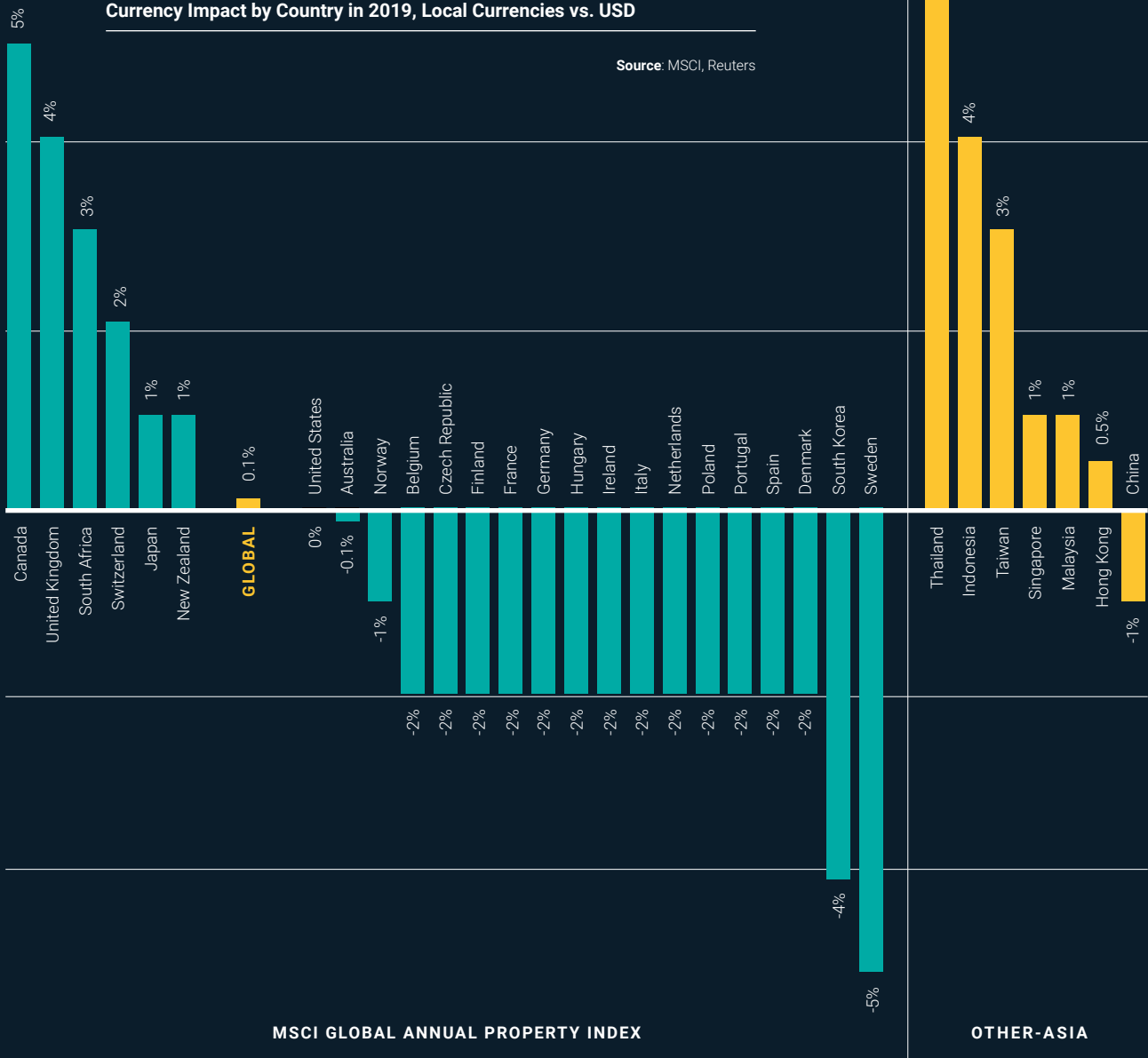
The currencies for Canada, United Kingdom, South Africa, Switzerland, Japan and New Zealand appreciated against the USD, while those for the remaining countries in the MSCI Global Property

Index depreciated against the USD. In 2018, the Japanese Yen was the only currency that had appreciated against the USD while the overall Global impact was -2.6%.

