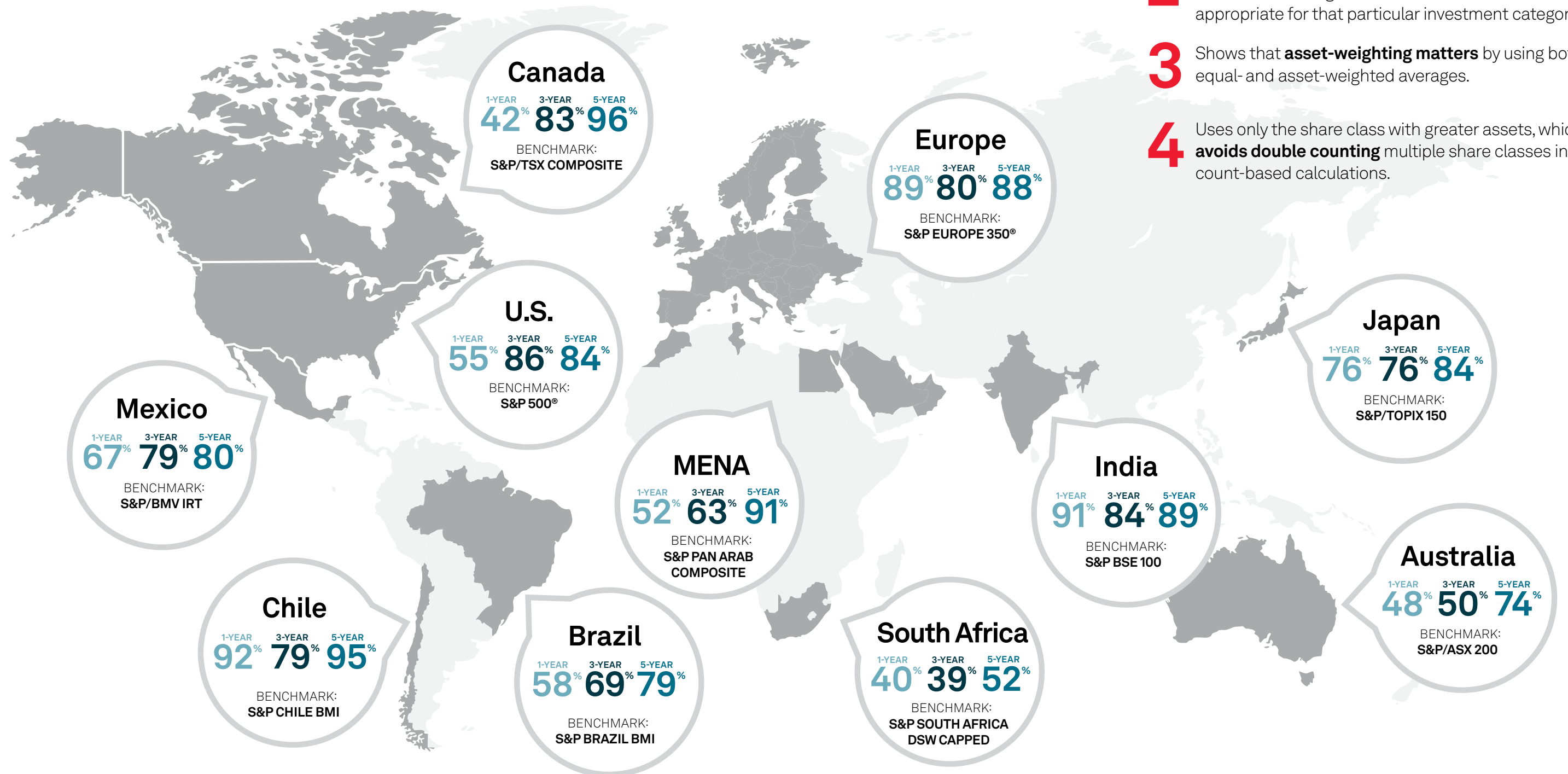


SPIVA[®] Around the World

Percentage of active funds outperformed by benchmarks* over 1-, 3-, and 5-year periods



The SPIVA Difference

- 1 Accounts for the entire opportunity set—not just the survivors—thereby **eliminating survivorship bias**.
- 2 Applies an **apples-to-apples comparison** by measuring a fund's returns against the returns of a benchmark appropriate for that particular investment category.
- 3 Shows that **asset-weighting matters** by using both equal- and asset-weighted averages.
- 4 Uses only the share class with greater assets, which **avoids double counting** multiple share classes in all count-based calculations.

* Regional benchmarks included here are large cap, with the exception of Brazil and Chile, where SPIVA results displayed reflect regional broad-market indices. Multiple benchmarks exist in all regions tracked by SPIVA. For more information on SPIVA methodology, including a full list of regional benchmarks and results, visit <https://www.spglobal.com/spdji/en/research-insights/spiva>.

Source: S&P Dow Jones Indices LLC, Morningstar, Funddata, CRSP. Data as of June 30, 2022. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

SPIVA: S&P Indices Versus Active
www.spglobal.com/spdji/en/research-insights/spiva