

MSCI Real Estate Market Size 2022: An Index Perspective

IMPACT ON GLOBAL & REGIONAL COMPOSITE PROPERTY
INDEXES

24th July 2023

Objective

- In this report MSCI presents the 2022 market size estimates based on its expanded database following the full integration with Real Capital Analytics (RCA)
- Through this report, MSCI announces the following highlights:
 1. Changes to market size weights by country for its Global and Regional Composite Property indexes
 2. For Global and Europe Quarterly Property Indexes these changes are effective from Q2 2023 reporting (to be published on 6 Sep 2023 and 4 Sep 2023 respectively)
 3. For Global and other regional composite annual property indexes, these changes are effective from 2023 annual reporting (to be published in April 2024)
 4. The enriched market size weights will be used in reweighted indexes on a moving forward basis

2022 Market Sizes – What's New?

- In 2022, MSCI initiated a review and enrichment of market size data based on additional information available from the MSCI Real Capital Analytics (RCA) database
- The existing method of data collection is complemented with the estimated data from the RCA database to create the 2022 total market size estimates which has allowed us to capture an additional portion of the market which was professionally managed but not publicly disclosed
- The reweighting methodology¹ for MSCI composite property indexes **remains unchanged** and is based on the 'Professionally Managed' real estate market size estimates
- MSCI endeavors to continuously improve the market size sample based on new information/data sources that become available every year and announce the summary of changes along with the impact on country weights in MSCI composite indexes on MSCI's web-site, as needed

Benefits of Larger Market Size Estimates

- Greater transparency with two levels of market size intel - 'Total Investable' and the 'Professionally Managed' real estate market sizes across the globe
- More representative market size estimations for reweighting MSCI real estate composite indexes
- Enhanced market size estimates with better insights at the regional and global levels for benchmarking, research, and to enable market participants to take informed investment decisions

Real Estate Market Size Hierarchy & Definitions

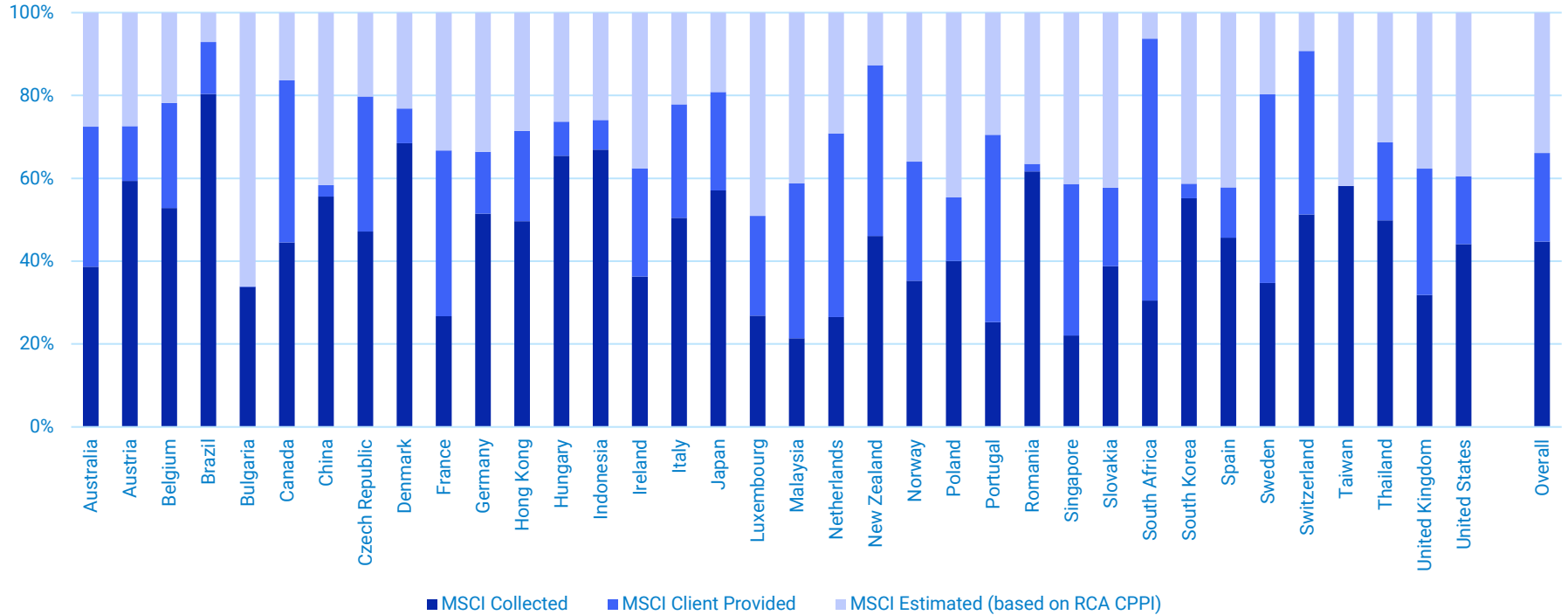


- Small Private Landlords (< USD 100 million)
- Owner-occupied portfolios
- Development companies
- Municipal and social housing

- Insurance and Pension Funds
- Sovereign Wealth Fund
- Unlisted Funds (Closed and Open Ended)
- Traditional Estates and Charities
- Listed Funds
- Large Private Landlords (> USD 100 million)
- Leased office, retail, industrial, residential and other property
- Investment property under development

