S&P Dow Jones Indices

A Division of S&P Global

SPIVA® Global Scorecard

Summary

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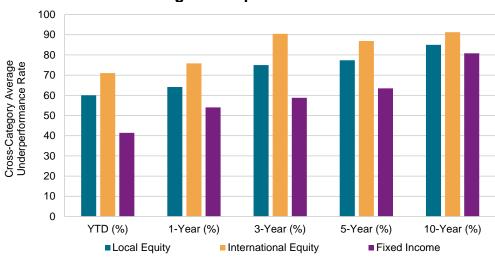
Experience the active vs. passive debate on a global scale.

For over two decades, S&P Dow Jones Indices' SPIVA Scorecards have compared the performance of actively managed funds to appropriate benchmarks. Initially covering just U.S.-domiciled funds, nine regional year-end scorecards now cover active performance in funds operating in markets from Australia to Chile.

For the first time, this mid-year global report aggregates key statistics from across regions to produce a single, consolidated update on the performance of actively managed funds around the world.

Exhibit 1 shows a cross-category summary of the average underperformance rates reported for actively managed funds spanning across regions in the first half of 2024 and longer periods, across local equity, international equity and fixed income categories.

Exhibit 1: Global Average Underperformance Rates



Sources: S&P Dow Jones Indices LLC, Morningstar, Fundata, CRSP. Data as of June 30, 2024. Local Equity includes actively managed fund categories focused in geographic segments within their respective SPIVA Scorecard region. Excludes non-USD Global Equity categories for 5- and 10-year periods, and the Japan International Equity category for the 10-year period, because the comparison benchmark performance was not being published in the category currency at the start of the period. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Highlights

The first half of 2024 will likely go down as another generally challenging period for the active management industry, most notably for funds focused on U.S. or global equities.

Over the six-month period ending June 2024, across the 56 equity and fixed income fund categories included in this report, a majority of funds underperformed in over two-thirds of reported categories. Of the 8,417 unique funds represented across all the half-year statistics, a similar figure (64%) of individual funds underperformed their assigned benchmark.

Accompanied by the outperformance of the very largest companies, the first half of 2024 proved to be a **particularly difficult market environment for active managers across developed equity markets**. A majority of Global Equity funds domiciled in the U.S., Europe, Japan, Canada and Australia underperformed the <u>S&P World Index</u>, with **underperformance rates all falling within the range of 70%-85%**.

Part of the disappointing performance of actively managed Global Equity funds may have been down to the difficulty of outperforming in the U.S. component, with majorities ranging between 57% to 78% of U.S. equity-focused funds in the U.S., Europe, Japan and Canada underperforming the <u>S&P 500</u>[®]. However, there were also challenging headwinds in other developed equity markets, including the continental Europe majors of Switzerland, France and Germany, where 76%, 85% and 88% of local active funds underperformed, respectively.

Those seeking outperforming actively managed equity funds would have found the odds in their favor in a select few markets during the first half of 2024. Most notably, a significant majority (85%) of U.S.-based domestic small-cap active funds *out*performed the <u>S&P</u> <u>SmallCap 600</u>[®], while active equity funds in the Middle East built on their 2023 domestic record with another strong beat rate, with a similar figure outperforming the <u>S&P Pan Arab</u> <u>Composite LargeMidCap Index</u>. Actively managed domestic equity funds in South Africa and Mexico also performed relatively well, with beat rates close to or above 50%.

There were some other bright spots to be found for active performance, particularly in fixed income categories. On both sides of the Atlantic, lower-credit and less-liquid bonds broadly outperformed and, since both are often seen as sources of potential excess returns, it may not be surprising that the **U.S. dollar and euro-denominated fixed income markets hosted some of the most fertile grounds** for actively managed funds. Overall, we report majority outperformance in 9 out of 12 fixed income categories, including the lowest underperformance rate reported in this scorecard—just **13% of U.S.-domiciled Investment Grade Short and Intermediate Bond funds underperformed** the iBoxx \$ Overall 1-5 Year Index.

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About the SPIVA Global Mid-Year Scorecard

S&P Dow Jones Indices' (S&P DJI's) Year-End SPIVA Scorecards are currently produced for nine major fund regions around the world, providing a wealth of data on actively managed funds including underperformance rates, fund survivorship, average and asset-weighted average returns, quartile breakpoints and risk-adjusted outperformance rates. Importantly, as well as offering a short-term perspective on active fund performance, the SPIVA Scorecards provide statistics that might inform market participants on their prospects for achieving long-term outperformance by selecting actively managed funds.

In addition to the annual year-end scorecards, S&P DJI has traditionally produced a mid-year update on active fund performance for each region. These interim reports give an indication of more recent trends, but typically show only small differences in the long-term statistics as compared to the prior (or subsequent) year-end scorecard. **Accordingly, the focus of interest among market participants in the mid-year reports has traditionally been on the shorter-term figures.**

More importantly to the genesis of this global report, the environments facing active managers in different global markets can share common dynamics; meanwhile, many investors seeking to diversify abroad are able to choose between local or foreign-based managers. In acknowledgement of the increasingly global market for investment management, for the first time, this report aggregates the key results across major markets to offer a single global scorecard for the mid-year 2024 period. In doing so, the authors sought a balance between comprehensiveness and global resonance: roughly half of the more than 100 fund categories across the traditional range of scorecards were selected for inclusion in this report, with the considerations for the selection of categories including fund sample sizes, assets under management, global interest in the fund category and the ability to make cross-regional comparisons. Additionally, we restricted the volume of reported data in this scorecard to the statistics we deemed most relevant to an investor seeking to update their perspectives to incorporate recent market developments.

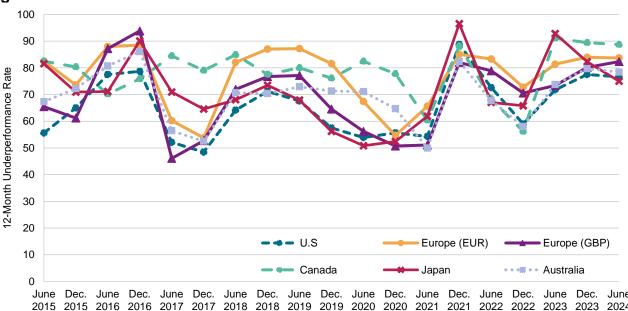
The sources and methodologies used in this report are exactly the same as those reported in the respective regional year-end scorecards, although a few innovations were introduced in this report to better facilitate cross-regional comparisons. Most notably, the **S&P World Index**—introduced as the benchmark for the Global Equity Category in the <u>SPIVA Europe Year-End 2023 Scorecard</u> has been substituted as the comparison benchmark for a range of similar global fund categories in other regions, with the **S&P World Ex-U.S.** Index also replacing the legacy category benchmark for the International Equity fund category in the U.S.

The SPIVA Regional Year-End 2023 Scorecards are available at the <u>S&P Dow Jones Indices SPIVA Library</u>.

A Global Perspective on Active Performance

While specific factors may vary by market, fund industry and time period, common themes and shared dynamics have emerged during the more than two decades of producing SPIVA Scorecards that appear to offer tailwinds or headwinds to the active management industry, wherever it is based. Exhibit 2 and Exhibit 3 show these global connections, graphically illustrating a similarity in the evolution of underperformance rates reported for the active fund categories benchmarked by the S&P World Index and the S&P 500, for funds based in the U.S., Europe, Canada, Japan and Australia.²

Exhibit 2: Global Equity Active Funds versus the S&P World Index, Various SPIVA Regions



Source: S&P Dow Jones Indices LLC, CRSP, Morningstar, Fundata. Data as of June 30, 2024. Statistics for the U.S. and for all data points after December 2020 based on comparisons to the S&P World Index total returns in the relevant category currency. Data for categories in non-USD currencies prior to June 2021 based on as-reported in the historical Europe, Canada, Japan and Australia SPIVA Scorecards. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

² Australian actively managed U.S. Equity funds were excluded due to a limited sample size. See the previous section, "About the SPIVA Global Mid-Year Scorecard" for remarks regarding the introduction of the S&P World Index as the benchmark for global equity funds in various regions; the relevant fund categories are detailed in Reports 1 and 2.

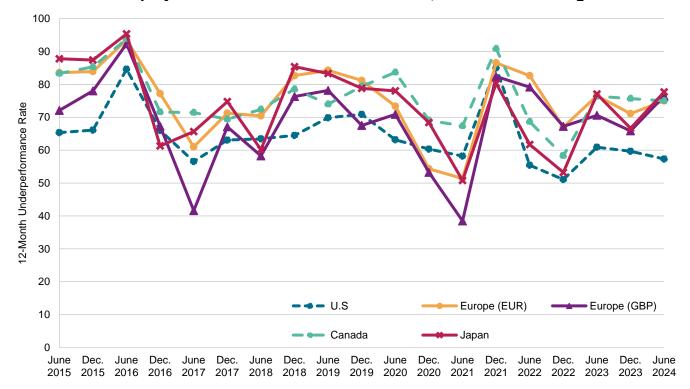


Exhibit 3: U.S. Equity Active Funds versus the S&P 500, Various SPIVA Regions

Source: S&P Dow Jones Indices LLC, CRSP, Morningstar, Fundata. Data as of June 30, 2024. U.S. funds represented by the "All Large Cap" SPIVA U.S. Category. Data prior to June 2024 as reported in the historical SPIVA Scorecards. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Three of the more significant factors that may potentially drive the similarities in rolling underperformance rates evidenced by Exhibits 2 and 3 are: first, the relative performance of the very largest stocks in each market and the (related) trends in market concentration; second, the degree of skew in the cross-sectional distribution of single stock performance and; third, the performance of close to, but outside benchmark market segments.

Largest Stock Performance and Market Concentration

An often quoted—if not fundamental—putative advantage promoted by actively managed funds is that: they are not required to hold all the constituents of their benchmark in capitalization-weighted proportions, and hence can avoid a potential (or perceived) "overconcentration" in the very largest components. Accordingly, it is not uncommon for the "average" active manager to hold lower-than-benchmark weights in some (or even most) of the largest constituents. This is naturally more likely to be of greater consequence when those constituents are themselves of greater aggregate weight and when they have notably different performance compared to the rest of the benchmark. But since market concentration increases when the very largest stocks outperform (and thereby take up great capitalization

weights), and concentration decreases when smaller stocks outperform larger,³ the evolution of market concentration offers a powerful perspective on the relative prospects for the typical active manager in each market.

There are a range of different measures of concentration that may offer insight, but one that is particularly suited to making comparisons between equity benchmarks containing different numbers of constituents is the ratio of the index-weighted average market capitalization to the unweighted average market capitalization—which one can think of as providing "how many times bigger a company" is per the average dollar in the benchmark's constituents, compared to the simple average size among companies included in the benchmark.⁴ Exhibit 4 shows the evolution of this concentration measure as applied to the S&P 500 and S&P World Index, quarterly, over the past 10 years.

The exhibit confirms that especially over the past six months, but also and increasingly over the past 10-, 5-, 3- and 1-year time horizons, active managers benchmarked to the S&P 500 and S&P World Index would have likely been facing headwinds arising from the combined facts that their benchmarks had historically elevated weights in the largest companies, and that over the periods ending June 2024, those same largest companies considerably outperformed their smaller competitors.