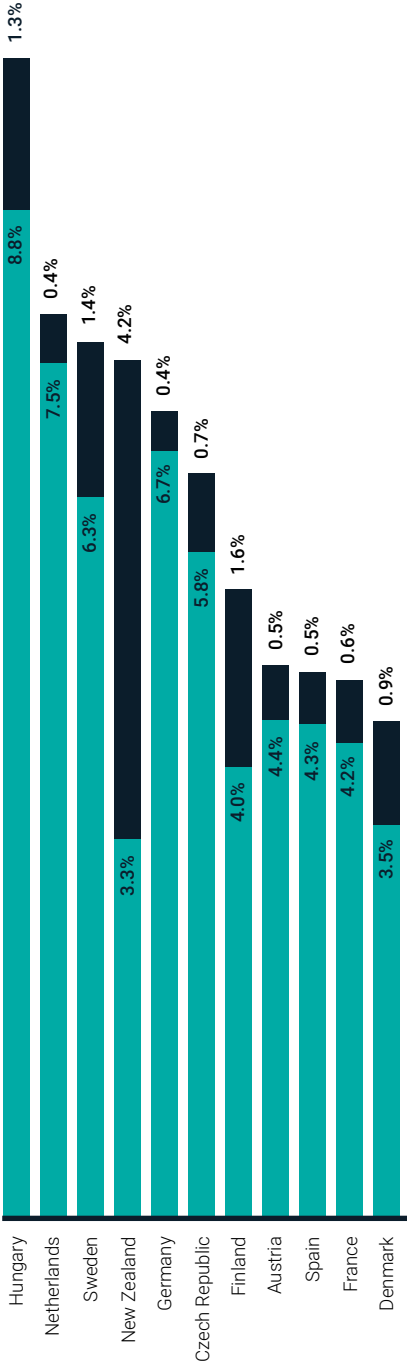
For the remaining Asian countries we saw an appreciation against the USD in six of the seven countries, with Chinese RMB being the only currency amongst the seven that depreciated against the USD in 2019. ■

EXHIBIT 7:
Currency Impact by Country in 2019, Local Currencies vs. USD

Source: MSCI, Reuters



Capital growth and asset value growth



23 of the 25 countries in the MSCI Global Annual Property Index showed a positive capital growth in local currency terms in 2019, as shown in Exhibit 8. A negative capital growth in local currency was observed only for South Africa and United Kingdom. The highest levels of annual capital growth at standing investment level were recorded for Hungary (8.8%) and the Netherlands (7.5%).

The Capital Growth for the MSCI Global Annual Property Index for standing investments was 1.9%.

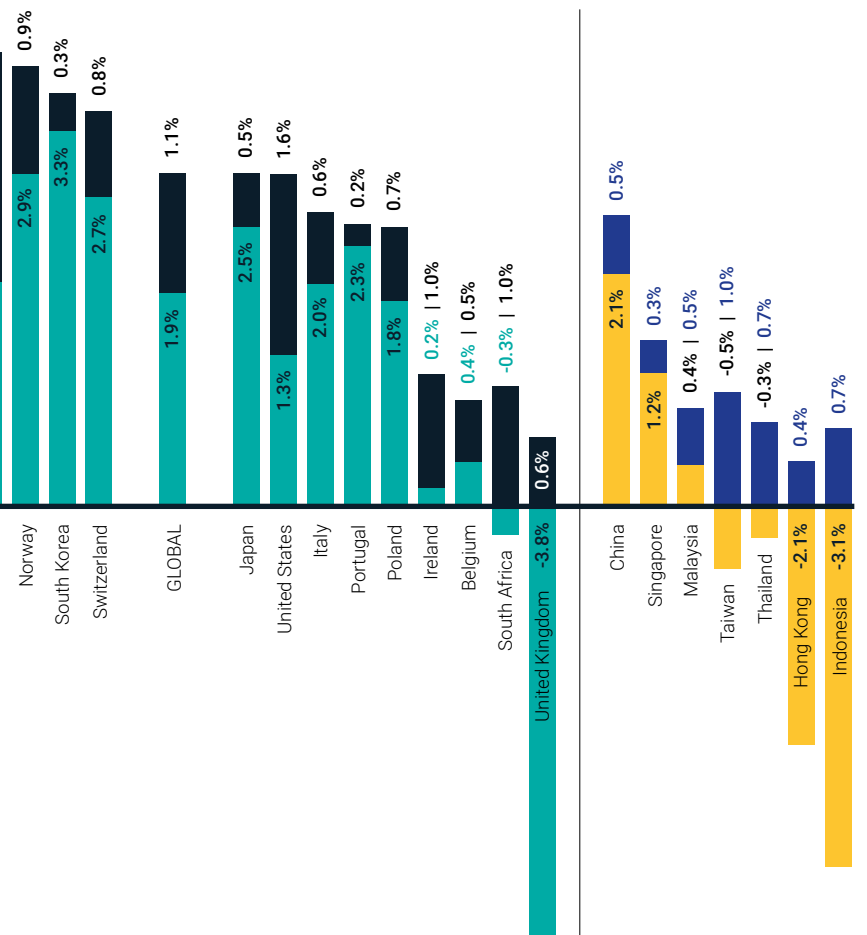
Of the seven Asian markets China, Singapore and Malaysia had a positive capital growth rate while the remaining four markets have shown a negative capital growth.

