

# The Relevance of U.S. Equities to Japan

## Contributors

**Hamish Preston, CFA**

Director

U.S. Equity Indices

[hamish.preston@spglobal.com](mailto:hamish.preston@spglobal.com)

**Cristopher Anguiano, CFA,  
FRM**

Senior Analyst

U.S. Equity Indices

[cristopher.anguiano@spglobal.com](mailto:cristopher.anguiano@spglobal.com)

## Executive Summary

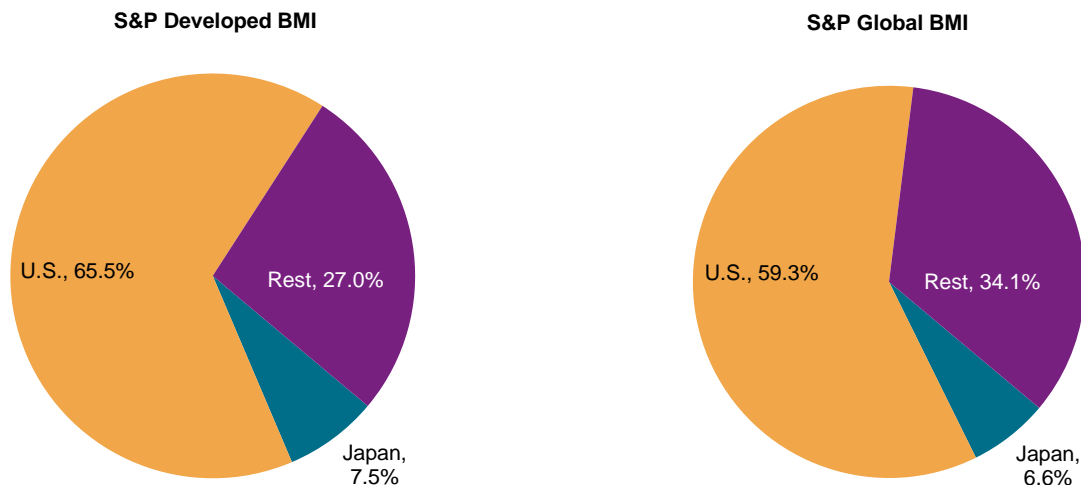
U.S. equities represent a significant portion of the global equity opportunity set, with characteristics that offer potential diversification benefits for Japanese markets. In this paper, we:

- Outline the global relevance of the U.S. equity market;
- Illustrate the U.S. equity market's distinct sector exposures;
- Demonstrate how the inclusion of U.S. equities might improve risk and returns; and
- Summarize the record of actively managed equity funds in comparison to S&P DJI's flagship equity benchmarks.

## The Size and Relevance of the U.S.

The U.S. equity market represents a sizeable portion of the global equity opportunity set. Exhibit 1 shows that U.S.-domiciled companies accounted for 59.3% of the float market capitalization of the global equity universe at the end of June 2023, nearly nine times larger than the Japanese equity market (6.6%).

## Exhibit 1: The U.S. Is the Largest Market in the Developed and Global Equity Market Universe



Source: S&P Dow Jones Indices LLC. Data as of June 30, 2023. Data based on float market capitalization in USD trillions. Past performance is no guarantee of future results. Charts are provided for illustrative purposes.

## Beyond U.S. Large Caps: The S&P 1500<sup>®</sup>

Launched in 1995, the [S&P Composite 1500<sup>®</sup>](#)—otherwise known as the S&P 1500—is designed to measure the performance of the U.S. equity market. The S&P 1500 is a float market capitalization-weighted combination of three component indices: the [S&P 500<sup>®</sup>](#), [S&P MidCap 400<sup>®</sup>](#) and [S&P SmallCap 600<sup>®</sup>](#), covering the large-, mid- and small-cap U.S. equity segments, respectively. Each index follows the same comprehensive, rules-based and transparent methodology, which has historically helped the S&P 1500 to avoid less liquid, lower priced and lower quality stocks.<sup>1</sup>

Although the large-cap segment represents a sizeable portion of the U.S. equity market—on average, the S&P 500 accounted for over 80% of the U.S. stock market, historically<sup>2</sup>—the breadth and depth of the U.S. equity market means that smaller U.S. size segments are as large as some countries' equity markets. For example, taken as standalone countries, the S&P MidCap 400 and S&P SmallCap 600 would have been the 4<sup>th</sup> and 12<sup>th</sup> largest countries in the S&P Global BMI, respectively, at the end of 2022.<sup>3</sup>

<sup>1</sup> See Brzenk, Phillip, Preston, Hamish and Soe, Aye, "[The S&P Composite 1500: An Efficient Measure of the U.S. Equity Market](#)," S&P Dow Jones Indices LLC, May 2020.

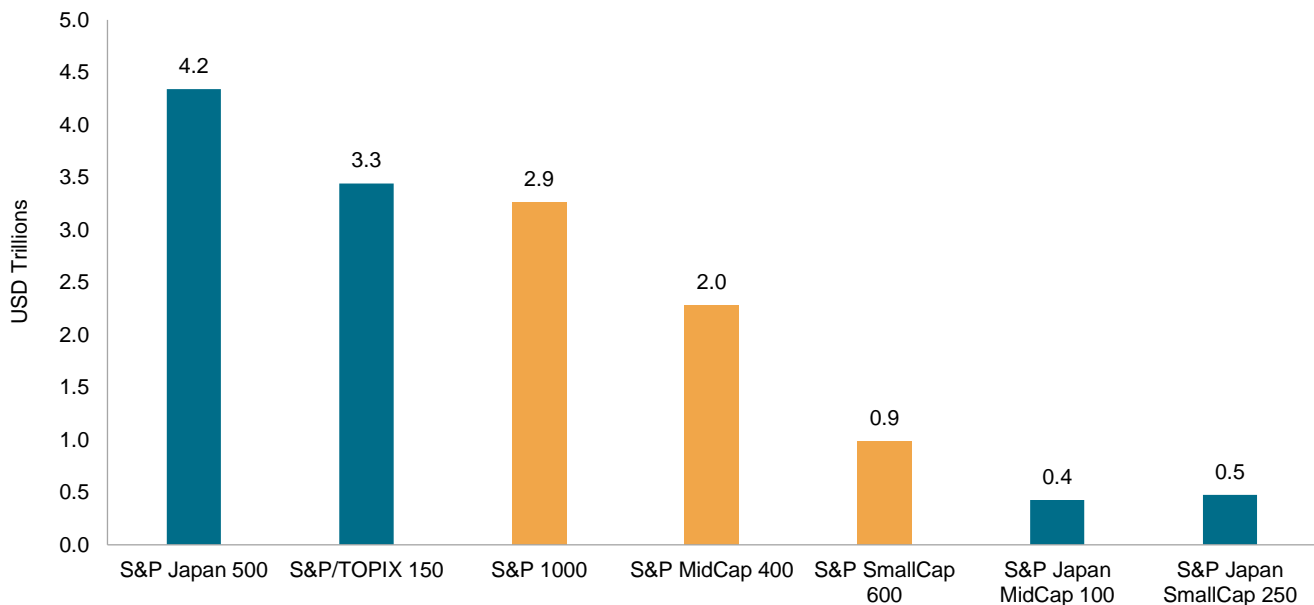
<sup>2</sup> See [S&P 500: The Gauge of the U.S. Large-Cap Market](#).

<sup>3</sup> Glawe, Garrett and Issifu, Sherifa, "[Diversifying Israel's Home Bias with U.S. Equities](#)," S&P Dow Jones Indices LLC, March 2023.

Exhibit 2 compares the float market capitalization of the S&P MidCap 400 and the S&P SmallCap 600 against several Japanese equity index benchmarks. The [S&P/TOPIX 150](#) is designed to track the performance of large-cap Japanese companies, while the [S&P Japan MidCap 100](#) and [S&P Japan SmallCap 250](#) seek to measure the mid- and small-cap segments, respectively. Collectively, the three indices compose the [S&P Japan 500](#).

As of June 2023, the S&P SmallCap 600 was larger than the S&P Japan MidCap 100 and S&P Japan SmallCap 250, combined. Moreover, the mid- and small-cap segment of the U.S. market, as represented by the [S&P 1000®](#), was similar in size to the large-cap Japanese equity segment.

**Exhibit 2: The U.S. Mid- and Small-Cap Segment Is Almost the Same Size as the Japanese Large-Cap Segment**

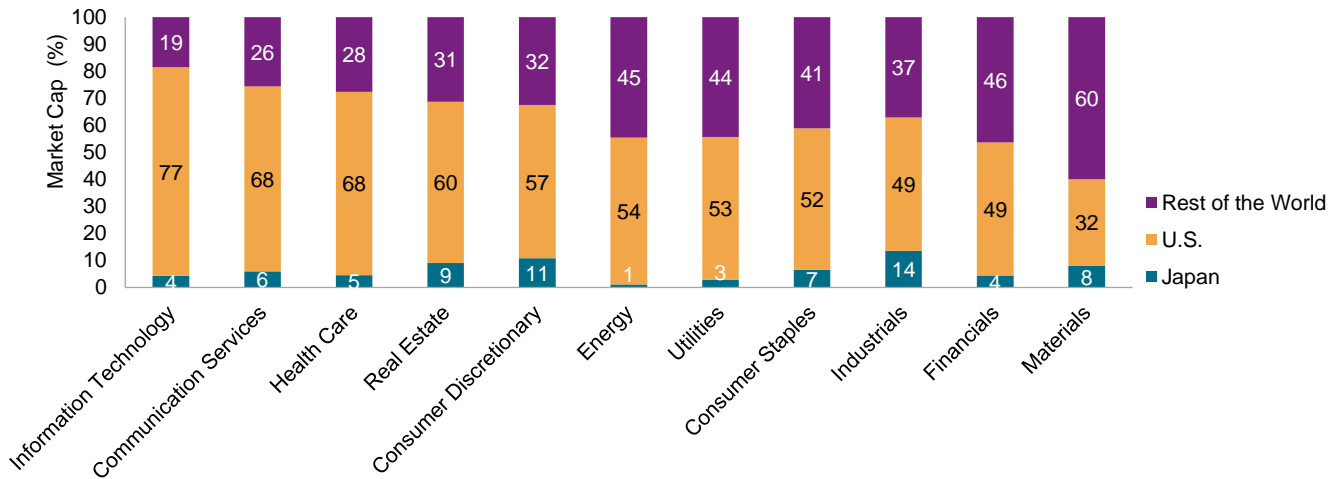


Source: S&P Dow Jones Indices LLC. Data as of June 30, 2023. Data based on float market capitalization in USD trillions. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

## U.S. Equity Market’s Distinct Sectoral Composition

The global relevance of U.S. equities can also be observed through a sector lens. Exhibit 3 provides a geographic breakdown of the float market capitalization of the 11 GICS sectors in the [S&P Global BMI](#). U.S.-domiciled companies accounted for most of the weight in 8 out of the 11 sectors, with particularly high representation in Information Technology (77%), Communication Services (68%) and Health Care (68%). As a result, market participants looking for certain sector exposure may necessarily require U.S. equity exposure.

