

# Real Estate Market Size 2018



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# Overview

## Key takeaways

### MARKET SIZE ROSE IN 2018

The size of the professionally managed global real estate investment market increased from **\$8.5 trillion in 2017** to **\$8.9 trillion in 2018**.



### U.S. WEIGHTING INCREASED

The relative weight of the U.S. within the MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size) increased in 2018, following a decline in 2017.

### CHINA REPLACED GERMANY AS THE FOURTH-LARGEST MARKET

China ranked as the fourth-largest national market, overtaking Germany, which had held this position for 2017. Although both markets grew in 2018, China's increase was larger.

### CURRENCY HAS NEGATIVELY IMPACTED MARKET SIZE ESTIMATES

Currency movements effectively decreased the size of the global real estate investment market by approximately -2.6% in U.S. dollars (USD), in contrast to their positive impact in 2017 (+5.3%). Capital growth and transaction activity of already existing portfolios, new 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.

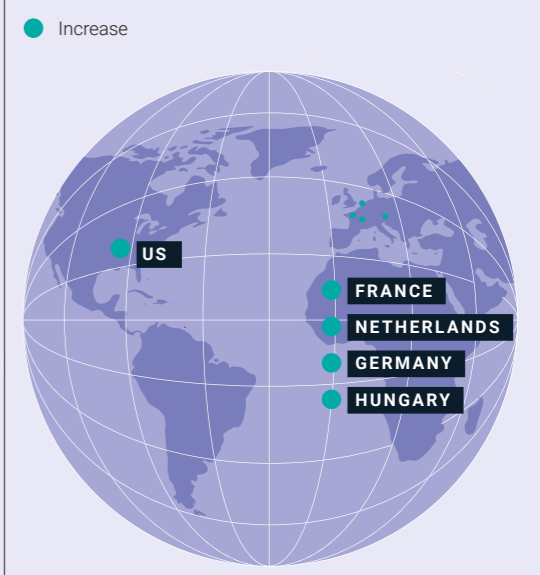


### MSCI'S INDEX COVERAGE INCREASED BY 20 BPS GLOBALLY

And also by 30 bps within the MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size). A number of country level changes were more noticeable. The representativeness of MSCI's asset-level real estate indexes increased the most in France, Netherlands, US, Germany and Hungary, but decreased in Australia, Switzerland, Spain and Denmark.



### Changes in representativeness of MSCI's asset-level real estate indexes by country



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# About the estimates

**M**SCI 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 2018 market size estimates and explains the main changes that occurred between 2017 and 2018.

The MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size) weights 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 (Unfrozen; Weighting: Market Size), 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 U.S. dollars using the year-end currency conversion rate.

## Estimating market sizes

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 (Global Intel) and Enterprise Analytics for direct real estate holdings at the asset level. By the end of 2018, the value of these directly measured real estate investment portfolios was \$2.1 trillion. However, despite this high level of coverage, MSCI does not directly measure all portfolios in the market. While MSCI's data are 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 benefitting 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 (Unfrozen; Weighting: Market Size). For this purpose, all country-level market size estimates are converted to U.S. 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 reweighting in the MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size), 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. ■

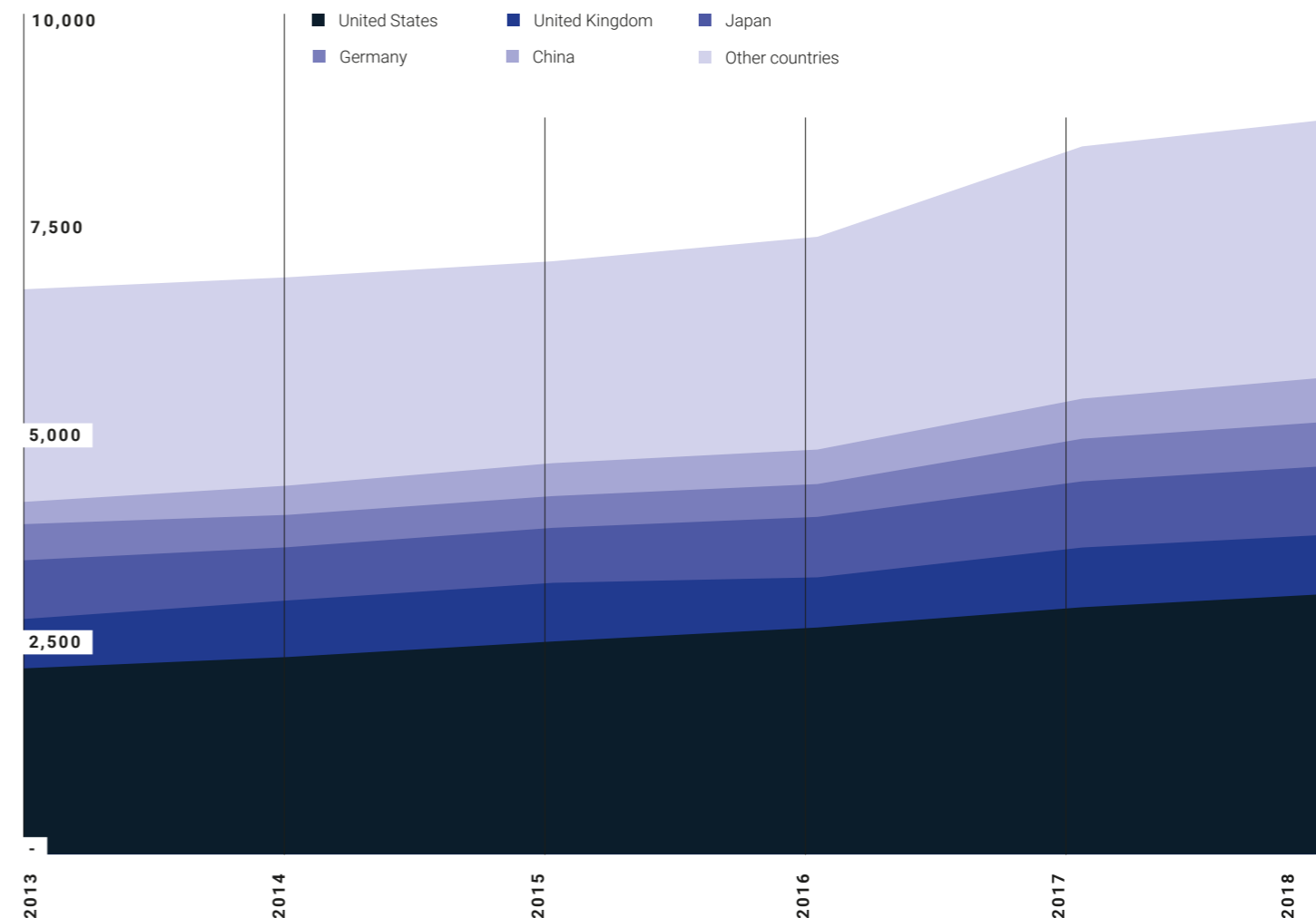


## Market size estimate change

The size of the professionally managed global real estate investment market increased from \$8.5 trillion in 2017 to \$8.9 trillion in 2018. The increase in growth in 2018 reduced to 4.1% compared to the increase by 14.6% in 2017. However, the growth in 2018 was at a similar level as the growth in 2014, 2015 and 2016 with increases of 2.1%, 2.8% and 4.1% respectively.

