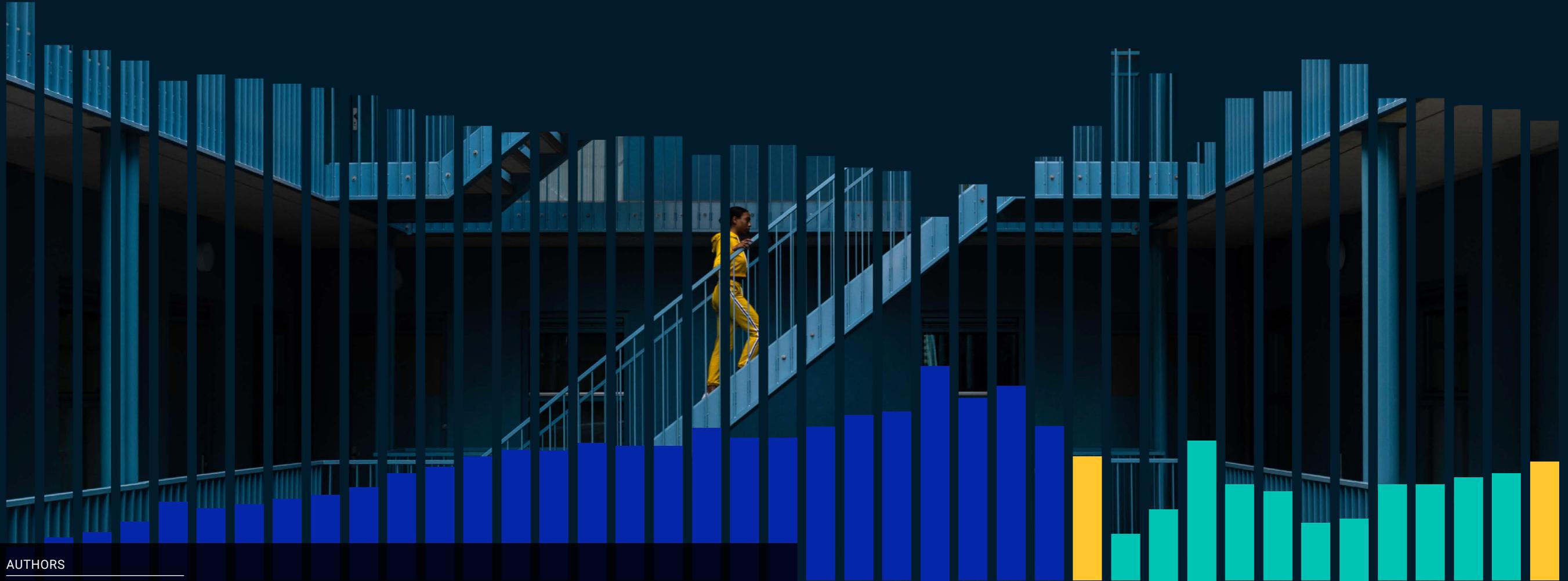


Real Estate Market Size 2021/22



AUTHORS

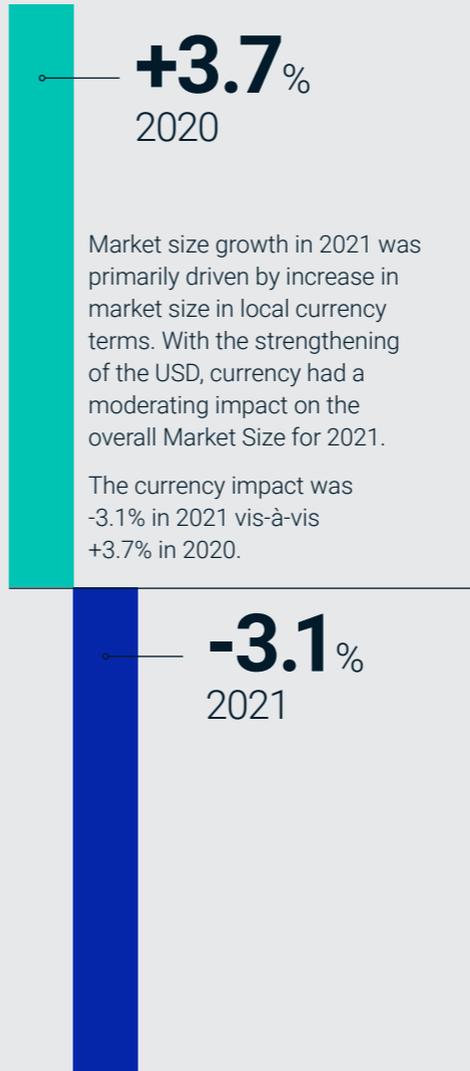
Hariharan GG
Rishikesh Patkar
Razia Neshat

Overview

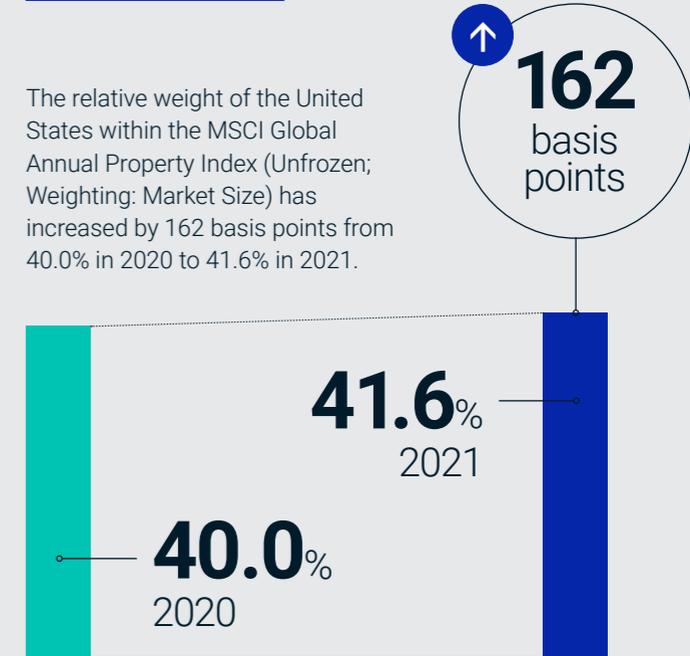
Key takeaways



Currency movements witnessed trend reversal compared to last year



Increase in relative weight of United States



China is now the fourth-largest market

China has moved to the fourth position overtaking Germany, after being in the fifth position last year. In 2021, China is ranked behind United States, Japan, and United Kingdom.

Contents



Interactive page

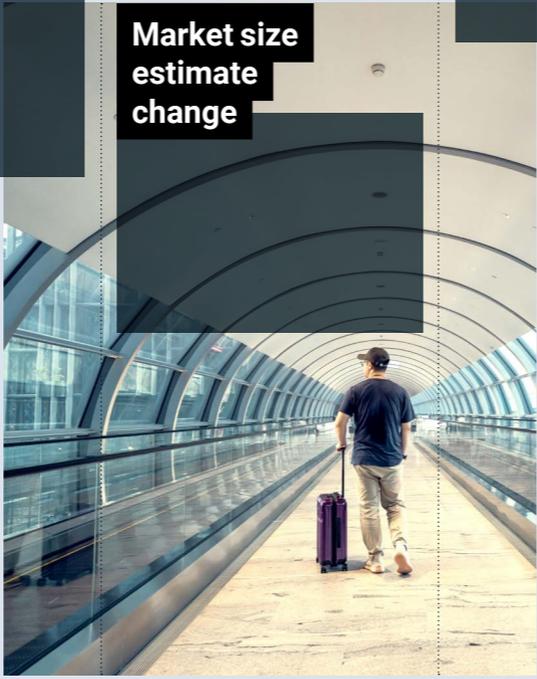
“ Possessing data on the size and structure of the market and of the wider opportunity set, particularly in new property types, is vital to enable managers to raise capital for strategies they can implement.”

RENÉ VEERMAN
HEAD OF REAL ASSETS, MSCI

Country market sizes

Drivers of market size changes in 2021

Market size estimate change



Foreword



RENÉ VEERMAN
HEAD OF REAL ASSETS, MSCI

INVESTORS ARE SEEKING INVESTMENT OPPORTUNITIES WITH BENEFICIAL LONG-TERM STRUCTURAL TRENDS.

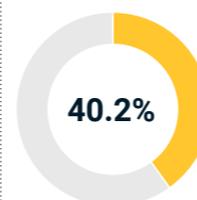
Investors may well have expected a decline in real estate pricing and an increase in distressed opportunities following the economic impact of 2020’s global lockdowns. However, the hit to pricing was, for the most part, negligible and the flood of distressed assets never came. Instead, the market rallied in 2021 and investors globally completed transactions totalling USD 2.1 trillion.

The size of the professionally-managed real estate market also continued to grow in 2021, rising to USD 11.4 trillion from USD 10.5 trillion in 2020. The Americas contributed 40.2% of the overall market size estimate. At USD 4.6 trillion this was an increase of 12.9% from 2020. Europe, Middle East and Africa grew by 5.5% and Asia Pacific by 6.8%, tempered by the strengthening of the U.S. dollar against local currencies.

Understanding and possessing data on the wider market is important because it is the unprecedented demand for real estate from across a diverse group of investors and occupiers – as demonstrated by record transaction volumes – that has put downward pressure on cap rates and resulted in overall price growth. Growth in prices has persisted even as property types such as offices and retail face headwinds in a world reshaped by the pandemic.

It’s amid these headwinds that investors have become even more strategic about their investment choices. Assets benefitting from long-term structural tailwinds have soared. Logistics and residential assets are two examples, boosted by the increased propensity to shop online and the jump in the cost of buying homes, which has led younger generations to rent for longer.

We’re also seeing investors explore new sectors such as data centers and life sciences – a pandemic-era discovery for many investors. The downside of such changes of strategic focus is that investors have largely dropped retail, traditionally one of the biggest commercial property sectors, from their shopping lists and replaced it with sectors that are either overly subscribed or minuscule in scale. While capital-raising continues at pace, investors may find deployment harder, which could potentially limit increases in market size increases.



The Americas contributed 40.2% of the overall market size estimate.

The focus of investors on the assets that can deliver on net-zero pledges could also further restrain the potential opportunity set.

What may also temper the growth of the professionally-managed market at the edges is a move by some investors to increase their allocation to debt. For some regulated investors the capital charge for lending to real estate is less than that of direct acquisition, so by lending to other investors they are getting exposure to real estate without increasing the overall professionally-managed asset pool.

Possessing data on the size and structure of the market and of the wider opportunity set, particularly in new property types, is vital to enable managers to raise capital for strategies they can implement. Our mission is to drive real asset transparency and help investors build better portfolios. Our hope is that this report is a key asset to achieving that goal.