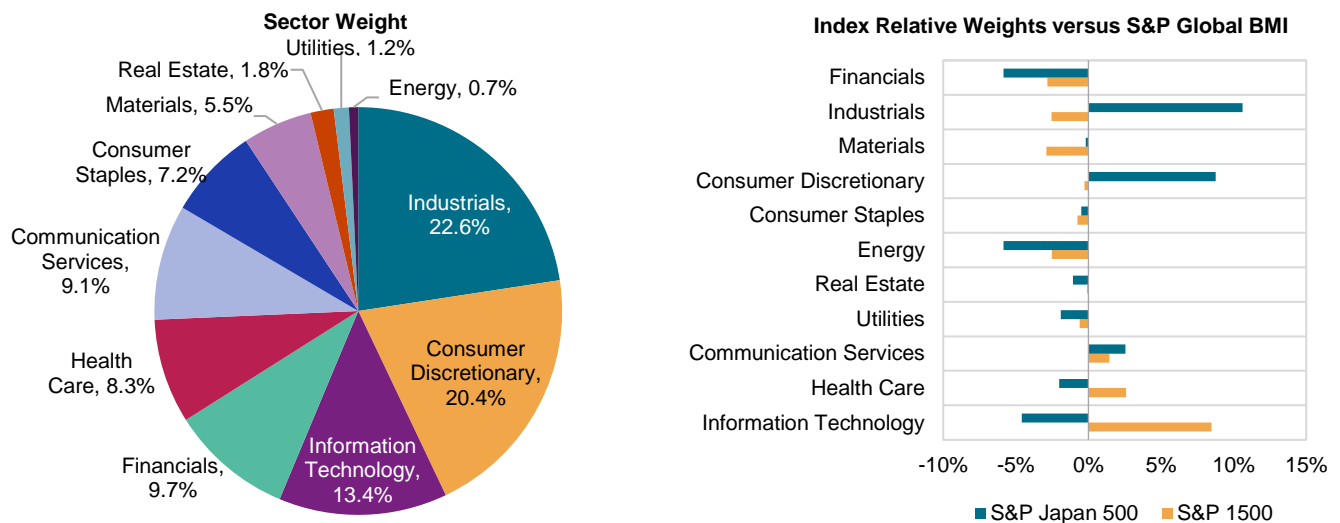
### Exhibit 3: The U.S. Represents More than 50% of the Global Market Capitalization in 8 out of 11 GICS Sectors



Source: S&P Dow Jones Indices LLC. Data as of June 30, 2023. Data based on float market capitalization in USD trillions. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

The representation of U.S.-domiciled companies in many global sectors is particularly relevant when compared to the domestic Japanese market. Exhibit 4 shows the S&P Japan 500's sectoral composition (left) and the S&P 1500 and S&P Japan 500's sector weights relative to the S&P Global BMI (right). Although Information Technology is the third-largest sector in the S&P Japan 500, representing 13.4% of the index, the Japanese equity index has a much lower weight in Information Technology than the S&P 1500 and the global equity market. Japan's largest sector (Industrials) also commands a far lower weight in the S&P 1500. Hence, incorporating U.S. equities could help Japanese market participants overcome domestic sector biases and bring sector exposures more in line with their global economic importance.

### Exhibit 4: Absolute and Relative Index Weights of the S&P Japan 500



Source: S&P Dow Jones Indices LLC. Data as of June 30, 2023. Data based on index market capitalization as of June 30, 2023. Past performance is no guarantee of future results. Charts are provided for illustrative purposes.

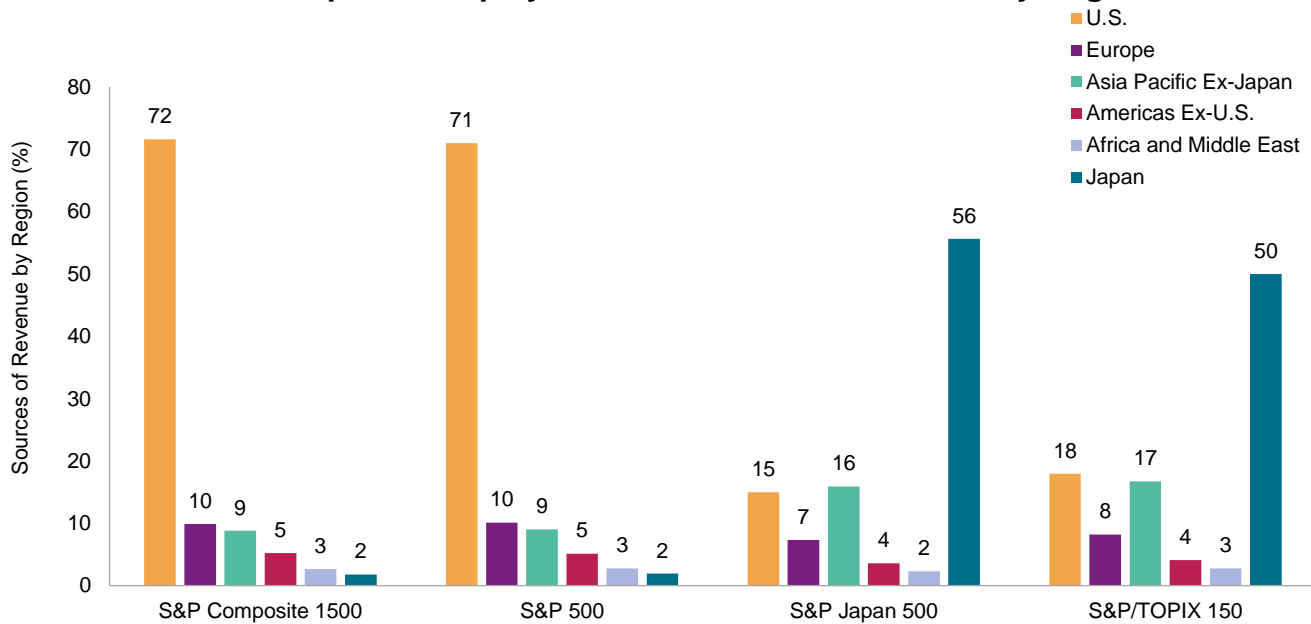
# Revenue Exposure of U.S. and Japanese Equity Indices

The distinct geo-revenue exposures offer another potential diversification benefit for Japanese investors incorporating U.S. equities. Exhibit 5 shows the sales-weighted average geo-revenue exposure of the S&P 500, S&P 1500, S&P Japan 500 and S&P/TOPIX 150.

On average, S&P 500 companies obtained 71% of their revenues from the U.S., compared to 15% for S&P Japan 500 companies. The U.S. equity indices also had higher (lower) revenue exposure to Europe (Asia Pacific Ex-Japan) than the Japanese equity indices.

Hence, incorporating U.S. equities could help Japanese market participants gain greater exposure to the U.S. economy and diversify geo-revenue exposures compared to those provided by Japanese equities.

**Exhibit 5: U.S. and Japanese Equity Indices' Sources of Revenue by Region**



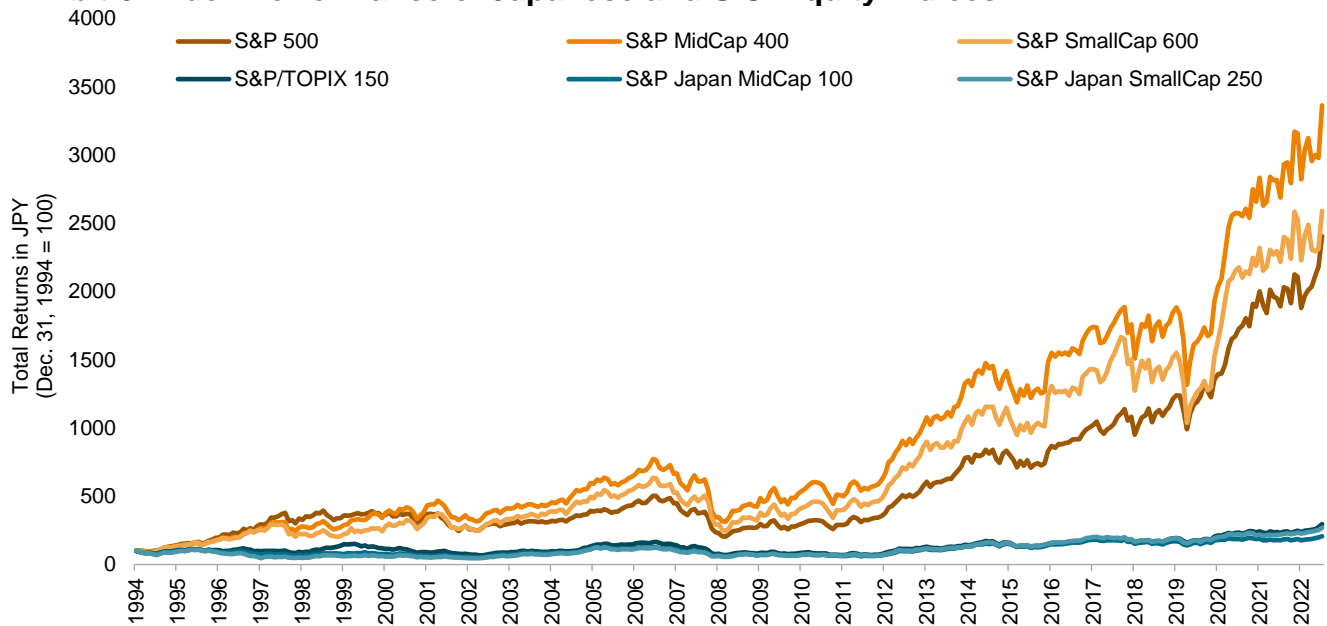
Source: S&P Dow Jones Indices LLC, FactSet. Data as of June 30, 2023, and compiled on July 10, 2023. Sales-weighted average of exposures. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

# Index Risk and Return Characteristics

Incorporating U.S. equities could have also helped Japanese investors improve their risk/returns profiles, historically. Exhibit 6 compares the cumulative total return for various indices, denominated in Japanese yen (JPY). Clearly, **U.S. equities outperformed Japanese equities over the past 29 years.**

The historical outperformance of the S&P MidCap 400 and S&P SmallCap 600 against the S&P 500 further illustrates the potential benefits of incorporating smaller U.S. equity size segments.