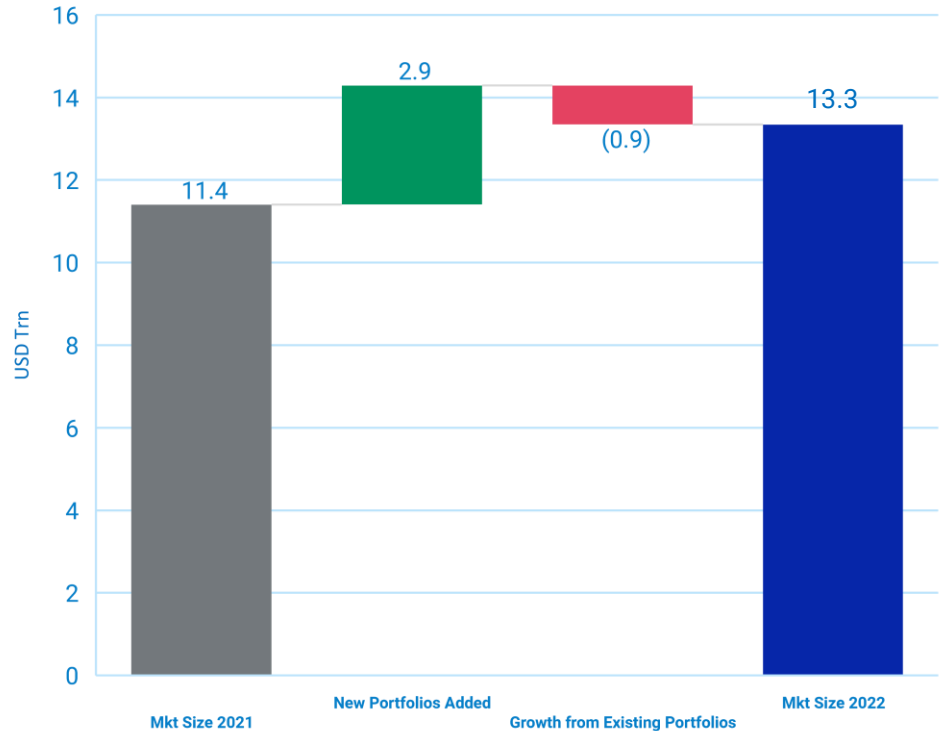
Timberland, farmland and infrastructure, mortgage companies and Funds of funds and indirect holdings are **excluded** from the analysis

Market Size Composition



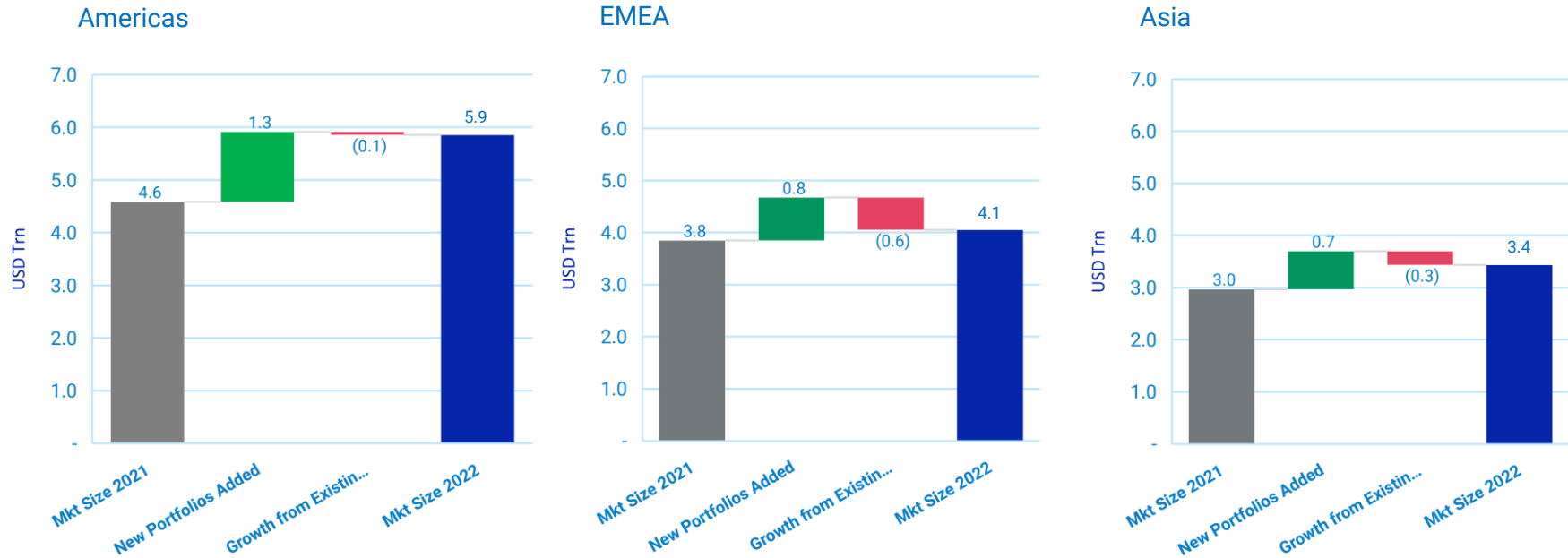
Drivers of Market Size Change in 2022

- The addition of new portfolios from the RCA database has contributed to the market size increase
- New portfolios added 25% to the 2021 market size estimates
- The existing portfolios witnessed a y-o-y decline of -8.3% in 2022
- For more detailed analysis of the impact on the weights of MSCI Global and Regional Property Indexes, please refer to slides 14 to 19