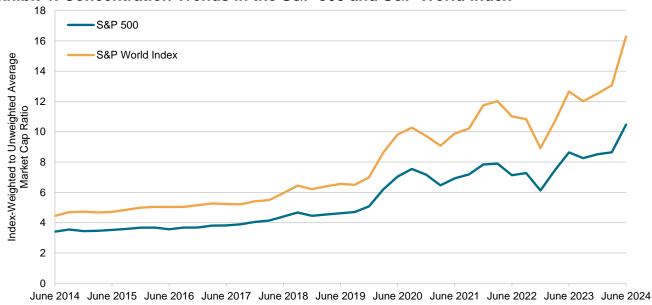


Exhibit 4: Concentration Trends in the S&P 500 and S&P World Index

Source: S&P Dow Jones Indices LLC. Quarterly data from June 30, 2014, to June 30, 2024. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Oncentration may also increase or decrease due to additions or deletions to the underlying benchmark, but for relatively short time periods such as six months or one year, the impact of such changes may be assumed to be typically relatively small in comparison to changes due to the relative performance of larger and smaller stocks.

⁴ A little algebra easily proves that this measure is very closely related to the "HHI" or Herfindahl-Hirschman Index of concentration; it is essentially the same as the "adjusted HHI" as introduced in Ganti & Lazzara, "Concentration within Sectors and Its Implications for Equal Weighting"; S&P Dow Jones Indices (2022)

Before moving on, it is worth observing that concentration trends can manifest at a broader level than individual securities. For example, the U.S. component of the S&P World Index rose from a weight of 47% in June 2009 to over 70% at the end of June 2024. Part of the reason that a higher proportion of Europe, Japan, Australia and Canada-based actively managed Global Equity funds underperformed the S&P World Index, compared to the underperformance rate of U.S.-based Global Equity funds (see Reports 1 and 2) may be because they were systematically underweight the U.S. market, focusing more instead on their local opportunity set.

Cross-Sectional Skew and Stock-Picking Conditions

Put simply, it is easier to pick relative winners in some circumstances, and harder in others. Few lottery tickets match the payout from the single one boasting the perfect combination, but the latter brings up the average winning, which nearly all tickets then underperform. Conversely, most investment grade bonds will deliver their yield to maturity, an unlucky few may default and bring down the average, making the vast majority to be relative "winners." The important fact about both lottery tickets and corporate bonds is that their returns can be skewed—positively skewed in the case of lottery tickets and negatively skewed in the case of bonds. In such circumstances, a few outliers pull the average up (or down) far from the median and mean that can be hard (or easy) to pick above-average performers, based on how common they are.

Exhibit 5 shows the distribution of constituent total returns for each member of the S&P 500 and the S&P World Index in the first six months of 2024, respectively, during the period when each constituent was included in the index.

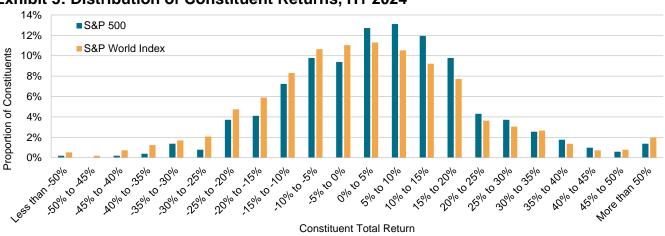


Exhibit 5: Distribution of Constituent Returns, H1 2024

Source: S&P Dow Jones Indices LLC, Factset LLC. Data as of June 30, 2024. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Note that the objective of simply more frequently picking winners does not necessarily mean the same thing as achieving long-term outperformance. The potentially misleading case of avoiding bond defaults by operating more concentrated bond portfolios is considered in detail in "The Hare and the Tortoise: Assessing Passive's Potential in Bonds"; S&P Dow Jones Indices (2024).

The distribution of stock returns shown in Exhibit 5 is relatively balanced, with a median return in both cases that was quite close to the average. Nonetheless, *both* markets observed a moderate degree of positive skewness, with almost 2% of S&P World Index constituents boasting a total return of more than 50% and more than half—52%—of S&P World Index constituents delivering below-average performance. Such conditions mean that a concentrated (or high conviction) "stock picker" is slightly disadvantaged: more than half of stocks had a performance that was below that of the average stock.⁶

However, in the first half of 2024, the relationship between performance and company size (and hence benchmark weight) was likely the more important factor than a mildly positive skew: the (unweighted) average stock performance was considerably lower than the *capitalization-weighted* average performance—as indicated by comparing the stock returns in Exhibit 5 to the six-month total returns (in USD) of 15% and 12% for the S&P 500 and S&P World Index, respectively. In other words, a much higher proportion of constituents underperformed the benchmark return. Exhibit 6 shows these proportions and equivalent results from the combined effects of concentration and skew dynamics for a selected range of the equity benchmarks included in this report, in particular showing the percentage of constituents whose performance (during index inclusion) was lower than the six-month total return of their respective index.

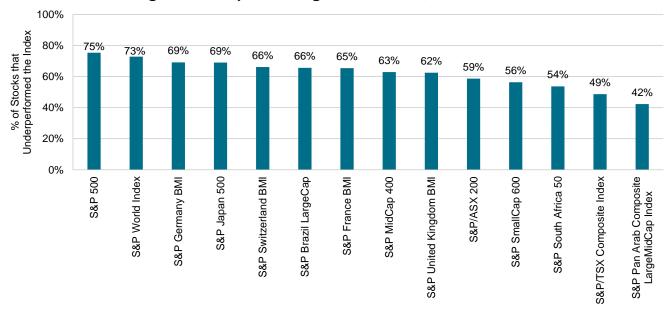


Exhibit 6: Percentage of Underperforming Constituents, H1 2024

Source: S&P Dow Jones Indices LLC, Factset LLC. Data as of June 30, 2024. Index constituent returns measured over the period of index inclusion. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

⁶ See also "Fooled by Conviction"; S&P Dow Jones Indices (2015)

Style Bias: Outperformance Drivers in "Nearby" Segments

Another universal theme that can impact the relative performance of actively managed funds is more granular and specific in each instance but might be grouped together under the category of "nearby" performance. In the equity markets in particular, and within U.S. equities especially, it is sometimes referred to as the consequence of "style bias". In the fixed income markets (treated in the next section), it is somewhat more universally apprehended, but in the equity markets, it can be quite idiosyncratic to each fund category. It includes, for example, the observation that underperformance rates in U.S. Value fund categories are historically positively correlated to the relative performance of U.S. Growth indices; and that funds focused on U.S. small-caps tend to outperform at a higher rate when small-cap indices underperform large-and mid-cap indices. It also includes the observation that outperformance rates in the U.K. Large-Cap Equity fund category were positively correlated to the relative performance of smaller U.K. stocks. It also includes the observation that in years when the international equity market offered overall better returns than the local Australian market, domestic actively managed General Australian Equity funds tended to see higher outperformance rates. 10

What all these examples have in common is that they evidence the fact that, first, in many fund categories, there are opportunities for active managers to seek exposures to securities outside the formal category boundaries, often in categories that are "close" in some sense or another. And second, there are some pairs of categories (one "home" and one "away") that historically have offered insight on the likely drivers of the relative performance of active funds. Finally, such examples illustrate the potential value of bringing all the data across our regional SPIVA Scorecards together: suppose an investor *knew* that actively managed Australian Equity funds were commonly predisposed to including U.S. exposures in their portfolio. That may well prove to be a good thing, but it would presumably also be important to know whether such international exposure might be achieved more efficiently with a U.S.-focused index fund, in which context, the performance of active funds around the world seeking to outperform U.S. equity benchmarks is highly relevant.

Active Fixed Income Conditions: Term, Credit & Liquidity Trends

Although the same dynamics of concentration and skew can also affect the prospects for active managers operating in the bond markets, prior analysis of beat rates reported across our SPIVA Scorecards suggest that out-of-benchmark exposures may be of greater importance. There are intuitive grounds to suspect this; whereas in the equity markets, where

⁷ See in particular, "Style Bias and Active Performance"; S&P Dow Jones Indices (2021).

⁸ H1 2024 would appear to provide further confirmation (see section: SPIVA U.S.)

⁹ Examined in the <u>SPIVA Europe Mid-Year 2022</u> Scorecard.

Examined in the SPIVA Australia Mid-Year 2023 Scorecard. An equivalent dynamic was also evidenced for actively managed domestic Canadian equity funds in the SPIVA Canada Year End 2022 Scorecard.

there are believed to be potential additional returns available from certain categories such as smaller stocks, value stocks, momentum stocks (and so on), the future *realization* of such returns is highly uncertain. Conversely, in the bond markets, **the putative excess return available for taking on more risk is explicitly visible in each bond's yield to maturity.** Taking on greater duration risk when there is an upward-sloping yield curve, investing in bonds with a lower credit quality, or in bonds with less liquidity typically comes with a directly observable increase in yields.

Of course, any higher yield may not be realized if there is a default—and it only relates to the return achieved by holding for the full remainder of the life of the bond. But the existence of such clearly observable excess return sources has meant that, historically, **the relative performance of actively managed bond funds can be usefully qualified** by the context of the relative performance of bonds with **greater duration**, **worse credit quality or less liquidity** than the average represented in their category benchmark.

Exhibit 7 and Exhibit 8 summarize the relative performance of the term, credit and liquidity factors relevant to the major U.S. dollar and euro-denominated bond categories, as indicated by the relative performance of various representative iBoxx indices. In each case, the exhibit reports a *relative* return obtained by subtracting the six-month performance of the index in the fourth column from the index in the third column. For example, the excess return obtained by moving from U.S. Treasuries to the potentially riskier, but still investment grade-rated bond segment, as measured at the shorter end of the maturity spectrum, is proxied by the difference in returns between the iBoxx \$ Corporates 1-3 Year Index and the iBoxx \$ Treasuries 1-3 Year Index, which was equal to a positive excess return of 0.70% for the first six months of 2024.

Exhibit 7: Indicative Active Return Factor Performance, U.S. Dollar Bond Indices

Return Fac	tor	Index 1	(-) Index 2	H1 2024 (%)
(1) Term	Overall	iBoxx \$ Overall 10-15Y	iBoxx \$ Overall 1-3Y	-2.69
	Short Term IG	iBoxx \$ Corporates 1-3Y	iBoxx \$ Treasuries 1-3Y	0.70
(2) Cradit	Long Term IG	iBoxx \$ Corporates 15Y+	iBoxx \$ Treasuries 15Y+	1.00
(2) Credit	Short Term HY	iBoxx USD High Yield Developed Markets 1-3	iBoxx \$ Corporates 1-3Y	1.54
	Long Term HY	iBoxx USD High Yield Developed Markets 10+	iBoxx \$ Corporates 15Y+	3.10
(2) III:i-dit-	IG	iBoxx \$ Corporates	iBoxx \$ Liquid Investment Grade	1.15
(3) Illiquidity	HY	iBoxx \$ High Yield Developed Markets	iBoxx \$ Liquid High Yield	0.37

[&]quot;IG" and "HY" refer to "Investment Grade" and "High Yield", respectively Source: S&P Dow Jones Indices LLC. Data as of June 30, 2024. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

¹¹ For example, notwithstanding a few brief periods, the "Value" factor - as represented for example by the S&P Composite 1500 Value Index – has consistently underperformed the broader benchmark for more than 15 years. Source: S&P Dow Jones Indices, data as of June 28, 2024. Past performance is no guide to future performance.

