# WisdomTree RESEARCH

# TAKING ADVANTAGE OF THE JAPANESE EQUITY OPPORTUNITY WITH SMALL-CAP STOCKS

Authored by Jesper Koll (Head of WisdomTree Japan)

Jeremy Schwartz (CFA®, Director of Research)

Matt Wagner (Research Analyst)

Christopher Gannatti (CFA®, Associate Director of Research)



Since Shinzo Abe was elected prime minister in late 2012, the investment environment for Japanese equities has changed for the better with a key focus on "Abenomics<sup>1</sup>." At WisdomTree, we have been constructive on Japan's efforts over the past several years: expansionary fiscal stimulus, expansionary monetary policies and structural reforms aimed at ending Japan's deflationary<sup>2</sup> cycle.

By and large, an improved economy and better financial market performance support our conviction. As the equity gains have been accompanied by corporate profit growth, Japanese valuations<sup>3</sup> remain among the most attractive in developed markets globally.

In the October 2017 parliamentary election, Abe's pro-business Liberal Democratic Party won a two-thirds supermajority, suggesting policy continuity and relative political stability. Continuity at the Bank of Japan (BOJ), with Governor Haruhiko Kuroda's reappointment in 2018—the first such reappointment since 1961—was also reaffirmed.<sup>4</sup>

#### DOMESTICALLY DRIVEN GROWTH CYCLE

With a compelling backdrop for a multiyear Japanese up cycle, we think Japanese small caps<sup>5</sup> provide the purest way to tap into the local economic growth prospects. After decades of deflation, deleveraging<sup>6</sup> and demand contraction, Japan's domestic demand is now driving growth on the back of two fundamental forces:

- 1) **Demographic Sweet Spot:** A structural shortage of labor is forcing improvements in both the quality of employment and the incomes earned from employment.
- **2) Policy Switch to "Fiscal Dominance":** Instead of relying on monetary policy alone to support the economy, in August 2016, the Japanese cabinet approved a multiyear supplementary spending program of ¥28 trillion, approximately 5.5% of GDP.<sup>7</sup> Coupling fiscal stimulus with monetary policy has multiplier effects on economic growth, while negative real yields keep borrowing costs under control.

While the investment case for Japanese large caps is crucially interconnected to the global economy and ultimately also the yen, small companies are more locally oriented and provide greater exposure to the local economy's endogenously driven growth cycle with strengthening domestic demand.

<sup>2</sup> Deflation: The opposite of inflation, characterized by falling price levels.

<sup>4</sup> Source: Robin Harding, "Haruhiko Kuroda set for BOJ second term after Abe nomination," FT.com, 2/16/18.

<sup>6</sup> Deleverage: Bring down levels of debt.



<sup>&</sup>lt;sup>1</sup> Abenomics: Series of policies enacted after the election of Japanese prime minister Shinzo Abe on December 16, 2012, aimed at stimulating Japan's economic growth.

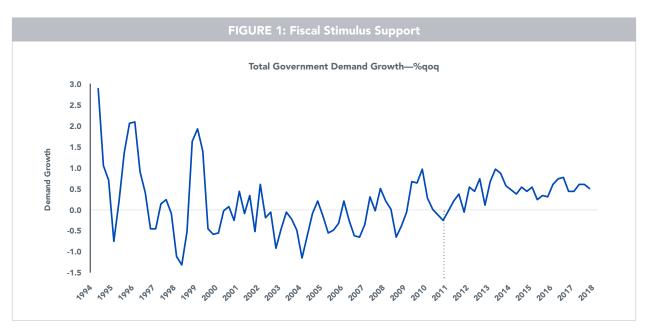
<sup>&</sup>lt;sup>3</sup> Valuation: Refers to metrics that relate financial statistics for equities to their price levels to determine if certain attributes, such as earnings or dividends, are cheap or expensive.

<sup>&</sup>lt;sup>5</sup> Size capitalization: A measure by which a company's size is classified. Large caps are usually classified as companies that have a market cap over \$10 billion. Mid-caps range from \$2 billion to \$10 billion. Small caps are typically new or relatively young companies and have a market cap between \$200 million and \$2 billion.

<sup>&</sup>lt;sup>7</sup> Source: Robin Harding, "Japan's stimulus package: will it work?" FT.com, 8/2/16.

#### **SOLVING THE DEFLATIONARY CYCLE**

With inflation still well below target, Abe and Kuroda cannot proclaim victory. Monetary policy, the "first arrow8" of Abenomics, has received a lot of the global attention for powering global asset prices higher, but a complementary key driver to Japan's economic success has been the "second arrow" of a robust fiscal policy framework. While monetary policy can serve to buy time, the fiscal side of the coin is likely more important in shifting Japan's economic growth potential on a longer-term basis. A steady source of modest government demand growth, a clear turning point from previous eras of massive volatility in fiscal support, has been critical to stimulating a domestic demand growth cycle.

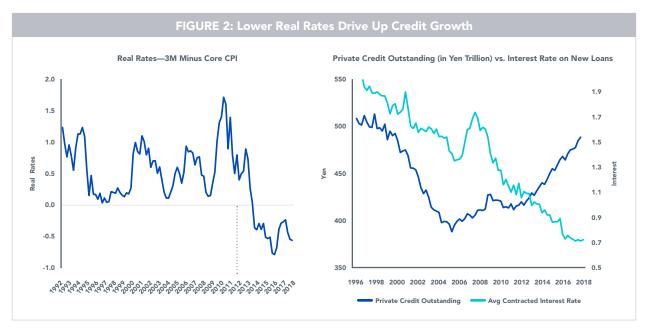


Sources: Japan Cabinet Office, Bloomberg, as of 12/31/17.

Real rates are negative for the first time since the mid-1980s and should stay negative through 2020. This has obvious benefits to stimulating private borrowing and investment as corporations can finance at low rates, and when growth and inflation pick up, inflation will diminish the costs of repaying this borrowing in the future. In addition to the corporate impact, the combination of low rates and rising full-time employment is creating greater access to credit for the growing Japanese middle class that we see driving future consumption growth.