**Exhibit 6: Index Performance of Japanese and U.S. Equity Indices**



Source: S&P Dow Jones Indices LLC. Data from Dec. 30, 1994, to June 30, 2023. Index performance based on monthly total return in JPY. Indices were rebased to 100 on Dec. 30, 1994. The S&P/TOPIX 150 was launched June 21, 1999. The S&P Japan MidCap 100 and S&P Japan SmallCap 250 were launched Oct. 2, 2002. The S&P 500 (JPY) was launched March 9, 2006. The S&P MidCap 400 (JPY) and S&P SmallCap 600 (JPY) were launched Aug. 11, 2010. All data prior to index launch date is back-tested hypothetical data. Past performance is no guarantee of future results. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

Exhibit 7 provides more information on the risk/return profiles in JPY for the various indices and shows that **the U.S. equity indices outperformed the Japanese indices over multiple horizons.** For example, although the S&P 1500 displayed slightly higher annualized volatility over the entire period (18.7% versus 17.4%), the S&P 1500's higher returns (11.9% versus 3.7%) meant it outperformed on a risk-adjusted basis since Dec. 30, 1994.

Similar results were observed for the JPY-denominated versions of the S&P 500, S&P MidCap 400 and S&P SmallCap 600 against their Japanese equity counterparts.

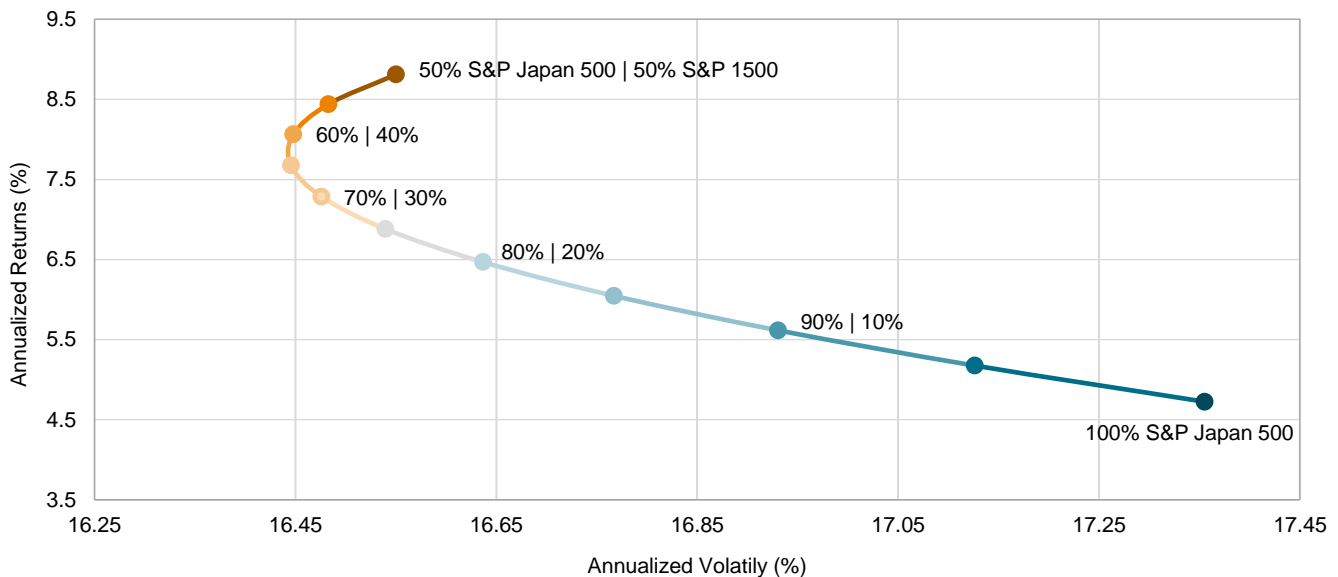
**Exhibit 7: Risk/Return Profile of Japanese and U.S. Equity Indices**

Period	Small Caps			Mid Caps			Large Caps			All Caps		
	U.S.	Japan	Difference	U.S.	Japan	Difference	U.S.	Japan	Difference	U.S.	Japan	Difference
<b>Annualized Return (%)</b>												
3-Year	27.0	15.3	11.7	27.3	9.3	18.0	26.3	18.4	7.9	26.4	17.0	9.4
5-Year	11.0	6.8	4.2	13.7	3.1	10.5	18.4	10.2	8.3	17.9	9.0	9.0
10-Year	14.0	10.3	3.8	14.4	7.7	6.7	17.2	10.0	7.1	16.9	9.9	7.1
15-Year	12.1	7.5	4.7	12.1	5.1	7.0	13.2	5.9	7.3	13.1	6.0	7.1
20-Year	11.3	8.3	3.0	11.5	6.3	5.2	11.1	7.0	4.1	11.2	7.1	4.1
25-Year	9.1	6.5	2.6	10.0	4.1	5.9	7.8	4.4	3.4	8.0	4.6	3.4
Since Dec. 30, 1994	12.1	3.5	8.6	13.1	2.6	10.5	11.8	3.9	7.9	11.9	3.7	8.2
<b>Annualized Volatility (%)</b>												
3-Year	22.0	13.0	-9.0	20.1	13.7	-6.5	18.0	14.4	-3.6	18.1	13.9	-4.2
5-Year	25.3	15.8	-9.5	23.6	16.0	-7.7	19.6	15.8	-3.9	19.9	15.6	-4.3
10-Year	22.1	14.8	-7.3	20.1	15.3	-4.8	17.4	15.4	-2.0	17.5	15.1	-2.4
15-Year	24.2	17.3	-6.8	22.5	17.3	-5.1	19.3	18.2	-1.1	19.6	17.8	-1.8
20-Year	22.5	17.1	-5.4	21.0	16.7	-4.3	18.1	17.6	-0.6	18.3	17.2	-1.1
25-Year	23.2	17.6	-5.5	21.3	16.8	-4.5	18.6	18.0	-0.6	18.8	17.5	-1.3
Since Dec. 30, 1994	22.6	18.7	-3.9	20.9	16.9	-4.0	18.6	17.8	-0.8	18.7	17.4	-1.3
<b>Annualized Risk-Adjusted Return</b>												
3-Year	1.23	1.18	0.05	1.35	0.68	0.68	1.46	1.27	0.19	1.46	1.22	0.24
5-Year	0.43	0.43	0.00	0.58	0.20	0.38	0.94	0.65	0.29	0.90	0.57	0.33
10-Year	0.63	0.69	-0.06	0.72	0.50	0.22	0.99	0.65	0.34	0.96	0.65	0.31
15-Year	0.50	0.43	0.07	0.54	0.29	0.24	0.68	0.32	0.36	0.67	0.34	0.33
20-Year	0.50	0.48	0.02	0.55	0.38	0.17	0.61	0.40	0.21	0.61	0.41	0.20
25-Year	0.39	0.37	0.02	0.47	0.24	0.23	0.42	0.25	0.17	0.43	0.26	0.16
Since Dec. 30, 1994	0.54	0.19	0.35	0.63	0.15	0.48	0.63	0.22	0.42	0.64	0.21	0.42

Source: S&P Dow Jones Indices LLC. Data from Dec. 30, 1994, to June 30, 2023. Index performance based on monthly total return in JPY. The U.S. small, mid, large and all caps are represented by the S&P SmallCap 600 (JPY), S&P MidCap 400 (JPY), S&P 500 (JPY) and S&P Composite 1500 (JPY), respectively. The Japan small, mid, large and all caps are represented by the S&P Japan SmallCap 250, S&P Japan MidCap 100, S&P/TOPIX 150 and S&P Japan 500, respectively. The S&P/TOPIX 150 was launched June 21, 1999. The S&P Japan MidCap 100 and S&P Japan SmallCap 250 were launched Oct. 2, 2002. The S&P Japan 500 was launched Dec. 19, 2006. The S&P 500 (JPY) was launched March 9, 2006. The S&P MidCap 400 (JPY) and S&P SmallCap 600 (JPY) were launched Aug. 11, 2010. The S&P Composite 1500 (JPY) was launched July 17, 2023. All data prior to index launch date is back-tested hypothetical data. Past performance is no guarantee of future results. Table is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

In order to help illustrate the potential impact of incorporating U.S. equities into a Japanese equity allocation, we consider several hypothetical portfolios. Each hypothetical portfolio combines the S&P 1500 and S&P Japan 500 and rebalances back to target weights at the end of each year. Target weights start with a 50%/50% allocation to the S&P Japan 500/S&P 1500 and move in 5% increments until a 100% allocation to the S&P Japan 500 is reached. Exhibit 8 shows the annualized returns and volatility for the various hypothetical portfolios. Overall, incorporating U.S. equities typically helped to lower volatility and to increase hypothetical historical performance.