Exhibit 8: Indicative Active Return Factor Performance. Euro Bond Indices

Return Fac	tor	Index 1	(-) Index 2	H1 2024 (%)
(1) Term	Overall	iBoxx EUR Overall 10+	iBoxx EUR Overall 1-3Y	-5.06
	Short Term IG	iBoxx EUR Corporates 1-3Y	iBoxx EUR Sovereigns 1-3Y	1.13
(0) 0 111	Long Term IG	iBoxx EUR Corporates 10Y+	iBoxx EUR Sovereigns 10Y+	2.22
(2) Credit	Short Term HY	iBoxx EUR High Yield Capped cum-crossover 1-3	iBoxx EUR Corporates 1-3Y	2.05
	Long Term HY	iBoxx EUR High Yield Capped cum-crossover 10+	iBoxx EUR Corporates 10Y+	5.58
(3) Illiquidity	IG	iBoxx EUR Corporates	iBoxx EUR Liquid Investment Grade	0.65
(o) iniquidity	HY	iBoxx EUR High Yield cum-crossover	iBoxx EUR Liquid High Yield	1.00

IG" and "HY" refer to "Investment Grade" and "High Yield", respectively.

Source: S&P Dow Jones Indices LLC. Data as of June 30, 2024. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

In the first instance, Exhibits 7 and 8 would suggest somewhat mixed conditions for active bond managers: there were generally favorable tailwinds to be found in taking additional credit risk or holding less-liquid bonds, but reaching for yield by taking longer-dated bonds would not have helped. However, the situation at the start of 2024 was relatively unusual in that both the U.S. and German sovereign yield curves were "inverted," with higher yields available for the shortest-dated issuances than longer-dated issuances. At the start of 2024, bond managers in both U.S. dollar and euro markets might have achieved a higher yield by selecting securities with a *lower* time to maturity. Bringing this final fact into the mix, it becomes clear that the first half of 2024 presented supportive dynamics across each of the factors of term, credit and (il)liquidity, as far as they might have been typically employed by active bond managers seeking to generate outperformance.

Active Fund Performance Results: Major International Categories

Aggregating results relevant to this section, Report 1 provides a summary of the various statistics typically featured in our SPIVA Scorecards as applied to the global and U.S. equity categories, focusing on the six-month period ending June 2024. Report 2 illustrates the impact of the most recent six months on underperformance rates measured over longer time horizons.

Report 1: Mid-Year 2024 Statistics - Major International Categories

1. Wild I cal 2024 Old	atiotics – Major ii	licination	ai Ca	tegoi	163				
Fund Category	Comparison Index	% Under- performing (H1 2024)	Comparison Index Return (%)	Bottom Quartile Return	Asset Weighted Avg. Return (%)	Median Return	Top Quartile Return	Sample Size	Survivorship (%)
quities									
Global Equity (USD)	S&P World Index	70.75	12.26	5.69	11.07	9.22	13.46	253	96.44
Global Equity (EUR)	S&P World Index	80.21	15.70	8.09	13.67	11.68	14.86	1612	98.64
Global Equity (GBP)	S&P World Index	78.44	13.21	6.36	10.26	9.43	12.76	603	97.35
Global Equity (JPY)	S&P World Index	80.98	28.08	17.75	22.37	21.97	27.06	205	97.56
Global Equity (CAD)	S&P World Index	82.07	16.49	8.52	11.65	10.64	14.40	251	99.60
Global Equity (AUD)	S&P World Index	72.38	14.69	6.62	11.76	10.83	15.42	251	99.05
ities									
All Large-Cap U.S.	S&P 500	57.31	15.29	8.31	15.83	14.00	18.12	773	98.84
U.S. Equity (EUR)	S&P 500	75.00	18.83	9.10	16.85	15.51	18.91	428	97.66
U.S. Equity (GBP)	S&P 500	76.43	16.27	6.12	13.05	11.47	16.07	263	97.34
U.S. Equity (JPY)	S&P 500	77.68	31.55	16.62	32.57	20.84	29.88	112	98.21
U.S. Equity (CAD)	S&P 500	75.00	19.64	10.79	17.66	15.18	19.68	140	98.57
ed Income									
General Government Funds	iBoxx \$ Domestic Sov. & Sub-Sov.	75.00	0.17	-1.49	-1.35	-0.76	0.40	40	95.00
High Yield Funds	iBoxx \$ Liquid High Yield Index	38.95	2.28	1.98	2.85	2.50	3.12	172	97.09
General Investment-Grade Funds	iBoxx \$ Liquid Investment Grade Index	19.51	-1.20	-0.84	-1.17	-0.19	0.21	82	97.56
IG Short & Intermediate Funds	iBoxx \$ Overall 1-5 Year	12.57	1.11	1.44	1.56	1.76	2.12	167	97.60
Corporate Bond (USD)	iBoxx \$ Corporates	40.00	-0.05	-0.21	0.41	0.33	0.80	60	98.33
High Yield Bond (USD)	iBoxx \$ Liquid High Yield Index	36.78	2.28	1.97	2.72	2.56	2.96	87	98.85
ed Income									
Corporate Bond (EUR)	iBoxx EUR Corporates	35.24	0.44	0.26	0.80	0.63	1.07	349	97.99
High Yield Bond (EUR)	iBoxx EUR Liquid High Yield Index	26.92	2.03	1.95	2.71	2.63	3.21	182	99.45
Government Bond (EUR)	iBoxx EUR Sovereigns	33.54	-2.13	-2.24	-1.84	-1.85	-1.21	164	97.56
	quities Global Equity (USD) Global Equity (EUR) Global Equity (GBP) Global Equity (CAD) Global Equity (CAD) Global Equity (AUD) Global Equity (AUD) Global Equity (AUD) ities All Large-Cap U.S. U.S. Equity (EUR) U.S. Equity (GBP) U.S. Equity (CAD) ed Income General Government Funds High Yield Funds General Investment-Grade Funds IG Short & Intermediate Funds Corporate Bond (USD) High Yield Bond (USD) ed Income Corporate Bond (EUR) High Yield Bond (EUR)	quities Global Equity (USD) S&P World Index Global Equity (EUR) S&P World Index Global Equity (GBP) S&P World Index Global Equity (JPY) S&P World Index Global Equity (CAD) S&P World Index Global Equity (AUD) S&P World Index Global Equity (AUD) S&P World Index Ities All Large-Cap U.S. S&P 500 U.S. Equity (EUR) S&P 500 U.S. Equity (GBP) S&P 500 U.S. Equity (JPY) S&P 500 U.S. Equity (CAD) S&P 500 I.S. Equity (CAD) S&P 500 I.S. Equity (CAD) S&P 500 I.S. Equity (IPY) S&P 500 III INTERVAL IN INTERVAL INTERVAL IN INTERVAL INTERVAL IN INTERVAL	Fund Category Comparison Index ### Under- performing (H1 2024) Quities	Fund Category Comparison Index	Fund Category Comparison Index % Underperforming (H1 2024) Underperforming (H1 2	Global Equity (USD) S&P World Index 70.75 12.26 5.69 11.07 Global Equity (EUR) S&P World Index 80.21 15.70 8.09 13.67 Global Equity (GBP) S&P World Index 78.44 13.21 6.36 10.26 Global Equity (JPY) S&P World Index 80.98 28.08 17.75 22.37 Global Equity (JPY) S&P World Index 82.07 16.49 8.52 11.65 Global Equity (AUD) S&P World Index 72.38 14.69 6.62 11.76 Global Equity (AUD) S&P World Index 72.38 14.69 6.62 11.76 Global Equity (AUD) S&P World Index 72.38 14.69 6.62 11.76 Global Equity (EUR) S&P 500 57.31 15.29 8.31 15.83 U.S. Equity (EUR) S&P 500 75.00 18.83 9.10 16.85 U.S. Equity (GBP) S&P 500 76.43 16.27 6.12 13.05 U.S. Equity (JPY) S&P 500 77.68 31.55 16.62 32.57 U.S. Equity (CAD) S&P 500 75.00 19.64 10.79 17.66 Global Income General Government Funds Sov. & Sub-Sov. 75.00 0.17 -1.49 -1.35 Global Equity (IPM) S&P 500 75.00 19.64 10.79 17.66 Global Equity (IPM) S&P 500 75.00 19.64 10.79 17.6	Fund Category	Part Part	Fund Category Comparison Index 7, Underperforming the 2024 page of the 2

Sources: S&P Dow Jones Indices LLC, Morningstar, Fundata, CRSP. Data as of June 30, 2024. See Appendix for column definitions. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 2: Fund Underperformance Rates - Major International Categories

Report	2: Fund Underpo	erformance Rate	es – Major	internation	ai Categoi	ries	
SPIVA Region	Fund Category	Comparison Index	YTD (%)	1-Year (%)	3-Year (%)	5-Year (%)	10-Year (%)
Global Ed	quities						
U.S.	Global Funds (USD)	S&P World Index	70.75	76.61	92.17	86.42	87.80
Europe	Global Equity (EUR)	S&P World Index	80.21	83.70	95.15	N/A	N/A
Europe	Global Equity (GBP)	S&P World Index	78.44	82.35	93.59	N/A	N/A
Japan	Global Equity (JPY)	S&P World Index	80.98	75.00	95.53	N/A	N/A
Canada	Global Equity (CAD)	S&P World Index	82.07	88.72	97.30	N/A	N/A
Australia	Global Equity (AUD)	S&P World Index	72.38	78.41	88.49	N/A	N/A
U.S. Equi	ities						
U.S.	All Large-Cap U.S.	S&P 500	57.31	57.05	86.08	77.26	84.71
Europe	U.S. Equity (EUR)	S&P 500	75.00	73.99	96.19	93.31	96.58
Europe	U.S. Equity (GBP)	S&P 500	76.43	72.33	88.84	89.15	94.62
Japan	U.S. Equity (JPY)	S&P 500	77.68	74.53	94.59	90.43	91.55
Canada	U.S. Equity (CAD)	S&P 500	75.00	72.14	98.00	96.45	96.90
USD Fixe	ed Income						
U.S.	General Government Funds	iBoxx \$ Domestic Sov. & Sub- Sovereigns	75.00	86.84	88.57	91.43	100
U.S.	IG Short & Intermediate Funds	iBoxx \$ Overall 1-5 Year	12.57	15.95	23.75	31.65	57.24
U.S.	General Investment- Grade Funds	iBoxx \$ Liquid Investment Grade Index	19.51	47.56	36.26	60.67	85.86
U.S.	High Yield Funds	iBoxx \$ Liquid High Yield Index	38.95	68.02	64.02	51.81	76.92
Europe	Corporate Bond (USD)	iBoxx \$ Corporates	40.00	44.07	61.67	67.21	78.38
Europe	High Yield Bond (USD)	iBoxx \$ Liquid High Yield Index	36.78	61.9	61.36	63.53	84.38
EUR Fixe	ed Income						
Europe	Corporate Bond (EUR)	iBoxx EUR Corporates	35.24	44.13	47.56	53.82	81.74
Europe	Government Bond (EUR)	iBoxx EUR Sovereigns	33.54	43.45	48.17	60.59	90.00
Europe	High Yield Bond (EUR)	iBoxx EUR Liquid High Yield Index	26.92	38.67	72.97	72.09	73.97

Sources: S&P Dow Jones Indices LLC, Morningstar, Fundata, CRSP. Data as of June 30, 2024. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

U.S.