The United States has remained the largest market. Japan continued to be the second largest market for the third consistent year. The United Kingdom completes the top three real estate investment market by size. China moved into the fourth position in the overall market size estimate above Germany, although the absolute difference of USD 5 billion is relatively small. Both China and Germany saw increases in absolute market size, however the increase for China was bigger. ■

**EXHIBIT 1:**  
Change in global market size estimate, USD billion





# Country market sizes

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15 RELATIVE MARKET SIZE ESTIMATES



# Market size estimates in 2018

**\$172**  
billion US market size increase

**22%**  
market size increase for Czech Republic

**10.8%**  
weight for Japanese market, making it second largest

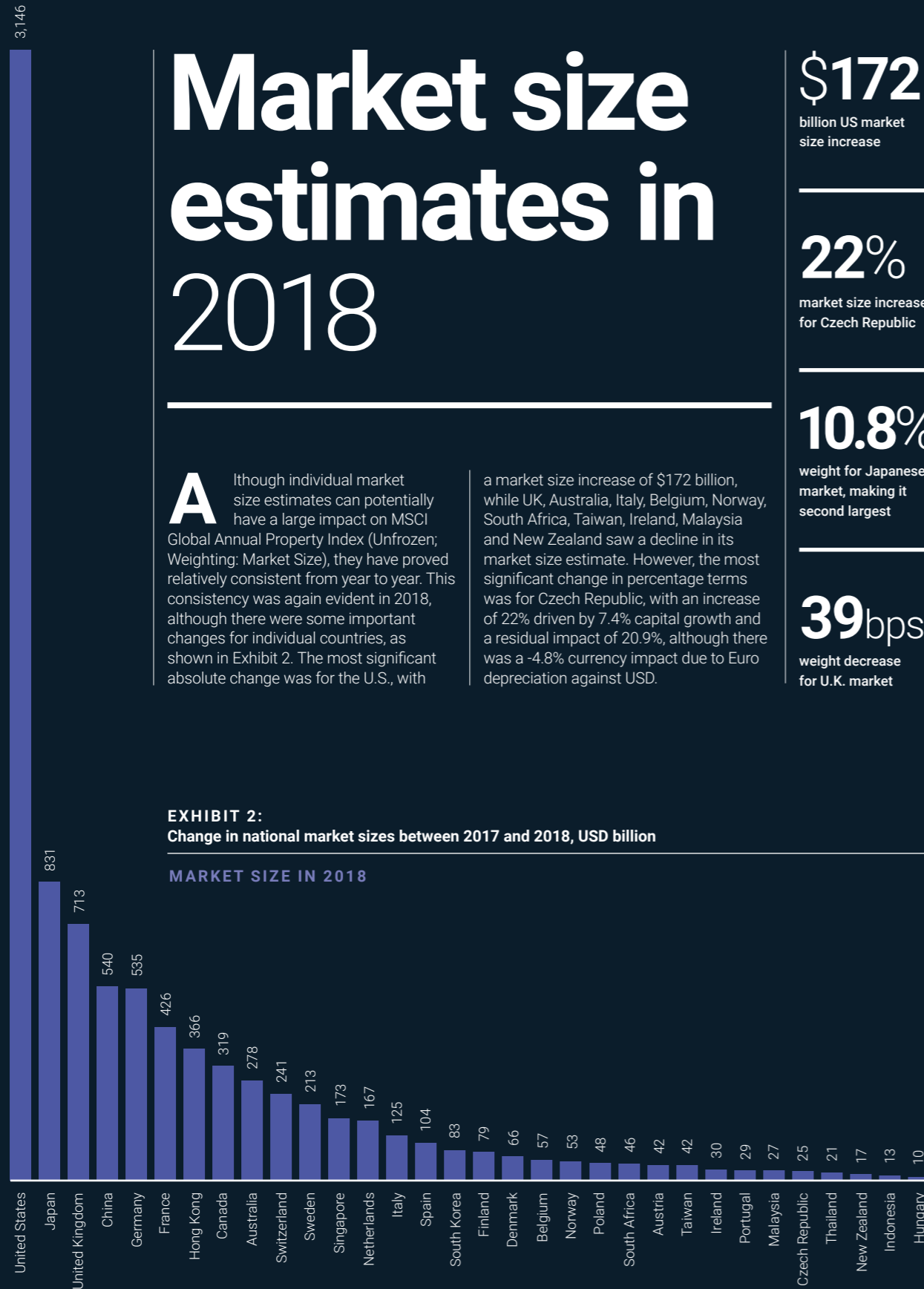
**39bps**  
weight decrease for U.K. market

Although individual market size estimates can potentially have a large impact on MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size), they have proved relatively consistent from year to year. This consistency was again evident in 2018, although there were some important changes for individual countries, as shown in Exhibit 2. The most significant absolute change was for the U.S., with

a market size increase of \$172 billion, while UK, Australia, Italy, Belgium, Norway, South Africa, Taiwan, Ireland, Malaysia and New Zealand saw a decline in its market size estimate. However, the most significant change in percentage terms was for Czech Republic, with an increase of 22% driven by 7.4% capital growth and a residual impact of 20.9%, although there was a -4.8% currency impact due to Euro depreciation against USD.