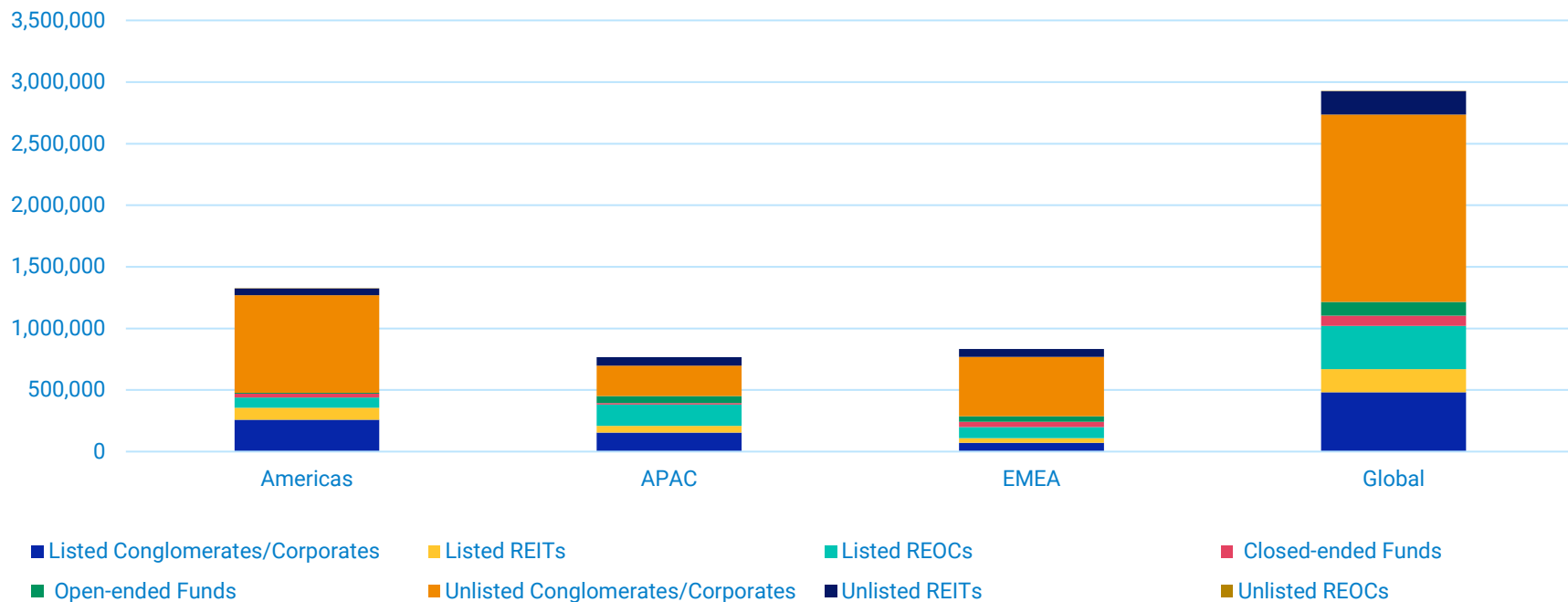
Drivers of Market Size Change in 2022 | Regional Break-down

The increase was driven primarily by United States which saw portfolios worth USD 1.3 trillion being added



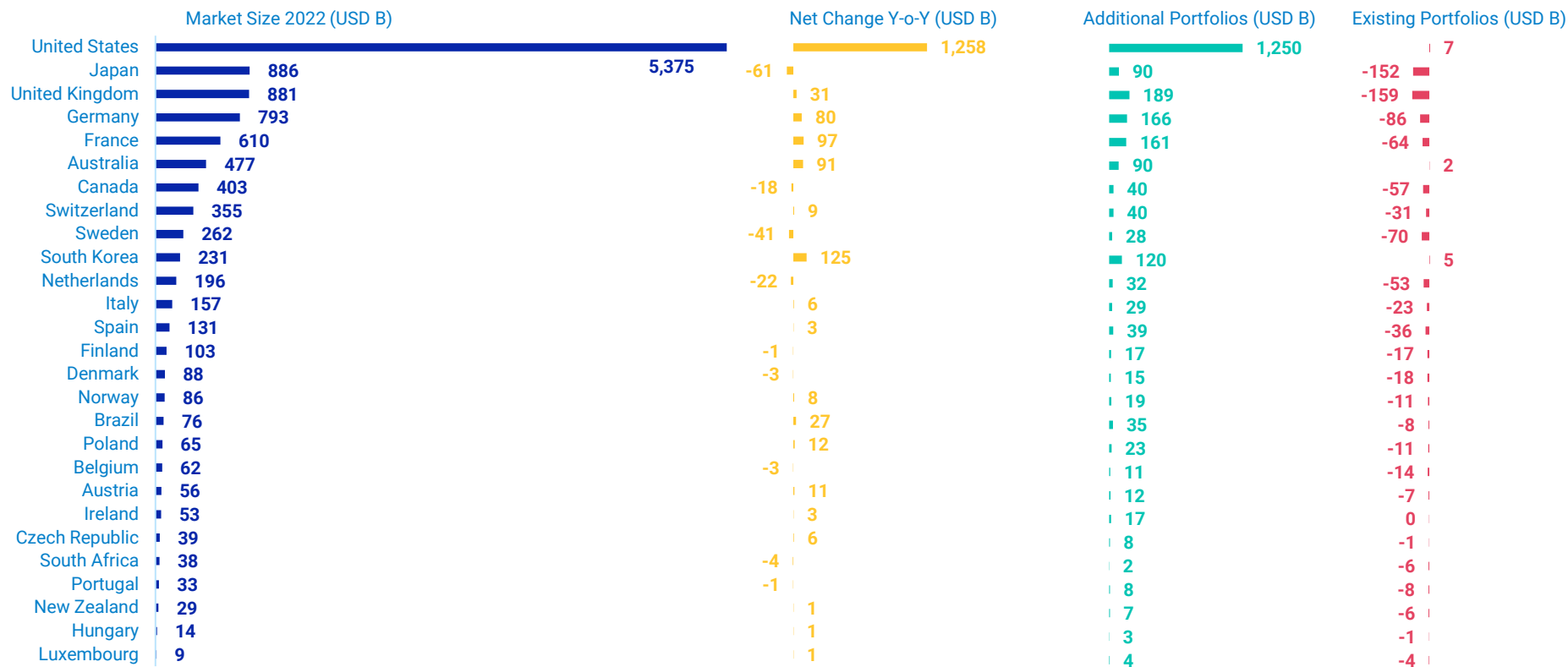
2022 Market Size Analysis | New Additions by Portfolio Type

New additions are mainly driven by unlisted companies where data may not be publicly disclosed