Market Context

Powered by mega-cap outperformance and AI-related optimism, U.S. large-cap equities surged in H1 2024, as markets shrugged off inflation concerns and uncertainty over the timing of Fed rate cuts. Most of our selected equity benchmarks delivered positive performance, led by S&P 500 Growth. Exhibit 9 provides the six-month performance of the set of comparison benchmarks used in our reported U.S.-domiciled fund categories.

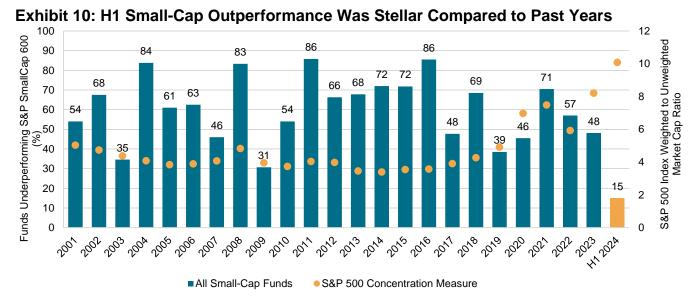
S&P 500 Growth 23.56 S&P 500 15.29 S&P 1500 14 35 S&P World Index (USD) TR 12.26 S&P/IFCI Composite 7.18 S&P Midcap 400 6.17 S&P 500 Value 5.79 S&P World Ex-U.S. Index (USD) TR 5.36 S&P SmallCap 600 -0.72 iBoxx \$ Liquid High Yield Index 2.28 iBoxx \$ Overall 1-5Y 1.11 iBoxx \$ Domestic Sovereign & Sub-Sovereigns 0.17 S&P National AMT-Free Municipal Bond Index -0.26 iBoxx \$ Liquid Investment Grade Index -1.20 -5 0 5 20 25 30 10 15 H1 2024 Total Return (%)

Exhibit 9: U.S. Category Benchmark & Selected Index Performance

Source: S&P Dow Jones Indices LLC. Data as of June 30, 2024. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Amid this environment of large-cap outperformance, **57% of all active large-cap U.S. equity managers underperformed the S&P 500**, a relatively benign result that was consistent with the better-than-might-be expected record also observed in 2023. Market concentration also increased, as Exhibit 10 illustrates. But a silver lining may have been in the clouds for U.S. small-cap funds, which posted stellar H1 relative performance, with 85% of funds outperforming the S&P SmallCap 600. Small-cap managers may have benefited by tilting up the capitalization scale toward outperforming large-cap issues, with a 16% performance differential between the S&P 500 and the S&P SmallCap 600.

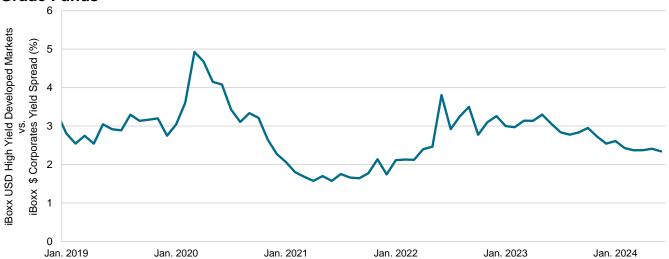
^{12 &}quot;SPIVA U.S. Year-End 2023 Scorecard", S&P Dow Jones Indices, March 2024.



Source: S&P Dow Jones Indices LLC, CRSP. Data as of June 30, 2024. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Fixed income managers may have also benefited from ripe style bias opportunities. Tightening credit spreads in our broad market high yield versus investment grade corporates indices corresponded with outperformance of 3.5% for our benchmark iBoxx \$ Liquid High Yield Index versus the iBoxx \$ Liquid Investment Grade Index. Meanwhile, 80% of General Investment Grade and 87% of Investment-Grade Short & Intermediate funds outperformed their respective benchmarks, perhaps by tilting down the credit spectrum to outperforming high yield bonds.

Exhibit 11: Tightening Credit Spreads May Have Created Opportunities for Investment Grade Funds



Source: S&P Dow Jones Indices LLC. Data as of June 30, 2024. Spreads calculated as the yield differential between the iBoxx USD High Yield Developed Markets and iBoxx \$ Corporates. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

¹³ See also Exhibit 7, earlier.

Similar to their domestic peers, U.S. managers investing overseas in emerging markets might have also faced concentration challenges, especially if they were underweight the outperforming larger names. The S&P/IFCI Composite LargeCap outperformed the S&P/IFCI Composite SmallCap by 6% in H1 2024. Meanwhile, some managers may have benefited from an underweight to China, the largest country weight in the benchmark S&P/IFCI Composite and a topic of broad industry concern following poor performance in recent years. The S&P Emerging BMI underperformed the S&P Emerging Ex-China BMI by 2.5% in H1, with China acting as a performance detractor for most of the period. Overall, 46% of U.S. Emerging Market Equity funds underperformed the benchmark, a relatively moderate showing.

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Dec. 2023 Jan. 2024 Feb. 2024 Mar. 2024 Apr. 2024 May. 2024 Jun. 2024

— S&P Emerging BMI vs. S&P Emerging Ex-China BMI Cumulative Relative Return (%)
— S&P/IFCI Composite LargeCap vs. S&P/IFCI Composite SmallCap Cumulative Relative Return (%)

Exhibit 12: Emerging Market Equity Managers Faced Dueling Headwinds and Tailwinds

Source: S&P Dow Jones Indices LLC. Data as of June 30, 2024. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Report 3: Mid-Year 2024 Statistics - Major U.S. Categories

report.	J. Wild-Teal 2024		o.c. categ	OHICS						
SPIVA Region	Fund Category	Comparison Index	% Under- performing (H1 2024)	Comparison Index Return (%)	Bottom Quartile Return	Asset Weighted Avg. Return (%)	Median Return	Top Quartile Return	Sample Size	Survivorship (%)
Global E	Global Equities									
U.S.	Global Funds	S&P World Index	70.75	12.26	5.69	11.07	9.22	13.46	253	96.44
U.S.	International Funds	S&P World Ex-U.S Index	56.17	5.36	3.30	5.47	5.03	7.13	413	96.61
U.S.	Emerging Markets Funds	S&P/IFCI Composite	46.30	7.18	4.47	7.58	7.90	10.08	216	96.76
U.S. Equ	ities									
U.S.	All Domestic Funds	S&P Composite 1500	76.56	14.35	3.74	13.09	7.68	13.98	2197	98.82
U.S.	All Large-Cap Funds	S&P 500	57.31	15.29	8.31	15.83	14.00	18.12	773	98.84
U.S.	All Mid-Cap Funds	S&P MidCap 400	70.76	6.17	2.05	4.35	4.33	6.62	301	99.00
U.S.	All Small-Cap Funds	S&P SmallCap 600	15.02	-0.72	0.54	3.03	2.71	5.54	526	99.05
U.S.	All Multi-Cap Funds	S&P Composite 1500	78.56	14.35	6.27	11.25	9.21	13.61	597	98.49
U.S.	Large-Cap Growth Funds	S&P 500 Growth	82.14	23.56	16.86	20.74	20.15	22.77	252	98.81
U.S.	Large-Cap Core Funds	S&P 500	58.66	15.29	11.31	16.39	14.55	16.61	254	98.82
U.S.	Large-Cap Value Funds	S&P 500 Value	28.09	5.79	5.45	8.77	7.51	10.05	267	98.88
U.S. Fixe	d Income									
U.S.	General Government Funds	iBoxx \$ Domestic Sovereign & Sub- Sovereigns	75.00	0.17	-1.49	-1.35	-0.76	0.40	40	95.00
U.S.	High Yield Funds	iBoxx \$ Liquid High Yield Index	38.95	2.28	1.98	2.85	2.50	3.12	172	97.09
U.S.	General Investment- Grade Funds	iBoxx \$ Liquid Investment Grade Index	19.51	-1.20	-0.84	-1.17	-0.19	0.21	82	97.56
U.S.	Investment-Grade Short & Intermediate Funds	iBoxx \$ Overall 1-5 Year	12.57	1.11	1.44	1.56	1.76	2.12	167	97.60
U.S.	General Municipal Debt Funds	S&P National AMT- Free Municipal Bond	13.33	-0.26	0.05	0.69	0.61	1.07	90	97.78

Sources: S&P Dow Jones Indices LLC, CRSP. Data as of June 30, 2024. See Appendix for column definitions. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 4: Fund Underperformance Rates - Major U.S. Categories

SPIVA Region	Fund Category	Comparison Index	YTD (%)	1-Year (%)	3-Year (%)	5-Year (%)	10-Year (%)
Global Eq	uities		(70)	(70)	(70)	(70)	(70)
U.S.	Global Funds	S&P World Index	70.75	76.61	92.17	86.42	87.80
U.S.	International Funds	S&P World Ex-U.S. Index	56.17	71.25	81.68	79.25	81.48
U.S.	Emerging Markets Funds	S&P/IFCI Composite	46.30	63.47	72.59	72.17	86.21
U.S. Equit	ies						
U.S.	All Domestic Funds	S&P Composite 1500	76.56	76.17	90.09	85.91	90.08
U.S.	All Large-Cap Funds	S&P 500	57.31	57.05	86.08	77.26	84.71
U.S.	All Mid-Cap Funds	S&P MidCap 400	70.76	71.77	72.82	83.17	78.75
U.S.	All Small-Cap Funds	S&P SmallCap 600	15.02	36.50	48.82	62.73	81.31
U.S.	All Multi-Cap Funds	S&P Composite 1500	78.56	74.30	90.79	84.59	89.16
U.S.	Large-Cap Growth Funds	S&P 500 Growth	82.14	50.21	80.80	78.11	82.70
U.S.	Large-Cap Core Funds	S&P 500	58.66	63.67	78.24	78.85	95.95
U.S.	Large-Cap Value Funds	S&P 500 Value	28.09	58.08	88.64	86.31	91.33
U.S. Fixed	Income						
U.S.	General Government Funds	iBoxx \$ Domestic Sovereign & Sub- Sovereigns	75.00	86.84	88.57	91.43	100.00
U.S.	High Yield Funds	iBoxx \$ Liquid High Yield Index	38.95	68.02	64.02	51.81	76.92
U.S.	General Investment- Grade Funds	iBoxx \$ Liquid Investment Grade Index	19.51	47.56	36.26	60.67	85.86
U.S.	Investment-Grade Short & Intermediate Funds	iBoxx \$ Overall 1-5 Year	12.57	15.95	23.75	31.65	57.24
U.S.	General Municipal Debt Funds	S&P National AMT- Free Municipal Bond	13.33	24.72	90.48	72.29	64.84

Sources: S&P Dow Jones Indices LLC, CRSP. Data as of June 30, 2024. See Appendix for column definitions. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Europe

Market Context

The performance of European-based actively managed Global Equity, U.S. Equity, Emerging Equity and Fixed Income funds were in line with the global trends observed in earlier sections: outperformance by the largest stocks may have helped to drive relatively high underperformance rates in developed equities, tailwinds from a wisely avoided Chinese equity market may have helped emerging market equity managers to keep up with their benchmark, while the active drivers of credit, liquidity and term were likely supportive to active bond managers.

Narrowing our focus to more local concerns, there were gains to be found across European equity and corporate fixed income markets in the first half of 2024, but our broad-based indices for euro sovereign bonds and investment grade U.S. dollar corporate bonds posted small declines. Exhibit 13 provides the six-month performance of the set of comparison benchmarks used in our reported Europe-domiciled fund categories, as well as other selected indices of relevance and interest.