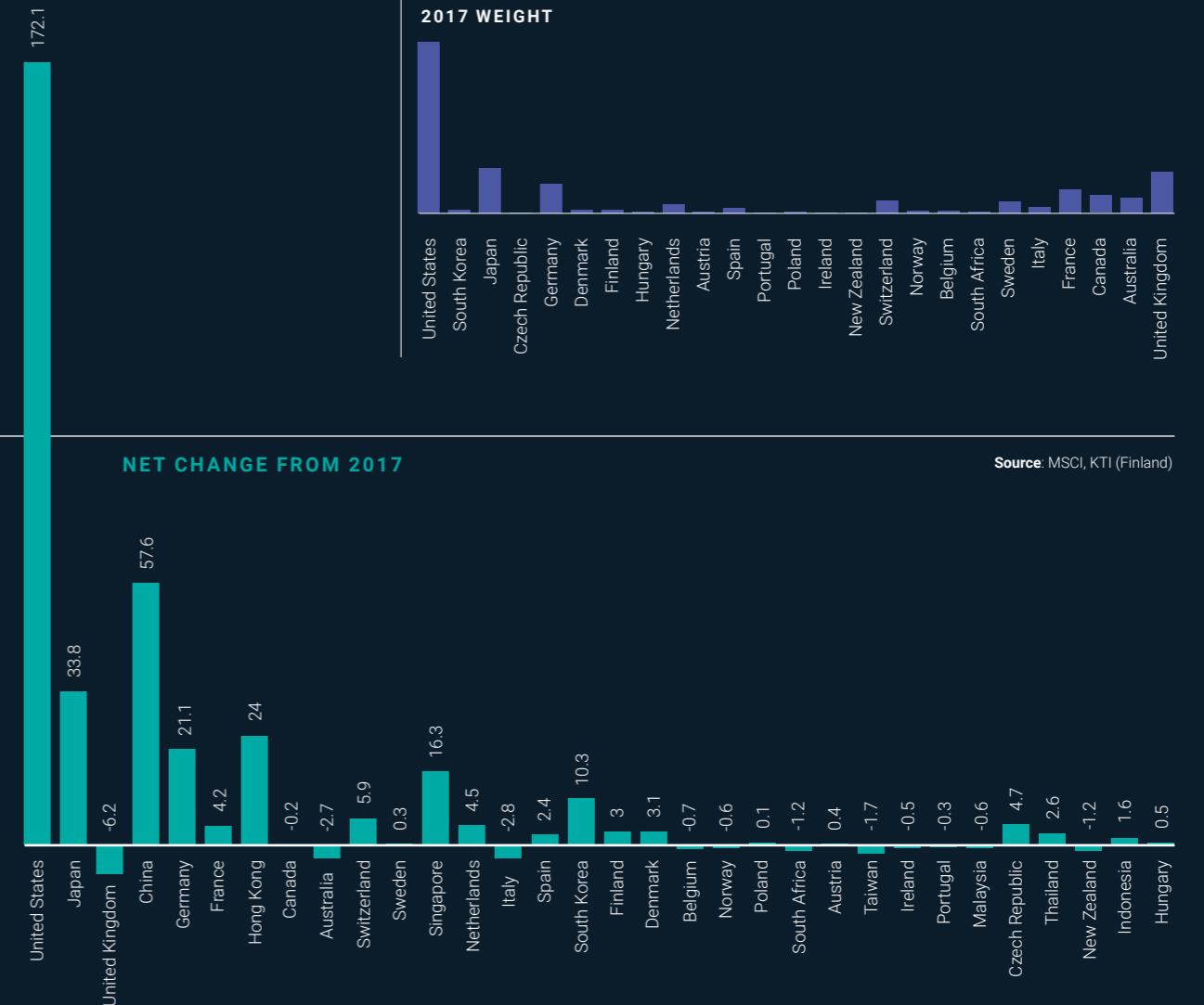
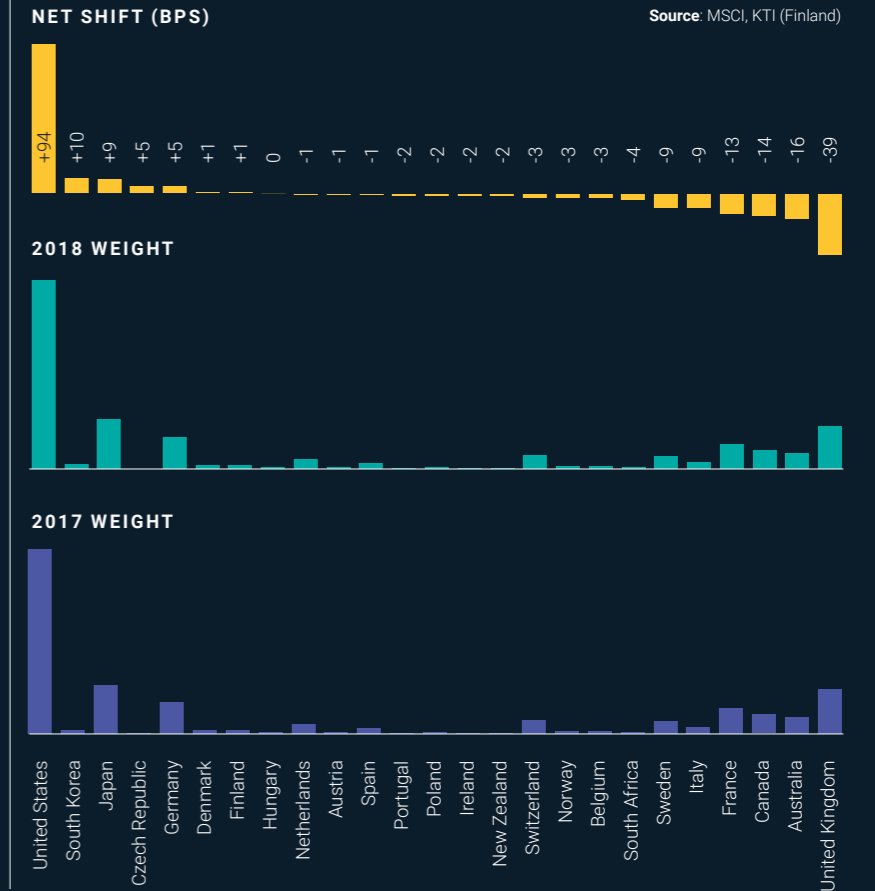
**EXHIBIT 2:**  
Change in national market sizes between 2017 and 2018, USD billion

**MARKET SIZE IN 2018**



Among the constituents of the MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size) (see Exhibit 3), only the U.S. weighting changed by more than 50 bps between 2017 and 2018. The U.S. remained the largest market in 2018, its share of the 25-country index increased by 94 bps from 40.0% to 40.9%. Japan remained the second largest market with a 10.8% weight, despite its share increasing by 9 bps, while the U.K. remained in third position, although its weight decreased by 39 bps to 9.3%. Besides the U.K. there were three other countries with a decline in weight: Australia, Canada and France, with a decline of 16, 14 and 13 bps, respectively. No other country recorded a change in weight of more than 10 bps. ■

**EXHIBIT 3:**  
Change in weight in the MSCI Global Annual Property Index (unfrozen; weighting: market size), 2017 -2018



# Longer term changes in market weighting

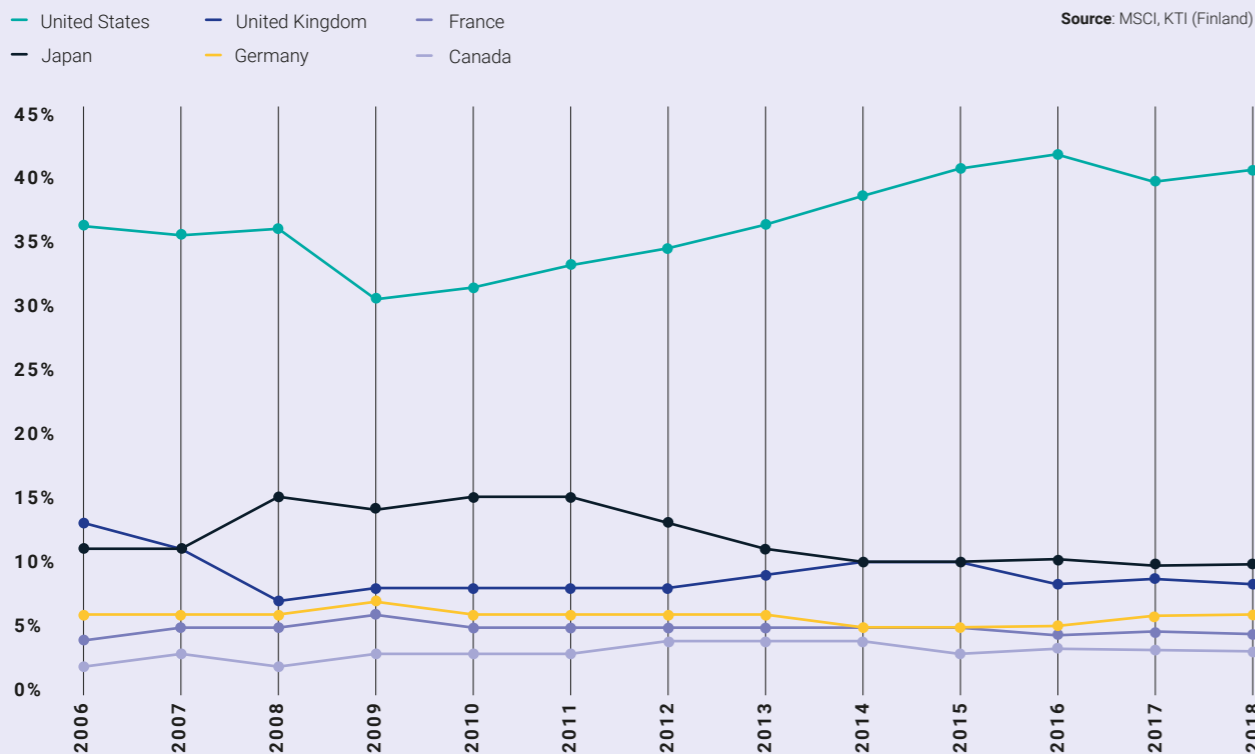
The relative weights of individual countries in the MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size) have shifted over time, as shown in Exhibit 4. These changes have mainly resulted from a combination of capital growth and currency impacts. National weightings were particularly impacted by the Global Financial Crisis (GFC), with

large decreases seen in the weightings of both the U.K. and the U.S., due to negative capital growth. Currently, the absolute market sizes of the U.K. and the U.S. have increased by 55% and 83%, respectively, from the trough levels recorded during 2008 and 2009. In contrast, Japan's market size is still at its 2009 level, despite rising in each of the past four years. ■