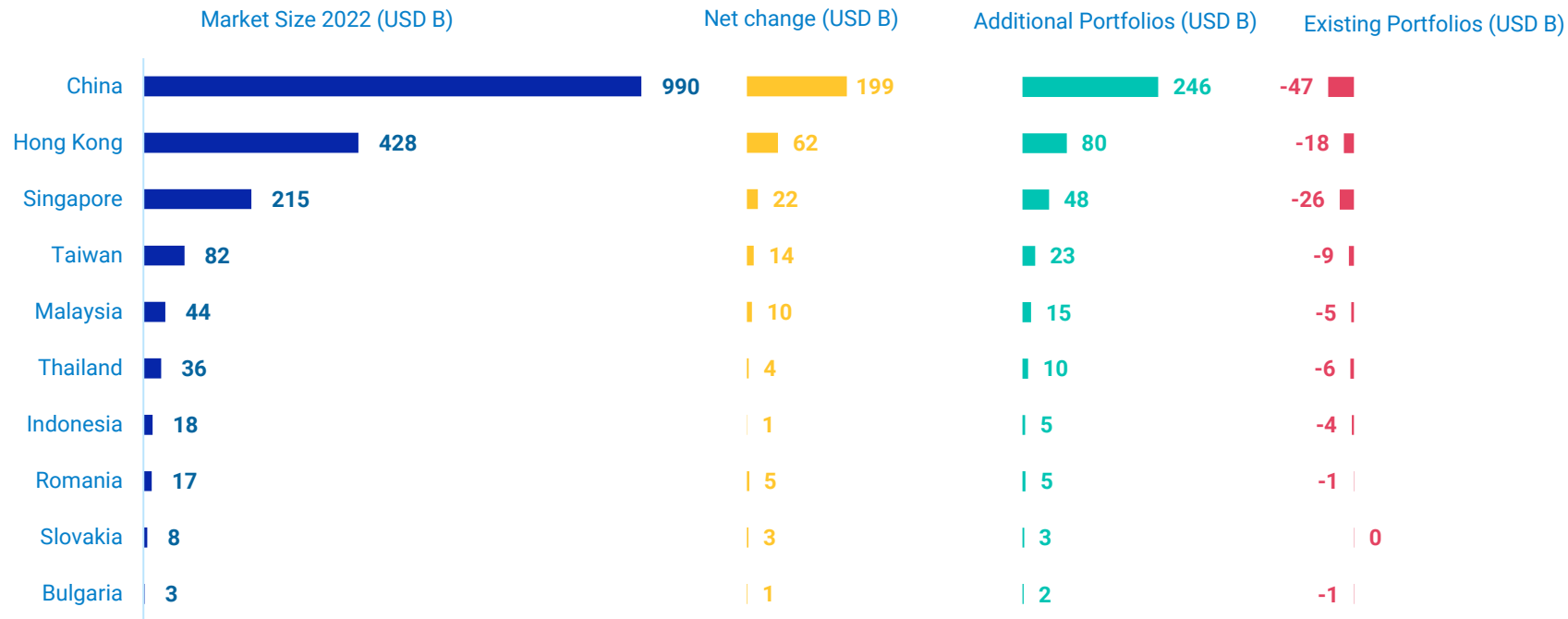
Market size estimate Changes by Market

Constituents of MSCI Global Annual Property Index



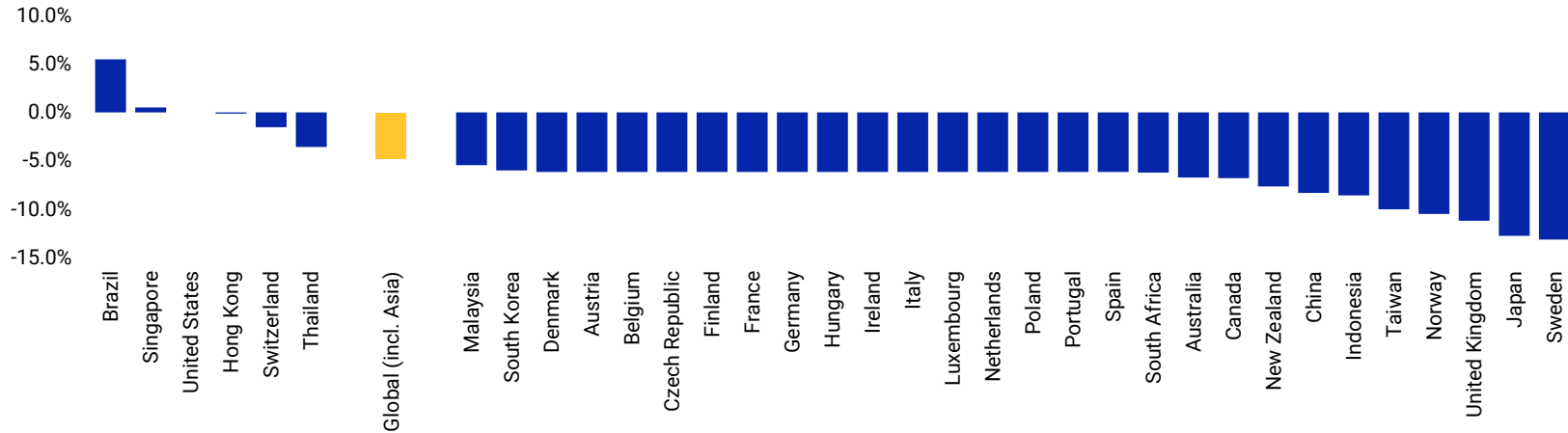
Market size estimate Changes by Market

Other Markets

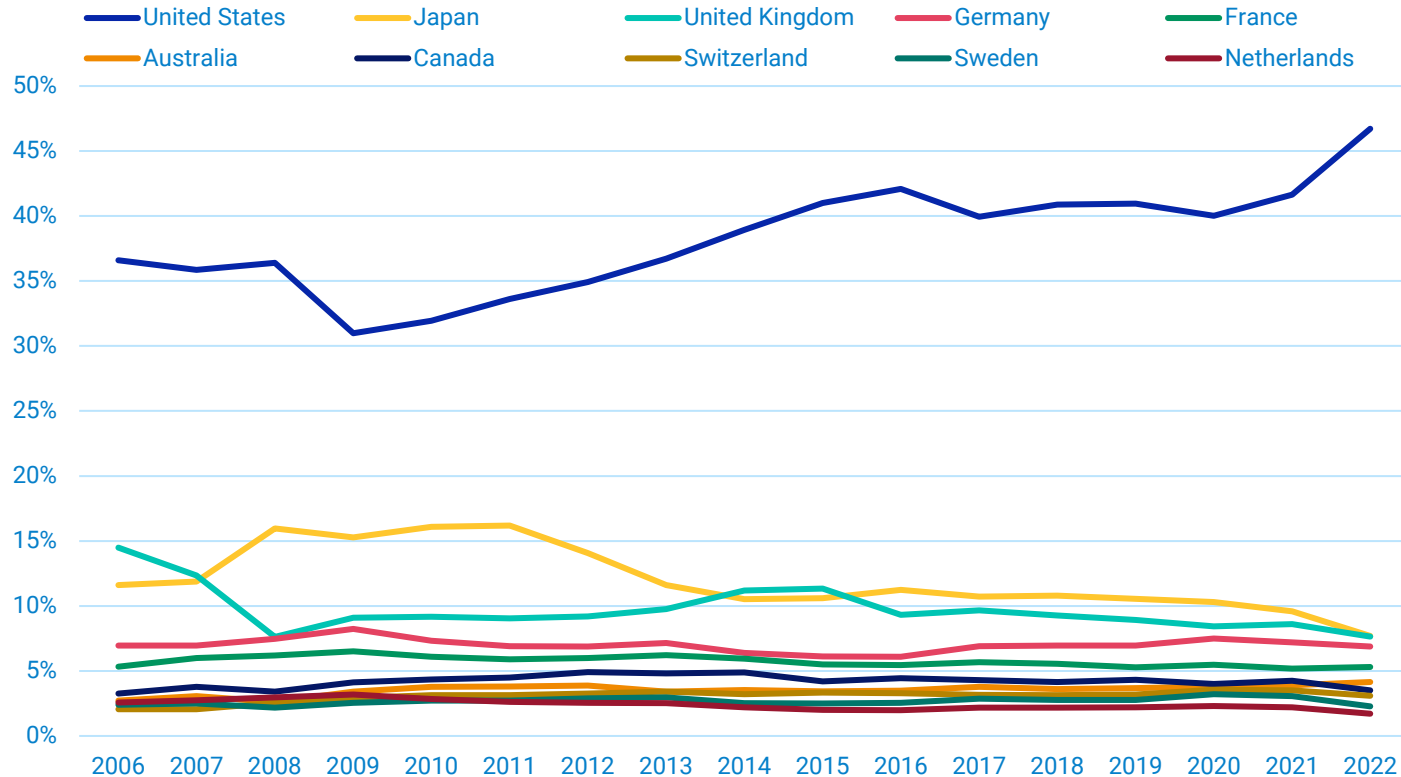


Drivers of Market size change 2022 | Currency Impact vs. USD

- USD strengthened against all currencies except Brazilian Real and Singapore Dollar in 2022
- Overall currency impact (weighted by country market sizes) was -4.8%, driven