S&P 500 (EUR) 18.83 S&P 500 (GBP) 16.27 S&P World Index (EUR) 15.70 S&P World Index (GBP) 13.21 S&P/IFCI Composite (EUR) 10.47 S&P Europe 350 (EUR) 9.80 S&P Switzerland BMI (CHF) 9.40 S&P Eurozone BMI (EUR) 8.20 S&P Germany BMI (EUR) 7.88 S&P U.K. BMI (GBP) 7.48 S&P U.K. SmallCap (GBP) 3.86 S&P France BMI (EUR) 1.67 iBoxx USD Liquid High Yield Index 2.28 iBoxx EUR Liquid High Yield Index 2.03 iBoxx EUR Corporates 0.44 iBoxx USD Corporates -0.05 iBoxx EUR Sovereigns -2.13 -5 15 20 H1 2024 Total Return (%)

Exhibit 13: European Category Benchmark and Selected Index Performance

Source: S&P Dow Jones Indices LLC. Data as of June 30, 2024. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Meanwhile, the European equity markets offered evidence that the recent trend for megacap dominance was not unique to the U.S. market, with outperformance of the largest names leading to increased concentration (and the associated challenges for actively managed funds) in France, Germany, the U.K. and, to a lesser extent, Spain. Among the region's larger markets, Switzerland did offer an exception to the rule.

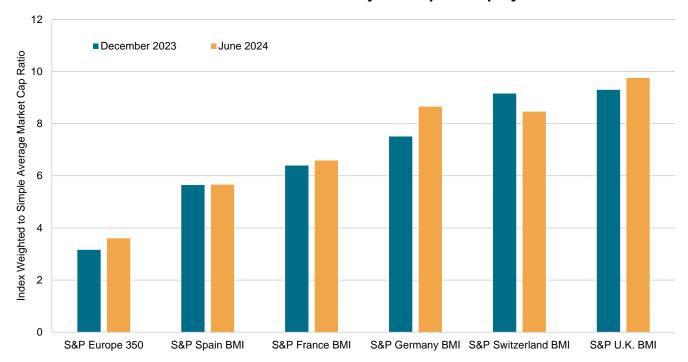


Exhibit 14: Concentration Increased in Most Major European Equity Markets

Source: S&P Dow Jones Indices LLC. Data as of June 30, 2024. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

The dynamics of increasing market concentration (and the associated largest-company outperformance), combined with relatively strong gains overall in regional and single-country benchmarks, meant that actively managed European equity funds faced an overall challenging environment for outperformance. A relatively disappointing 82% of pan-European active equity funds lagged the S&P Europe 350 in the first six months of 2024, with even higher underperformance rates observed in the single markets of France and Germany.

The balance of the market environment would have also led one to suppose that it would prove a torrid time for U.K. active equity funds, so it is perhaps to their credit that only a small majority (55%) of active funds in the U.K. Equity category underperformed.

Report 5: Mid-Year 2024 Statistics - Major Europe Categories

report	5. Wild-Teal 2024	Statistics - Majo	Luiope	Caleg	ULICS					
SPIVA Region	Fund Category	Comparison Index	% Under- performing (H1 2024)	Comparison Index Return (%)	Bottom Quartile Return	Asset Weighted Avg. Return (%)	Median Return	Top Quartile Return	Sample Size	Survivorship (%)
EUR-Denominated Equity Funds										
Europe	Europe Equity	S&P Europe 350	82.27	9.80	3.90	7.26	6.63	9.04	987	98.38
Europe	Eurozone Equity	S&P Eurozone BMI	72.69	8.20	3.00	6.46	6.25	8.45	509	97.45
Europe	France Equity	S&P France BMI	84.54	1.67	-6.15	-0.99	-2.17	1.09	194	96.91
Europe	Germany Equity	S&P Germany BMI	87.78	7.88	-0.23	3.86	3.16	6.26	90	100.00
Europe	U.S. Equity	S&P 500	75.00	18.83	9.10	16.85	15.51	18.91	428	97.66
Europe	Emerging Markets Equity	S&P/IFCI Composite	55.23	10.47	7.54	10.15	10.23	12.06	373	98.12
Europe	Global Equity	S&P World Index	80.21	15.70	8.09	13.67	11.68	14.86	1612	98.64
GBP-Den	ominated Equity Funds	•								
Europe	U.K. Equity	S&P U.K. BMI	55.33	7.48	5.47	7.02	7.34	8.83	291	95.19
Europe	Global Equity	S&P World Index	78.44	13.21	6.36	10.26	9.43	12.76	603	97.35
Europe	U.S. Equity	S&P 500	76.43	16.27	6.12	13.05	11.47	16.07	263	97.34
CHF-Dend	ominated Equity Funds									
Europe	Switzerland Equity	S&P Switzerland BMI	76.35	9.40	5.36	7.60	7.85	9.37	241	97.93
EUR-Den	ominated Fixed Income	•								
Europe	Government Bond	iBoxx EUR Sovereigns	33.54	-2.13	-2.24	-1.84	-1.85	-1.21	164	97.56
Europe	Corporate Bond	iBoxx EUR Corporates	35.24	0.44	0.26	0.80	0.63	1.07	349	97.99
Europe	High Yield Bond	iBoxx EUR Liquid High Yield Index	26.92	2.03	1.95	2.71	2.63	3.21	182	99.45
USD-Den	ominated Fixed Income									
Europe	Corporate Bond	iBoxx USD Corporates	40.00	-0.05	-0.21	0.41	0.33	0.80	60	98.33
Europe	High Yield Bond	iBoxx \$ Liquid High Yield Index	36.78	2.28	1.97	2.72	2.56	2.96	87	98.85

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2024. Past performance is no guarantee of future results. Table is provided for illustrative purposes. Comparison index total returns in the relevant fund category currency were used.

Report 6: Fund Underperformance Rates - Major Europe Categories

SPIVA	Fund Category		YTD	1-Year	3-Year	5-Year	40 Vaa-
Region		Comparison Index	(%)	(%)	(%)	5-1ear (%)	10-Year (%)
EUR-Denom	ninated Equity Funds						
Europe	Europe Equity	S&P Europe 350	82.27	84.41	94.36	91.36	92.07
Europe	Eurozone Equity	S&P Eurozone BMI	72.69	79.73	82.97	88.93	94.36
Europe	France Equity	S&P France BMI	84.54	80.71	95.19	95.19	97.75
Europe	Germany Equity	S&P Germany BMI	87.78	78.02	80.43	86.87	87.88
Europe	U.S. Equity	S&P 500	75.00	73.99	96.19	93.31	96.58
Europe	Emerging Markets Equity	S&P/IFCI Composite	55.23	78.90	77.18	81.16	94.90
Europe	Global Equity	S&P World Index	80.21	83.70	95.15	N/A	N/A
GBP-Denom	ninated Equity Funds						
Europe	U.K. Equity	S&P U.K. BMI	55.33	56.42	92.35	73.61	79.56
Europe	U.S. Equity	S&P 500	76.43	72.33	88.84	89.15	94.62
Europe	Global Equity	S&P World Index	78.44	82.35	93.59	N/A	N/A
CHF-Denom	ninated Equity Funds						
Europe	Switzerland Equity	S&P Switzerland BMI	76.35	68.78	83.77	77.25	77.97
EUR-Denom	ninated Fixed Income						
Europe	Corporate Bond	iBoxx EUR Corporates	35.24	44.13	47.56	53.82	81.74
Europe	Government Bond	iBoxx EUR Sovereigns	33.54	43.45	48.17	60.59	90.00
Europe	High Yield Bond	iBoxx EUR Liquid High Yield Index	26.92	38.67	72.97	72.09	73.97
USD-Denom	ninated Fixed Income						
Europe	Corporate Bond	iBoxx USD Corporates	40.00	44.07	61.67	67.21	78.38
Europe	High Yield Bond	iBoxx \$ Liquid High Yield Index	36.78	61.90	61.36	63.53	84.38

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2024. Past performance is no guarantee of future results. Table is provided for illustrative purposes. Comparison index total returns in the relevant fund category currency were used. Performance statistics for periods prior to the May 2020 initial publication of the S&P World Index in currencies other than USD are excluded.

Japan

Market Context

Japanese equities performed well in the first half of the year, as strong exports and a weakening yen continued to boost the country's economy. In line with the global trend, large-cap companies led the Japanese market, with the <u>S&P/TOPIX 150</u> outperforming the S&P Japan MidSmallCap by a large margin of 9.8%. Momentum was among the best-performing factors, which combined with the large-cap outperformance led to a 6.8% underperformance of the <u>S&P Japan 500 Equal Weight Index</u> versus its market-cap weighted counterpart—the largest six-month underperformance rate since 2018 (see Exhibit 15).

H1 2024 Total Return (%) S&P Japan 500 20.72 S&P/TOPIX 150 22.44 Size S&P Japan MidSmallCap 12.59 S&P Momentum Japan LargeMidCap 30.30 S&P Japan 500 ESG 23.46 S&P Enhanced Value Japan LargeMidCap 21.90 **Factor** S&P Quality Japan LargeMidCap 17.84 S&P Japan 500 Equal Weight 13.90 S&P Japan 500 Low Volatility 6.71 S&P World 28.08 Global S&P Developed Ex-Japan & Korea LargeMidCap 28.66 S&P Japan Government Bond -3.12 **Fixed Income** S&P Japan Corporate Bond -0.55 Currency S&P Japanese Yen Futures -12.39

Exhibit 15: Japan Category Benchmark and Selected Index Performance

Source: S&P Dow Jones Indices LLC. Data as of June 30, 2024. Index performance based on total return in JPY. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

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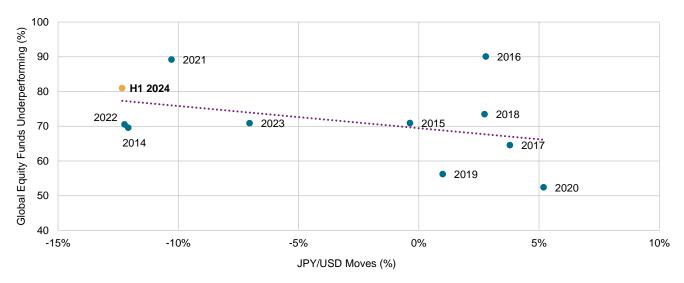
30

Against this backdrop, more than two-thirds (69%) of constituents underperformed the S&P Japan 500 (see Exhibit 6), indicating a challenging stock-picking environment for Japanese equity managers in H1 2024. Over two-thirds (68%) of All Japan Equity funds underperformed.

Meanwhile, the S&P World Index (JPY) rose 28.1% versus a 12.3% gain for the equivalent USD index in the first six months of 2024. The large decline in the Japanese yen meant that currency hedging would have had a negative impact on funds that employed it, and the historical data in Exhibit 16 suggests that some funds may have done so. Global Equity funds domiciled in Japan tended to have higher underperformance rates in periods in which the yen depreciated against the U.S. dollar, including H1 2024 (82%).

¹⁴ For the long-term relationships among currency, inflation and Japanese equity market, see <u>SPIVA Japan Year-End 2023</u>, S&P Dow Jones Indices research.