Capital growth is not the most appropriate performance measure to compare the market size change. Instead the asset value growth, which doesn't subtract the capital expenditure, could be used for comparing the market size growth instead. The Asset Value Growth for the MSCI Global Annual Property Index for standing investments was 2.9%. In exhibit 8 besides the capital growth, the impact of the capital expenditure on standing investments based on the asset value growth is shown. In the MSCI Global Annual Property Index the difference between the asset value growth and the capital growth is approximately 1.0%. Deviations of more than 1.0% have been observed for New Zealand, Canada, Australia, United States and Finland. The deviations ranged from 4.2% for New Zealand to 1.6% for Finland. ■

EXHIBIT 8:
Capital Growth (CG) and Asset Value Growth (AVG) by Country in 2019, Local Currencies (Standing Investments)

■ Difference between AVG and CG ■ Capital Growth

Source: MSCI, KTI (Finland)



Residual

E Exhibit 9 shows the percentage change in market size estimates from 2018 to 2019, together with the asset value growth. It should be noted that a residual item remained for many markets when comparing the impact of fundamental drivers and the overall change in estimated market size. The largest residuals were observed for Sweden at 7.0%, New Zealand at 6.7% and Australia at 6.6%. For the Asian markets large residuals were observed for Taiwan at 18.0%, Thailand at 17.0% and China at 8.6%. There are a number of possible reasons for the residual, including:

NET INVESTMENT DUE TO CAPITAL EXPENDITURE ON NEW DEVELOPMENTS AND TRANSACTION ACTIVITY

While MSCI measures net investment on data-submitting portfolios, this sample may not necessarily reflect the wider market. In addition, it is not always possible to break down net investment figures sufficiently to avoid double-counting. Given the uncertainty of its composition, net investment is not reported separately in this exercise, instead it is included in the residual.

TRANSACTIONS WITH NON-PROFESSIONALLY MANAGED ORGANIZATIONS

These could arise from the sale of portfolios to small private investors or the acquisition of properties from developers or owners that don't meet the criteria for the professionally managed real investment portfolios.

Sale and leaseback transactions in which real estate becomes an invested asset, having previously been owner-occupied. This may relate to particular sectors that become investable, such as hotels and healthcare. In some cases tenants may acquire buildings that they previously leased.

TIMELINESS OF REPORTING

As discussed above, not all portfolios reported end-2019 data in time to be included in this analysis. In 2019, 73.6% of those assets supporting MSCI Global Annual Property Index weights were updated with 2019 data (versus 73.1% in 2018), together with 82.5% for other Asian markets (versus 78.2% in 2018). The remainder were included using the most recently available data, mainly dated to the year 2018.

REPORTING BY OWNER STATUS

Lower rates of updating occurred for private investors and other direct asset owners that only release data on their portfolios after the first quarter of the year. In general information on listed companies was updated.

ASSET QUALITY

Capital growth for MSCI-measured portfolios may differ from overall market capital growth because of differences in the quality of the underlying assets or sector deviations.

NEWLY IDENTIFIED PORTFOLIOS

Newly identified portfolios that already existed, but were not previously included in market size estimates. These are more common in smaller, more opaque markets.