**55%**  
absolute market size increase for U.K.

**83%**  
absolute market size increase for U.S.

**EXHIBIT 4:**  
Weight of the six largest countries in the MSCI Global Annual Property Index (unfrozen; weighting: market size)

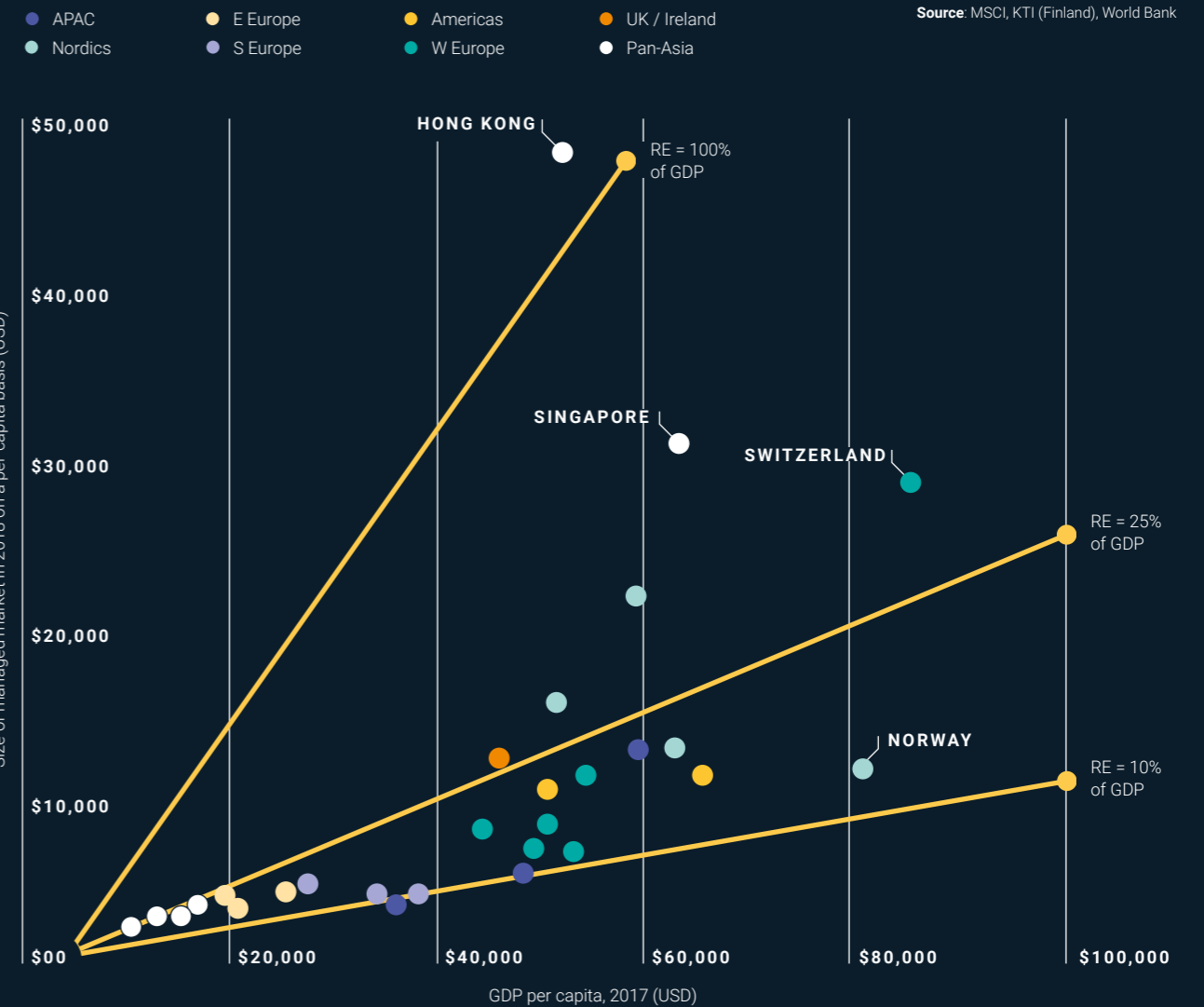


## Relative market size estimates

Exhibit 5 compares 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 equates over 100% of GDP, a level driven up significantly by the high value per floor area. Switzerland and

Sweden have the largest relative real estate investment market sizes in Europe, as measured by the ratio of market size to GDP. However, Norway, Europe's second wealthiest country in terms of GDP per capita, falls behind several of its Nordic neighbors in relative real estate market size. A more detailed discussion of relative market size is included in the 2013 market size report. ■

**EXHIBIT 5:**  
Relative estimated market size by GDP per capita



<sup>1</sup>Clacy-Jones, M. and A.J.J. Teuben. (2014). "Real Estate Investment Market Size: A better understanding of the professionally managed real estate investment universe." MSCI Research Insight.



# Drivers of market size changes in 2018



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**M**SCI'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 estimates 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 74% of the total estimated market size is based on 2018 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. During 2018, the proportion of updated information was at or above 60% in each of the 25 markets covered in the MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size), as it was for the seven emerging markets in Asia.

The changes in market size estimates between 2017 and 2018 are considered below, broken down into the contributions of currency impacts, capital growth in local currency and other changes. ■

Measured in USD, currency movements in 2018 effectively decreased the size of the global market by **-2.6%**