primarily by the weakening of currencies in the larger markets of UK (GBP: -11.2%) and Japan (Yen: -12.7%)
- Weakening of Euro by 6.2% compared to USD contributed to a fourth of the total currency impact

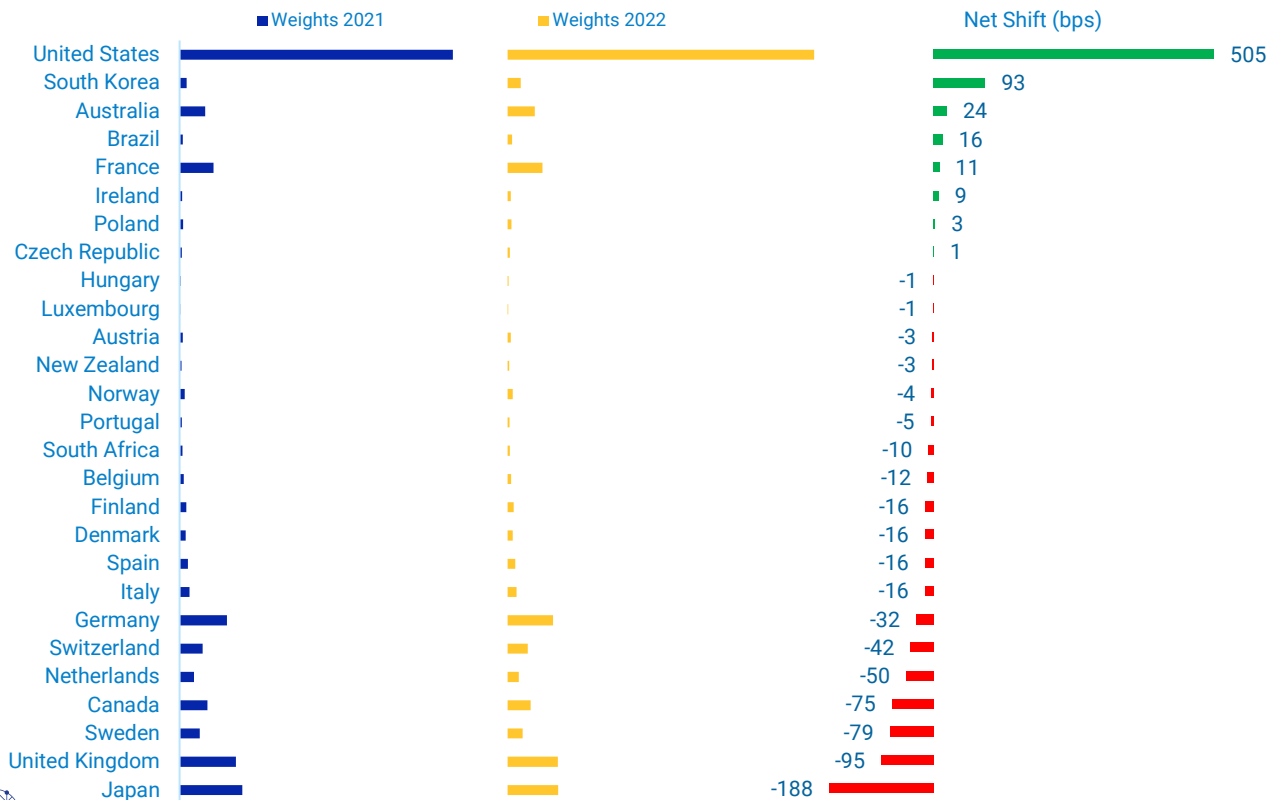


Market Size Weight of Top 10 Markets in MSCI Global Annual Property Index



- Weight of United States increased by 5.1 percentage points in 2022 compared to 2021
- Top 10 markets comprise of 89.0% of the capital value of the MSCI Global Annual Property Index