<sup>8</sup> Three-arrow policy: This refers to three-pointed economic policy of Shinzo Abe, consisting of fiscal stimulus, monetary easing and structural reforms.





Source: Bloomberg, as of 12/31/17. Subject to change.

## CREATING A NEW MIDDLE CLASS: THE "DEMOGRAPHIC SWEET SPOT"

A shrinking population is often brought up as a warning flag for corporate Japan.

Far from a negative force, Japan's demographics are a positive force:

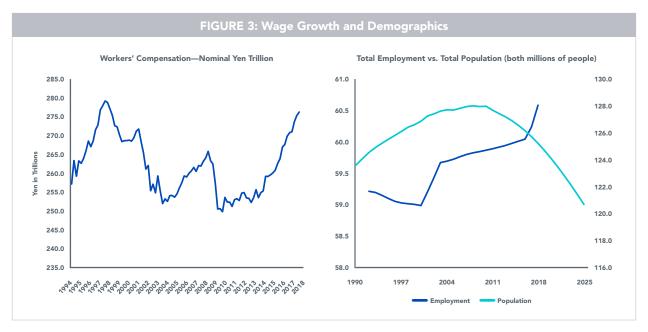
- + Labor force participation rates are rising.
- + Quality of jobs is improving (i.e., full time, not part time).
- + Household sector leverage is rising as full-time jobs create credit demand.
- + Corporate efficiency gains are made as companies are forced to rethink "human capital."
- + The "war for talent" is forcing industrial reorganization and consolidation.

# Thesis: Japan is creating a new middle class, which in turn gives rise to an endogenous and self-sustaining domestic demand up cycle and a new domestic investor.

If employers cannot hire talented and competitive employees to fit their needs, then they will have to face collapsing margins as wages rise, ultimately finding it harder and harder to fill necessary slots.

After almost two decades of full-time job destruction, full-time job creation has inflected to positive growth since 2015, and nominal workers' compensation has pulled up from a 20-year trend decline. It has to be stressed that this is the first time in some two decades that nominal workers' compensation has been in an uptrend. Importantly, this uptrend is poised to be resilient given the structural decline in the supply of labor.





Source: Ministry of Labor, as of 12/31/17.

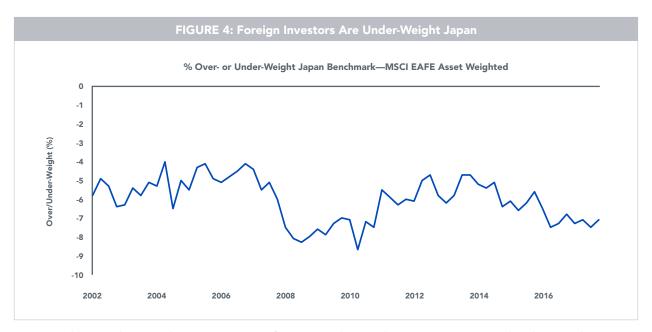
Directly as a result of full-time employment and rising incomes, Japanese households are gaining middle-class benefits, such as the ability to apply for credit cards and take out a mortgage. It is this demographic sweet spot that is powering an endogenous growth cycle that small-cap Japanese companies, those less sensitive to global trade, are poised to profit from.

### **INVESTORS REMAIN SKEPTICAL**

While no economy is ever without risk, we look at Japan today compared to many other developed regions and see what we think is a very favorable picture. The chart in figure 4 below shows the relative weight that foreigners have invested in Japanese equities relative to Japan's weight in the MSCI EAFE Index to gauge foreign investor sentiment in the market. Given that this Index is a broad benchmark for developed international exposure, a systematic under-weight of a country relative to its weight in this Index signals an active bet against the market. We would remind people that Japan seems to have the most aligned fiscal and monetary policies, as well as an executive and legislative branch that appear stable.

Bottom line: Market skepticism and positioning is another factor fueling our bullish view on Japan's equities, particularly the domestically oriented small-cap stocks.





Sources: Goldman Sachs Research, MSCI, FactSet, as of 12/31/17. Subject to change. You cannot invest directly in an index.

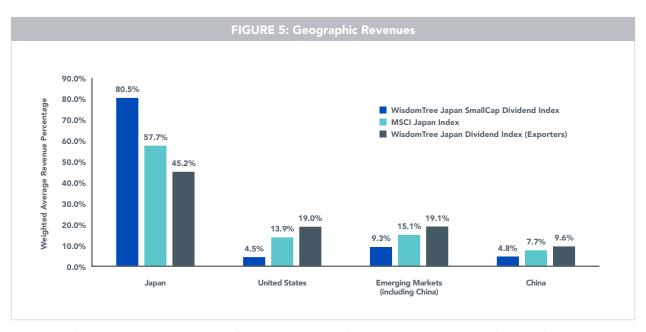
### DOMESTIC REVENUE FOCUS FOR ACCELERATING ECONOMIC DYNAMISM

Abenomics is about stimulating growth and changes in behavior of companies and investors in Japan. Whereas the WisdomTree Japan Dividend Index, focused on exporters, derived only 45% of its revenue from within Japan, the WisdomTree Japan SmallCap Dividend Index generated more than 80% of its revenue from within Japan.

If an investment thesis is predicated on an acceleration of growth in places like the U.S., Europe, China or India, then Japan's large caps are well positioned. However, if one is positioning for a more robust growth scenario in Japan, we think small caps are more aligned with this investment thesis.



<sup>&</sup>lt;sup>9</sup> Sources: WisdomTree, FactSet, with data as of 12/31/17.



Sources: WisdomTree, FactSet, MSCI. Data as of 12/31/17. Subject to change. You cannot invest directly in an index.