BETTER INFORMATION

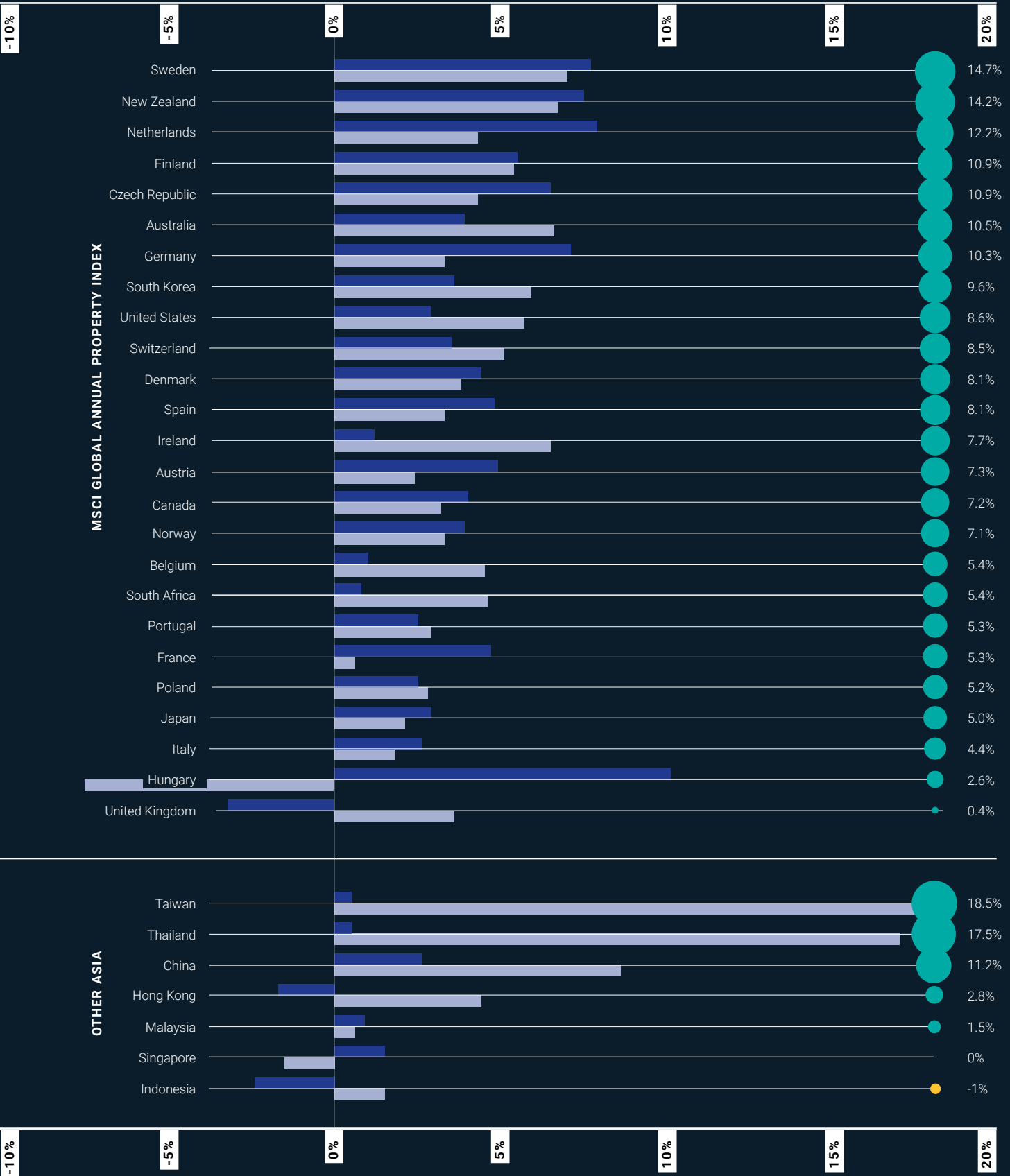
Newly identified information on portfolios previously included in market size estimates. ■