RENÉ VEERMAN
HEAD OF REAL ASSETS, MSCI

The size of the professionally-managed real estate market also continued to grow in 2021, rising to \$11.4 trillion from \$10.5 trillion in 2020.

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 2021 market size estimates and explains the main changes that occurred between 2020 and 2021.

The MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size) weights real estate investment returns across 27 countries. Luxembourg was included in the MSCI Global Annual Property Index in 2021 with four years of history. While MSCI's national indexes for Japan and Korea are included in the MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size), data for seven other Asian markets – China, Hong Kong, Indonesia, Malaysia, Singapore,

Taiwan and Thailand – are excluded from that index. Three additional CEE markets – Bulgaria, Romania and Slovakia have been added to the study. While these markets are not included in the MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size), as per the MSCI Property Indexes methodology, they contribute to the recently launched MSCI Global Quarterly Property Index (Unfrozen; Weighting: Market Size) and MSCI Europe Quarterly Property Index (Unfrozen; Weighting: Market Size). In this report, all national market sizes are based on bottom-up, portfolio-specific estimates, and these are converted into USD using the year-end currency conversion rate.



“Understanding and possessing data on the wider market is important because it is the unprecedented demand for real estate from across a diverse group of investors and occupiers – as demonstrated by record transaction volumes.”

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HEAD OF REAL ASSETS, MSCI

Estimating market size changes



MSCI captures a large amount of information on individual real estate investment portfolios around the world, which forms the foundation of our market data and portfolio analysis for direct real estate holdings at the asset level. By the end of 2021, the value of these directly measured real estate investment portfolios was \$2.5 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 of 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 is 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).

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.



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 national-level market size estimates are converted to USD 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 the MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size), MSCI Europe Annual Property Index (Unfrozen; Weighting: Market Size), MSCI Global Quarterly Property Index (Unfrozen; Weighting: Market Size), MSCI Europe Quarterly Property Index (Unfrozen; Weighting: Market Size) as well as other regional indexes and bespoke or custom indexes.

By the end of 2021, the value of real estate investment portfolios measured by MSCI was

\$2.5 trillion

Market size estimate change

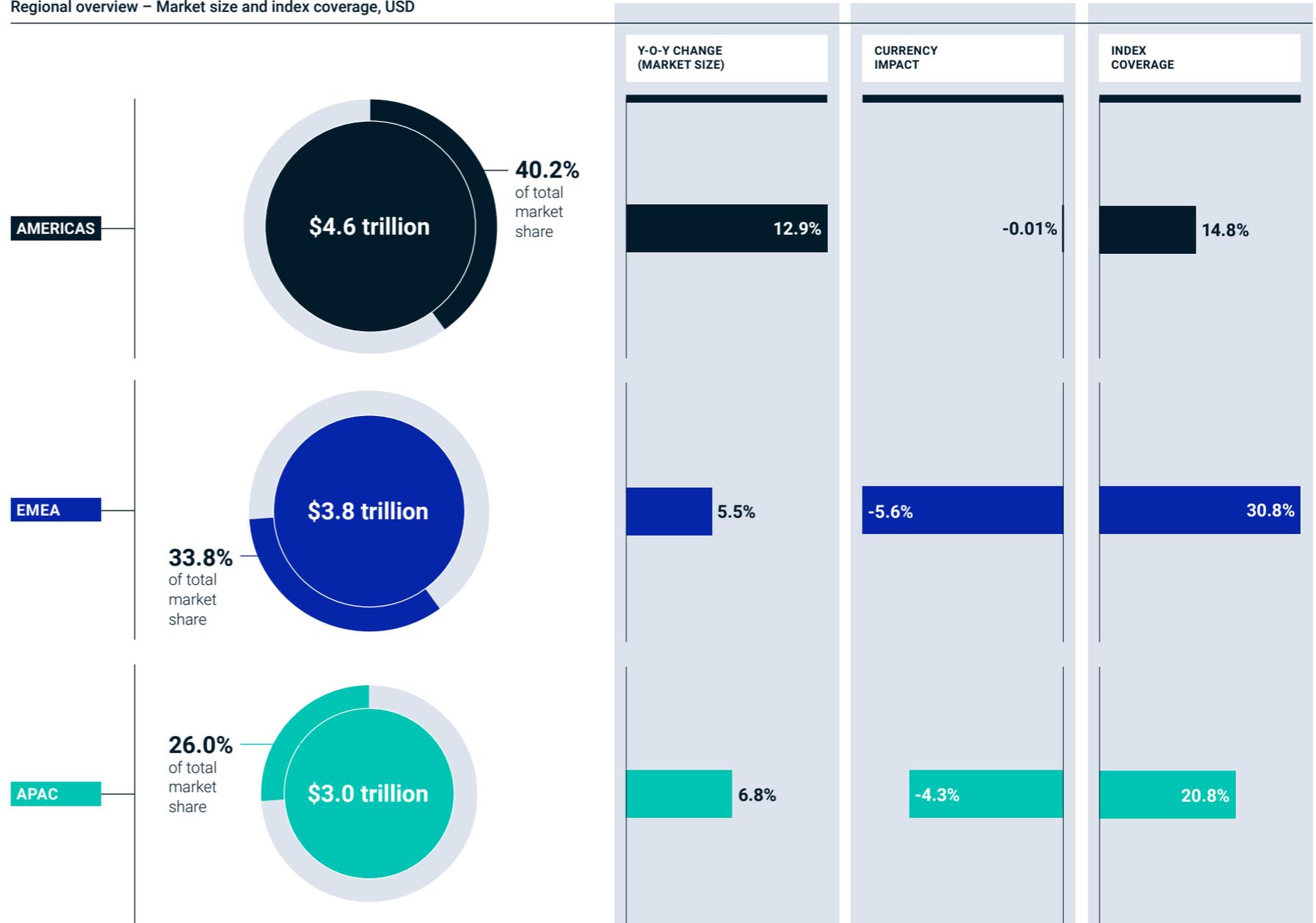


The size of the professionally managed global real estate investment market increased by 8.5% from \$10.5 trillion to \$11.4 trillion in 2021. The market grew by 9.0% in 2020.

The 2021 Market Size study includes 37 markets – 3 from Americas, 23 from Europe, Middle East and Africa (EMEA) and 11 from Asia Pacific (APAC). While Americas contributed to 40.2% of the Market Size in 2021, EMEA and APAC contributed 33.8% and 26.0% respectively.

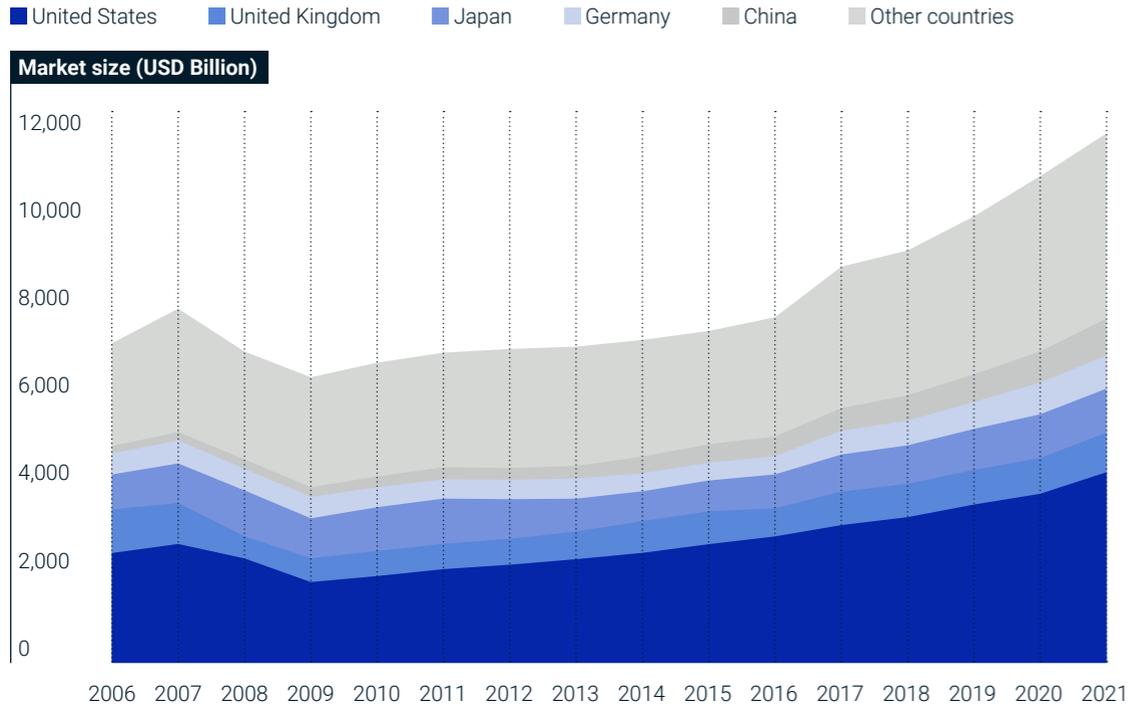
The Market Size in Americas grew by 12.9% in 2021 to USD 4.6 trillion while EMEA and APAC grew by 5.5% and 6.8% to USD 3.8 trillion and USD 3.0 trillion, respectively. The slowing market size growth in EMEA and APAC was driven by the strengthening of USD against respective local currencies.

EXHIBIT 1
Regional overview – Market size and index coverage, USD



Source: MSCI, KTI (Finland)

EXHIBIT 2
Market size estimate, USD Billion



United States continued to be the largest market, while Japan and United Kingdom retained their second and third position, respectively. China with a market size of USD 791 billion moved up to be at the fourth position while Germany which had a market size of USD 712 billion slipped to the fifth position.