**Exhibit 8: Risk/Return Characteristics of Hypothetical Portfolios Combining the S&P Japan 500 and S&P Composite 1500**



All portfolios are hypothetical.  
 Source: S&P Dow Jones Indices LLC. Data from Dec. 30, 1994, to June 30, 2023. Index performance is based on monthly total return in JPY. Hypothetical index combinations using an index of indices approach, annual rebalancing effective in January. The S&P Japan 500 was launched Dec. 19, 2006. The S&P Composite 1500 (JPY) was launched July 17, 2023. All data prior to index launch date is back-tested hypothetical data. Past performance is no guarantee of future results. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

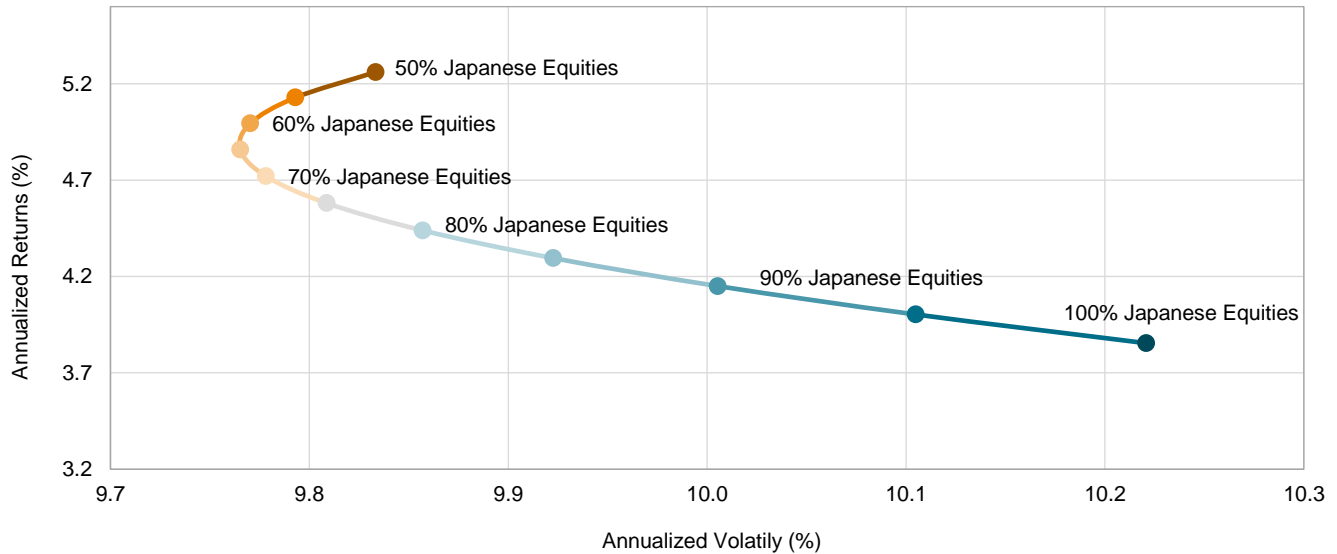
Exhibit 9 repeats the above analysis within the context of hypothetical equity/fixed income portfolios. Each hypothetical multi-asset portfolio consists of a 60%/40% equity/fixed income allocation. The [S&P Japan Bond Index](#) is used for the fixed income sleeve, while the hypothetical portfolios described in Exhibit 8 are used for the equity sleeve. All hypothetical portfolios rebalance annually.

For example, immediately after each annual rebalance, the “60% Japanese Equities” hypothetical portfolio has a 40% weight in the S&P Japan Bond Index, a 36% weight in the S&P Japan 500 (60% equity allocation x 60% Japanese equity allocation) and a 24% weight in the S&P 1500 (60% equity allocation x 40% U.S. equity allocation).



Exhibit 9 shows that a **greater weight to U.S. equities in the equity sleeve typically improved the overall returns per unit of risk for a 60% equities/40% fixed income hypothetical portfolio**. Owing to S&P Japan Bond Index’s lower volatility and lower returns, the hypothetical multi-asset portfolios posted lower annualized returns and volatility compared to the hypothetical equity portfolios shown in Exhibit 8.<sup>4</sup>

**Exhibit 9: Risk/Return Characteristics of Hypothetical 60/40 Equity/Fixed Income Portfolio, Combining the S&P Japan 500 and S&P 1500 for Equities**



All portfolios are hypothetical.  
 Source: S&P Dow Jones Indices LLC. Data from Jan. 31, 1998, to June 30, 2023. Index performance based on monthly total return in JPY. Hypothetical index combinations using an index of indices approach, annual rebalancing effective in January. The S&P Japan Bond Index was used for the fixed income allocation. The S&P Japan Bond Index was launched Oct. 21, 2014. The S&P Japan 500 was launched Dec. 19, 2006. The S&P Composite 1500 (JPY) was launched July 17, 2023. All data prior to index launch date is back-tested hypothetical data. Past performance is no guarantee of future results. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

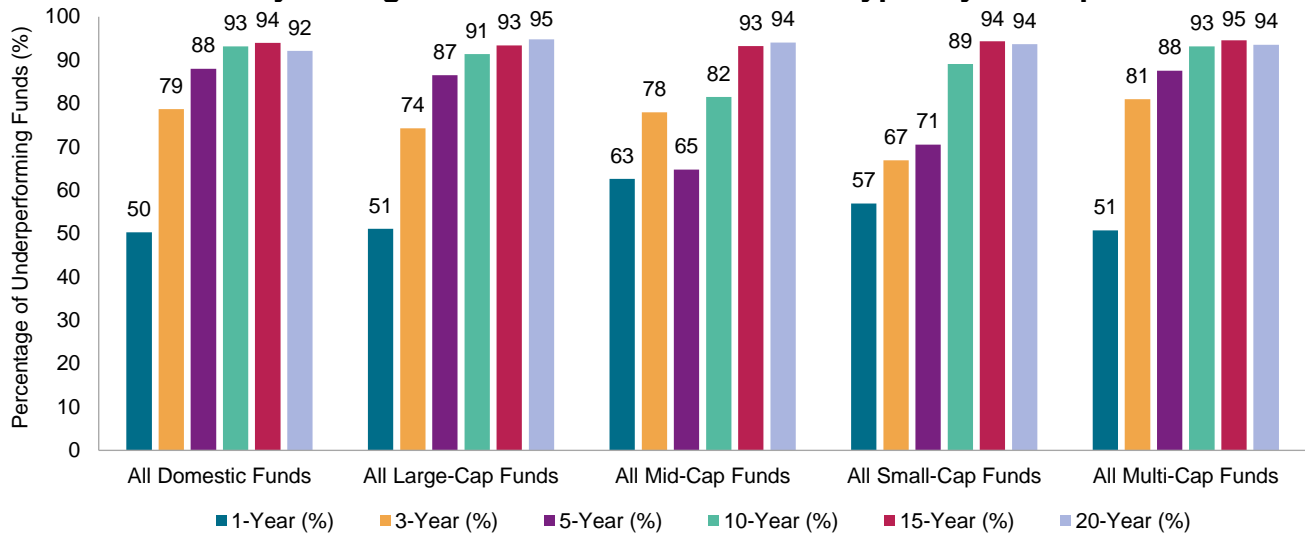
## Active versus Passive

Market participants can use active or passive index-based approaches to gain exposure to different segments. S&P Dow Jones Indices publishes semiannual [SPIVA® Scorecards](#) for several countries and regions, reporting on the performance of actively managed funds against appropriate benchmarks across different time horizons. Although SPIVA results vary by country and region, the overall message has been consistent: **active managers typically underperformed their respective benchmarks over multiple time horizons.**

<sup>4</sup> Please see the Appendix for similar analysis across the market cap spectrum

Exhibit 10 shows results from the [SPIVA U.S. Year-End 2022 Scorecard](#). Across the market capitalization spectrum, over multiple horizons, the majority of active managers underperformed on an absolute basis. Similar results were also observed on a risk-adjusted basis.

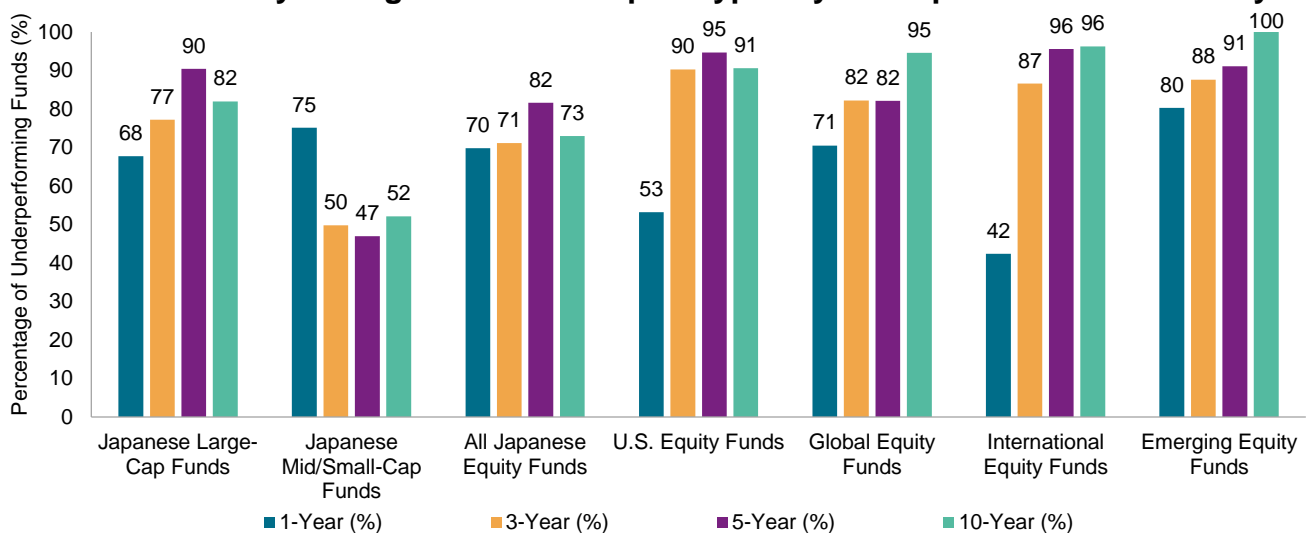
**Exhibit 10: Actively Managed Funds Offered in the U.S. Typically Underperformed**



Source: S&P Dow Jones Indices LLC, CRSP. Data for periods ending Dec. 30, 2022. Past performance is no guarantee of future results. Charts are provided for illustrative purposes.

The [SPIVA Japan Year-End 2022 Scorecard](#) shows similar results for the Japanese equity market, including for U.S. equity-focused active managers in Japan. Indeed, Exhibit 11 shows that most active managers typically underperformed their respective index benchmarks. These results point to the potential benefit of taking an index-based approach, historically.

**Exhibit 11: Actively Managed Funds in Japan Typically Underperformed Historically**



Source: S&P Dow Jones Indices LLC, Morningstar. Data for periods ending Dec. 30, 2022. Past performance is no guarantee of future results. Charts are provided for illustrative purposes.