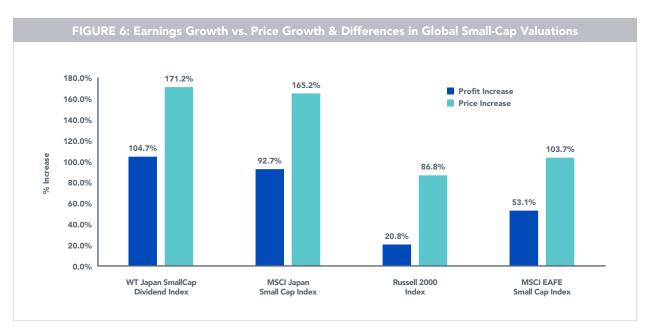
### WHERE TO FIND VALUE IN SMALL CAPS

Many investors we speak to are very familiar with U.S. small caps, particularly the Russell 2000 Index, but when they share their investment strategies beyond U.S. borders, it is rare that we see any small caps at all. Therefore, we talk frequently about how international and emerging market small caps can add a lot to overall portfolios and differentiate exposures beyond the largest companies that are emphasized across large-cap international equity benchmarks and active managers<sup>10</sup> alike.

When thinking about where to focus across global small-cap markets, we start with differences in relative valuation while understanding that earnings growth is also an important factor to be sensitive to.

<sup>&</sup>lt;sup>10</sup> Active managers: Portfolio managers who run funds that attempt to outperform the market by selecting those securities they believe to be the best.





	WT Japan SmallCap Dividend Index	MSCI Japan Small Cap Index	Russell 2000 Index	MSCI EAFE Small Cap Index
Profit Increase	104.7%	92.7%	20.8%	53.1%
Price Increase	171.2%	165.2%	86.8%	103.7%
P/E Start (11/30/2012)	12.2x	13.3x	18.4x	14.3x
P/E End (12/29/2017)	16.2x	18.4x	28.4x	19.1x
Expansion in P/E	32.5%	37.6%	54.7%	33.0%

Sources: WisdomTree, FactSet. Data is from 11/30/12, start of Abenomics period, to 12/31/17. Profit and price increase measured in local currency. Past performance is not indicative of future results. You cannot invest directly in an index.

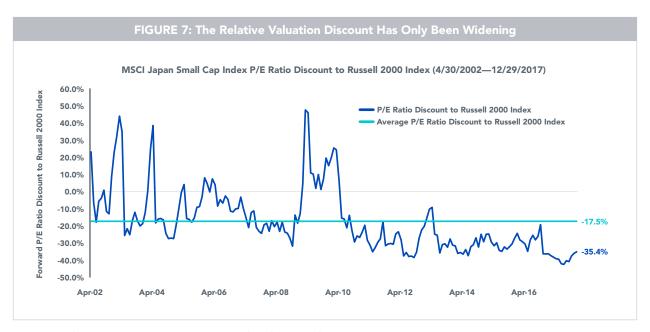
+ Start with the Russell 2000 Index, where we see that the earnings growth-to-valuation trade-off has been among the worst globally over this period. The result: The Russell 2000 Index is one of the most expensive global small-cap equity indexes in the market today.

WisdomTree has been focused on non-U.S. small caps for some time, and the fundamentals—particularly the earnings growth—that we see in figure 6 go a long way to explaining why. There are the positive economic factors we mentioned earlier, and this is reflected in the earnings power and earnings growth of Japan's small caps.

## **VALUATION DIFFERENCES ARE HISTORICALLY WIDE**

Many investors would correctly point out that Japan's small caps usually trade at lower valuations than the Russell 2000 Index, as this Index has a high multiple partly because of the presence of a lot of speculative firms with negative earnings, typically about 20% of the weight of the Index.





Source: WisdomTree, FactSet. You cannot invest directly in an index.

+ Presently, the discount of Japan's small caps to the Russell 2000 Index on the basis of forward P/E<sup>11</sup> ratios is at 35%, significantly different from the average level of 17.5% over this period.

# INTRODUCING THE WISDOMTREE JAPAN SMALLCAP DIVIDEND INDEX

WisdomTree has been creating innovative approaches to equity indexes for more than 10 years. Among the first strategies designed was the WisdomTree Japan SmallCap Dividend Index, which began live calculation on June 1, 2006. Broadly speaking, this Index:

- + Selects stocks from all equities listed on the Tokyo Stock Exchange that are incorporated in Japan, have paid the equivalent of \$5 million in cash dividends<sup>12</sup> over the last annual cycle and have a market capitalization<sup>13</sup> above \$100 million. Other liquidity parameters are also included to ensure investability in strategies designed to track this approach.
- + Once the largest 300 stocks by market capitalization have been removed from this comprehensive list of Japanese dividend payers, the remaining firms comprise the WisdomTree Japan SmallCap Dividend Index.
- + Weighting of these companies is based on WisdomTree's *Dividend Stream*® methodology, where *Dividend Stream* = dividend per share over the prior annual cycle x number of shares outstanding<sup>14</sup>.

<sup>&</sup>lt;sup>14</sup> The annual cycle is defined as the period prior to the May 31 annual screening date. If a firm is a semiannual dividend payer, the last two dividends are counted.



<sup>&</sup>lt;sup>11</sup> Forward P/E ratio: Share price divided by compilation of analyst estimates for earnings per share over the coming 12-month period. These are estimates that may be subject to revision or prove to be incorrect over time.

<sup>&</sup>lt;sup>12</sup> Dividend: A portion of corporate profits paid out to shareholders.

<sup>13</sup> Market capitalization: Market cap = share price x number of shares outstanding. Firms with the highest values receive the highest weights.

WisdomTree has two Indexes for Japanese small caps: one that includes exposure to the yen in an unhedged<sup>15</sup> format, the WisdomTree Japan SmallCap Dividend Index (WTJSC), and a second one that neutralizes exposure to the yen, the WisdomTree Japan Hedged SmallCap Equity Index (WTJSEH).