**EXHIBIT 9:
Drivers of Market Size Change, 2019**

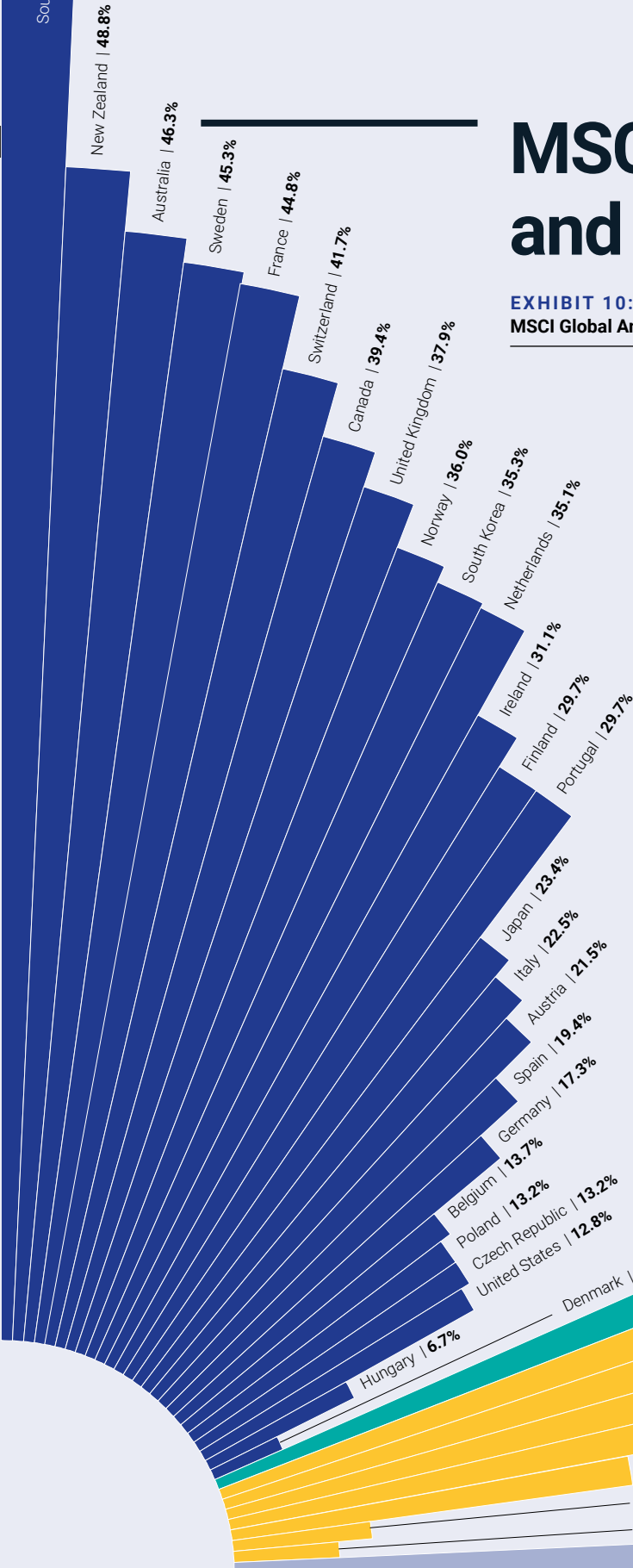
■ 2019 asset-value growth ■ Residual ● Total change (in local currency)

Source: MSCI, KTI (Finland)



MSCI Market coverage and global transparency

EXHIBIT 10:
MSCI Global Annual Property Index Coverage of the Professionally Managed Market



Among the 25 countries in the MSCI Global Annual Property Index, coverage ratios ranged from 63.1% in South Africa to 3.1% Denmark respectively. In aggregate, the 25 countries in the Global Index cover 24.2% of the estimated market by value.

The global coverage of the 32 countries – that comprise of the 25 countries in the MSCI Global Annual Property Index and the seven Asian markets, was 23.2%. ■

- MSCI Property Indexes
- MSCI Global Annual Property Index
- Other Asia
- Total Global coverage

32
countries

MSCI Real Estate
global coverage

24.2%

of estimated market
by value is covered
by the MSCI Global
Annual Property Index

Source: MSCI, KTI (Finland)

In a number of countries, MSCI measures the performance of portfolios not included in the coverage figures in Exhibit 10; these are portfolios that do not fulfill the requirements for index inclusion. This applies, for example, to several portfolios in the United Kingdom that do not have a December-end reporting year. The coverage of more frequent indexes (monthly, quarterly and biannual) available in some countries is lower than that shown in Exhibit 10. This applies to the MSCI UK Monthly Property Index, quarterly indexes in the United States, the Netherlands and the United Kingdom, and biannual indexes in France and Italy. The coverage of these indexes is shown in Appendix 3. MSCI will closely monitor future changes in coverage for Denmark and Hungary, where the coverage level has fallen below 10%, to ensure the representativeness of these indexes

remains sufficient to reflect the overall market. The coverage of China and Taiwan also stands below 10%, indicating that the results for these two countries are not reported in an MSCI national market index fact sheet.