# Conclusion

The U.S. equity market represents a significant portion of the global equity opportunity set, and the breadth and depth of the U.S. equity market means that its smaller size segments are as large as some countries' equity markets.

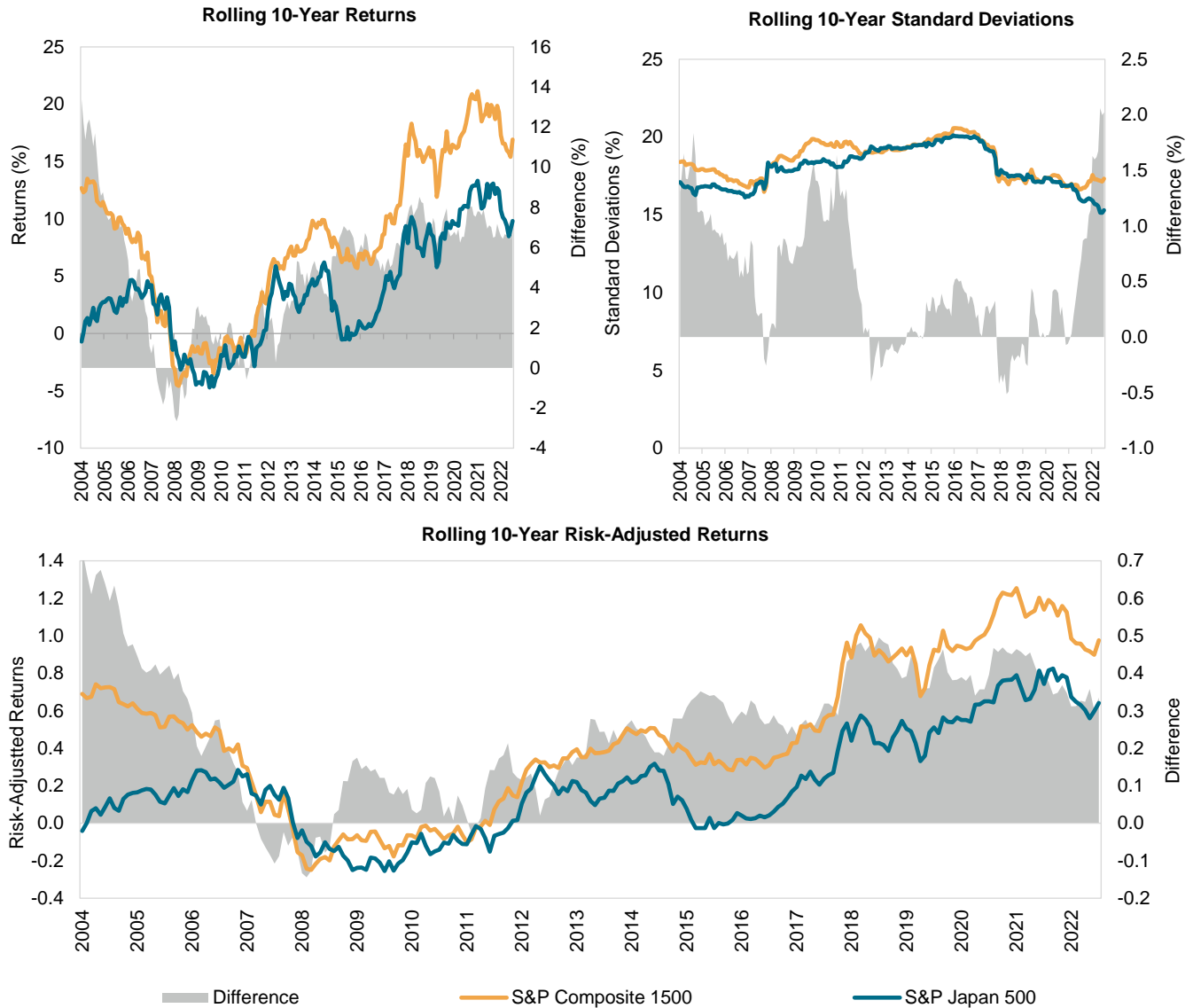
The S&P Composite 1500 combines the S&P 500, S&P MidCap 400 and S&P SmallCap 600 to measure the performance of the U.S. equity market. The S&P 1500's distinct sectoral composition and historical outperformance means Japanese investors may wish to consider the potential diversification benefits associated with incorporating U.S. equities.

Additionally, market participants may wish to consider an index-based approach to U.S. equity exposure, given the historical underperformance of active managers.

# Appendix: Risk/Return Characteristics by Size

## All Caps

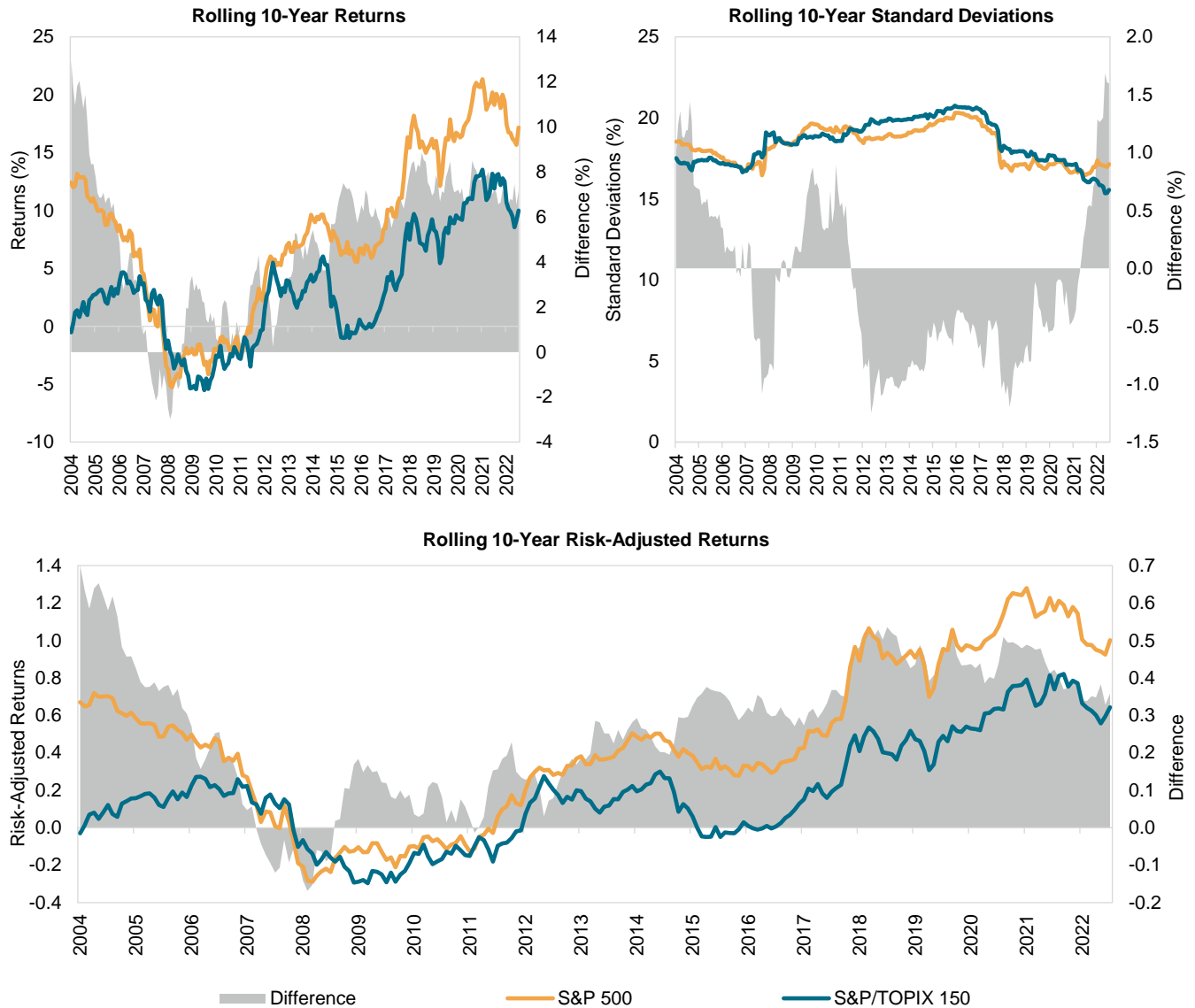
**Exhibit 12: All-Cap Rolling 10-Year Return, Standard Deviation and Risk-Adjusted Return**



Source: S&P Dow Jones Indices LLC. Data from Dec. 30, 1994, to June 30, 2023. Index performance based on monthly total return in JPY. The S&P Composite 1500 (JPY) was launched July 17, 2023. The S&P Japan 500 was launched Dec. 19, 2006. All data prior to index launch date is back-tested hypothetical data. Past performance is no guarantee of future results. Charts are provided for illustrative purposes and reflect hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

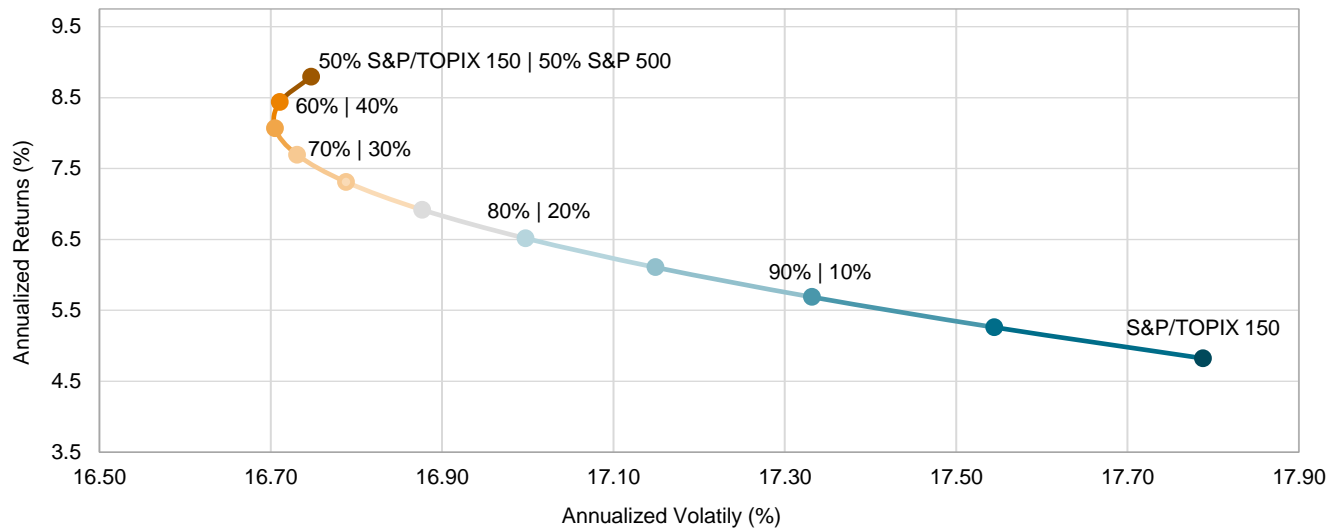
# Large Caps

**Exhibit 13: Large-Cap Rolling 10-Year Return, Standard Deviation and Risk-Adjusted Return**



Source: S&P Dow Jones Indices LLC. Data from Dec. 30, 1994, to June 30, 2023. Index performance is based on monthly total return in JPY. The S&P/TOPIX 150 was launched June 21, 1999. The S&P 500 (JPY) was launched March 9, 2006. All data prior to index launch date is back-tested hypothetical data. Past performance is no guarantee of future results. Charts are provided for illustrative purposes and reflect hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