By design, WisdomTree's philosophy on generating exposure to small-cap stocks is to be as broad-based as possible while tapping into dividend payers and maintaining an annual rebalance that is sensitive to changes in relative value. We believe these Indexes can tap into several critical themes that make Japanese small caps attractive:

- **+ Domestic Revenue Exposure and Local Economic Strength:** With the macro picture supportive, a more domestically oriented exposure can blunt the noise of global trade prospects.
- + **Relative Value:** Despite its outperformance, Japanese small caps are still cheap relative to other developed market small caps due to their corporate profit growth.
- + Small-Cap Value Premium in Japan: Unlike other global markets, where growth<sup>16</sup> has outperformed value<sup>17</sup> over the past decade, value and size<sup>18</sup> have been the clear winners from a factor perspective in Japan. We believe the small-cap value premium will continue to reward investors over the long run as it has historically in the Japanese market.
- + Dividend and Share Buyback Growth: High levels of cash on Japanese corporate balance sheets, along with structural reforms that have increased attention to shareholder returns via dividends and share buybacks<sup>19</sup>, suggest strong evidence of growing distributions to shareholders going forward.
- + Portfolio Construction Benefits: Correlations<sup>20</sup> are a key component to portfolio risk-adjusted returns<sup>21</sup>, and Japan small caps provide a key diversification element in a world of increased correlations across asset classes. When considering our hedged versus unhedged approach, we review how Japan is one of the few markets where the currency and stocks are negatively correlated. Adding in yen exposure on top of the stocks can result in lower volatility<sup>22</sup> than just looking at the stocks by themselves, but a hedged approach can increase return in a depreciating yen environment.



<sup>&</sup>lt;sup>15</sup> Currency hedging: Strategies designed to mitigate the impact of currency performance on investment returns.

<sup>&</sup>lt;sup>16</sup> Growth: Characterized by higher price levels relative to fundamentals, such as dividends or earnings. Price levels are higher because investors are willing to pay more due to their expectations of future improvements in these fundamentals.

<sup>&</sup>lt;sup>17</sup> Value: Characterized by lower price levels relative to fundamentals, such as earnings or dividends. Prices are lower because investors are less certain of the performance of these fundamentals in the future. This term is also related to the value factor, which associates these stock characteristics with excess returns vs. the market over time.

<sup>&</sup>lt;sup>18</sup> Size: Characterized by smaller companies rather than larger companies by market capitalization. This term is also related to the size factor, which associates smaller market cap stocks with excess returns vs. the market over time.

<sup>19</sup> Share buybacks: When a company uses its own cash to purchase its own outstanding shares; may positively impact the share price.

<sup>&</sup>lt;sup>20</sup> Correlation: Statistical measure of how two sets of returns move in relation to each other. Correlation coefficients range from -1 to 1. A correlation of 1 means the two subjects of analysis move in lockstep with each other. A correlation of -1 means the two subjects of analysis have moved in exactly opposite directions.

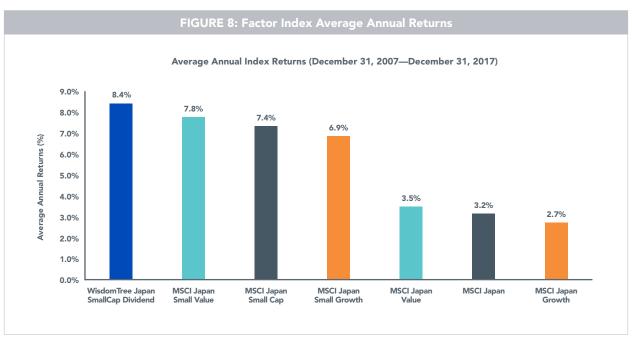
<sup>&</sup>lt;sup>21</sup> Risk-adjusted returns: Returns measured in relation to their own variability. High returns with a high level of risk indicate a lower probability that actual returns were close to average returns. High returns with a low level of risk would be more desirable, as they indicate a higher probability that actual returns were close to average returns.

<sup>&</sup>lt;sup>22</sup> Volatility: A measure of the dispersion of actual returns around a particular average level.

#### WISDOMTREE'S FOUNDATION: THE SIZE & VALUE PREMIUMS

Several widely studied and generally accepted factors have been associated with excess returns over the long run. Two such factors are size and value. The size factor relates to the tendency for smaller companies, as measured by market capitalization, to outperform larger companies. The value factor can be quantified in a variety of ways, such as low price to earnings<sup>23</sup> or price to book<sup>24</sup> and high dividend yield<sup>25</sup>, but essentially means that stocks that are underpriced based on some measure of relative value outperform the more expensive growth stocks, where investors tend to have a lot of excitement but fundamentals rarely keep pace with expectations.

Over the past decade, value has significantly underperformed growth in almost every market globally, except Japan. In the U.S., the average annual returns of the Russell 1000 Value Index underperformed the Russell 1000 Growth Index by 2.89%. In the developed international market, the MSCI EAFE Value Index underperformed the MSCI EAFE Growth Index by 1.52%. In Japan, value has outperformed growth in both small caps and large caps, as measured by the MSCI Japan Indexes.



Sources: WisdomTree, MSCI. Past performance is not indicative of future results. You cannot invest directly in an index.



<sup>&</sup>lt;sup>23</sup> Price-to-earnings (P/E) ratio: Share price divided by earnings per share. Lower numbers indicate an ability to access greater amounts of earnings per dollar invested.

<sup>&</sup>lt;sup>24</sup> Price-to-book ratio: Share price divided by book value per share. Lower numbers indicate an ability to access greater amounts of earnings per dollar invested.

<sup>&</sup>lt;sup>25</sup> Dividend yield: A financial ratio that shows how much a company pays out in dividends each year relative to its share price.

<sup>&</sup>lt;sup>26</sup> Sources: WisdomTree, Bloomberg, 12/31/07–12/31/17.