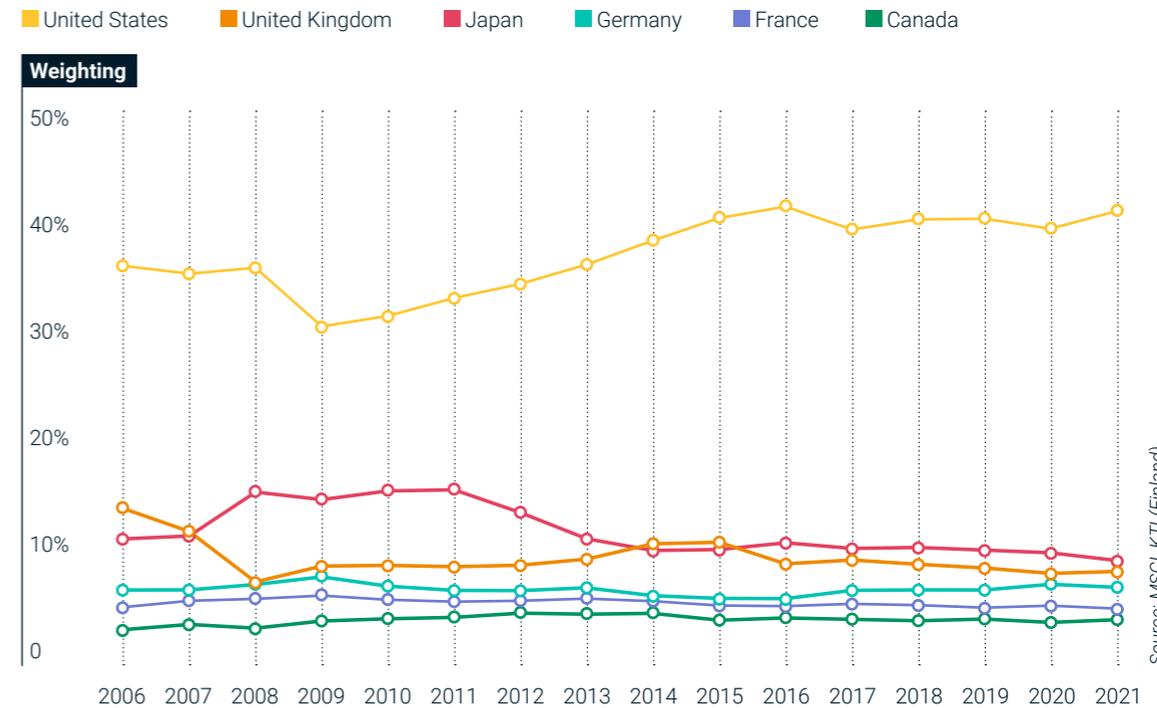


Longer term changes in market size

The relative market size weights of individual countries in the MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size) have shifted over time, as shown in Exhibit 3. These changes have resulted from a combination of asset value growth, currency impact and a residual component. The weight of the United States market has increased by 162 basis points to be at 41.6% compared to 40.0% in 2020. Canada witnessed an increase in weight in the global index with an increase of 27 basis points.

Its weight in the index increased from 4.0% in 2020 to 4.3% in 2021. Other markets that registered an increase in weights were United Kingdom (18 basis points), Australia (9 basis points), Norway (6 basis points), New Zealand (2 basis points) and Denmark (1 basis point). The weight of Japan decreased by 72 basis points to be at 9.6% in 2021. It is for the first time since 2006 that the weight of Japan has decreased to less than 10% in the MSCI Global Annual Property Index.

EXHIBIT 3
Weight of the six largest countries in the MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size)



Country market sizes

Market size estimates in 2021

Although individual market size estimates can potentially have a large impact on the MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size), they have proved to be relatively consistent from year to year. This consistency was again evident in 2021, although there were some important changes for individual countries, as shown in [Exhibit 4](#). Bulgaria, Luxembourg, Romania and Slovakia are four additional countries that have been included in the Market Size estimates for 2021.

The largest change (in USD terms) was for the United States, with a market size increase of \$466.3 billion. There was an increase in the market size estimates across 26 of 37 markets in 2021. In addition to the change in rankings for China and Germany, other noticeable movements in the market size rankings within top 15 markets included Australia and Hong Kong. Australia replaced Hong Kong to be at the eighth position while Hong Kong slipped to the ninth position in 2021.

While the ranking for Hong Kong dropped for the second consecutive year, it continued to be among the top 10 markets.

The four new markets included in the Market Size study for 2021 are the smallest markets (in USD terms) and are ranked at 34th (Romania), 35th (Luxembourg), 36th (Slovakia) and 37th (Bulgaria) positions.

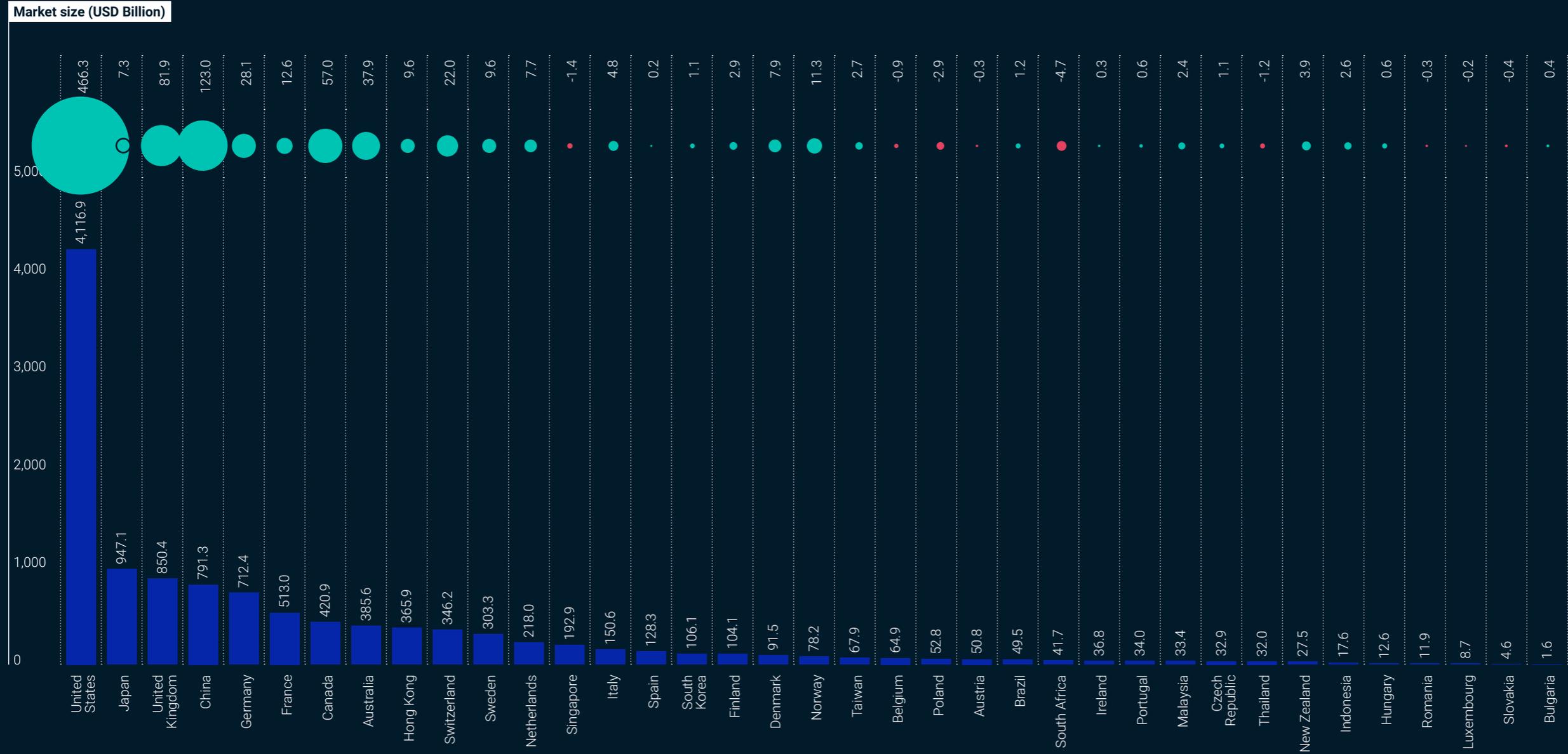
Among the constituents of the MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size) ([see Exhibit 5](#)), the United States remained the largest market in the index with an increase of 162 basis points in 2021. Japan continued to be the second largest market in the index although there was an overall decline in its weight by 72 bps. The third largest market was United Kingdom which also saw an increase of 18 basis points. Almost all European markets, except for United Kingdom, Norway, and Denmark, witnessed a drop in weights in the MSCI Global Annual Property Index due to the weakening of the Euro against the USD in 2021.

The largest change (in USD terms) was for the United States, with a market size increase of \$466.3bn



EXHIBIT 4
Change in national market sizes between 2020 and 2021, USD Billion

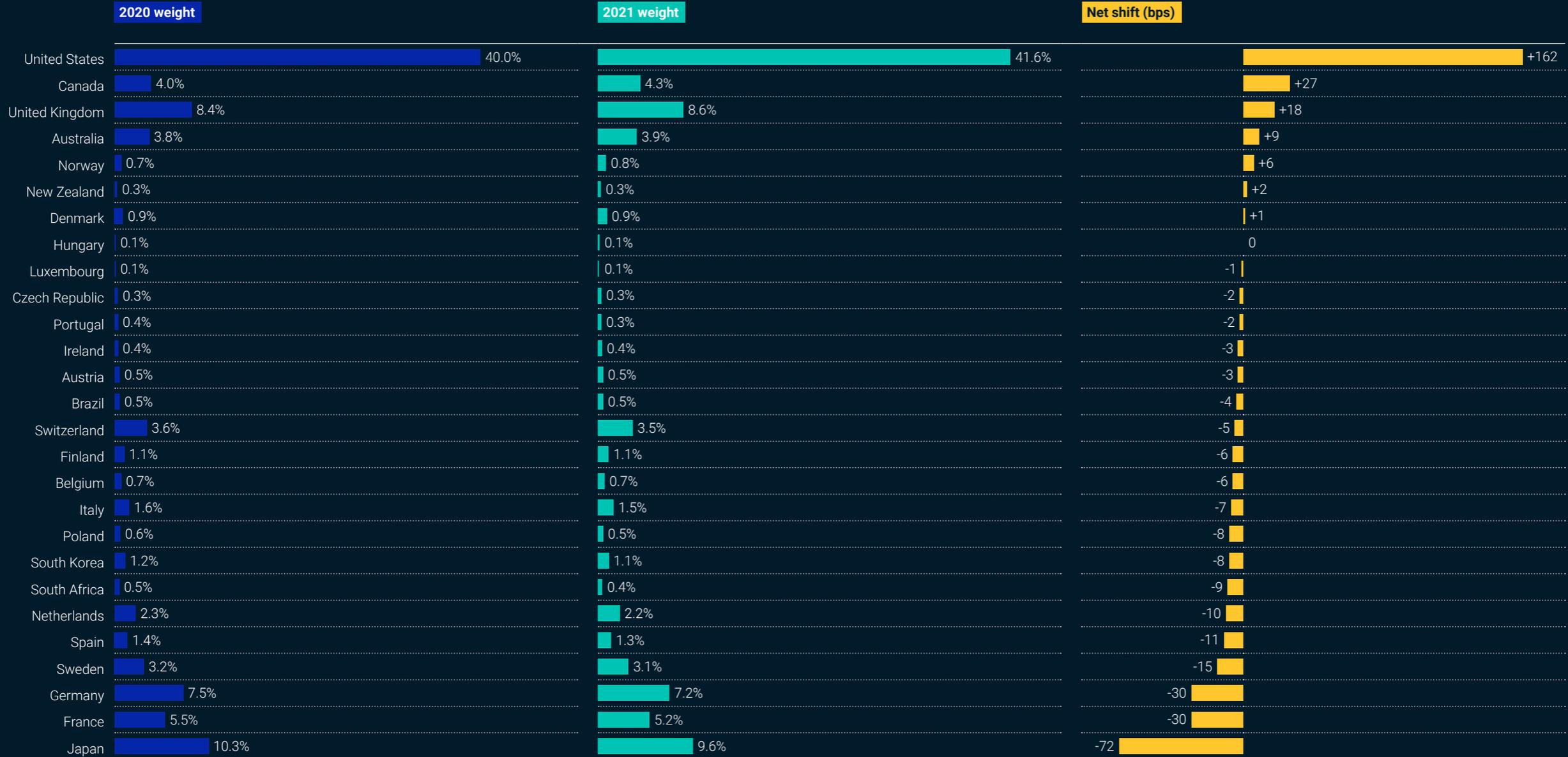
Market size in 2021 Positive net change from 2020 Negative net change from 2020



There was an increase in the market size estimates across 26 of 37 markets in 2021.