Exhibit 16: Underperformance Rate of Global Equity Funds in Japan and Currency Moves



Source: S&P Dow Jones Indices LLC, Morningstar, Bloomberg LP. Data as of June 30, 2024. Negative JPY/USD moves indicate the Japanese yen depreciating against the U.S. dollar. Fund underperformance rates prior to 2024 are as reported in previous SPIVA reports, being benchmarked to the S&P Global 1200 (JPY), while the H1 2024 fund underperformance rate is based on the S&P World (JPY) as a benchmark. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Report 7: Mid-Year 2024 Statistics – Major Japan Categories

SPIVA Region	Fund Category	Comparison Index	% Under- performing (H1 2024)	Comparison Index Return (%)	Bottom Quartile Return	Asset Weighted Avg. Return (%)	Median Return	Top Quartile Return	Sample Size	Survivorship (%)
Japan E	quities									
Japan	All Japanese Equity	S&P Japan 500	68.26	20.72	12.61	17.48	18.09	22.27	482	97.30
Japan	Japanese LargeCap	S&P/TOPIX 150	69.77	22.44	16.42	19.53	20.07	23.08	301	97.34
Japan	Japanese Mid/SmallCap	S&P Japan MidSmallCap	52.49	12.59	6.48	13.28	12.40	17.13	181	97.24
Internat	ional Equities									
Japan	Global Equity	S&P World Index	80.98	28.08	17.75	22.37	21.97	27.06	205	97.56
Japan	International Equity	S&P Developed ex-Japan & Korea LargeMidCap	67.69	28.66	19.40	25.88	25.49	29.69	65	96.92
Japan	U.S. Equity	S&P 500	77.68	31.55	16.62	32.57	20.84	29.88	112	98.21

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2024. Fund and benchmark returns are all in JPY. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 8: Fund Underperformance Rates - Major Japan Categories

SPIVA Region	Fund Category	Comparison Index	YTD (%)	1-Year (%)	3-Year (%)	5-Year (%)	10-Year (%)
Japan E	quities						
Japan	All Japanese Equity	S&P Japan 500	68.26	70.71	80.83	81.92	80.55
Japan	Japanese LargeCap	S&P/TOPIX 150	69.77	70.23	80.67	88.63	87.30
Japan	Japanese Mid/SmallCap	S&P Japan MidSmallCap	52.49	62.90	70.15	60.80	55.06
Internati	onal Equities						
Japan	Global Equity	S&P World Index	80.98	75.00	95.53	N/A	N/A
Japan	International Equity	S&P Developed ex-Japan & Korea LargeMidCap	67.69	69.84	95.00	93.85	N/A
Japan	U.S. Equity	S&P 500	77.69	74.53	94.59	90.43	91.55

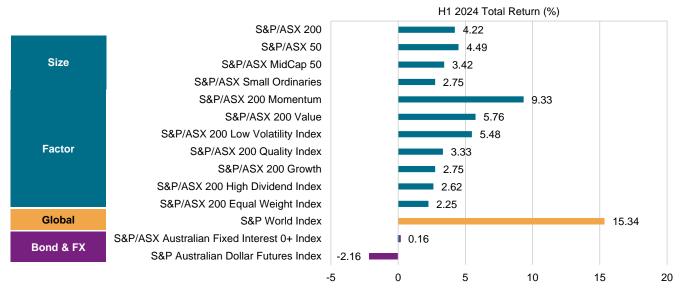
Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2024. Table is provided for illustrative purposes. Past performance is no guarantee of future results. Performance statistics for periods prior to the May 2020 initial publication of the S&P World Index in JPY and the November 2017 launch of the S&P Developed ex-Japan & Korea LargeMidCap are excluded.

Australia

Market Context

Australian equities advanced in the first half of 2024 with a 4.2% gain in the broad-based S&P/ASX 200. Large-cap dominance was also seen in the Australian market, largely driven by big banks, although the magnitude was smaller compared to other developed markets. Momentum outperformed by a large margin, while equal weight and dividend indices lagged (see Exhibit 17).

Exhibit 17: Australia Category Benchmark and Selected Index Performance



Source: S&P Dow Jones Indices LLC. Data as of June 30, 2024. Index performance based on total return in AUD. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

It is notable that Australian equities continued to trail international equities by a wide margin. The S&P World generated a 10.5% excess total return versus the S&P/ASX 200 in H1 2024, following a 11.4% excess return in 2023 (all measured in Australian dollars). This may have worked against global equity funds who had a "home-bias" with greater-than-benchmark domestic equity exposure. Exhibit 18 shows that the underperformance rate of Global Equity Funds tended to be higher in periods when international equities outperformed domestic equities, including H1 2024 (72%) and 2023 (81%).

¹⁵ For further details on Australia's home bias, see, "Connecting the S&P/ASX 200 to U.S. Equity Icons", S&P Dow Jones Indices (2023).

Exhibit 18: Underperformance Rate of Global Equity Funds in Australia and Domestic versus International Benchmark Return Spreads

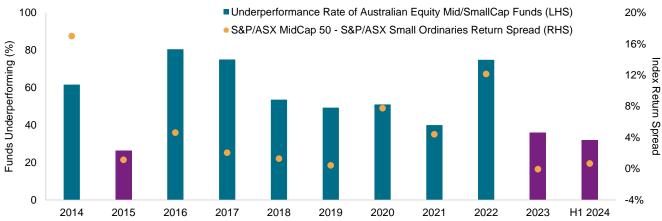


Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2024. The analysis includes funds in the Global Equity General category, which is equal to the International Equity General category in previous SPIVA Australia Scorecards. Fund underperformance rates prior to 2024 are as reported in previous SPIVA reports. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

While a slim majority (52%) of Australian Equity General funds outperformed the S&P/ASX 200, Australian Mid/SmallCap funds had better results with about two-thirds of the funds beating the S&P/ASX Mid-Small. This may be partially attributed to a predilection for funds in the Mid/SmallCap category to hunt for excess returns among the very smallest names. Exhibit 19 shows that the lowest fund underperformance rates in the past, including H1 2024, 2023 and 2015, coincided with historically lower return spreads between the S&P/ASX MidCap 50 and S&P/ASX Small Ordinaries. 16

¹⁶ As of June 30, 2024, the S&P/ASX MidCap 50 had an 11.1% annualized return since 2014 versus 8.7% for the S&P/ASX Small Ordinaries.

Exhibit 19: Underperformance Rate of Australian Mid/SmallCap Funds and Mid vs. Small-Cap Benchmark Return Spreads



Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2024. Past performance is no guarantee of future results. Chart is provided for illustrative purposes. Periods with the lowest fund underperformance rates are highlighted in purple.

Report 9: Mid-Year 2024 Statistics – Major Australia Categories

Report 3. Mid-Tear 2024 Otatistics - Major Australia Categories										
SPIVA Region	Fund Category	Comparison Index	% Under- performing (H1 2024)	Comparison Index Return (%)	Bottom Quartile Return	Asset Weighted Avg. Return (%)	Median Return	Top Quartile Return	Sample Size	Survivorship (%)
Australia	Equities									
Australia	Australian Equity General	S&P/ASX 200	48.32	4.22	2.92	4.31	4.45	5.64	298	97.99
Australia	Australian Equity Mid/SmallCap	S&P/ASX Mid-Small	32.02	3.11	2.79	5.97	6.20	8.75	178	97.75
Internatio	nal Equities									
Australia	Global Equity General	S&P World Index	72.38	14.94	6.62	11.76	10.83	15.42	315	99.05

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2024. Fund and benchmark returns are all in Australian dollar. The Global Equity General fund category is equal to the International Equity General category in previous SPIVA Australia Scorecards, with its benchmark index being changed from the S&P Developed ex-Australia LargeMidCap to the S&P World Index. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 10: Fund Underperformance Rates – Major Australia Categories

SPIVA Region	Fund Category	Comparison Index	YTD (%)	1-Year (%)	3-Year (%)	5-Year (%)	10-Year (%)
Australia	Equities						
Australia	Australian Equity General	S&P/ASX 200	48.32	65.66	69.57	68.10	82.16
Australia	Australian Equity Mid/SmallCap	S&P/ASX Mid-Small	32.02	24.71	54.49	49.01	75.83
Internation	nal Equities						
Australia	Global Equity General	S&P World Index	72.38	78.41	88.49	N/A	N/A

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2024. The Global Equity General fund category is equal to the International Equity General category in previous SPIVA Australia Scorecards, with its benchmark index being changed from the S&P Developed ex-Australia LargeMidCap to the S&P World Index. Performance statistics for periods prior to the May 2020 initial publication of the S&P World Index in AUD are excluded. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Canada

Market Context

The <u>S&P/TSX Composite Index</u> finished the first half of 2024 up 6.1%. In local currency, Canadian large-cap equity performance trailed domestic small-cap issues, as well as the global flagship S&P World Index and the U.S.-focused S&P 500, as shown in Exhibit 20.

S&P World Index

S&P/TSX Composite Index

S&P/TSX Composite Index

S&P/TSX 60

0.0% 5.0% 10.0% 15.0% 20.0% 25.0% H1 2024 Performance

Exhibit 20: Canadian, U.S. & S&P World Index Performance

Source: S&P Dow Jones Indices LLC. Data as of June 30, 2024. All indices in Canadian dollar. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Among S&P/TSX Composite constituents, slightly more than half (51.3%) outperformed the index in H1, and contributions of single stocks to benchmark performance were relatively balanced, with the top and bottom contributors accounting for 0.68% and -0.52% of the 6.1% S&P/TSX Composite total performance, respectively. **Despite nearly even odds of picking a winning stock, exactly two-thirds of Canada Equity funds (66.7%) underperformed the benchmark** in the first half of the year.

While no single stocks stood out dramatically from the pack, sector picking may have played a bigger role in active fund performance. From a contribution perspective, the **Energy sector accounted for 2.4% of the S&P/TSX Composite's 6.1% increase** in the first six months of 2024, as shown in Exhibit 21.

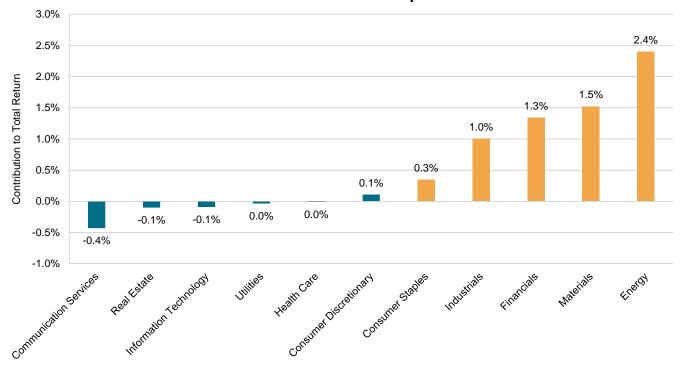


Exhibit 21: Sector Contributions to H1 S&P/TSX Composite Performance

Source: S&P Dow Jones Indices LLC. Data as of June 30, 2024. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

For actively managed Canadian funds focused on international stocks, H1 2024 results were even more dispiriting. A roughly four-fifths majority of funds failed to beat their assigned benchmarks, with underperformance rates of 75% among Canadian funds focused on U.S. Equity and 82% for managers of Global Equity.