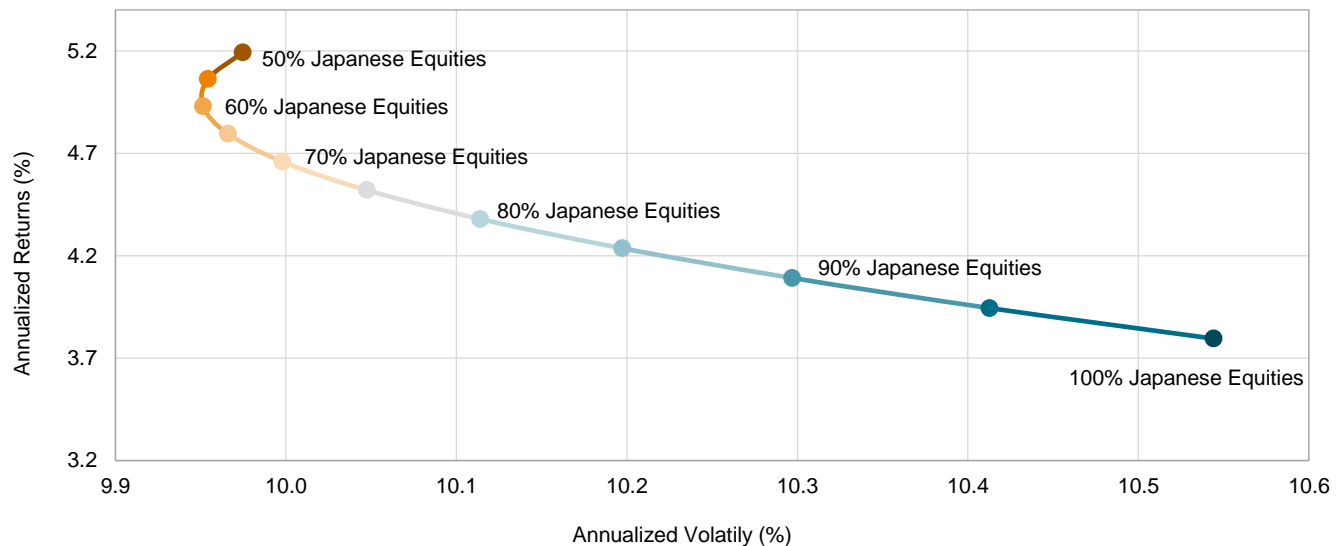
### Exhibit 14: Risk/Return Characteristics of Hypothetical Portfolios Combining the S&P/TOPIX 150 and S&P 500



All portfolios are hypothetical.

Source: S&P Dow Jones Indices LLC. Data from Dec. 30, 1994, to June 30, 2023. Index performance is based on monthly total return in JPY. Hypothetical index combinations using an index of indices approach, annual rebalancing effective in January. The S&P/TOPIX 150 was launched June 21, 1999. The S&P 500 (JPY) was launched March 9, 2006. All data prior to index launch date is back-tested hypothetical data. Past performance is no guarantee of future results. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

### Exhibit 15: Risk/Return Characteristics of Hypothetical 60/40 Equity/Fixed Income Portfolio, Combining the S&P/TOPIX 150 and S&P 500 for Equities

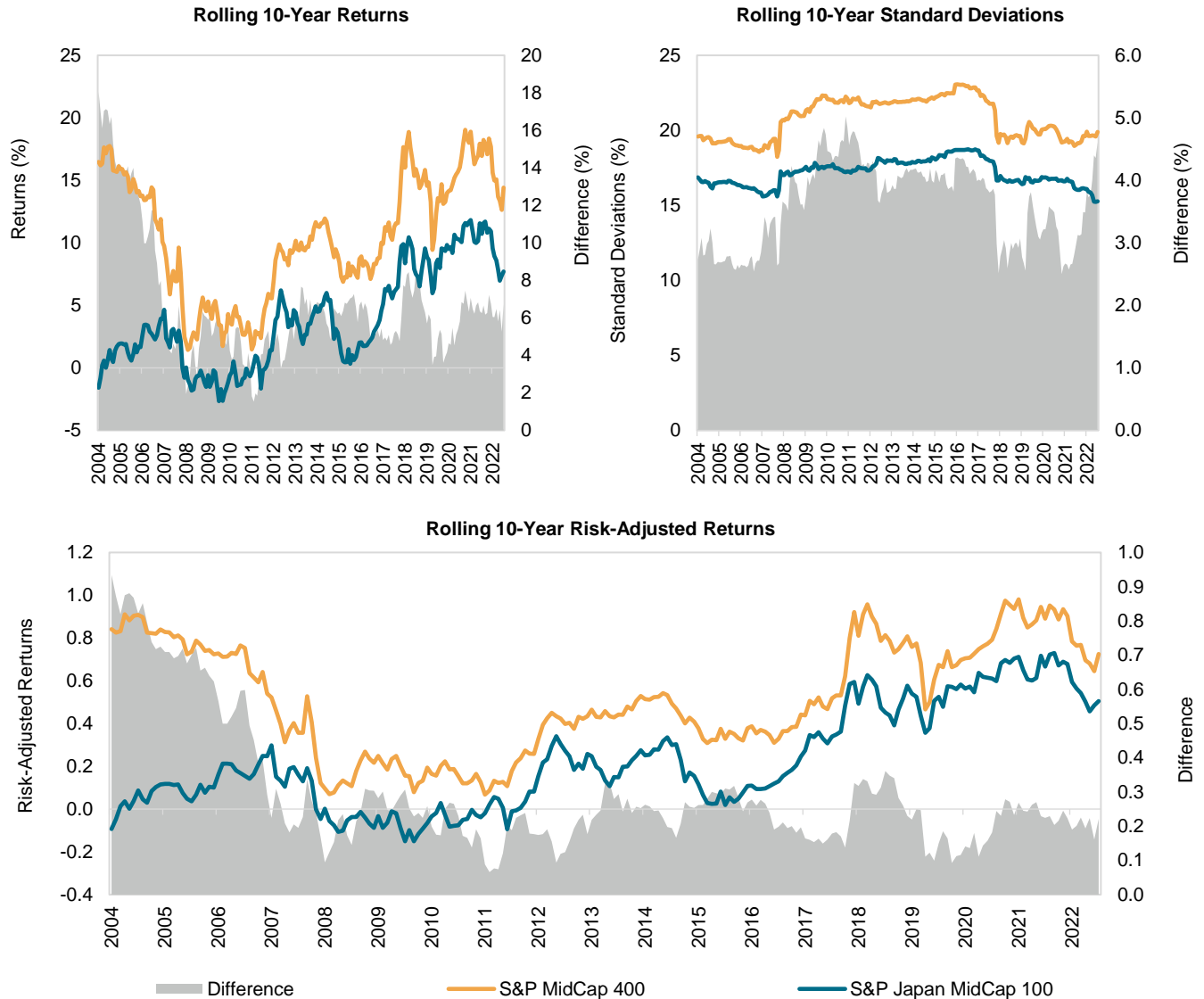


All portfolios are hypothetical.

Source: S&P Dow Jones Indices LLC. Data from Jan. 31, 1998, to June 30, 2023. Index performance based on monthly total return in JPY. Hypothetical index combinations using an index of indices approach, annual rebalancing effective in January. The S&P Japan Bond Index was used for the fixed income allocation. The S&P Japan Bond Index was launched Oct. 21, 2014. The S&P/TOPIX 150 was launched June 21, 1999. The S&P 500 (JPY) was launched March 9, 2006. All data prior to index launch date is back-tested hypothetical data. Past performance is no guarantee of future results. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