Source: MSCI, KTI (Finland)

EXHIBIT 5
Change in weight in the MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size), 2020–2021



Almost all European markets, except for United Kingdom, Norway, and Denmark, witnessed a drop in weights in the MSCI Global Annual Property Index due to the weakening of the Euro against the USD in 2021.

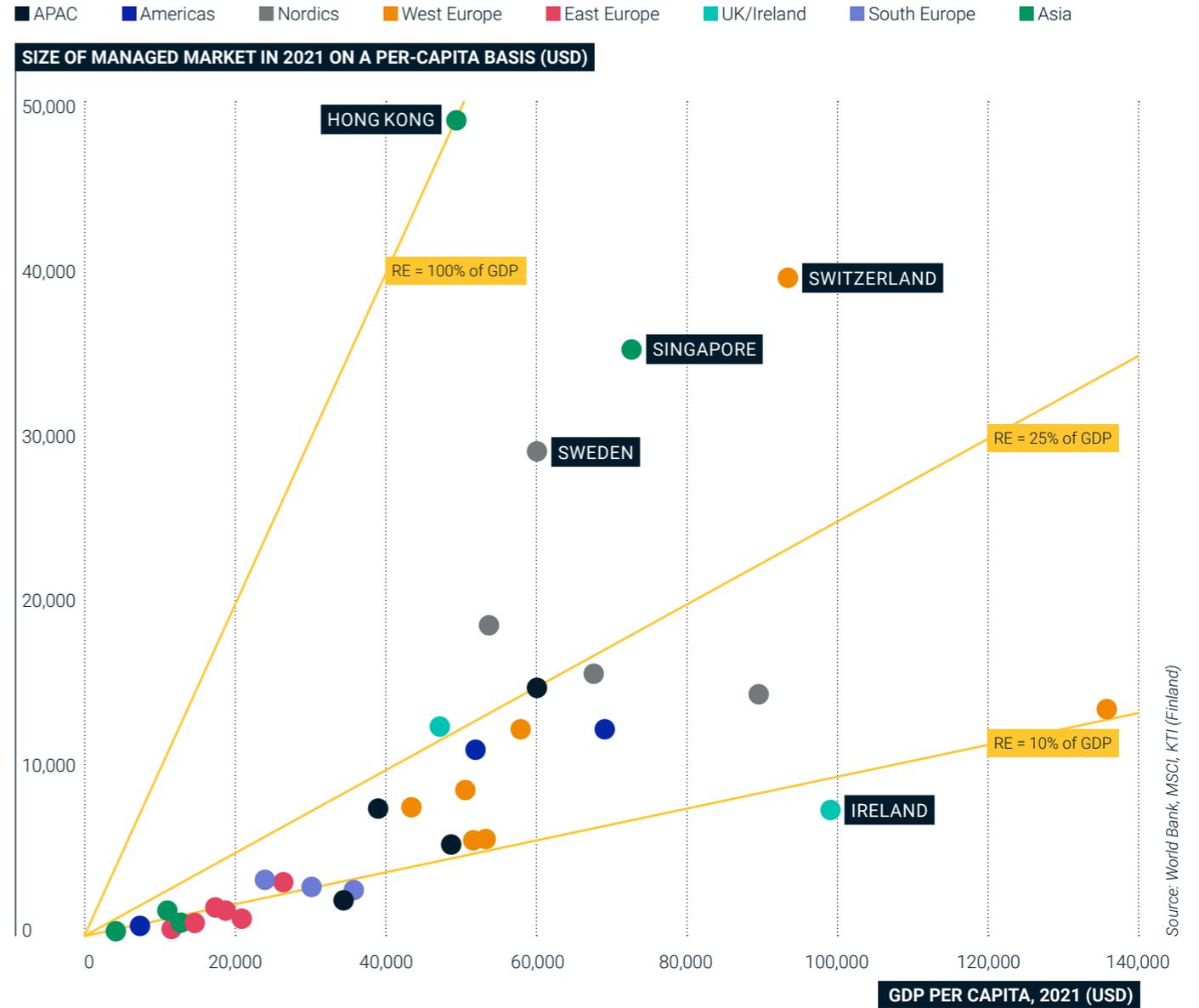
Source: MSCI, KTI (Finland)

Relative market size estimates

Exhibit 6 compares the national real estate market sizes with GDP per capita, with clear regional differences emerging. The wealthy city-states of Hong Kong and Singapore have the largest and the third largest relative market sizes respectively. The size of the professionally managed real estate investment market in Hong Kong was 99% of its GDP per capita (2021), a level driven up significantly by the high value per floor area. Switzerland and Sweden continued to have the largest real estate investment market size per capita in Europe. Among the 27 countries included in the MSCI Global Annual Property Index, the top three countries by GDP per capita are Luxembourg, Switzerland and Ireland. The professionally managed market per capita for Ireland however, is approximately a fifth of the real estate market per capita for Switzerland.

The size of the professionally managed real estate investment market in Hong Kong was 99% of its GDP per capita (2021).

EXHIBIT 6
Relative estimated market size by GDP per capita



Market size estimates by portfolio types

MSCI in 2021 has extended the Market Size Analysis to cover the various types of portfolios in the MSCI Market Size Universe. The portfolios are broadly divided into four categories – Asset Owner, Unlisted, Listed and Other & Unknown. Details on subcategories are available in [Appendix 4](#).

The Listed real estate market size was the largest category, with a total Market Size of \$4.5 trillion followed by the Unlisted real estate category at \$3.7 trillion. Exhibit 7 gives the distribution of the different portfolio types by regions. The Listed real estate category in Americas and APAC represented 38.3% and 57.9% of the regional market size estimate. The Unlisted real estate market size represented a larger share of region's market size at 39.9%.

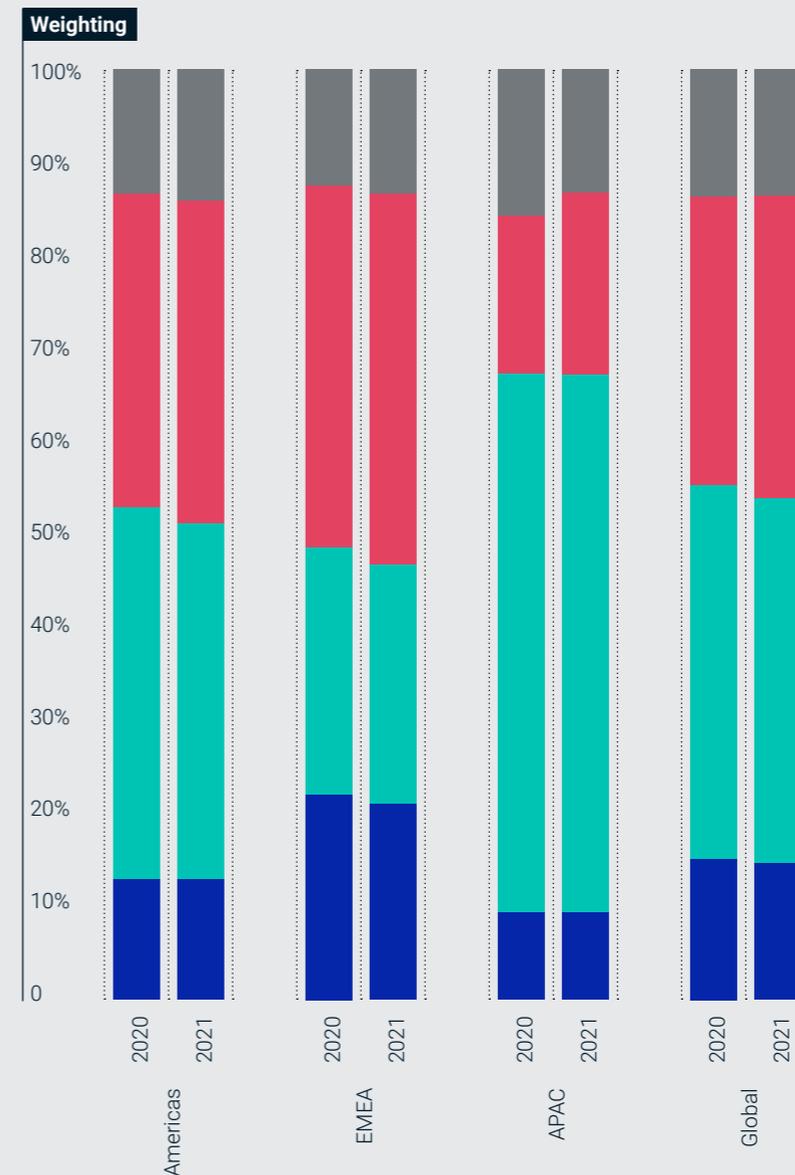


The Unlisted real estate category has registered the largest growth globally in 2021, with an increase of 13.8% over the previous year. Amongst the portfolio types by region, the largest growth was in the APAC Unlisted real estate category at 22.7%.

The Listed real estate market size was the largest category, with a total Market Size of \$4.5 trillion followed by the Unlisted real estate category at \$3.7 trillion.

EXHIBIT 7
Portfolio type by regions, 2020 and 2021

■ Asset owner ■ Listed ■ Unlisted ■ Other & Unknown



The unlisted real estate category has registered the largest growth globally in 2021, with an increase of 13.8% over the previous year. Amongst the regional portfolio type, the largest growth was in the APAC unlisted real estate category at 22.7%.

Drivers of market size changes in 2021



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 as well as 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

Around 79.5% of the total estimated market size is based on 2021 real estate market values.

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.