FIGURE 9: Fama and French Portfolio Returns

Japanese Markets
Fama/French 5x5 Portfolios: Size x Book to Market
Full Period 7/31/90—12/31/17

		Book to Market				
		Lowest	Low	Mid	High	Highest
Size Segment	Smallest	2.53%	3.61%	4.13%	4.95%	6.56%
	Small	1.90%	-0.75%	1.53%	3.46%	3.34%
	Mid	-2.81%	0.33%	1.50%	1.90%	4.25%
	Large	-2.27%	1.56%	1.79%	3.61%	3.47%
	Largest	-0.70%	1.56%	2.00%	3.51%	5.43%

Sources: WisdomTree, Kenneth French Data Library. Size segment = market capitalization. Operating profitability = operating profit divided by book value of equity. Returns are average annual returns. Past performance is not indicative of future results.

Figure 9 showcases a grid of returns representing equity portfolios sorted by size and book-to-market value ratio and available in the Kenneth French Data Library. Clearly, over the long run, stocks in Japan that have the highest book-to-market value ratios—in other words, the most "value" oriented—have outperformed. Additionally, there has been a noted advantage for small caps over large caps.

### CORPORATE GOVERNANCE REFORM: DIVIDEND GROWTH AND SHARE BUYBACKS ACCELERATING

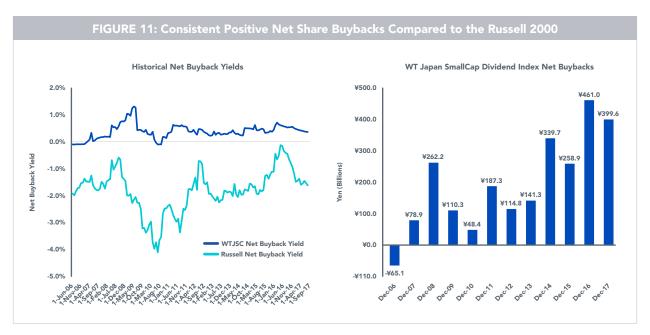
When buying value, investors are also looking for the catalyst that will drive markets higher. Shareholder returns through dividend growth and share buybacks are the keys. As we can see in the below table, over the past five years coinciding with the period of Abenomics, Japan has become a global leader in dividend growth. And when we look at the relative regional payout ratios in figure 12, we see even further potential for growth in capital distributions over the coming years to converge with global peers.



FIGURE 10: Japan Is a Global Dividend Growth Leader					
Indexes	Median Dividend Growth of Current Constituents				
indexes	1-Year	3-Year	5-Year		
MSCI Japan Small Cap	6.67%	10.06%	10.76%		
MSCI EAFE Small Cap	7.41%	9.34%	9.00%		
MSCI Europe Small Cap	10.00%	10.60%	8.43%		
Russell 2000	4.03%	5.60%	4.56%		

Sources: WisdomTree, Bloomberg, as of 12/31/17. You cannot invest directly in an index.

Structural reforms that include corporate governance improvements have been a key aim of Abenomics. As can be seen from its track record of recent dividend growth and positive net buyback yields, Japan Inc. is responding to the structural reform initiatives. Comparing the consistent positive net share buybacks of the WisdomTree Japan SmallCap Dividend Index to the Russell 2000 Index provides some context to the unique exposure of Japanese small caps: The constituents of the WisdomTree Index are rewarding shareholders with net share reductions, as opposed to the Russell 2000 companies that are net share issuers.



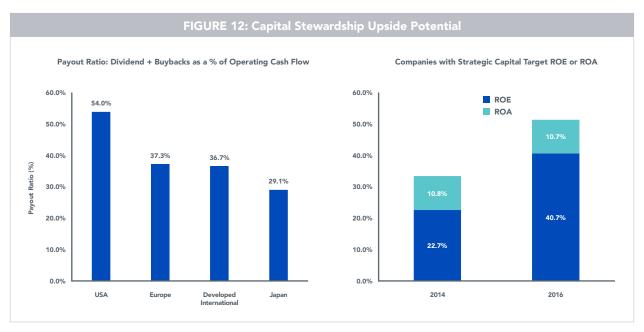
Sources: WisdomTree, FactSet. Data from 6/30/06 to 12/31/17. You cannot invest directly in an index.

In terms of capital stewardship, Japan has chronically had one of the lowest payout ratios globally. Japan's approximately 29% payout ratio, measured as dividends and share buybacks as a percentage of operating cash flows, is about 25 percentage points below that of the United States.

The Japanese Government Pension Investment Fund (GPIF), the country's largest pension fund, has been encouraging asset managers to take a role in shareholder activism to obtain greater corporate governance reforms.<sup>27</sup> As a greater number of companies publish return-on-equity (ROE) and return-on-assets (ROA) targets, it seems logical that a greater payout ratio will accompany these targets as companies try to reduce the size of the denominator in those two profitability ratios.



<sup>&</sup>lt;sup>27</sup> JC de Swaan, "Japan Is Counting on Shareholder Activism to Improve Its Economy," HBR.org, 9/20/17.



Sources: WisdomTree, FactSet, MSCI, OECD, as of 12/31/17. USA = MSCI USA IMI. Europe = MSCI Europe IMI. Developed International = MSCI EAFE IMI. Japan = MSCI Japan IMI.

## QUALITY—AN ADDITIONAL BENEFIT OF A FOCUS ON DIVIDENDS

When investors think of a dividend strategy in the context of factors, the one that often comes to mind first is value. The WisdomTree Index is certainly in that value category with its tilt to higher dividend yields. But what we have witnessed over time is that the dividend screen, and more specifically the dividend-weighting methodology given the high preponderance of dividend payers in this market already, provides an organic exposure to the quality factor.<sup>28</sup> There are many ways to quantify this exposure, but one that we often focus on as a direct contributor to long-term returns is shareholder yield.<sup>29</sup>

In figure 13 below, we assign the constituents of the WisdomTree Japan SmallCap Dividend Index and the MSCI Japan Small Cap Index into quintiles based on shareholder yields (buybacks and dividends). In breaking down how to read the table, the total attribution column that sums up the 108-basis point outperformance is coming from three sources: The first is the allocation differences to that shareholder yield quintile (whether it was over-weighted or under-weighted) and whether that quintile outperformed the market. Then there is also stock selection within a quintile—and whether the investment methodology added value compared to the benchmark within the quintile. And finally, there is an interaction component between these two in terms of weighting and stock selection/methodology.