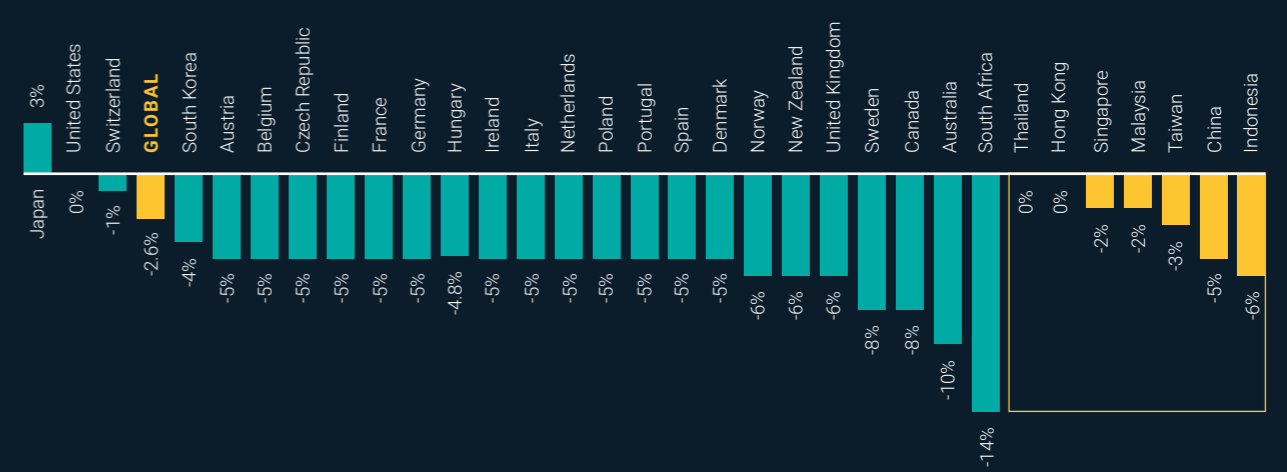


## Currency impact

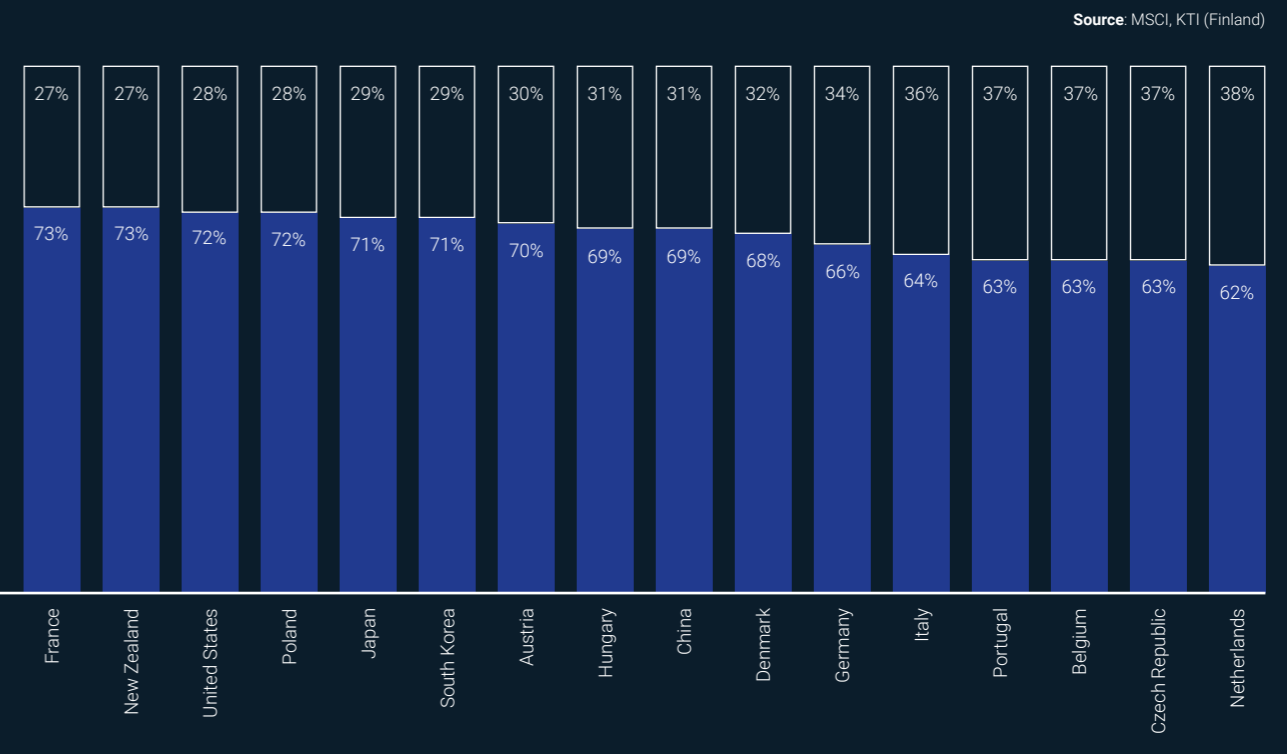
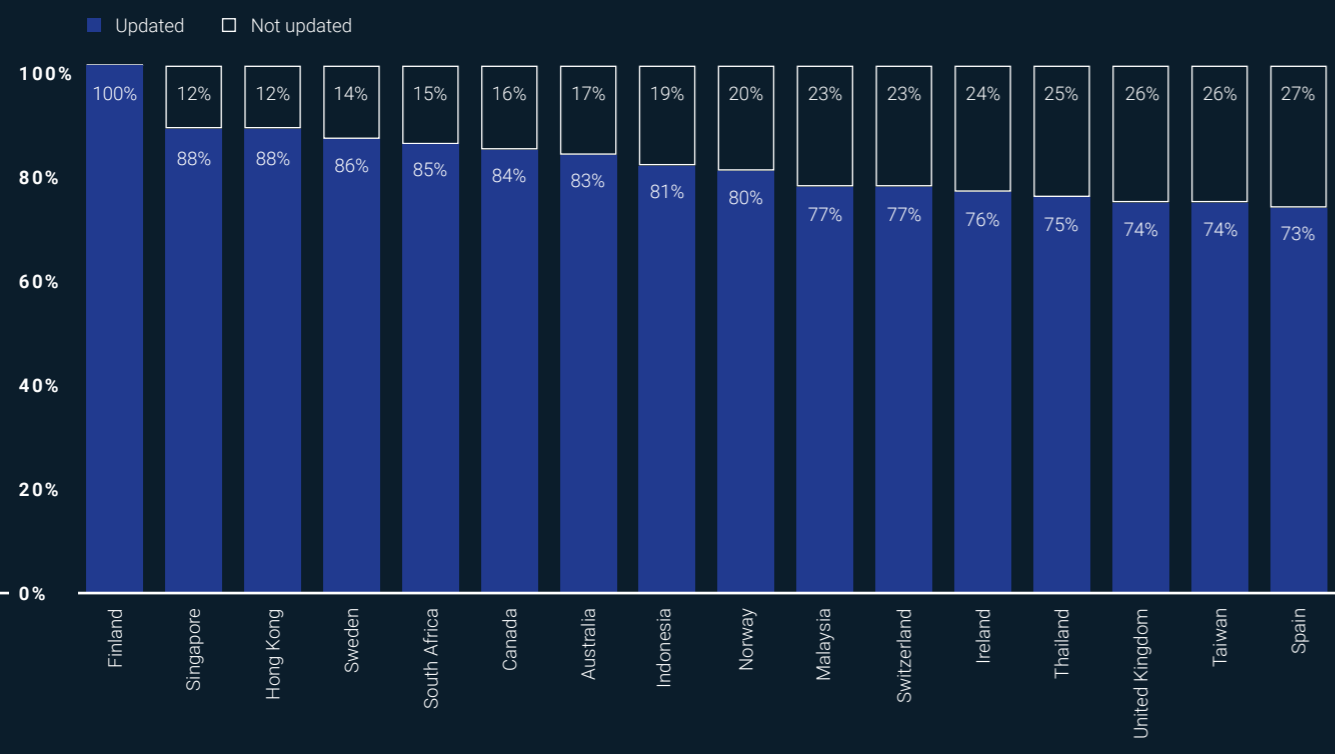
The impact of currency movements has been mentioned earlier in this report. Measured in USD, currency movements in 2018 effectively decreased the size of the global market by -2.6%. Each country's currency impact expressed in terms of USD is shown in Exhibit 7, which indicates negative impacts across all countries except Japan within the MSCI Global Annual Property

Index (Unfrozen; Weighting: Market Size) in 2018. This contrasted with the positive currency impact for all almost all countries in 2017. Most notably, the currencies in Sweden, Canada, Australia and South Africa all depreciated over 7% against USD in 2018. Also the Euro depreciated by 5% against USD in 2018, in contrast to 2017 when the Euro appreciated by 14%. ■

**EXHIBIT 7:** Currency impact by country in 2018, local currencies vs. USD



**EXHIBIT 6:** Updated AUM by country, 2018 data



Source: MSCI, KTI (Finland)