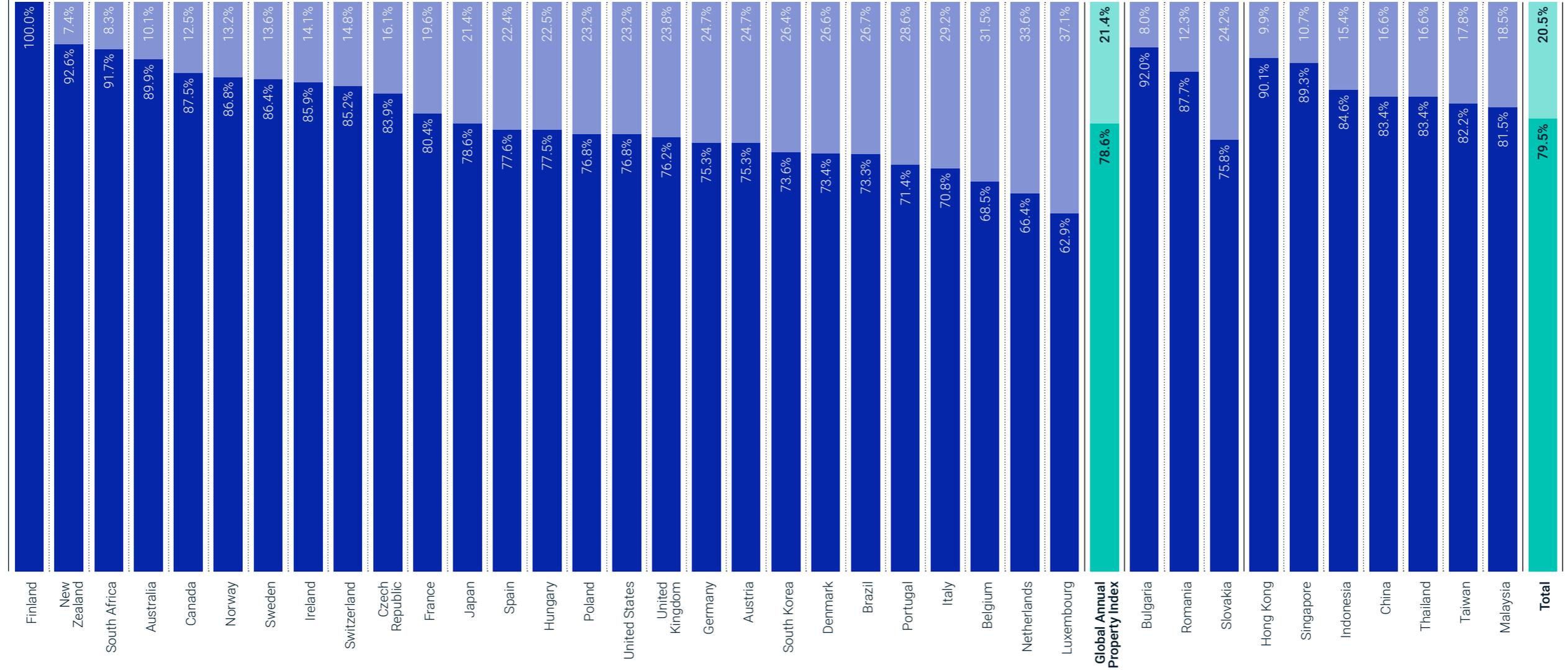
Around 79.5% of the total estimated market size is based on 2021 real estate market values. The proportion of updated information varies between countries, but generally stands at between 60% and 95% of the total identified investment stock. The average proportion of updated information was 78.6% for the 27 markets covered in MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size). The overall percentage of information updated for the seven countries in the Other Asia market was 85.7%.

The changes in the market size estimates between 2020 and 2021 are considered below, broken down into the contributions of currency impacts, capital growth in local currency and other changes.

EXHIBIT 8
Updated AUM by country, 2021 Data

Updated Not updated

Total percentage share



Source: MSCI, KTI (Finland)

Currency impact

The impact of currency on the market size at a global level (36 countries) was -3.1% in 2021. Each country's currency impact expressed in terms of USD is shown in [Exhibit 9](#).

With a stronger USD in 2021 as compared to 2020, most currencies with the exception of Canadian Dollar, Chinese Renminbi and Taiwanese Dollar have depreciated against the United States Dollar (USD). Currency impact at a country level was the highest for Japanese Yen and the Thai Bhat at -10.3% for both in 2021.

The impact of currency on the market size at a global level (36 countries) was -3.1% in 2021.



Capital growth and asset value growth

25 of the 27 countries in the MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size) showed a positive capital growth in local currency terms in 2021, as shown in [Exhibit 10](#). The highest levels of annual capital growth at standing investment level were recorded for United States (12.2%) and United Kingdom (10.7%).

The Capital Growth for the MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size) for standing investments was 8.3%.

Capital Growth in other Asian markets was lower in 2021 compared to 2020, as Taiwan, Singapore, and China witnessed positive capital growth in 2021.

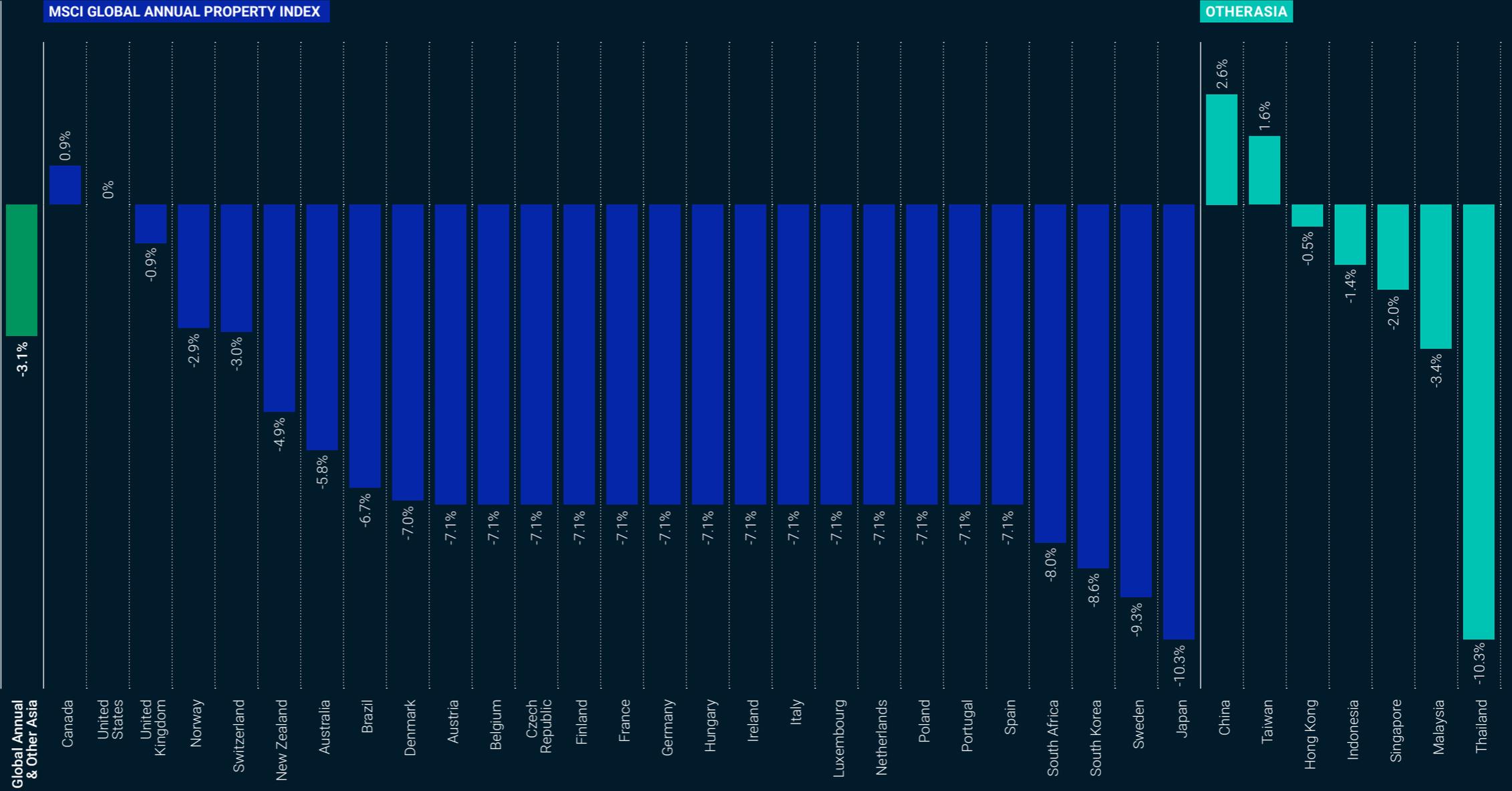
In the MSCI Global Annual Property Index the difference between the asset value growth and the capital growth is approximately 0.9%.



Unlike capital growth, the asset value growth, which doesn't adjust for the capital expenditure, could be used for comparing the market size growth. The Asset Value Growth for the MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size) for standing investments was 9.2%. In Exhibit 10 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 0.9%.

EXHIBIT 9
Currency impact by country in 2021, local currencies vs. USD

Currency impact at a country level was the highest for Japanese Yen and the Thai Bhat at **-10.3%** for both in 2021.