Change in Market Size weight of constituents of MSCI Global Annual Property Index



- As per MSCI Property Indexes Methodology, the refresh of market size weights is *timed along with the respective index releases in April/May every year*

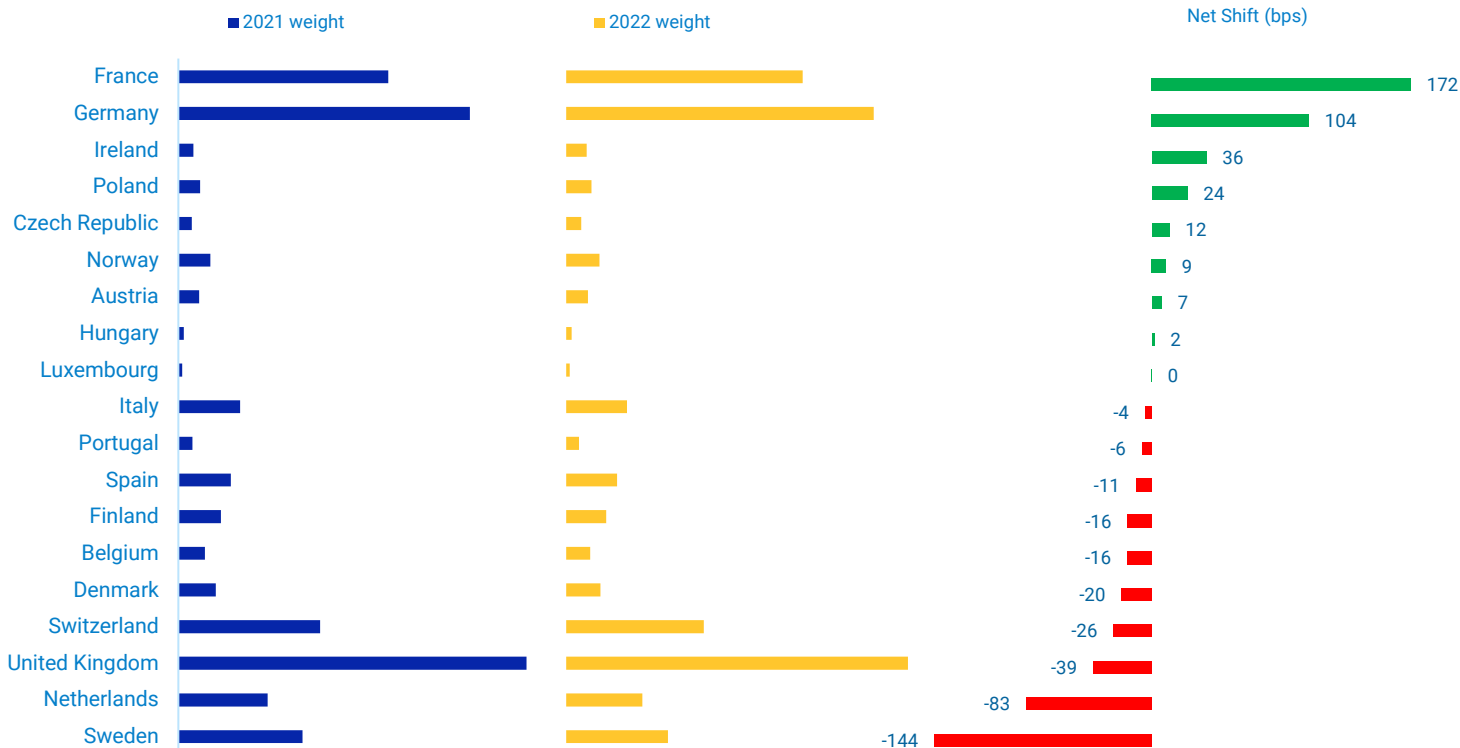
For 2022 MSCI Composite Annual Property Indexes:

- 'Weights 2021' were used as a base to derive the 2022 estimated weights for reweighting.

For 2023 MSCI Composite Annual Property Indexes:

- 'Weights 2022' will be used as a base to derive the 2023 estimated weights for reweighting

Change in Market Size weight of constituents of MSCI Europe Annual Property Index



- As per MSCI Property Indexes Methodology, the refresh of market size weights is *timed along with the respective index releases in April/May every year*

For 2022 MSCI Composite Annual Property Indexes:

- 'Weights 2021' were used as a base to derive the 2022 estimated weights for reweighting.

For 2023 MSCI Composite Annual Property Indexes:

- 'Weights 2022' will be used as a base to derive the 2023 estimated weights for reweighting

Change in Market Size weight of constituents of MSCI Asia Annual Property Index



- As per MSCI Property Indexes Methodology, the refresh of market size weights is *timed along with the respective index releases in April/May every year*

For 2022 MSCI Composite Annual Property Indexes:

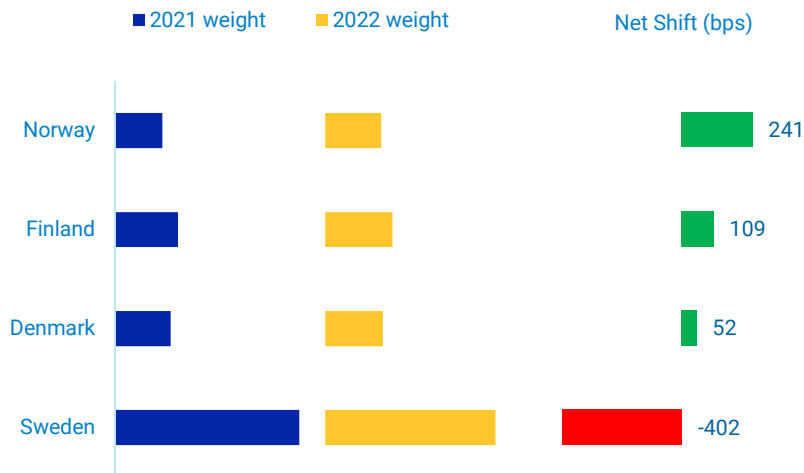
- 'Weights 2021' were used as a base to derive the 2022 estimated weights for reweighting.