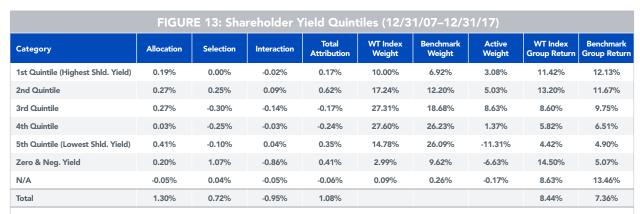
<sup>&</sup>lt;sup>28</sup> Quality factor: Excess returns achieved by companies exhibiting higher quality or profitability vs. the market. Typically measured using operating profitability, return on equity and/or return on assets.

<sup>&</sup>lt;sup>29</sup> Shareholder yield: A data point that references the combination of dividend yield and buyback yield.

Some interesting takeaways from this table of 10-year returns:

- + Active Weights<sup>30</sup>: The WisdomTree Index has a combined active under-weight of 18% to the lowest shareholder yield quintile and those companies with zero or negative shareholder yield. What this tells us is that the Index effectively tilts away not only from companies that have low dividend yields, but also from companies that are issuing new shares of equity, an indicator of poor quality.
- + Total Outperformance Attribution: 76 basis points<sup>31</sup> of the 108-basis-point outperformance over the benchmark during this period was due to those above-mentioned under-weights.

Given the unique nature of the Japanese market, where over 97% of the MSCI benchmark index contains dividend paying companies, the WisdomTree Index's selection based on dividends is not very selective. What the attribution on shareholder yields helps show is that a dividend approach helps navigate some of those frothier parts of the market that may get included in the Index by giving greater weight to companies that have stronger balance sheets and are returning value to shareholders through dividends and buybacks.





Sources: WisdomTree, FactSet. Index weight and benchmark weight refer to the average weight over the analysis period. Allocation refers to the portion of return that is attributable to a quintile's over-weight vs. the benchmark. Stock selection refers to the portion of return that is attributable to the equities held vs. the benchmark. Interaction refers to the portion of return attributable to the effects of how the selection and allocation interact with each other within the portfolio versus the same effects in the benchmark. Past performance is not indicative of future results. You cannot invest directly in an index. Weights subject to change.



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<sup>&</sup>lt;sup>30</sup> Active weight: The difference in allocation between the portfolio and the benchmark.

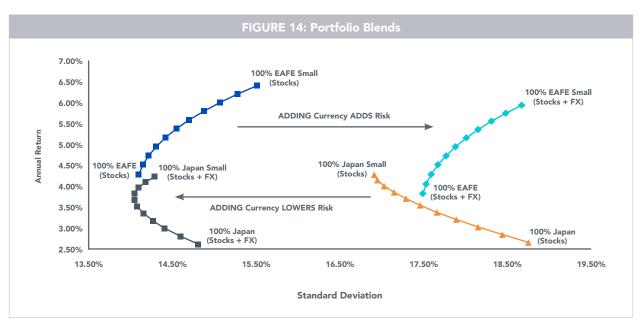
<sup>&</sup>lt;sup>31</sup> Basis point: 1/100th of 1 percent.

#### TO HEDGE OR NOT TO HEDGE THE YEN

When allocating to a market like Japan, it is important to consider not only market cap allocations, but also whether or not you want to take the currency exposure. Over the past decade, Japanese small caps outperformed their large-cap counterparts, and this was true on both a local and USD basis. Therefore, increasing allocations to Japanese smalls caps improved returns and in some cases even lowered the risk<sup>32</sup>, depending on whether they were blended with or without the currency. Looking at just large caps, it is apparent that over the period, taking the currency exposure (i.e., the MSCI Japan USD Index) had very little impact on overall returns, with a headwind of a mere 4 basis points on returns compared to the MSCI Japan Local Currency Index.

Japan is one of the few markets where the currency and the stocks are negatively correlated, so that adding in yen exposure on top of the stocks can result in lower volatility than just looking at the stocks by themselves. Typically, when WisdomTree discusses foreign currency risk on broad baskets of international equities, we refer to currency as uncompensated risk that would increase the volatility of that basket. Japan is the outlier. While the return differential between the MSCI Japan Local and USD Indexes was negligible, the local currency Index had nearly 400 basis points more risk.

Comparing the currency exposure in Japan to the broader MSCI EAFE universe, the MSCI EAFE USD Index had more than 300 basis points of risk than the local currency index. The arrows in figure 14, a chart showing a blend of the respective small-cap and large-cap indexes in local currency terms and in USD, help sum up the story: Adding currency exposure in the EAFE universe adds to overall risk, whereas adding currency in Japan lowers risk.