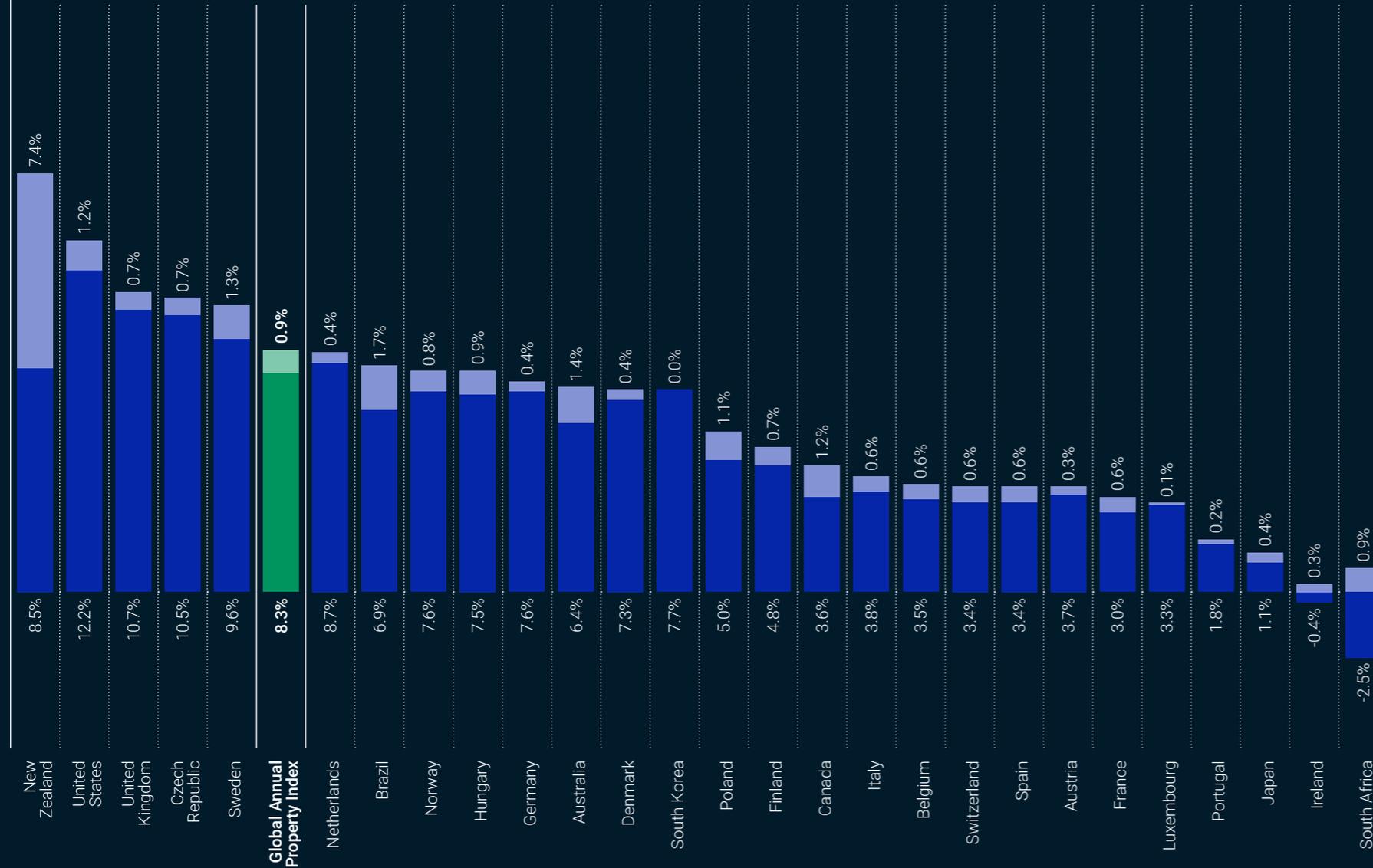


Source: MSCI, Reuters

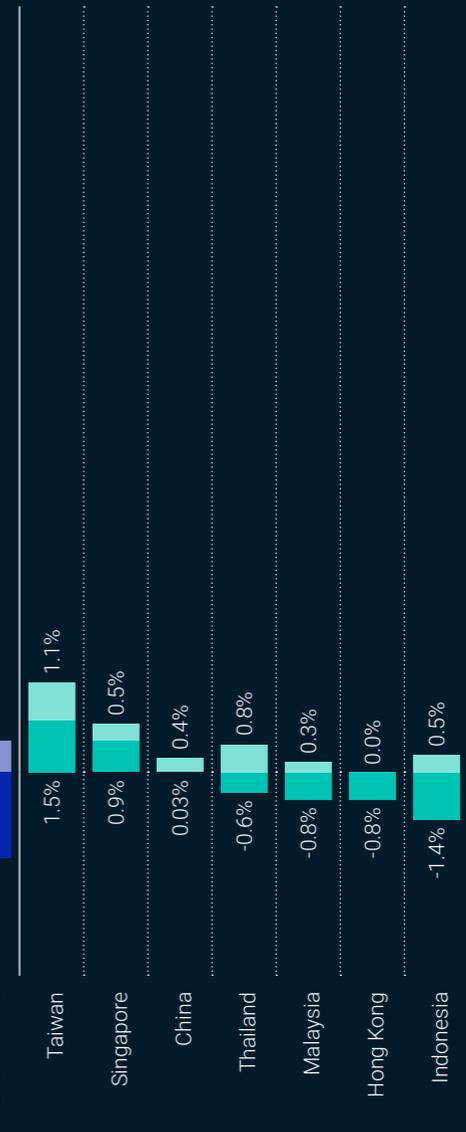
EXHIBIT 10
Capital Growth and Asset-Value Growth by country in 2021, local currencies (Standing investments)

■ Capital growth ■ Difference between Asset Value Growth and Capital Growth

MSCI GLOBAL ANNUAL PROPERTY INDEX



OTHERASIA



Source: MSCI, KTI (Finland)

The Capital Growth for the MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size) for standing investments was **8.3%**.



Residual

Exhibit 11 shows the percentage change in market size estimates in local currency from 2020 to 2021, 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 in the constituents of the MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size) were observed for Norway at 11.9%, Japan at 10.8% and Canada at 10.2%. For the Asian markets large residuals were observed for Indonesia at 19.7%, China at 15.0% and Malaysia at 12.0%. 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.

The largest residuals in the constituents of the MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size) were observed for:

Norway
11.9%

Japan
10.8%

Canada
10.2%

In the Asian markets large residuals were observed for:

Indonesia
19.7%

China
15.0%

Malaysia
12.0%



Timeliness of reporting

As discussed above, not all portfolios reported end-2021 data in time to be included in this analysis. In 2021, 78.6% of those assets supporting MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size) weights were updated with 2021 data (same as 2020), together with 85.7% for other Asian markets (versus 85.0% in 2020). The remainder were included using the most recently available data, mainly dated to the year 2020.

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

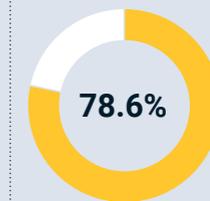
Capital growth for MSCI-measured portfolios may differ from overall market capital growth because of differences in the quality of the underlying assets or sector deviations.

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

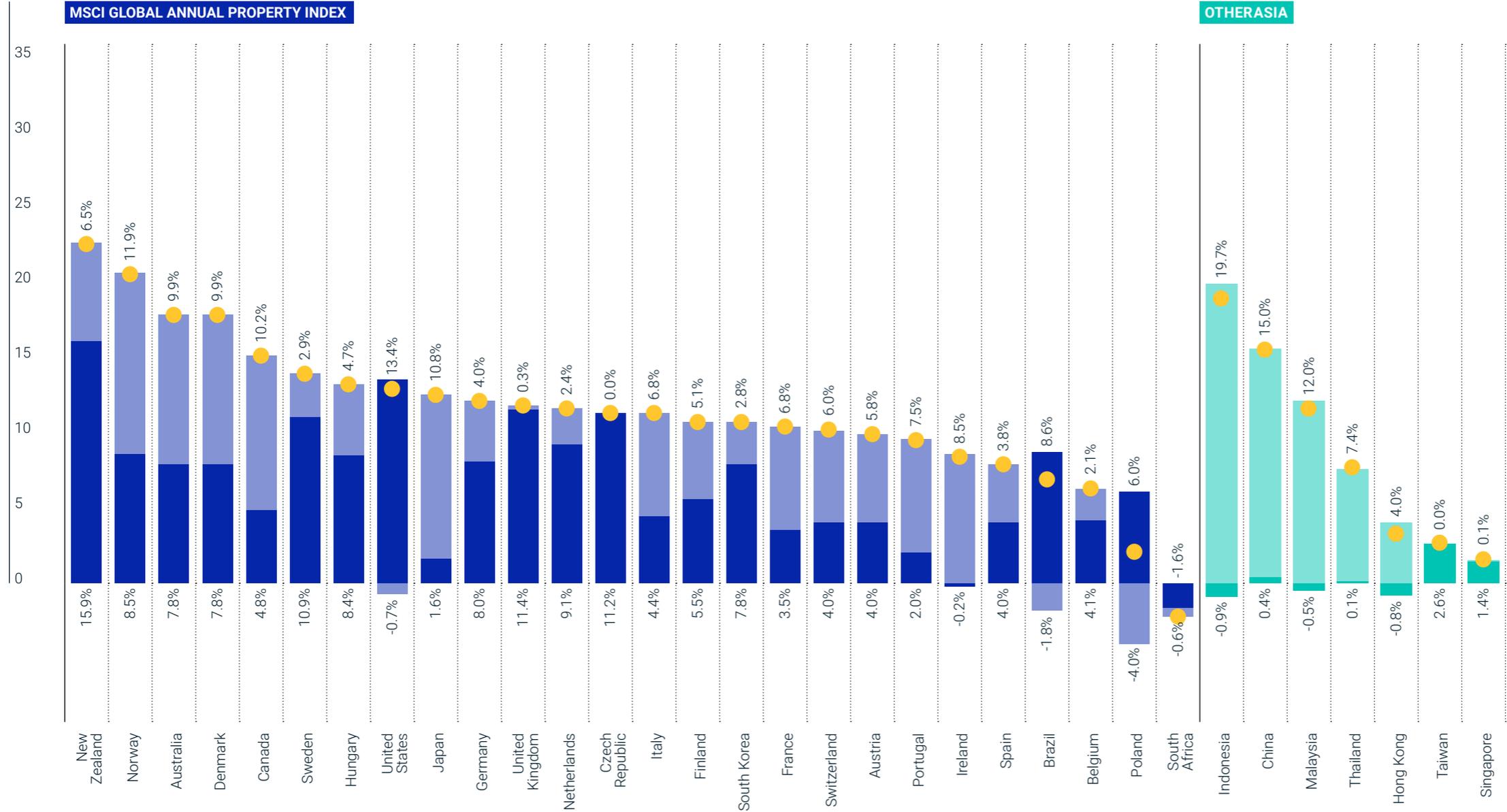
Newly identified information on portfolios previously included in market size estimates.



In 2021, 78.6% of those assets supporting MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size) weights were updated with 2021 data (same as 2020).