# Capital growth

Many countries showed positive capital growth in their local currency in 2018, as shown in Exhibit 8. The highest levels of annual capital growth at standing investment level were recorded for Hungary (17.4%) and the Netherlands (9.7%). Ten further countries in the MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size) – the Czech Republic, Sweden, Germany, Australia, Ireland, Spain Denmark, New Zealand, Austria, Norway – also exceeded the MSCI Global Annual Property Index's (Unfrozen; Weighting: Market Size)

**2.5%**  
capital growth in U.S.

**2.3%**  
capital growth in China

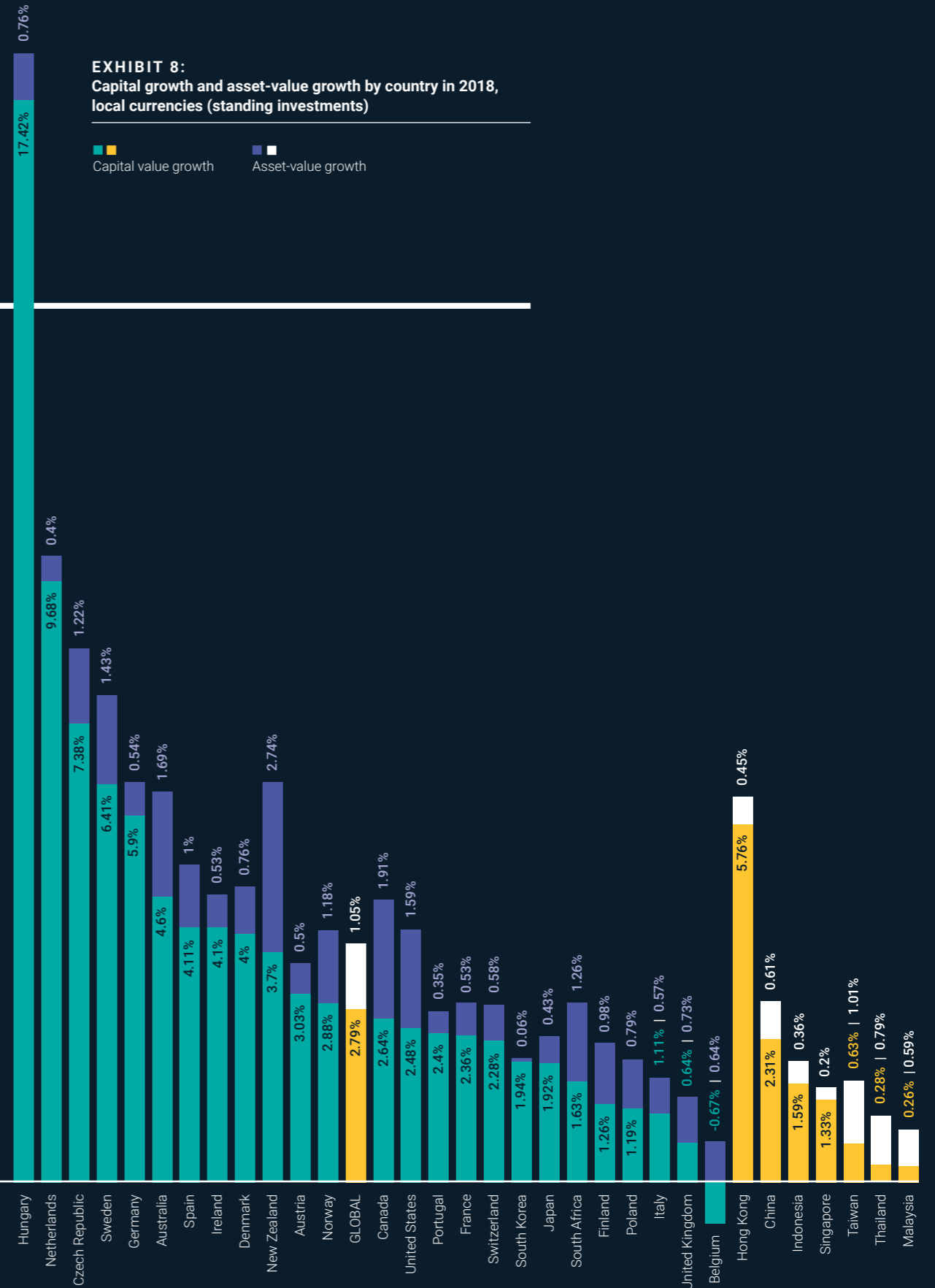
2.8% capital growth in 2018. All other countries recorded lower capital growth than the MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size). Negative capital growth occurred in Belgium. The U.S. recorded capital growth of 2.5% in 2018, 30 bps below the MSCI Global Annual Property Index's (Unfrozen; Weighting: Market Size) average. China, the market with the second largest increase in weight in 2018, saw capital growth of 2.3%.

The 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. In exhibit besides the capital growth also 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 expenditure is approximately 1.0% however for New Zealand, Canada, Australia and U.S. this is all above 150 bps. ■



**EXHIBIT 8:**  
Capital growth and asset-value growth by country in 2018, local currencies (standing investments)

■ Capital value growth ■ Asset-value growth



# Residual

**E**xhibit 9 shows the percentage change in market size estimates from 2017 to 2018, together with the asset-value growth. It should be noted that a residual item remains for many markets when comparing the impact of fundamental drivers and the overall change in estimated market size. In some markets, such as Poland and Denmark, this residual made up a large part of the change. Beyond the 25 countries in the global index, a similar trend was evident in Malaysia and Taiwan. In general, the residual is larger for smaller, less transparent markets. 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 non-professionally managed organizations.

### 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-2018 data in time to be included in this analysis. In 2018, 73% of those assets supporting MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size) weightings were updated with 2018 data (versus 74% in 2017), together with 78% for other Asian markets (versus 78% in 2017). 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.