Sources: WisdomTree, Zephyr StyleADVISOR. Data from 6/1/06 to 12/31/17. 100% EAFE (Stocks) = MSCI EAFE Local Currency Index. 100% EAFE Small (Stocks) = MSCI Japan Local Currency Small Cap Index. 100% Japan (Stocks) = MSCI Japan Local Currency Index. 100% Japan Small (Stocks) = MSCI Japan Local Currency Small Cap Index. 100% EAFE (Stocks + FX) = MSCI EAFE USD Index. 100% EAFE Small (Stocks + FX) = MSCI EAFE USD Small Cap Index. 100% Japan (Stocks + FX) = MSCI Japan USD Index. 100% Japan Small (Stocks + FX) = MSCI Japan USD Index. 100% Japan Small (Stocks + FX) = MSCI Japan USD Small Cap Index. 100% J

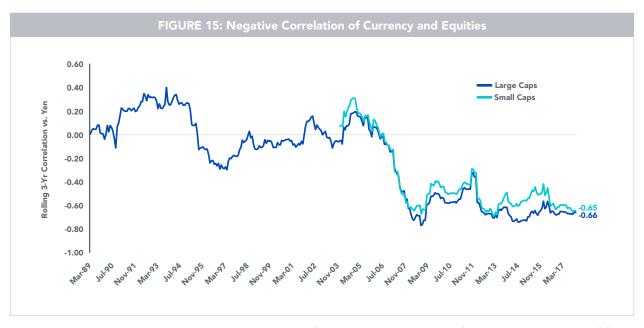
<sup>&</sup>lt;sup>32</sup> Risk: Also "standard deviation," which measures the spread of actual returns around an average return during a specific period. Higher risk indicates greater potential for returns to be farther away from this average.



#### WHAT DO NEGATIVE CORRELATIONS IMPLY?

One could interpret the negative correlation between the currency and the stock market as requiring a view that the currency is going to weaken to be supportive for investing in the market. This is largely a critical part of the view we have for large caps and exporters, which are more sensitive to fluctuations in the exchange rate<sup>33</sup>. Interestingly, though, the Japanese small-cap market was also fairly strongly negatively correlated to the yen.

It is important to note that the fundamental relationship between the yen and the Japanese equity markets has and may change over time. In the early 1990s, the correlations between the yen and Japanese stocks were slightly positive, and this occurred again at times in the early 2000s. Since the financial crisis, the correlations have been consistently negative, with three-year correlations for the most recent period of -0.66 for large caps and -0.65 for small caps.



Sources: MSCI, WisdomTree, 3/31/1986–12/31/2017. Dates reflect data availability. Past performance is not indicative of future results. You cannot invest directly in an index. Yen refers to the performance of the yen on a trade-weighted basis. Large Caps refers to the MSCI Japan Index, and Small Caps refers to the MSCI Japan Small Cap Index.

<sup>33</sup> Exchange rate: The exchange of one currency for another, or the conversion of one currency into another currency.



### **CURRENCY HEDGING AS STRATEGIC ALLOCATION # CURRENCY BET**

WisdomTree has argued that currency hedging should be considered more as a strategic baseline. In their 1988 paper, "The Free Lunch in Currency Hedging: Implications for Investment Policy and Performance Standards," Andre F. Perold and Evan C. Shulman wrote:

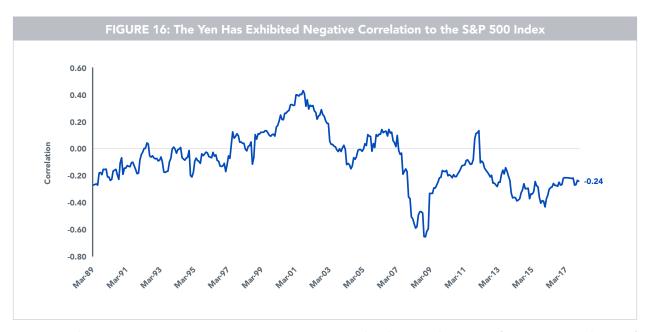
In this article we argue that it is better to formulate long-run investment policy in terms of hedged portfolios than unhedged portfolios. The key to our argument is that, from the perspective of long-run policy, investors should think of currency hedging as having zero expected return. Therein lies the free lunch. On average, currency hedging gives you substantial risk reduction at no loss of expected return. Our prescription does not say the prescient investor should not selectively lift a hedge, just that hedging should be the policy, and lifting the hedge an active investment decision.<sup>34</sup>

Steve Scoles wrote in the paper "Currency Risk: To Hedge or Not to Hedge—Is That the Question?":

My view is that currency risk should almost always be hedged. Instead of asking whether to hedge or not, the questions that should be asked are: "To make a bet or not to make a bet?" and "Do we truly have the ability to predict currency movements?" 35

The question then becomes this: Do you have an edge and the ability to predict currency moves with meaningful accuracy?

The consideration with the yen that may be different from a broad basket of currencies is the risk-off role the yen has traditionally played with this negative correlation to equities such that the yen may serve to be a "diversifier" for both the Japanese equity positions and other positions more generally. However, this diversification and negative correlation may not persist forever, and the environment could change such that the yen becomes an additional source of unrewarded risk.



Sources: WisdomTree, MSCI, 3/31/1986–12/31/2017. You cannot invest directly in an index. Past performance is not indicative of future results.

<sup>35</sup> Steve Scoles, "Currency Risk: To Hedge or Not to Hedge—Is That the Question?" Risks and Rewards: Society of Actuaries, 2/08.



<sup>&</sup>lt;sup>34</sup> Andre F. Perold and Evan C. Schulman, "The Free Lunch in Currency Hedging: Implications for Investment Policy and Performance Standards," Financial Analysts Journal, May–June 1988.

FIGURE 17: How Currency Exposure Can Impact Volatility					
Period	Volatility of MSCI Japan in U.S. dollars (unhedged)	Volatility of MSCI Japan expressed in local currency terms	Volatility of embedded Japan currency exposure	Volatility increase attributable to currency	Correlation between currency and equity expressed in local terms
Full Period	20.9%	19.4%	11.2%	1.5%	-0.17
Last 20 Years	17.2%	18.0%	10.7%	-0.8%	-0.38
Last 10 Years	15.7%	19.8%	10.4%	-4.1%	-0.62

Correlation between currency and equity expressed in local terms: Correlation between yen returns and the MSCI Japan equity returns that are expressed in local currency terms. Source: MSCI, for period from 3/31/1986 to 12/31/2017. Concept for chart comes from "Managing Currency Risk," Record Currency Management, March 2015. You cannot invest directly in an index. Past performance is not indicative of future results.