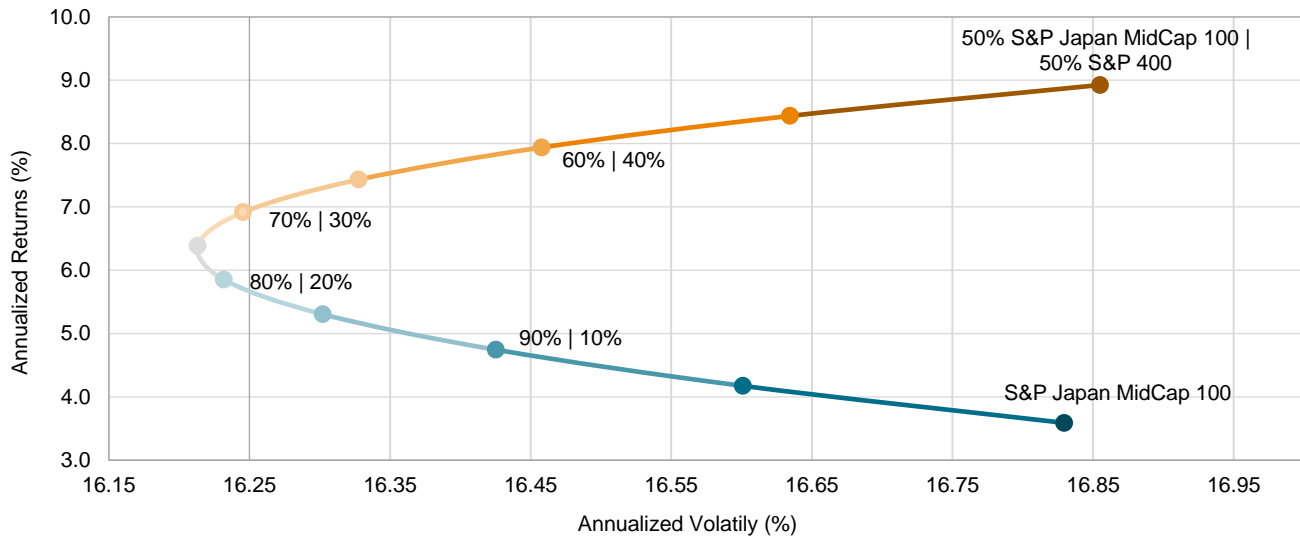
# Mid Caps

**Exhibit 16: Mid-Cap Rolling 10-Year Return, Standard Deviation and Risk-Adjusted Return**



Source: S&P Dow Jones Indices LLC. Data from Dec. 30, 1994, to June 30, 2023. Index performance is based on monthly total return in JPY. Hypothetical index combinations using an index of indices approach, annual rebalancing effective in January. The S&P Japan MidCap 100 was launched Oct. 2, 2002. The S&P MidCap 400 (JPY) was launched Aug. 11, 2010. All data prior to index launch date is back-tested hypothetical data. Past performance is no guarantee of future results. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

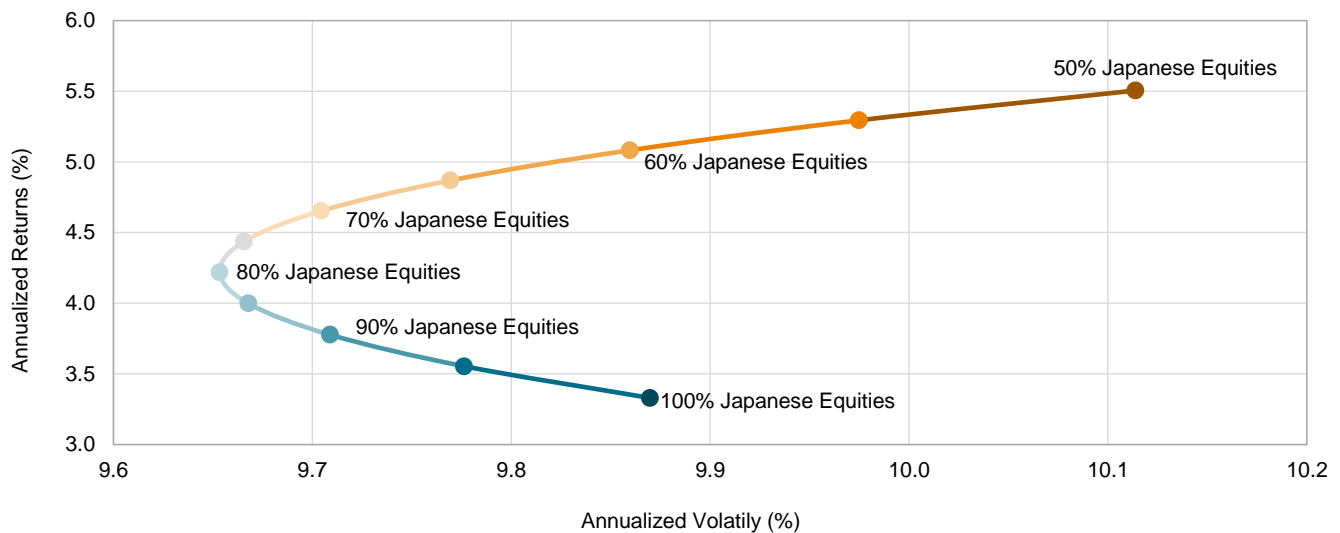
### Exhibit 17: Risk/Return Characteristics of Hypothetical Portfolios Combining the S&P Japan MidCap 100 and S&P MidCap 400



All portfolios are hypothetical.

Source: S&P Dow Jones Indices LLC. Data from Dec. 30, 1994, to June 30, 2023. Index performance is based on monthly total return in JPY. Hypothetical index combinations using an index of indices approach, annual rebalancing effective in January. The S&P Japan MidCap 100 was launched Oct. 2, 2002. The S&P MidCap 400 (JPY) was launched Aug. 11, 2010. All data prior to index launch date is back-tested hypothetical data. Past performance is no guarantee of future results. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

### Exhibit 18: Risk/Return Characteristics of Hypothetical 60/40 Equity/Fixed Income Portfolio, Combining the S&P Japan MidCap 100 and S&P MidCap 400 for Equities



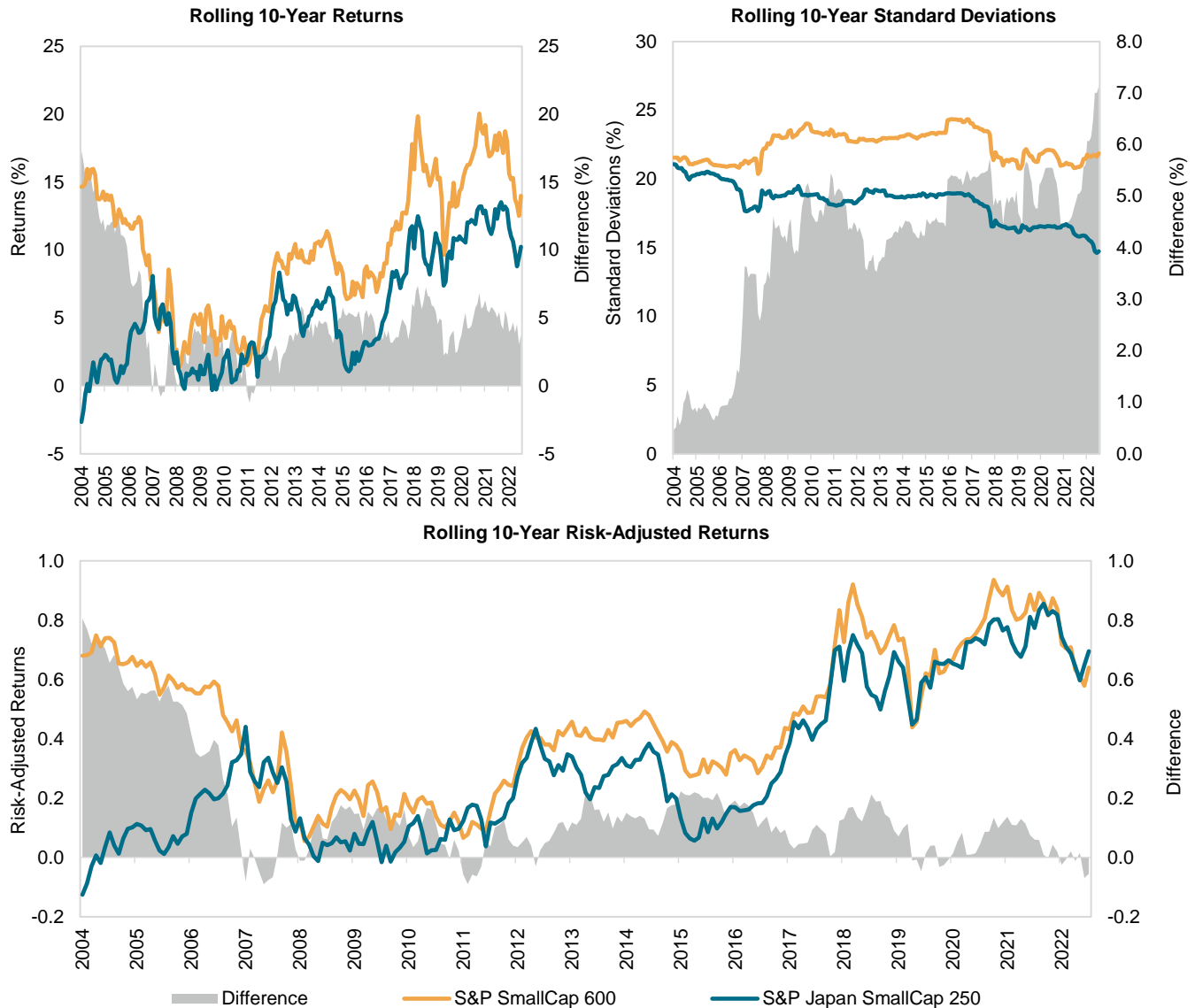
All portfolios are hypothetical.

Source: S&P Dow Jones Indices LLC. Data from Jan. 31, 1998, to June 30, 2023. Index performance based on monthly total return in JPY. Hypothetical index combinations using an index of indices approach, annual rebalancing effective in January. The S&P Japan Bond Index was used for the fixed income allocation. The S&P Japan Bond Index was launched Oct. 21, 2014. The S&P Japan MidCap 100 was launched Oct. 2, 2002. The S&P MidCap 400 (JPY) was launched Aug. 11, 2010. All data prior to index launch date is back-tested hypothetical data. Past performance is no guarantee of future results. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.