EXHIBIT 11
Drivers of market size change, 2021

■ 2021 Asset Value Growth ■ Residual ■ Total market size change (in local currency)



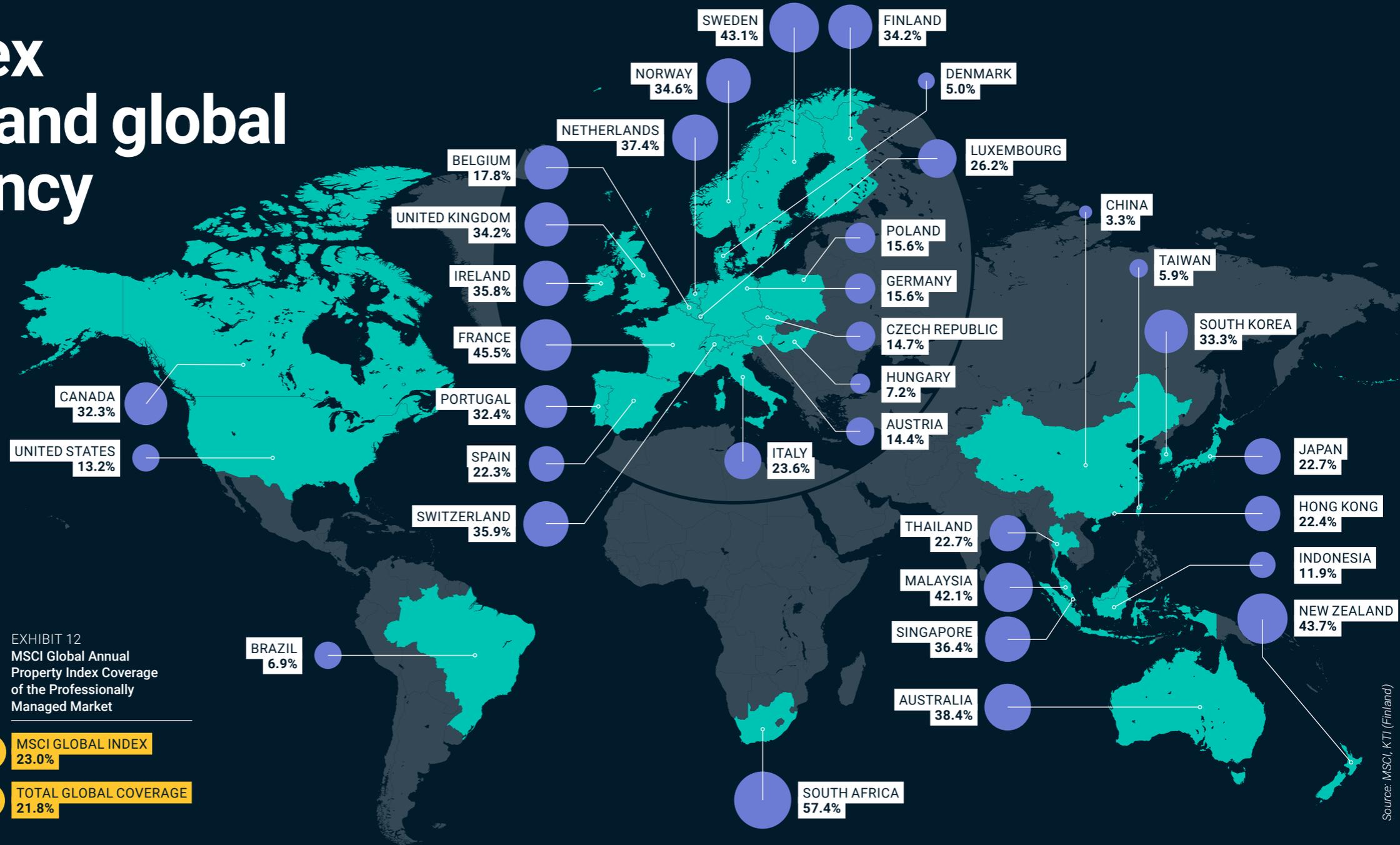
Source: MSCI, KTI (Finland)



MSCI Index coverage and global transparency

Among the 27 countries in the MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size), index coverage ranged from 57.4% in South Africa to 5.0% in Denmark. In aggregate, the 27 countries in the Global Index cover 23.0% of the estimated market by value.

The global coverage of the 34 countries – that comprise of the 27 countries in the MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size), and the seven Asian markets, was 21.8%.

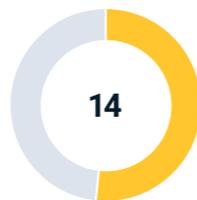


In a number of countries, MSCI measures the performance of portfolios not included in the coverage figures in [Exhibit 12](#); these are portfolios that do not fulfill the requirements for index inclusion. This applies, for example, to several portfolios in the United Kingdom that do not have a December-end reporting year.

The coverage of more frequent indexes (monthly, quarterly and biannual) available in some countries is lower than that shown in [Exhibit 12](#). This applies to the MSCI UK Monthly Property Index, quarterly indexes in the United States, Canada, Ireland, Netherlands, and the United Kingdom, and biannual indexes in France, Italy, and United Kingdom. The coverage of these indexes is shown in [Appendix 3](#). The coverage for Denmark and Hungary remained under 10% although Denmark witnessed an increase in coverage levels to reach 5.0% in 2021.

Among Asian markets, the coverage of China and Taiwan was recorded below 10%, the results for these two countries are not reported in an MSCI national market index fact sheet.

[Exhibit 13](#) 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. MSCI produced index results for 30 of the most transparent markets (as per JLL GRETI ranking) with the exception of Slovakia, Taiwan and China. 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.



14 of the 27 markets in the MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size) had a coverage of greater than 30%.

14 of the 27 markets in the MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size) had a coverage of greater than 30%. All these markets have been ranked high on the JLL GRETI. United Kingdom, Australia and France had a high coverage in the MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size) and the JLL GRETI. Two countries with high coverage and ranked below 20 on the JLL GRETI are South Africa and Malaysia. While South Africa had the highest coverage in the MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size) its JLL GRETI rank is 26, while the lowest transparency rank among the constituents of the MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size) was for Brazil.

Among the seven Asian countries not included in the MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size), Singapore, Hong Kong and Malaysia have independent indexes and have a JLL transparency rank of 14, 16 and 33 respectively.

The four new additions to the market size analysis – Bulgaria, Luxembourg, Romania and Slovakia are ranked 41, 25, 32 and 27 respectively on the JLL GRETI.

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.

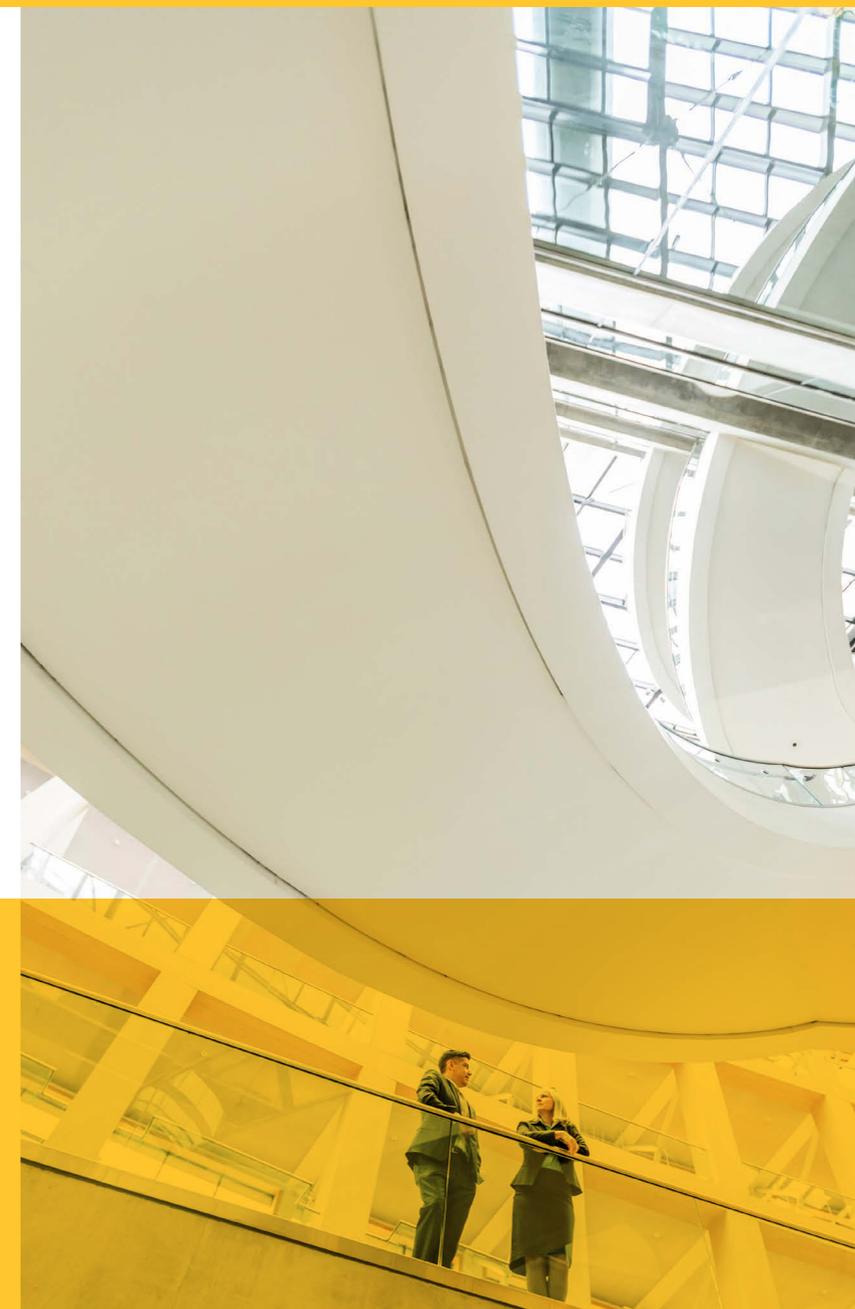
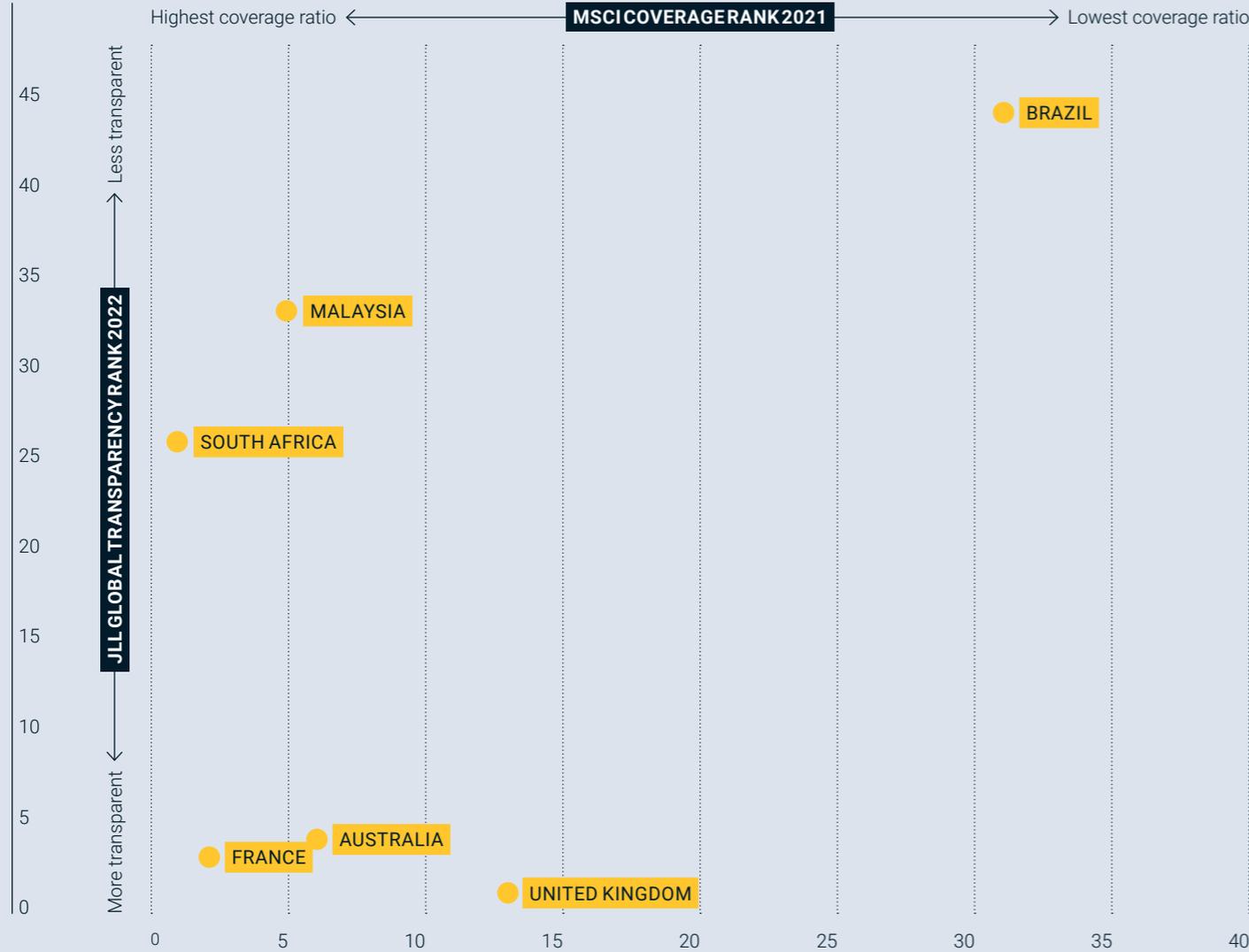