For 2023 MSCI Composite Annual Property Indexes:

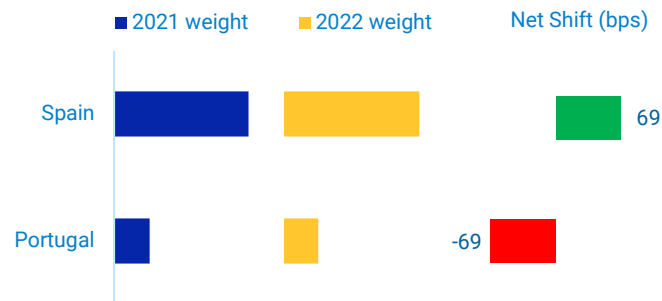
- 'Weights 2022' will be used as a base to derive the 2023 estimated weights for reweighting

Change in Market Size weight of constituents of MSCI Nordic Property Index and MSCI Iberia Property Index

MSCI Nordic Property Index



MSCI Iberia Property Index



- As per MSCI Property Indexes Methodology, the refresh of market size weights is *timed along with the respective index releases in April/May every year*

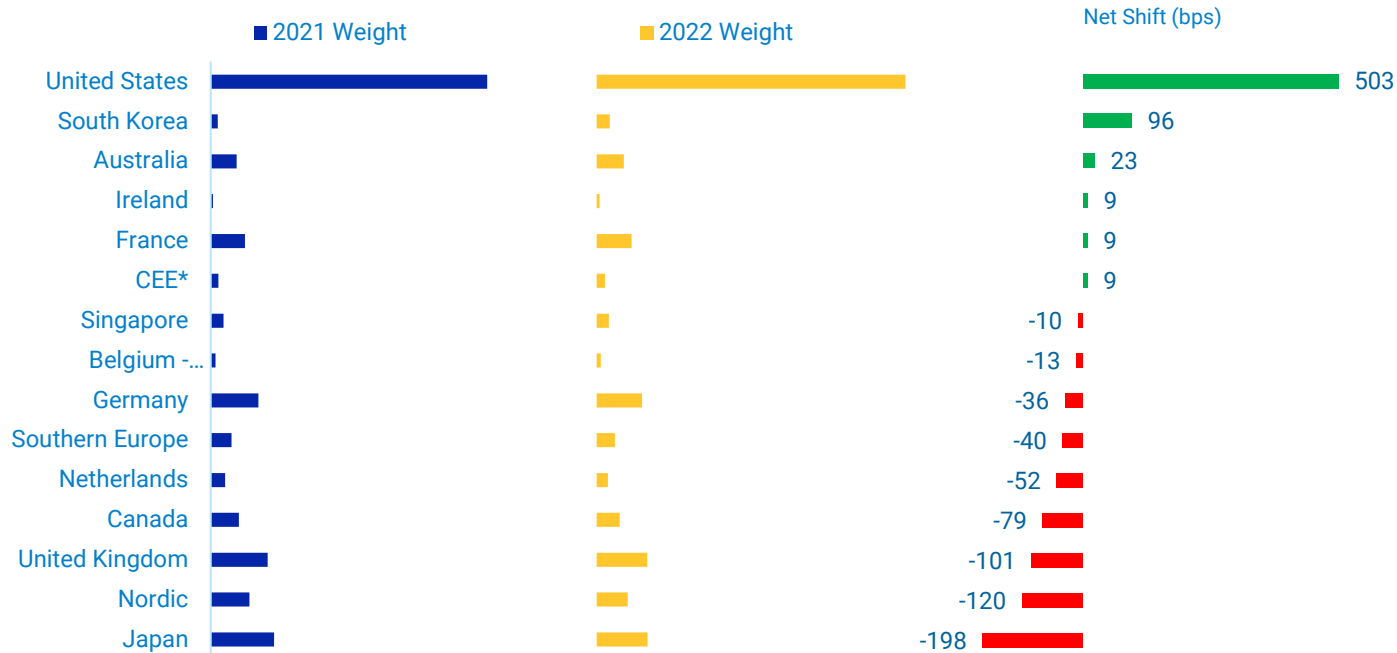
For 2022 MSCI Composite Annual Property Indexes:

- 'Weights 2021' were used as a base to derive the 2022 estimated weights for reweighting.

For 2023 MSCI Composite Annual Property Indexes:

- 'Weights 2022' will be used as a base to derive the 2023 estimated weights for reweighting

Change in Market Size weight for constituents MSCI Global Quarterly Property Index (MSCI GQPI)