Report 11: Mid-Year 2024 Statistics - Major Canada Categories

SPIVA Region	Fund Category	Comparison Index	% Under- performing (H1 2024)	Comparison Index Return (%)	Bottom Quartile Return	Asset Weighted Avg. Return (%)	Median Return	Top Quartile Return	Sample Size	Survivorship (%)	
Canada E	Canada Equities										
Canada	Canadian Equity	S&P/TSX Composite Index	66.67	6.05	4.38	5.31	5.38	6.49	72	97.22	
Global Ed	uities										
Canada	Global Equity	S&P World Index	82.07	16.49	8.52	11.65	10.64	14.40	251	99.60	
U.S. Equi	ties										
Canada	U.S. Equity	S&P 500	75.00	19.64	10.79	17.66	15.18	19.68	140	98.57	

Source: S&P Dow Jones Indices LLC, Fundata. Data as of June 30, 2024. Fund and benchmark returns are all in Canadian dollar. See Appendix for column definitions. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 12: Fund Underperformance Rates - Major Canada Categories

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SPIVA Region	Fund Category	Comparison Index	YTD (%)	1-Year (%)	3-Year (%)	5-Year (%)	10-Year (%)
Canada E	quities						
Canada	Canadian Equity	S&P/TSX Composite Index	66.67	80.82	76.00	89.55	93.41
Global Eq	uities						
Canada	Global Equity	S&P World Index	82.07	88.72	97.30	N/A	N/A
U.S. Equit	ies						
Canada	U.S. Equity	S&P 500	75.00	72.14	98.00	96.45	96.90

Source: S&P Dow Jones Indices LLC, Fundata. Data as of June 30, 2024. Fund and benchmark returns are all in Canadian dollar. Performance statistics for periods prior to the May 2020 initial publication of the S&P World Index in CAD are excluded. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Latin America

Market Context

In Latin America, most major single-country equity indices finished the first half of 2024 in negative territory, standing in stark contrast to 2023 when benchmarks across capitalization ranges and countries rose by double digits. In local currency, the S&P Brazil LargeCap, S&P Brazil MidSmallCap and S&P BMV/IRT fell 2.3%, 8.5% and 7.2%, respectively, while the S&P Chile BMI was the sole gainer, up 3.3%. Exhibit 22 illustrates the six-month performance of these benchmarks along with the S&P World Index in USD to provide global context on Latin American equity performance.

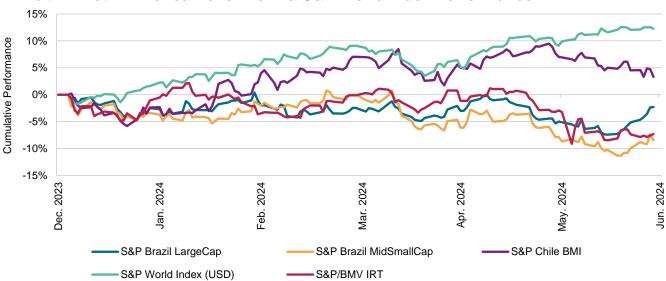


Exhibit 22: Latin America Benchmark & S&P World Index Performance

Source: S&P Dow Jones Indices LLC. Data as of June 30, 2024. Index performance based on total return in local currency except S&P World Index in USD. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

H1 underperformance rates for managers of Brazil Large-Cap, Brazil Small-Cap and Chile Equity funds reached 89%, 61% and 58%, respectively. Mexico Equity was the sole category where slightly more than half of managers succeeded, with 42% underperforming the S&P/BMV IRT.

Skewness of stock returns, or the lack thereof, may have played a role in Latin American active fund performance. Chile and Mexico, the two countries exhibiting the lowest rates of underperformance across major Latin American equity markets in H1, were also notable due to the rarity of stocks outperforming their benchmarks, as shown in Exhibit 23. Within the S&P Chile BMI, 63.6% of stocks outperformed the benchmark itself, while in Mexico 56.8% of constituents outperformed the S&P/BMV IRT. In both markets, stock pickers had a higher probability of randomly picking a winning stock than a losing one.

In contrast, the S&P Brazil LargeCap was led up by a select few large contributors, with 65.6% of constituents underperforming the index. With only a rare few individual stocks keeping up with the benchmark, active equity funds in Brazil had one of the highest underperformance rates of all single country equity funds reported for H1 in our SPIVA Global Scorecard, with 89% of funds underperforming the S&P Brazil LargeCap.

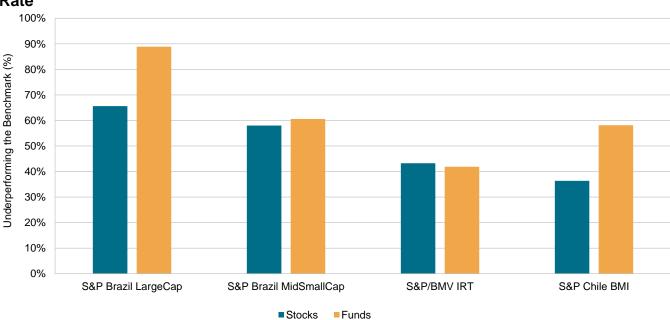


Exhibit 23: Percentage of Underperforming Constituents and Fund Underperformance Rate

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2024. All indices in local currency. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Report 13: Mid-Year 2024 Statistics - Major Latin America Categories

SPIVA Region	Fund Category	Comparison Index	% Under- performing (H1 2024)	Comparison Index Return (%)	Bottom Quartile Return	Asset Weighted Avg. Return (%)	Median Return	Top Quartile Return	Sample Size	Survivorship (%)
Latin Am	erica Equities									
Latin America	Brazil Large-Cap Funds	S&P Brazil LargeCap	88.89	-2.31	-10.29	-7.73	-7.97	-6.69	153	98.69
Latin America	Brazil Mid-/Small- Cap Funds	S&P Brazil MidSmallCap	60.56	-8.47	-13.11	-9.96	-10.21	-6.08	142	95.77
Latin America	Chile Equity Funds	S&P Chile BMI	58.14	3.32	1.45	3.68	3.03	3.96	43	97.67
Latin America	Mexico Equity Funds	S&P/BMV IRT	41.86	-7.19	-8.78	-1.61	-6.74	-4.23	43	100.00

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2024. See Appendix for column definitions. Fund and benchmark returns are all in local currency. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 14: Fund Underperformance Rates - Major Latin America Categories

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SPIVA Region	Fund Category	Comparison Index	YTD (%)	1-Year (%)	3-Year (%)	5-Year (%)	10-Year (%)		
Latin America Ed	quities								
Latin America	Brazil Large-Cap Funds	S&P Brazil LargeCap	88.89	89.87	85.00	85.05	80.90		
Latin America	Brazil Mid-/Small-Cap Funds	S&P Brazil MidSmallCap	60.56	64.29	65.14	67.65	88.37		
Latin America	Chile Equity Funds	S&P Chile BMI	58.14	60.87	64.29	70.45	93.18		
Latin America	Mexico Equity Funds	S&P/BMV IRT	41.86	53.49	60.47	72.73	85.37		

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2024. Fund and benchmark returns are all in local currency. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

India

Market Context

Indian equities were among the best-performing around the world in H1 2024, with the <u>S&P India LargeMidCap</u> posting a total return of 17% and outperforming the S&P Emerging BMI by a wide margin (see Exhibit 24). Among S&P India LargeMidCap constituents, slightly less than half (48%) underperformed the index in H1. **Despite nearly even odds of picking a winning stock**, **over three-quarters of Indian Equity Large-Cap funds (77%) underperformed the benchmark** in the first half of the year.

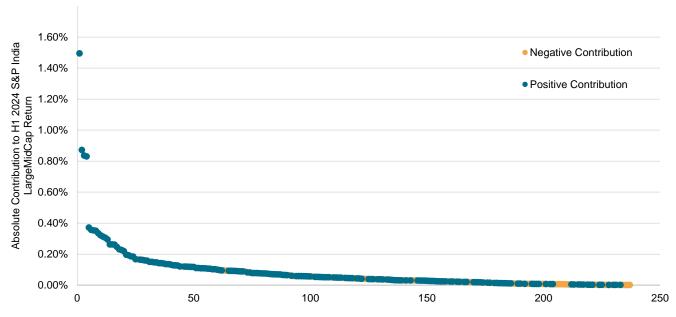
20% 15% **Cumulative Performance** 10% 5% 0% -5% Jan. 2024 Dec. 2023 Feb. 2024 Mar. 2024 Apr. 2024 May. 2024 Jun. 2024 S&P Emerging BMI S&P India BMI S&P India LargeMidCap S&P World Index

Exhibit 24: Indian Equities, S&P Emerging BMI & S&P World Index Performance

Source: S&P Dow Jones Indices LLC. Data as of June 30, 2024. Index performance based on total return in INR for the S&P India BMI and S&P India LargeMidCap, and in USD for the S&P Emerging BMI and the S&P World Index. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

What could have been a winning strategy for Indian Equity Large-Cap managers? There have been times and places when the easiest way to generate outperformance was avoiding some of the biggest laggards in a market, but in H1 2024, within large-mid-cap Indian equities, getting a few bold selections right might have proved more lucrative: the top positive contributor's absolute contribution was 9 times as large as that of the largest detractor, and the top decile of stocks delivered well over half of the S&P India LargeMidCap's total return, as shown in Exhibit 25. Winners towered over losers not just in the magnitude of their contributions but also in their sheer number: all the top 25 largest absolute contributors to the S&P India LargeMidCap's performance had a positive return.

Exhibit 25: Single-Security S&P India LargeMidCap Contributions in H1 2024



Source: S&P Dow Jones Indices LLC. Data as of June 30, 2024. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Report 15: Mid-Year 2024 Statistics - Major India Categories

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SPIVA Region	Fund Category	Comparison Index	% Under- performing (H1 2024)	Comparison Index Return (%)	Bottom Quartile Return	Asset Weighted Avg. Return (%)	Median Return	Top Quartile Return	Sample Size	Survivorship (%)
India Equ	ities									
India	Indian Equity Large Cap	S&P India LargeMidCap	76.67	17.40	14.43	14.48	15.57	17.32	30	100
India	Indian Equity Mid/Small Cap	S&P India SmallCap	51.79	22.35	19.19	21.85	22.31	25.86	56	100

Source: S&P Dow Jones Indices LLC, Morningstar, Association of Mutual Funds in India. Data as of June 30, 2024. See Appendix for column definitions. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 16: Fund Underperformance Rates – Major India Categories

SPIVA Region	Fund Category	Comparison Index	YTD (%)	1-Year (%)	3-Year (%)	5-Year (%)	10-Year (%)
India Equi	ties						
India	Indian Equity Large Cap	S&P India LargeMidCap	76.67	76.67	81.82	100.00	71.82
India	Indian Equity Mid/Small Cap	S&P India SmallCap	51.79	79.25	82.35	76.09	76.27

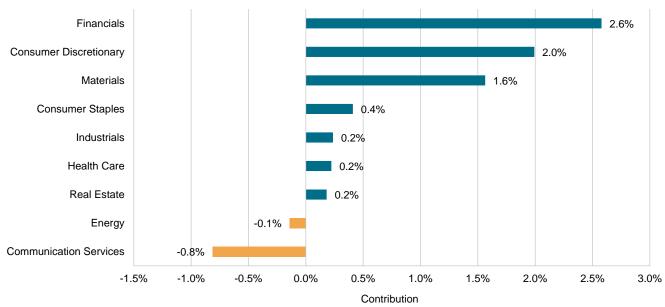
Source: S&P Dow Jones Indices LLC, Morningstar, Association of Mutual Funds in India. Data as of June 30, 2024. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

South Africa

Market Context

As global markets extended their 2023 gains in H1 2024, South Africa was no exception from international trends. Propelled by the strength of large-cap stocks, particularly in the Financials and Consumer Discretionary sectors, as shown in Exhibit 26, the <u>S&P South Africa</u> 50 rose 6% in H1 2024, outperforming its broad market and domestic shareholder-weighted counterpart, the <u>S&P South Africa DSW Capped Index</u>, by 1%.