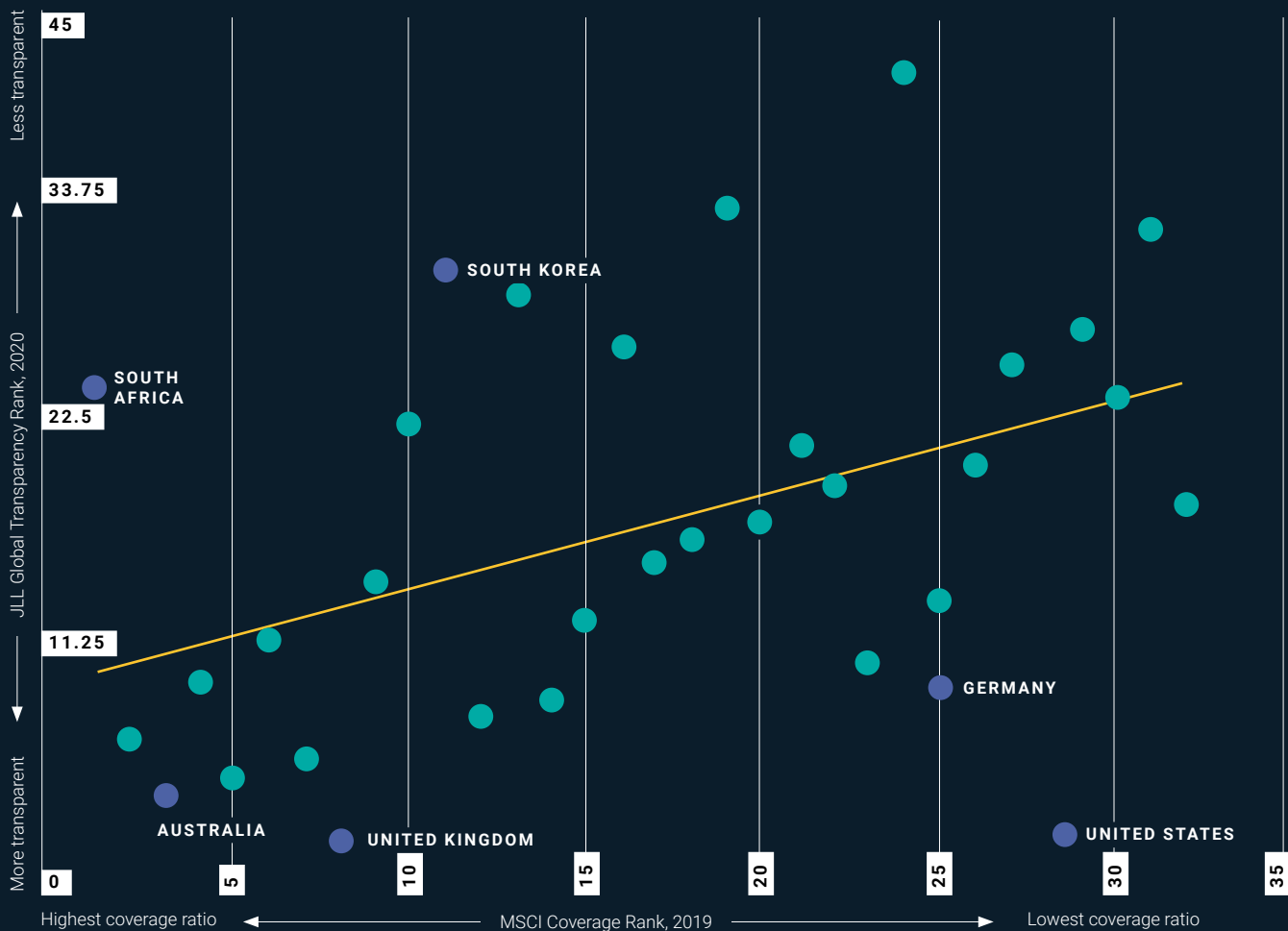
Exhibit 11 plots MSCI's real estate index coverage against JLL's Global Real Estate Transparency Index (GRETI), with the country rankings along each axis. The exhibit shows that the more transparent markets generally had a higher MSCI real estate index coverage ratio, with a modest positive correlation. MSCI produced index results for each of JLL's 27 most transparent ranked markets with the exception of Taiwan. MSCI real estate indexes are published quarterly in each of the eight most transparent markets, with the exception of France, where index results are published biannually.