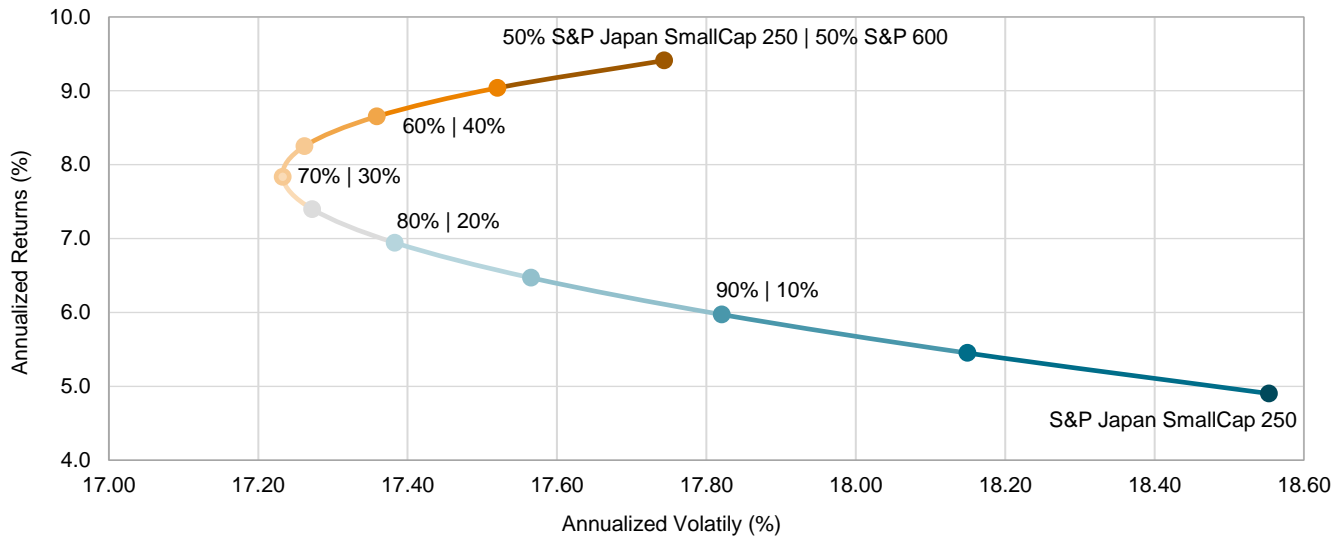
# Small Caps

**Exhibit 19: Small-Cap Rolling 10-Year Return, Standard Deviation and Risk-Adjusted Return**



Source: S&P Dow Jones Indices LLC. Data from Dec. 30, 1994, to June 30, 2023. Index performance is based on monthly total return in JPY. The S&P Japan SmallCap 250 was launched Oct. 2, 2002. The S&P SmallCap 600 (JPY) was launched Aug. 11, 2010. All data prior to index launch date is back-tested hypothetical data. Past performance is no guarantee of future results. Table is provided for illustrative purposes and reflect hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

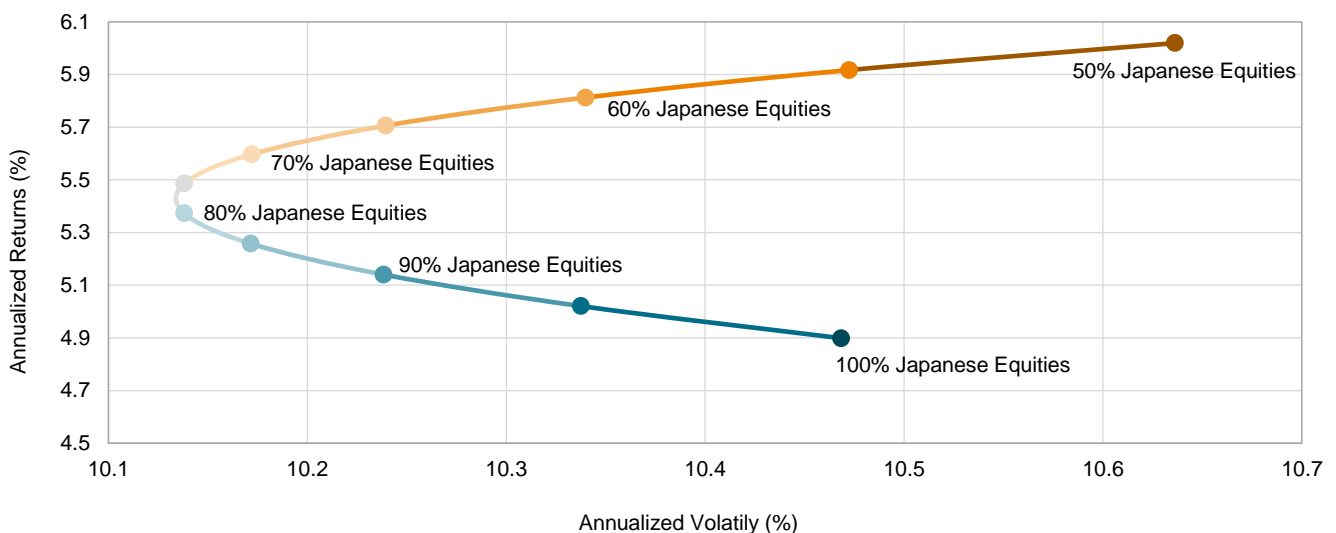
### Exhibit 20: Risk/Return Characteristics of Hypothetical Portfolios Combining the S&P Japan SmallCap 250 and S&P SmallCap 600



All portfolios are hypothetical.

Source: S&P Dow Jones Indices LLC. Data from Dec. 30, 1994, to June 30, 2023. Index performance is based on monthly total return in JPY. Hypothetical index combinations using an index of indices approach, annual rebalancing effective in January. The S&P Japan SmallCap 250 was launched Oct. 2, 2002. The S&P SmallCap 600 (JPY) was launched Aug. 11, 2010. All data prior to index launch date is back-tested hypothetical data. Past performance is no guarantee of future results. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

### Exhibit 21: Risk/Return Characteristics of Hypothetical 60/40 Equity/Fixed Income Portfolio, Combining the S&P Japan SmallCap 250 and S&P SmallCap 600 for Equities



All portfolios are hypothetical.

Source: S&P Dow Jones Indices LLC. Data from Jan. 31, 1998, to June 30, 2023. Index performance based on monthly total return in JPY. Hypothetical index combinations using an index of indices approach, annual rebalancing effective in January. The S&P Japan Bond Index was used for the fixed income allocation. The S&P Japan Bond Index was launched Oct. 21, 2014. The S&P Japan SmallCap 250 was launched Oct. 2, 2002. The S&P SmallCap 600 (JPY) was launched Aug. 11, 2010. All data prior to index launch date is back-tested hypothetical data. Past performance is no guarantee of future results. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

## Performance Disclosure

The S&P Japan 500 was launched December 19, 2006. The S&P/TOPIX 150 was launched June 21, 1999. The S&P Japan MidCap 100 and S&P Japan SmallCap 250 were launched October 2, 2002. The S&P 500 (JPY) was launched March 9, 2006. The S&P MidCap 400 (JPY) and S&P SmallCap 600 (JPY) were launched August 11, 2010. The S&P Composite 1500 (JPY) was launched July 17, 2023. All information presented prior to an index's Launch Date is hypothetical (back-tested), not actual performance, and is based on the index methodology in effect on the index launch date. However, when creating back-tested history for periods of market anomalies or other periods that do not reflect the general current market environment, index methodology rules may be relaxed to capture a large enough universe of securities to simulate the target market the index is designed to measure or strategy the index is designed to capture. For example, market capitalization and liquidity thresholds may be reduced. In addition, forks have not been factored into the back-test data with respect to the S&P Cryptocurrency Indices. For the S&P Cryptocurrency Top 5 & 10 Equal Weight Indices, the custody element of the methodology was not considered; the back-test history is based on the index constituents that meet the custody element as of the Launch Date. Complete index methodology details are available at [www.spglobal.com/spdji](http://www.spglobal.com/spdji). Back-tested performance reflects application of an index methodology and selection of index constituents with the benefit of hindsight and knowledge of factors that may have positively affected its performance, cannot account for all financial risk that may affect results and may be considered to reflect survivor/look ahead bias. Actual returns may differ significantly from, and be lower than, back-tested returns. Past performance is not an indication or guarantee of future results.

Please refer to the methodology for the Index for more details about the index, including the manner in which it is rebalanced, the timing of such rebalancing, criteria for additions and deletions, as well as all index calculations. Back-tested performance is for use with institutions only; not for use with retail investors.

S&P Dow Jones Indices defines various dates to assist our clients in providing transparency. The First Value Date is the first day for which there is a calculated value (either live or back-tested) for a given index. The Base Date is the date at which the Index is set at a fixed value for calculation purposes. The Launch Date designates the date upon which the values of an index are first considered live: index values provided for any date or time period prior to the index's Launch Date are considered back-tested. S&P Dow Jones Indices defines the Launch Date as the date by which the values of an index are known to have been released to the public, for example via the company's public website or its data feed to external parties. For Dow Jones-branded indices introduced prior to May 31, 2013, the Launch Date (which prior to May 31, 2013, was termed "Date of introduction") is set at a date upon which no further changes were permitted to be made to the index methodology, but that may have been prior to the Index's public release date.

Typically, when S&P DJI creates back-tested index data, S&P DJI uses actual historical constituent-level data (e.g., historical price, market capitalization, and corporate action data) in its calculations. As ESG investing is still in early stages of development, certain datapoints used to calculate S&P DJI's ESG indices may not be available for the entire desired period of back-tested history. The same data availability issue could be true for other indices as well. In cases when actual data is not available for all relevant historical periods, S&P DJI may employ a process of using "Backward Data Assumption" (or pulling back) of ESG data for the calculation of back-tested historical performance. "Backward Data Assumption" is a process that applies the earliest actual live data point available for an index constituent company to all prior historical instances in the index performance. For example, Backward Data Assumption inherently assumes that companies currently not involved in a specific business activity (also known as "product involvement") were never involved historically and similarly also assumes that companies currently involved in a specific business activity were involved historically too. The Backward Data Assumption allows the hypothetical back-test to be extended over more historical years than would be feasible using only actual data. For more information on "Backward Data Assumption" please refer to the [FAQ](#). The methodology and factsheets of any index that employs backward assumption in the back-tested history will explicitly state so. The methodology will include an Appendix with a table setting forth the specific data points and relevant time period for which backward projected data was used.

Index returns shown do not represent the results of actual trading of investable assets/securities. S&P Dow Jones Indices maintains the index and calculates the index levels and performance shown or discussed but does not manage actual assets. Index returns do not reflect payment of any sales charges or fees an investor may pay to purchase the securities underlying the Index or investment funds that are intended to track the performance of the Index. The imposition of these fees and charges would cause actual and back-tested performance of the securities/fund to be lower than the Index performance shown. As a simple example, if an index returned 10% on a US \$100,000 investment for a 12-month period (or US \$10,000) and an actual asset-based fee of 1.5% was imposed at the end of the period on the investment plus accrued interest (or US \$1,650), the net return would be 8.35% (or US \$8,350) for the year. Over a three-year period, an annual 1.5% fee taken at year end with an assumed 10% return per year would result in a cumulative gross return of 33.10%, a total fee of US \$5,375, and a cumulative net return of 27.2% (or US \$27,200).

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