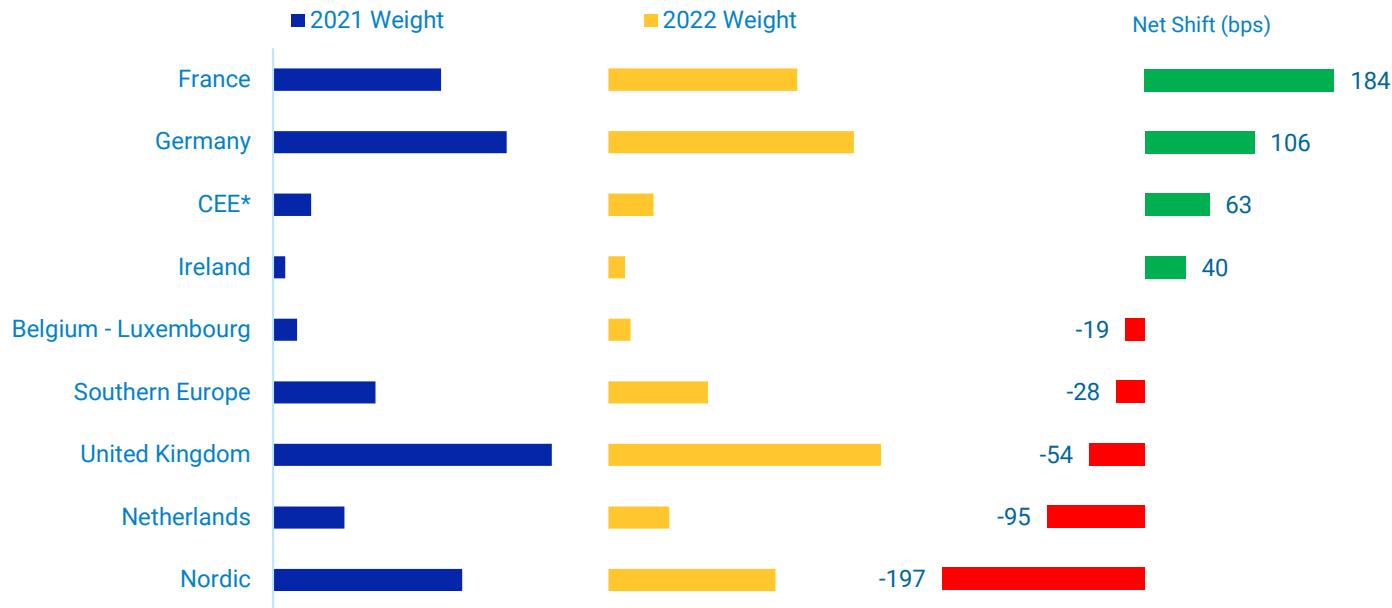


- As per MSCI Property Indexes Methodology, the refresh of market size weights used for reweighting MSCI GQPI is timed along with the release of **Q2 index results**

- '**2021 Weight**' is used as a base to derive the subsequent quarterly estimated weights used for reweighting of MSCI GQPI from **Q2 2022 to Q1 2023**

- '**2022 Weight**' is used as a base to derive the subsequent quarterly estimated weights used for reweighting of MSCI GQPI from **Q2 2023 to Q1 2024**

Change in Market Size weight for constituents MSCI Europe Quarterly Property Index (MSCI EQPI)



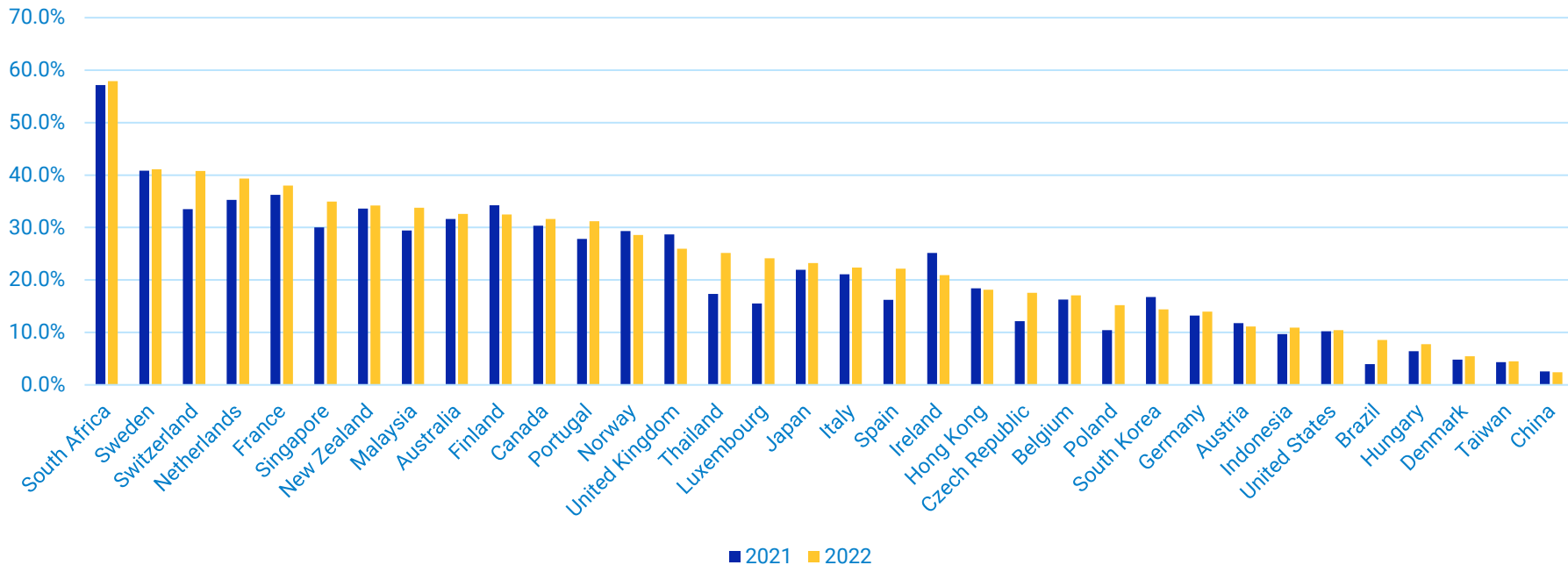
- As per MSCI Property Indexes Methodology, the refresh of market size weights used for reweighting MSCI EQPI is timed along with the release of **Q2 index results**

- '**2021 Weight**' is used as a base to derive the subsequent quarterly estimated weights used for reweighting of MSCI EQPI from **Q2 2022 to Q1 2023**

- '**2022 Weight**' is used as a base to derive the subsequent quarterly estimated weights used for reweighting of MSCI EQPI from **Q2 2023 to Q1 2024**

MSCI Annual Property Index Coverage: 2022 vs 2021 (history-adjusted¹)

Index coverage is calculated as a ratio of index capital value to the corresponding professionally managed market size estimate



¹2021 coverage is calculated using 2021 history-adjusted market size estimations as outlined in Appendix 1 of MSCI Real Estate Market Size Report
Singapore, Malaysia, Hong Kong, China, Indonesia, Taiwan, and Thailand are constituents of MSCI Asia Annual Property Index (Unfrozen; Weighting: Market Size) but not a constituent of MSCI Global Annual Property Index (Unfrozen; Weighting: Market Size)

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