12 of the 25 markets in the MSCI Global Annual Property Index had a coverage of greater than 30.0%. All these markets have been ranked high on the JLL (GRETI). United Kingdom and Australia had a high coverage in the MSCI Global Annual Property Index and the JLL (GRETI). South Africa had the highest coverage in the MSCI Global Annual Property Index and its JLL (GRETI) rank is 24, while the lowest transparency rank among the constituents of the MSCI Global Annual Property Index was for South Korea.

Among the seven Asian countries not included in the MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size), Singapore and Hong Kong have independent indexes and have a JLL transparency rank of 14 and 15 respectively. ■

EXHIBIT 11:
Country Ranking, MSCI Real Estate Coverage and JLL Global Real Estate Transparency Index

Source: MSCI, KTI (Finland), JLL Global Real Estate Transparency Index 2020



Conclusion

The size of the professionally managed global real estate market expanded to \$9.6 trillion in 2019 from \$8.9 trillion in 2018. MSCI began systematically estimating the size of the professionally managed real estate market in 2004. These estimates underpin the weightings of the MSCI Global Annual Property Index and a range of other multinational indexes, and they provide insights into the coverage of MSCI's direct property indexes.

Although individual market size estimates have changed from year to year, weightings have proved relatively consistent for each of the 25 countries within the MSCI Global Annual Property Index. At a global level, currency movements marginally increased the size of the global real estate investment market by approximately 0.1% in USD terms, while capital growth and other factors (including new developments) increased total market size. ■

AUTHORS:
BERT TEUBEN
RAZIA NESHAT

Appendix 1: Market Size Estimate Methodology

MSCI defines the real estate investment universe in each national market as the aggregation of real estate assets that meet all of the following conditions:

They are held as investments for the purposes of delivering a mix of income and capital returns.

They are professionally managed for the achievement of these purposes, either by the beneficial owners or by third party management businesses.

They are structured as investment interests within portfolios.

These direct real estate portfolios, managed on behalf of institutional or private investors, are financed via a mix of equity and debt.

The criteria that are adopted for the market size estimates are summarized in Exhibit 12, with further clarifications including:

MORTGAGES

Only direct real estate portfolios are included. We have excluded portfolios of mortgages.

INDIRECT HOLDINGS

In order to avoid double-counting, funds of funds are excluded from the analysis along with the indirect investment holdings of all portfolios.

JOINT VENTURES

In order to avoid double-counting, joint ventures are included as separate holdings, but only with the value of the share of the asset or portfolio included for each holding.

PRIVATE INVESTORS

The number of direct private investors is enormous, ranging from those holding a single residential unit to some with portfolios of over USD 1 billion. MSCI assumes that any portfolio with a value in excess of USD 100 million is professionally managed. While this figure is somewhat arbitrary, such a threshold is required to compile results. MSCI assumes that the majority of the professionally managed market will be captured by including these larger portfolios.

OTHER REAL ASSETS

This analysis aims to estimate the size of real estate markets globally. For this purpose infrastructure (such as airports, ports and toll roads), timberland and farmland are excluded.

DEVELOPERS

Pure development companies are excluded from this analysis as they do not seek an investment return, but investment property under development and construction is included.