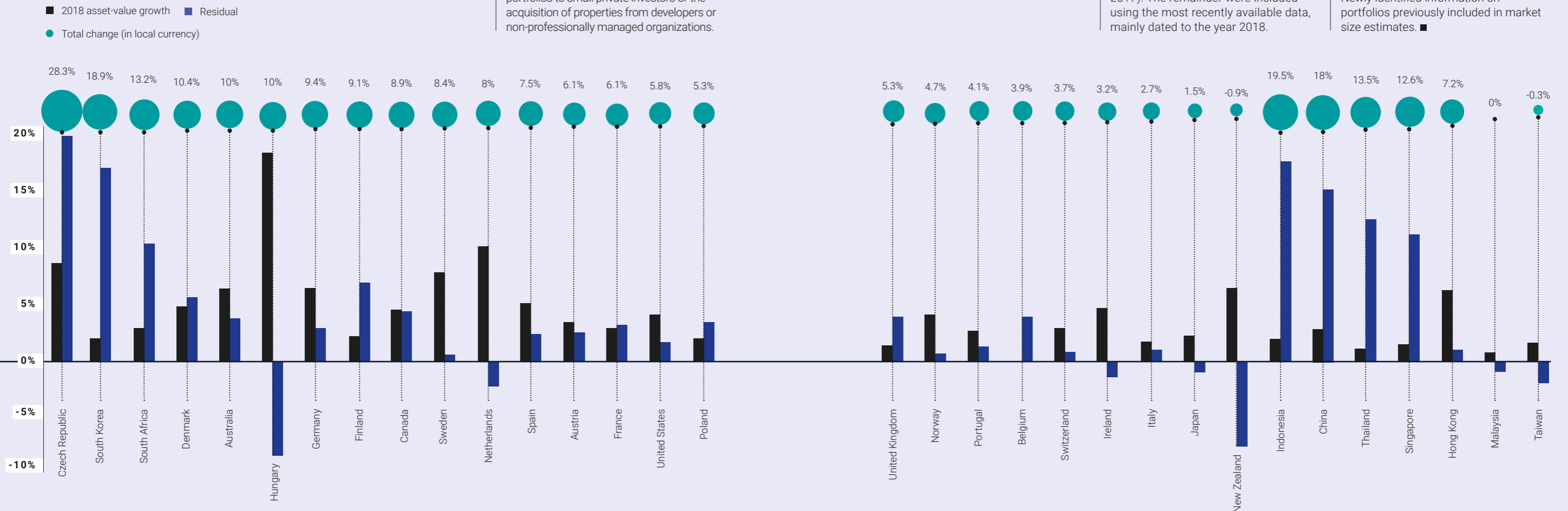
### NEWLY IDENTIFIED PORTFOLIOS

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. ■

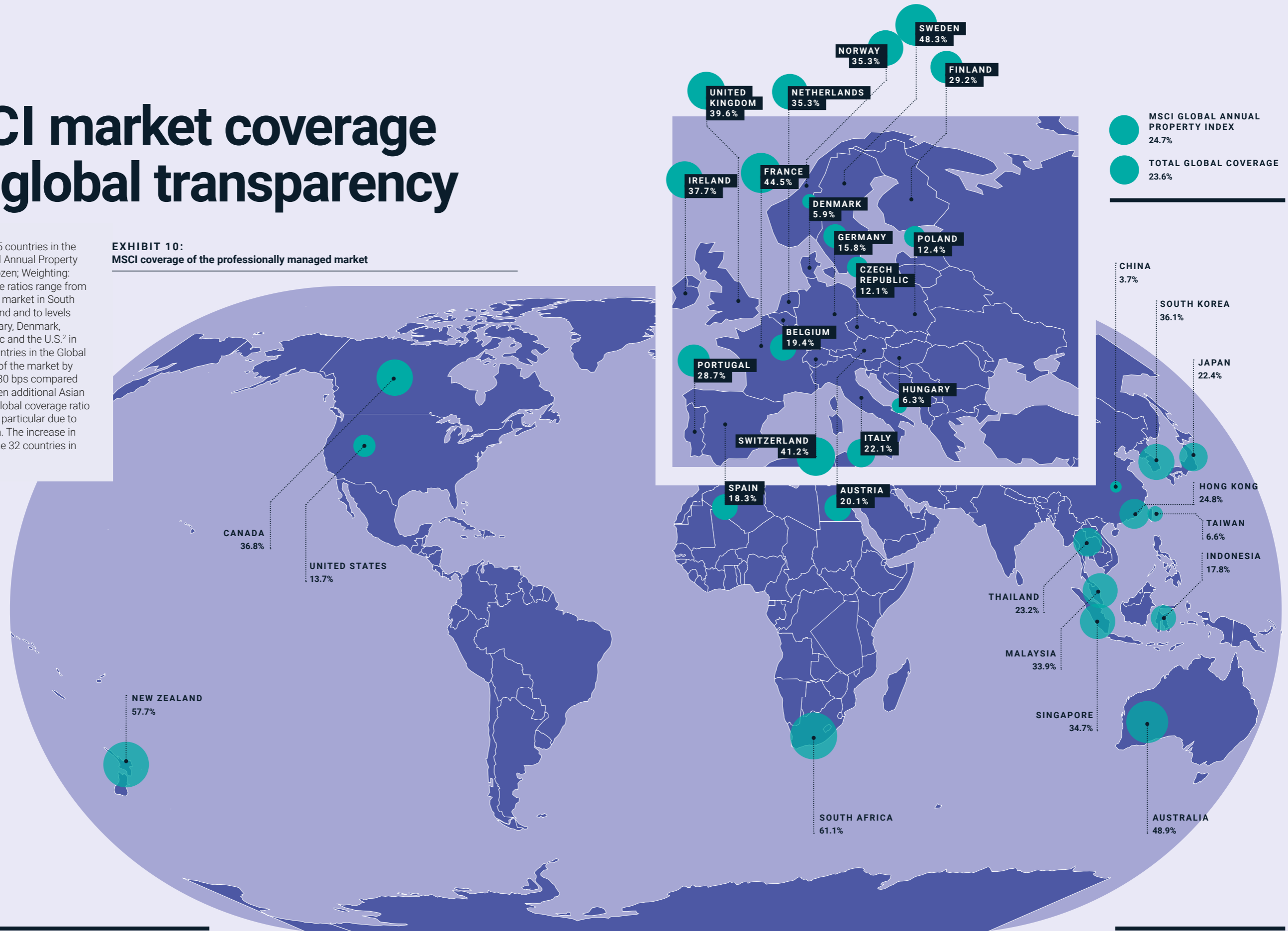
**EXHIBIT 9: Drivers of market size change, 2018, local currencies (standing investments)**



# MSCI market coverage and global transparency

**A**mong the 25 countries in the MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size), coverage ratios range from more than 50% of the market in South Africa and New Zealand and to levels of 6% to 14% in Hungary, Denmark, Poland, Czech Republic and the U.S.<sup>2</sup> in aggregate, the 25 countries in the Global Index covered 24.7% of the market by value, an increase of 30 bps compared to 2017. With the seven additional Asian markets added, the global coverage ratio remained at 23.6%, in particular due to low coverage in China. The increase in global coverage for the 32 countries in 2018 was 20 bps. ■

**EXHIBIT 10:**  
MSCI coverage of the professionally managed market



<sup>2</sup>Although it may appear low in percentage terms, the 13.7% coverage ratio (13.1% in 2017) in the U.S. market relates to a relatively large volume of real estate assets, given that the U.S. has a weight of more than 40% in the MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size). One of the reasons for the low coverage in the U.S. is the large proportion of the market owned by listed companies, which are not required to follow market-based appraisal processes; this means that they are not eligible for inclusion in MSCI's direct real estate indexes. Large proportion of the market owned by listed companies, which are not required to follow market-based appraisal processes; this means that they are not eligible for inclusion in MSCI's direct real estate indexes.

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 U.K. 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 U.S., the Netherlands and the U.K., 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%, meaning that the results for these two countries are not reported in an MSCI national market index fact sheet and that they are not included in the MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size).