# CONCLUSION: WISDOMTREE'S JAPAN SMALLCAP DIVIDEND INDEX ACCESSES THE BENEFICIAL MACRO BACKDROP IN JAPAN

WisdomTree's Japan SmallCap Dividend Index has exemplified the same approach and rules-based methodology for almost 12 years. While Japan's small-cap equity market has generally held up well through those years, we believe that the macro catalysts discussed in this piece support a long-term upward trend in this important market segment. Importantly:

- + We expect Japan's demographic sweet spot to lead to more full-time workers making more money. This means that they may increase their consumption. WisdomTree's approach, as we mentioned, receives more than 80% of weighted average revenue from inside Japan.
- + So many developed markets today have issues in their political systems, making it hard for leaders to complete important reform efforts. Japan has a fiscal and monetary authority on the same page, as well as a longstanding prime minister whose party also enjoys a supermajority in Japan's legislative branch.
- + Over the longer term, regardless of the macroeconomic backdrop, the size and value factors in Japan have performed strongly. WisdomTree's approach taps into these factors, and we believe that focusing on dividends is also a way to tap into higher-quality companies.
- + Many U.S. investors think about only the yen/U.S. dollar exchange rate when considering Japan's equities. Japan's small caps are less sensitive to changes in this dynamic, so if the yen begins to strengthen, earnings growth could be less at risk.



Investors should carefully consider the investment objectives, risks, charges and expenses of the Fund's before investing. To obtain a prospectus containing this and other important information, please call 866.909.9473 or visit WisdomTree.com to view a prospectus online. Read the prospectus carefully before you invest.

There are risks associated with investing, including possible loss of principal. Foreign investing involves special risks, such as risk of loss from currency fluctuation or political or economic uncertainty. Funds focusing their investments on smaller companies or certain sectors may be more vulnerable to any single economic or regulatory development. The Fund focuses its investments in Japan, thereby increasing the impact of events and developments in Japan that can adversely affect performance. This may result in greater share price volatility. Please read the Fund's prospectus for specific details regarding the Fund's risk profile.

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The WisdomTree Japan SmallCap Dividend Index is comprised of dividend-paying small-capitalization companies in Japan. The Index is created by removing the 300 largest companies by market capitalization from Japanese companies that meet the underlying liquidity and size screens, as of the annual index rebalance. The WisdomTree Japan Hedged SmallCap Equity Index is designed to provide exposure to the small-capitalization segment of the Japanese equity markets while neutralizing exposure to fluctuations of the Japanese yen's movements relative to the U.S. dollar. The WisdomTree Japan Dividend Index is a fundamentally weighted index that measures the performance of dividend-paying companies incorporated in Japan that are listed on the Tokyo Stock Exchange and that meet other requirements necessary to be included in the WisdomTree International Equity Index. The MSCI EAFE Index is a market cap-weighted index composed of companies representative of the developed market structure of developed countries in Europe, Australasia and Japan. The MSCI EAFE Small Cap Index is a free float-adjusted market capitalization-weighted equity index that captures small-cap representation across developed market countries around the world, excluding the U.S. and Canada. The MSCI EAFE Value Index is a market capitalization-weighted subset of stocks within the MSCI EAFE Index that have lower share prices relative to their earnings or dividends per share. The MSCI EAFE Growth Index is a market capitalization-weighted subset of stocks within the MSCI EAFE Index that have higher share prices relative to their earnings or dividends per share. The MSCI EAFE IMI is a free float-adjusted market cap-weighted index composed of companies representative of the developed market structure of developed countries in Europe, Australasia and Japan, covering the large-cap, mid-cap and small-cap segments of the capitalization spectrum. The MSCI EAFE Local Currency Index is a market cap-weighted index composed of companies representative of the developed market structure of developed countries in Europe, Australasia and Japan, with performance measured in local currency terms. The MSCI EAFE Local Currency Small Cap Index is a free float-adjusted market capitalization equity index that captures small-cap representation across developed market countries around the world, excluding the U.S. and Canada, with performance measured in local currency terms. The MSCI Europe Small Cap Index is a free float-adjusted market capitalization-weighted index designed to measure the performance of developed equity markets in Europe, specifically focusing on the small-cap segment of these equity markets. The MSCI Europe Investable Market Index (IMI) captures large-, mid- and small-cap representation across 15 developed market countries in Europe. The MSCI Japan Local Currency Index is a market cap-weighted index that measures the performance of the Japanese equity market in the local currency (yen). The MSCI Japan Local Currency Small Cap Index is a free float-adjusted market capitalization-weighted index that measures the performance of the small-cap segment of the Japanese market in the local currency (yen). The MSCI Japan USD Index is a market cap-weighted subset of the MSCI EAFE Index that measures the performance of the Japanese equity market in USD. The MSCI Japan USD Small Cap Index is a free float-adjusted market capitalization-weighted index that measures the performance of the small-cap segment of the Japanese market. The MSCI Japan Small Cap Index is a free float-adjusted market capitalization-weighted index that measures the performance of the small-cap segment of the Japanese market. The MSCI Japan Investable Market Index (IMI) is designed to measure the performance of the large-, mid- and small-cap segments of the Japanese market. The MSCI USA Investable Market Index (IMI) is an all-cap market capitalizationweighted index of U.S. companies with an emphasis on index liquidity, investability and replicability. The Russell 1000 Value Index is a measure of the large-cap value segment of the U.S. equity universe, selecting from the Russell 1000 Index. The Russell 1000 Growth Index is a measure of the large-cap growth segment of the U.S. equity universe, selecting from the Russell 1000 Index. The Russell 2000 Index measures the performance of the small-cap segment of the U.S. equity universe. The Russell 2000 is a subset of the Russell 3000 Index, representing approximately 10% of the total market capitalization of that index. It includes approximately 2,000 of the smallest securities based on a combination of their market cap and current index membership. The S&P 500 Index is a market capitalization-weighted benchmark of 500 stocks selected by the Standard & Poor's Index Committee, designed to represent the performance of the leading industries in the United States economy.

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