Exhibit 12:

Market Size Estimate Inclusion Criteria

Source: MSCI

INCLUDED

Insurance and pension funds

Sovereign wealth funds

Unlisted funds (closed and open end)

Traditional estates and charities

Listed funds

Large private landlords (> USD 100 million)

Leased office, retail, industrial, residential and other property

Investment property under development

EXCLUDED

Small private landlords (< USD 100 million)

Owner-occupied portfolios (pubs, hotels, hospitals)

Timberland, farmland and infrastructure

Mortgage companies

Development companies

Funds of funds and indirect holdings (double counting)

Municipal and social housing

Appendix 2: Market size estimates (USD billion)

	ESTIMATED MARKET SIZE 2018	ESTIMATED MARKET SIZE 2019	CAPITAL GROWTH (%)	MSCI INDEX COVERAGE 2019 IN ANNUAL INDEX	COVERAGE RATIO IN ANNUAL INDEX (%)
Australia	278.1	306.8	2.1%	142.0	46.3%
Austria	42.8	45.1	4.4%	9.7	21.5%
Belgium	57.8	59.8	0.4%	8.2	13.7%
Canada	319.8	361.0	2.0%	142.3	39.4%
Czech Republic	25.8	28.1	5.8%	3.7	13.2%
Denmark	66.7	70.7	3.4%	2.2	3.1%
Finland (KTI)	79.4	86.5	4.0%	25.7	29.7%
France	426.6	441.2	4.2%	197.8	44.8%
Germany	535.4	580.1	6.7%	100.3	17.3%
Hungary	10.7	10.8	8.8%	0.7	6.7%
Ireland	30.3	32.1	0.2%	10.0	31.1%
Italy	125	128.1	2.0%	28.9	22.5%
Japan	831.3	881.4	2.5%	206.4	23.4%
Netherlands	167.2	184.3	7.5%	64.7	35.1%
New Zealand	17.6	20.2	3.3%	9.9	48.8%
Norway	53.7	56.7	2.9%	20.4	36.0%
Poland	48.2	49.8	1.8%	6.6	13.2%
Portugal	29.2	30.2	2.3%	9.0	29.7%
South Africa	46.3	50.2	-0.3%	31.7	63.1%
South Korea	83.6	88.4	3.3%	31.2	35.3%
Spain	104.4	110.8	4.3%	21.5	19.4%
Sweden	213.1	231.5	6.3%	104.9	45.3%
Switzerland	241	266.3	2.7%	111.2	41.7%
United Kingdom	713.8	745.5	-3.8%	282.3	37.9%
United States	3,146.2	3,418.1	1.3%	436.2	12.8%
MSCI Global Annual Property Index	7,694.3	8,283.9	1.9%	2,007.6	24.2%
China	540.4	592.2	2.1%	25.8	4.4%
Hong Kong	366.3	378.3	-2.1%	92.3	24.4%
Indonesia	13.9	14.3	-3.1%	2.4	16.8%
Malaysia	27.9	28.6	0.4%	9.9	34.6%
Singapore	173.6	176.0	1.2%	66.1	37.5%
Taiwan	42.8	51.9	-0.5%	3.0	5.8%
Thailand	21.7	27.7	-0.3%	6.3	22.6%
Total Global coverage (incl. Other Asia)	8,881.0	9,553.0		2,213.3	23.2%

Appendix 3: Market Coverage for Non-Annual Indexes

	ESTIMATED MARKET SIZE 2019 (USD BILLION)	MSCI INDEX COVERAGE 2019 (USD BILLION)	COVERAGE RATIO (%)
United Kingdom (Monthly)	745.5	55.6	7.5%
United Kingdom (Quarterly)	745.5	212.6	28.5%
Netherlands (Quarterly)	184.3	47.4	25.7%
United States (Quarterly)	3,418.1	378.7	11.1%
France (Bi-Annual)	441.2	55.4	12.6%
Italy (Bi-Annual)	128.1	17.4	13.6%

Contact us

AMERICAS

Canada + 1 416 687 6284

US + 1 212 804 3900

EUROPE, MIDDLE EAST & AFRICA

UK + 44 20 7336 9200

France + 44 20 7336 4783

Germany + 49 691 3385 900

Italy + 44 20 7336 9684

Spain + 34 93 467 7403

South Africa + 27 11 656 2115

Sweden + 46 8 400 252 30

ASIA PACIFIC

Australia + 61 2 9033 9300

Hong Kong + 852 2844 9333

Singapore + 65 6826 9339

Japan + 81 3 5211 1455

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