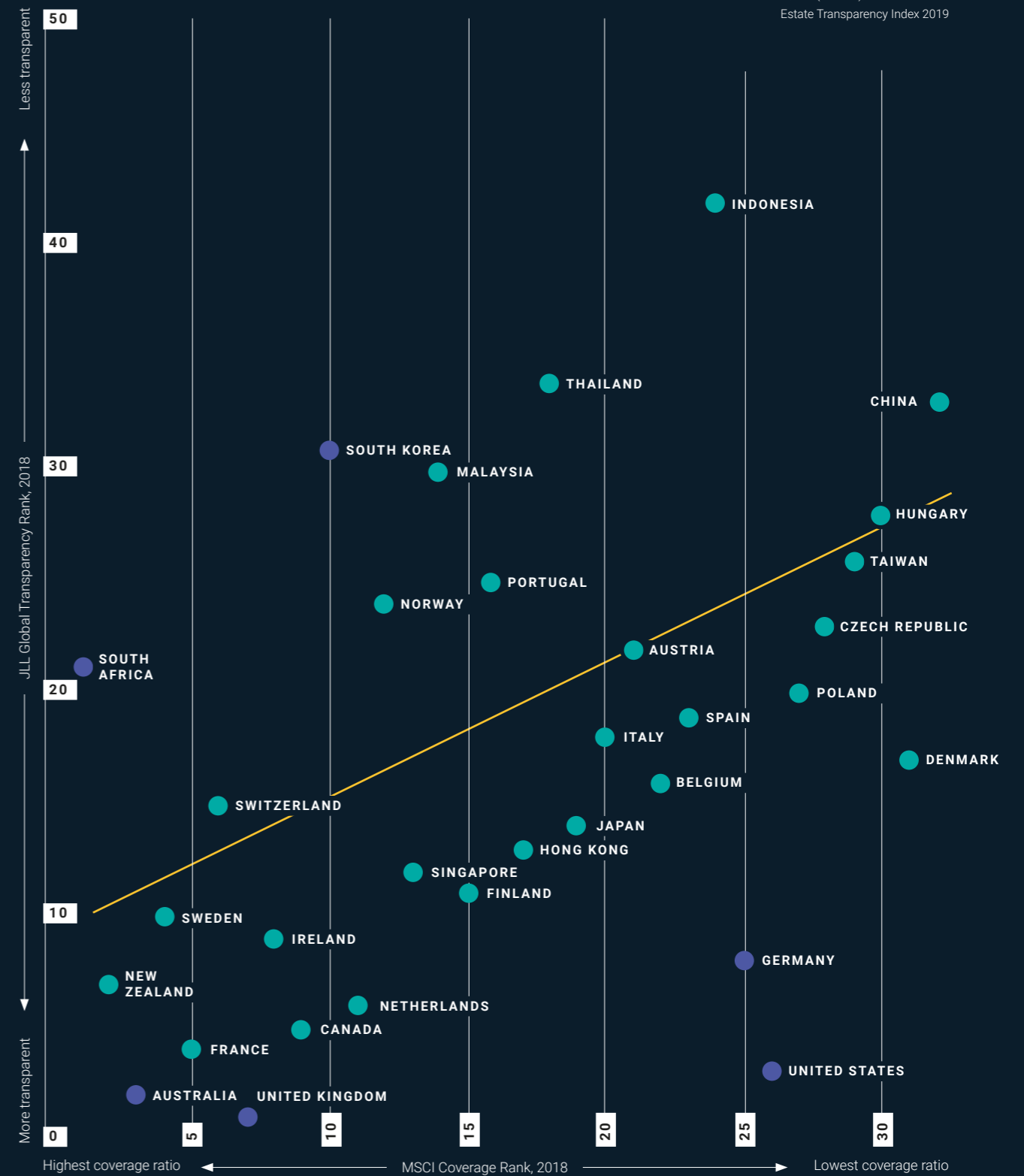


Exhibit 11 plots MSCI's real estate index coverage against JLL's Global Transparency Index, with the country rankings along each axis. The exhibit shows that more transparent markets generally also have a higher MSCI real estate index coverage ratio, with a modest positive correlation. MSCI produces index results for each of JLL's 26 most transparent ranked markets across the world. MSCI real estate indexes are published quarterly in each of the seven most transparent markets, with the exception of France, where index results are published biannually. Half of the markets included in the MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size) had coverage ratios exceeding 30% in 2018. Six markets tracked by MSCI had coverage ratios of more than 40% for the year. The two most transparent markets are the U.K. and Australia. MSCI's coverage is high in Australia as well as in the U.K. Of those markets that JLL ranks as less transparent, South Africa and South Korea are among the top 10 markets in terms of MSCI index coverage. ■



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

Source: MSCI, KTI (Finland), JLL Global Real Estate Transparency Index 2019



# Conclusion

The size of the professionally managed global real estate market expanded to \$8.9 trillion in 2018 from \$8.5 trillion in 2017. 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 (Unfrozen; Weighting: Market Size) 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 (Unfrozen; Weighting: Market Size). However, in 2018, after seven successive years of weighting increases, the weight of the U.S. in the index decreased. At a global level, currency movements decreased the size of the global real estate investment market by approximately -2.6% in USD terms, while capital growth and other factors (including new developments) increased total market size.

**Exhibit 12:**

**Market size estimate inclusion criteria**

Source: MSCI

## 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.

**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

**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 2017	ESTIMATED MARKET SIZE 2018	CAPITAL GROWTH (%)	MSCI INDEX COVERAGE 2018 IN ANNUAL INDEX	COVERAGE RATIO IN ANNUAL INDEX (%)
Australia	280.8	278.1	4.6%	136	48.9%
Austria	42.4	42.8	3.0%	8.6	20.1%
Belgium	58.4	57.8	-0.7%	11.2	19.4%
Canada	320	319.8	2.6%	117.8	36.8%
Czech Republic	21.2	25.8	7.4%	3.1	12.1%
Denmark	63.6	66.7	4.0%	3.9	5.9%
Finland (KTI)	76.5	79.4	1.3%	23.2	29.2%
France	422.3	426.6	2.4%	189.6	44.5%
Germany	514.3	535.4	5.9%	84.5	15.8%
Hungary	10.2	10.7	17.4%	0.7	6.3%
Ireland	30.9	30.3	4.1%	11.4	37.7%
Italy	127.9	125	1.1%	27.7	22.1%
Japan	797.5	831.3	1.9%	186.6	22.4%
Netherlands	162.7	167.2	9.7%	59.1	35.3%
New Zealand	18.8	17.6	3.7%	10.1	57.7%
Norway	54.3	53.7	2.9%	18.9	35.3%
Poland	48	48.2	1.2%	6	12.4%
Portugal	29.5	29.2	2.4%	8.4	28.7%
South Africa	47.6	46.3	1.6%	28.3	61.1%
South Korea	73.3	83.6	1.9%	30.2	36.1%
Spain	102	104.4	4.1%	19.1	18.3%
Sweden	212.8	213.1	6.4%	102.9	48.3%
Switzerland	235.2	241	2.3%	99.4	41.2%
United Kingdom	720	713.8	0.6%	282.8	39.6%
United States	2,974.10	3,146.20	2.5%	432.6	13.7%
<b>MSCI GLOBAL ANNUAL PROPERTY INDEX (UNFROZEN; WEIGHTING: MARKET SIZE)</b>	<b>7,444.30</b>	<b>7,694.30</b>	<b>2.8%</b>	<b>1,902.10</b>	<b>24.7%</b>

	ESTIMATED MARKET SIZE 2017	ESTIMATED MARKET SIZE 2018	CAPITAL GROWTH (%)	MSCI INDEX COVERAGE 2018 IN ANNUAL INDEX	COVERAGE RATIO IN ANNUAL INDEX (%)
China	482.8	540.4	2.3%	20.2	3.7%
Hong Kong	342.3	366.3	5.8%	90.8	24.8%
Indonesia	12.4	13.9	1.6%	2.5	17.8%
Malaysia	28.5	27.9	0.3%	9.5	33.9%
Singapore	157.3	173.6	1.3%	60.3	34.7%
Taiwan	44.4	42.8	0.6%	2.8	6.6%
Thailand	19.1	21.7	0.3%	5.0	23.2%
<b>TOTAL GLOBAL COVERAGE (INCL. OTHER ASIA)</b>	<b>8,531.0</b>	<b>8,881.0</b>		<b>2,093.2</b>	<b>23.6%</b>

Source: MSCI, KTI (Finland)

## Appendix 3:

### Market coverage for non-annual indexes

	ESTIMATED MARKET SIZE 2018 (USD BILLION)	MSCI INDEX COVERAGE 2018 (USD BILLION)	COVERAGE RATIO (%)
United Kingdom (monthly)	713.8	62.6	8.8%
United Kingdom (quarterly)	713.8	208.6	29.2%
Netherlands (quarterly)	167.2	42.3	25.3%
United States (quarterly)	3,146.20	361.4	11.5%
France (biannual)	426.6	51.4	14.6%
Italy (biannual)	125	18.2	12%

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