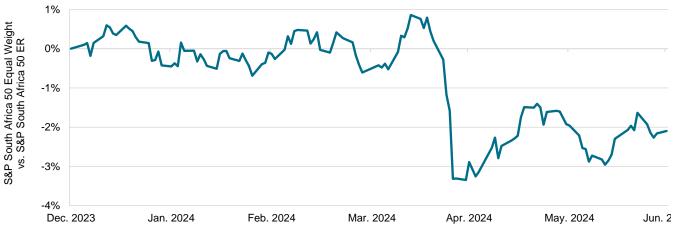
Exhibit 26: Financials and Consumer Discretionary Dominated within the S&P South Africa 50, While Communication Services Was a Detractor



Source: S&P Dow Jones Indices LLC. Data as of June 30, 2024. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Consistent with the recent trend for mega-cap dominance in the U.S. and many other equity markets around the world, local mega-cap issues outperformed in South Africa as well, leading to increased concentration (and the associated challenges for actively managed funds) in both the S&P South Africa 50 and the S&P South Africa DSW Capped Index, as illustrated in Exhibit 27. Unsurprisingly, given the outperformance of local mega-cap companies, the S&P South Africa 50 Equal Weight Index lagged the S&P South Africa 50 by 2.1% in H1 2024, following three straight calendar years of outperformance. Against this backdrop, the performance of active South African Equity funds in the first half of 2024 was quite remarkable: just 56% of them lagged the S&P South Africa 50, the lowest underperformance rate relative to this benchmark since its inclusion in the SPIVA South Africa Scorecard in 2019.

Exhibit 27: As Index Concentration Increased, S&P South Africa 50 Equal Weight Index Underperformed Its Cap-Weighted Counterpart



Source: S&P Dow Jones Indices LLC. Data as of June 30, 2024. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Report 17: Mid-Year 2024 Statistics - Major South Africa Categories

SPIVA Region	Fund Category	Comparison Index	% Under- performing (H1 2024)	Comparison Index Return (%)	Bottom Quartile Return	Asset Weighted Avg. Return (%)	Median Return	Top Quartile Return	Sample Size	Survivorship (%)
South Afr	ica Equities									
South Africa	South Africa Equity	S&P South Africa 50	56	6.23	4.63	6.26	6	7.47	200	97.50
South Africa	South Africa Equity	S&P South Africa DSW Capped Index	36.50	5.44	4.63	6.26	6	7.47	200	97.50
South Afr	ica Fixed Income									
South Africa	Diversified/Aggregate Bond	S&P South Africa Sovereign Bond 1+ Year Index	71.14	5.54	4.61	4.94	5	5.64	149	99.33

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2024. See Appendix for column definitions. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 18: Fund Underperformance Rates – Major South Africa Categories

SPIVA Region	Fund Category	Comparison Index	YTD (%)	1-Year (%)	3-Year (%)	5-Year (%)	10-Year (%)	
South Afri	ca Equities							
South Africa	South Africa Equity	S&P South Africa 50	56.00	48.22	76.12	80.30	95.68	
South Africa	South Africa Equity	S&P South Africa DSW Capped Index	36.50	54.31	47.26	47.47	67.90	
South Africa Fixed Income								
South Africa	Diversified/Aggregate Bond	S&P South Africa Sovereign Bond 1+ Year Index	71.14	79.59	28.36	61.40	76.92	

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2024. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Middle East

Market Context

In the Middle East, our range of equity indices finished the first half of 2024 in negative territory, standing in stark contrast to 2023 when all benchmarks posted positive total returns between 8%-16%. The <u>S&P Pan Arab Composite LargeMidCap</u> and the <u>S&P Pan Arab Composite</u> performed similarly, shedding 3.1% and 1.8%, respectively. Exhibit 28 illustrates the six-month performance of these benchmarks along with the S&P World Index in USD to provide global context on Middle East equity performance.

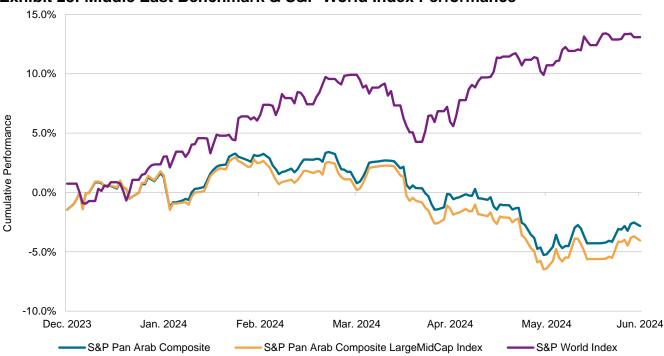
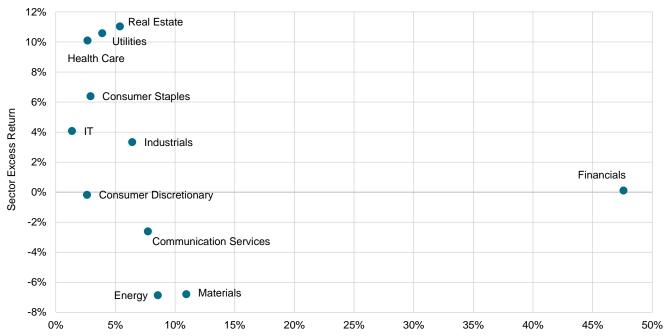


Exhibit 28: Middle East Benchmark & S&P World Index Performance

Source: S&P Dow Jones Indices LLC. Data as of June 30, 2024. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

When assessing opportunities for active managers to outperform their benchmarks, dissecting the underlying components of the index might provide valuable insights into where alpha may potentially be generated. Exhibit 29 shows the weight and performance of each sector in the S&P Pan Arab Composite in H1 2024. None of the three sectors with the largest index weights managed to outperform the benchmark; while Financials (by far the largest sector, with nearly one-half of the total index weight) matched the performance of the benchmark, Materials and Energy (the second and third biggest sectors) significantly underperformed with total returns of -9% each versus -2% for the benchmark. At the other end of the spectrum, Real Estate and Utilities stood out, up 9% each, offering active managers an opportunity for outperformance by shifting capital toward high-performing sectors.

Exhibit 29: S&P Pan Arab Composite Sector Weight and Performance



Source: S&P Dow Jones Indices LLC. Data as of June 30, 2024. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Report 19: Mid-Year 2024 Statistics – Major MENA Categories

SPIVA Region	Fund Category	Comparison Index	% Under- performing (H1 2024)	Comparison Index Return (%)	Bottom Quartile Return	Asset Weighted Avg. Return (%)	Median Return	Top Quartile Return	Sample Size	Survivorship (%)
MENA Equ	uities									
MENA	MENA Equity	S&P Pan Arab Composite	26.92	-1.83	-1.55	1.32	-0.12	3.47	26	96.15
MENA	MENA Equity	S&P Pan Arab Composite LargeMidCap Index	15.38	-3.06	-1.55	1.32	-0.12	3.47	26	96.15

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2024. See Appendix for column definitions. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 20: Fund Underperformance Rates - Major MENA Categories

Report 20.	Fund Unde	riperiormance Kales	– iviajoi ivit	INA Cale	gories		
SPIVA Region	Fund Category	Comparison Index	YTD (%)	1-Year (%)	3-Year (%)	5-Year (%)	10-Year (%)
MENA Equitie	es						
MENA	MENA Equity	S&P Pan Arab Composite	26.92	44.00	30.77	58.06	87.50
MENA	MENA Equity	S&P Pan Arab Composite LargeMidCap Index	15.38	32.00	30.77	45.16	87.50

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2024. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Appendix A: A Unique Scorecard for the Active Versus Passive Debate

Since its first publication in 2002, the SPIVA Scorecard has served as the de facto scorekeeper of the long-standing active versus passive debate. Beyond the SPIVA Scorecard's widely cited headline numbers is a rich data set that addresses issues—often far more fascinating though far less discussed—about measurement techniques, universe composition and fund survivorship. These data sets are rooted in the following fundamental principles of the SPIVA Scorecard, with which regular readers will be familiar.

- Survivorship Bias Correction: Many funds might be liquidated or merged during a
 period of study. However, for someone making an investment decision at the beginning
 of the period, these funds are part of the opportunity set. Unlike other commonly
 available comparison reports, SPIVA Scorecards account for the entire opportunity set—
 not just the survivors—thereby eliminating survivorship bias.
- Apples-to-Apples Comparison: Fund returns are often compared to popular benchmarks such as the S&P 500, regardless of size or style classification. SPIVA Scorecards avoid this pitfall by measuring a fund's returns against the returns of a benchmark appropriate for that particular investment category.
- Asset-Weighted Returns: Average returns for a fund group are often calculated using only equal weighting, which results in the returns of a USD 10 billion fund affecting the average in the same manner as the returns of a USD 10 million fund. A more accurate representation of how market participants fared in a particular period is found by calculating weighted average returns where each fund's return is weighted by net assets.
- Data Cleaning: SPIVA Scorecards avoid double-counting multiple share classes in all count-based calculations, using only the share class with greater assets. Since this is meant to be a scorecard for active managers, it excludes index funds, leveraged and inverse funds, and other index-linked products.

Appendix B: Glossary

Percentage of Funds Underperforming the Index

To correct for survivorship bias, we use the opportunity set available at the beginning of the period as the denominator. We determine the count of funds that have survived and beat the index. We then report the index outperformance percentage.

Fees

The fund returns used are net of fees, excluding loads.

Survivorship (%)

This measure represents the percentage of funds in existence at the beginning of the time period that are still active at the end of the time period.

Asset-Weighted Performance

Asset-weighted returns measure fund category performance in a way that accurately reflects the returns of the total money invested in that particular style category.

Except for funds in the SPIVA India Scorecard, asset-weighted returns for a particular style category are determined by calculating a weighted average return of all funds in that category in a particular month, with each fund's return weighted by its total net assets. In the case of the SPIVA India Scorecard, asset-weighted returns for a particular category are determined by calculating a weighted average return of all funds in that category in a particular month, with each fund's return weighted by its latest *quarterly* average assets available as of that month from the Association of Mutual Funds in India.

Quartile Breakpoints

The pth percentile for a set of data is the value that is greater than or equal to p% of the data but is less than or equal to (100-p)% of the data. In other words, it is a value that divides the data into two parts: the lower p% of the values and the upper (100-p)% of the values. The top quartile is the 75th percentile, the value separating the elements of a population into the lower 75% and the upper 25%. The median is the 50th percentile and the bottom quartile is the 25th percentile.

Survivorship Bias

Many funds might liquidate or merge during a period of study. This usually occurs due to continued poor performance by the fund. Therefore, if index returns were compared to fund

returns using only surviving funds, the comparison would be biased in favor of the fund category. These reports remove this bias by (a) using the entire investment opportunity set, made up of all funds in that particular category at the outset of the period, as the denominator for outperformance calculations, (b) explicitly showing the survivorship rate in each category and (c) constructing peer average return series for each category based on all available funds at the outset of the period.

Data Coverage

The dataset includes retail active mutual funds and all ETFs domiciled in their respective countries according to the SPIVA region.

Further Information

Further information on the methodology, sources and indices in this report is available in the respective regional SPIVA Year-End 2023 Scorecards, available at:

https://www.spglobal.com/spdji/en/research-insights/spiva/spiva-library/

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