EXHIBIT 13
Country ranking, MSCI Real Estate Coverage and JLL Global Transparency Index (excludes Austria)



Source: MSCI, KTI (Finland), JLL Global Real Estate Transparency Index 2022

Exhibit 13 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.



Interactive page



Conclusion

The size of the professionally managed global real estate market expanded by **8.5%** to **\$11.4 trillion** in 2021.

Around **75%** of the increase is from the **United States, United Kingdom and China**.

United Kingdom and China, Americas contributes to **40.2%** of the Market, while **EMEA and APAC** contribute to **33.8%** and **26.0%** of the market respectively.

Amongst regions, **Americas** contributed to around **5.0%** of the growth while **EMEA** contributed to **1.9%** and **APAC** around **1.8%**.

The size of the professionally managed global real estate market expanded by 8.5% to \$11.4 trillion in 2021. The growth was primarily driven by an increase in local market sizes while currency had a moderating impact of -3.1% on the overall growth.

The asset value growth and other factors (including new developments among other structural impacts) witnessed diverse trends from one market to the other. 25 of the 27 markets covered by the MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size) have registered a positive capital growth. Negative capital growth was observed only in the markets of Ireland and South Africa.

Around 75% of the increase is from the United States, United Kingdom and China. Americas contribute to 40.2% of the Market, while EMEA and APAC contribute to 33.8% and 26.0% of the market respectively. Amongst regions, Americas contributed to around 5.0% of the growth while EMEA contributed to 1.9% and APAC around 1.8%. Americas has continued to have the largest share of the Market Size amongst the 3 regions for the past 8 years replacing EMEA in 2014.

Around 39% of the total professionally managed market size is from the Listed real estate category, 32.5% consists of the Unlisted real estate category, 14.7% consists of Asset Owners category and the remaining from Other & Unknown category. The largest growth was for the Unlisted category at 13.8% globally with the APAC Unlisted real estate category recording the largest regional growth for this category.

Although individual market size estimates have changed from year to year, weightings in 2021 have proved relatively consistent for each of the 27 countries (i.e. in the range of -72 bps to +162 bps) within the MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size).



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 14, 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.

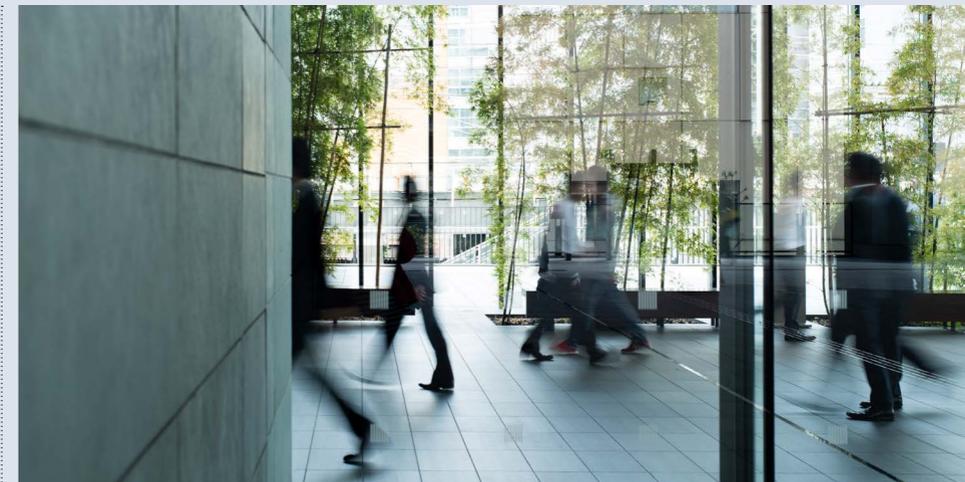


EXHIBIT 14
Market size estimate inclusion criteria

INCLUDED	EXCLUDED
Insurance and pension funds	Small private landlords (< USD 100 million)
Sovereign wealth funds	Owner-occupied portfolios (pubs, hotels, hospitals)
Unlisted funds (closed and open end)	Timberland, farmland and infrastructure
Traditional estates and charities	Mortgage companies
Listed funds	Development companies
Large private landlords (> USD 100 million)	Funds of funds and indirect holdings (double counting)
Leased office, retail, industrial, residential and other property	Municipal and social housing
Investment property under development	

Source: MSCI

Appendix 2
Market size estimates



In USD billions	ESTIMATED MARKET SIZE 2020	ESTIMATED MARKET SIZE 2021	CAPITAL GROWTH (%)	MSCI INDEX COVERAGE 2021 IN ANNUAL INDEX	COVERAGE RATIO IN ANNUAL INDEX (%)
Australia	347.7	385.6	6.6%	148.0	38.4%
Austria	49.8	50.8	4.1%	7.3	14.4%
Belgium	65.8	64.9	3.5%	11.6	17.8%
Brazil	49.6	49.5	6.2%	3.4	6.9%
Canada	363.9	420.9	3.9%	135.9	32.3%
Czech Republic	31.8	32.9	9.7%	4.8	14.7%
Denmark	83.6	91.5	7.6%	4.5	5.0%
Finland (KTI)	101.2	104.0	4.8%	35.6	34.2%
France	500.4	513.0	3.2%	233.5	45.5%
Germany	684.4	712.4	8.5%	110.9	15.6%
Hungary	12.0	12.6	6.2%	0.9	7.2%
Ireland	36.5	36.8	0.3%	13.2	35.8%
Italy	145.8	150.6	4.8%	35.5	23.6%
Japan	939.9	947.1	1.5%	215.3	22.7%
Luxembourg	9.0	8.7	3.8%	2.3	26.2%
Netherlands	210.3	218.0	9.2%	81.6	37.4%
New Zealand	23.6	27.5	7.1%	12.0	43.7%
Norway	66.9	78.2	10.4%	27.0	34.6%
Poland	55.6	52.8	6.4%	8.2	15.6%
Portugal	33.4	34.0	1.6%	11.0	32.4%
South Africa	46.3	41.7	-2.7%	23.9	57.4%
South Korea	105.1	106.1	8.8%	35.4	33.3%
Spain	128.0	128.3	4.6%	28.6	22.3%
Sweden	293.7	303.3	10.7%	130.8	43.1%
Switzerland	324.2	346.2	3.5%	124.4	35.9%
United Kingdom	768.5	850.4	10.7%	290.6	34.2%
United States	3,650.6	4,116.9	13.1%	541.9	13.2%
MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size)	9,127.6	9,884.7	8.9%	2,278.2	23.0%

Source: MSCI, KTI (Finland)

In USD billions	ESTIMATED MARKET SIZE 2020	ESTIMATED MARKET SIZE 2021	CAPITAL GROWTH (%)	MSCI INDEX COVERAGE 2021 IN ANNUAL INDEX	COVERAGE RATIO IN ANNUAL INDEX (%)
Bulgaria	1.2	1.6			
Romania	12.2	11.9			
Slovakia	5.0	4.6			
China	668.3	791.3	0.8%	26.5	3.3%
Hong Kong	356.3	365.9	-0.9%	82.0	22.4%
Indonesia	15.0	17.6	0.1%	2.1	11.9%
Malaysia	31.0	33.4	-0.7%	14.1	42.1%
Singapore	194.3	192.9	1.7%	70.4	36.5%
Taiwan	65.2	67.9	1.2%	4.0	5.9%
Thailand	33.1	32.0	-0.7%	7.2	22.7%
Total Global coverage (incl. Other Asia)	10,500.3	11,403.6		2,484.6	21.8%

Source: MSCI, KTI (Finland)

Appendix 3
Market coverage for non-annual indexes

In USD billions	ESTIMATED MARKET SIZE 2021 (USD BILLION)	MSCI INDEX COVERAGE 2021 (USD BILLION)	COVERAGE RATIO (%)
United Kingdom (Monthly)	850.4	52.9	6.2%
United Kingdom (Quarterly)	850.4	218.9	25.7%
United Kingdom (Biannual)	850.4	242.6	28.5%
Ireland (Quarterly)	36.8	9.4	25.6%
Netherlands (Quarterly)	218.0	56.9	26.1%
United States (Quarterly)	4,116.9	454.3	11.0%
France (Biannual)	513.0	64.4	12.6%
Italy (Biannual)	150.6	22.8	15.1%

Source: MSCI, KTI (Finland)

Appendix 4
Portfolio type categories and subcategories

CATEGORIES	SUBCATEGORIES
Asset Owner	Endowment
Asset Owner	Insurance
Asset Owner	Pension
Asset Owner	Segregated Accounts
Asset Owner	Sovereign Wealth Funds
Listed	REIT/Listed
Listed	REIT/Listed – REIT
Listed	REIT/Listed – REOC
Other	Other private investors
Other	Bank
Other	Conglomerate
Unknown	Unknown
Unlisted	Unlisted / Open
Unlisted	Unlisted / Not Defined
Unlisted	Unlisted / Closed

Source: MSCI



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