

# CHARTWELL VIEWS

## ***Small Cap Indices Are Not Created Equal***

As we have recently conducted index fund searches for clients, we've been intrigued by the different performance outcomes we were finding amongst funds in the same asset class. The differences are observable across all capitalization ranges and styles, but are most prominent in small cap equities. *What would cause a 2%-4% difference in the trailing annual returns for small cap index funds?* The answer goes beyond fees, which are dropping/disappearing as managers fight for dominance in the index fund arena. The answer lies in the construction of the various small cap indices and which one a manager chooses as a benchmark for their index fund. We researched the three most used indices in the small cap space; the Russell 2000, the S&P Smallcap 600 and the CRSP US Small Cap Index. Here is what the research shows:

### ***Performance – Short-Term, Long-Term and Calendar Year – through June 30, 2018***

	1 quarter	YTD	1 year	3 years	5 years	7 years
Russell 2000	7.8%	7.7%	17.6%	11.0%	12.5%	11.8%
S&P Smallcap 600	8.8%	9.4%	20.5%	13.8%	14.6%	14.1%
CRSP US Small Cap Index	6.2%	6.0%	16.5%	10.4%	12.4%	12.2%

	YTD	2017	2016	2015	2014	2013	2012
Russell 2000	7.7%	14.7%	21.3%	-4.4%	4.9%	38.8%	16.4%
S&P Smallcap 600	9.4%	13.2%	26.6%	-2.0%	5.8%	41.3%	16.3%
CRSP US Small Cap Index	6.0%	16.2%	18.3%	-3.7%	7.5%	38.5%	18.6%

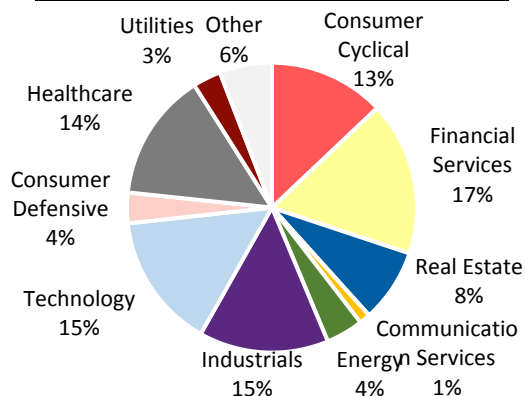
### ***Index Construction – Capitalization, Financial Criteria and Rebalancing***

	Inception Year	Capitalization Range (\$mm)	Total Index Cap (\$mm)	Number of Securities	% of Mkt Cap in Top 10 Securities	% non-US Stocks	Annual Rebalancing Frequency
Russell 2000	1984	450-2,100	4,867,641	~2000	2.4%	0.7%	1
S&P Smallcap 600	1994	100-4,700	892,923	600	5.1%	0.3%	4
CRSP US Small Cap Index	2011	38-11,000	3,626,102	~1390	2.9%	0.2%	4

### The Russell 2000 Index

The Russell 2000 Index was created to measure the performance of the small capitalization companies in the US equity market. The index is a composite of roughly 2,000 securities issued by companies with market capitalization values averaging \$2 billion. All Russell US indices are subsets of the Russell 3000 index, which includes the large cap Russell 200 index, the Russell Midcap (the next 800 securities), and small cap Russell 2000 index. Currently, there are approximately 2,011 securities in the Russell 2000 index.

Russell 2000 - Sector Allocation

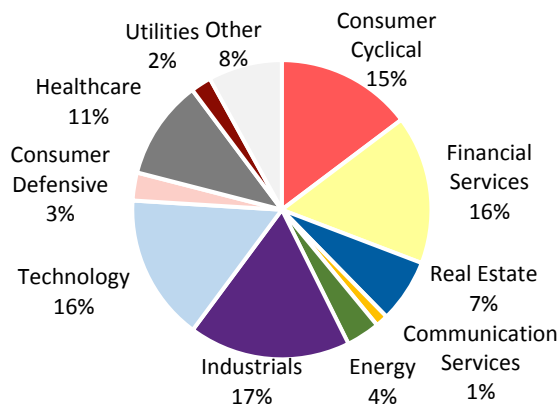


First launched in 1984, companies in the index are selected based on their float-adjusted market capitalization. Annually at the end of May, FSTE Russell rank-orders eligible companies by their then current total market caps, reflecting any changes occurring during the past twelve months. One month later the index is reconstituted, with some small-cap stocks “graduating” into the Russell Midcap index, and some stocks “falling” into the Russell 2000. To be eligible for inclusion in the index, a security must trade on the NYSE, NYSE MKT, NASDAQ, or ARCA exchanges.<sup>1</sup>

### The S&P SmallCap 600 Index

Founded in 1994, the objective of the S&P 600 index is to represent the risk and return characteristics of the investable US small cap equity market. Companies are selected by the Standard & Poors Index Committee. Currently, all constituents of the S&P SmallCap 600 are US companies with between \$450 million to \$2.1 billion in unadjusted market cap, having 50% of shares available for trading in an active secondary market. ADRs are not included. For a company to be added to any of the S&P indices, it must have positive earnings over the 4 most recent quarters summed together.

S&P SmallCap 600 - Sector Allocation



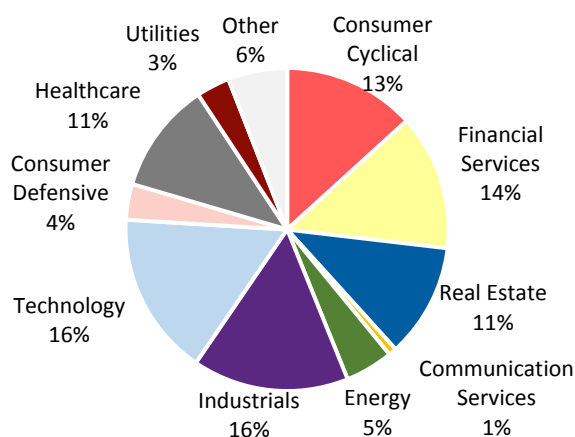
The index constituents are rank-ordered by market cap in March, June, September and December<sup>2</sup>. The Index Committee reviews the indexes’ market cap range from time to time to ensure consistency with market conditions.

### The CRSP US Small Cap Index

Unlike count-based indices, the CRSP (Center for Research in Security Prices) indices have no limit on the number of companies that may comprise an index. This is intended to better reflect the market’s evolution, as the number of listed securities in each CRSP index can change substantially over time. For the domestic CRSP indices, all US companies are rank-ordered from largest to smallest based on their total investable market capitalization (including all equity share classes). The US Small Cap Index includes U.S. companies that fall between the bottom 2-15 percent of the US market’s total investable capitalization. Companies comprising the bottom 2% of the market’s total capitalization are included in the CRSP Micro Cap index. Those making up the top 85% of the total market cap are included in other CRSP indices (see below). To reduce frequent migration of stocks into and out of each CRSP index, a buffering method was developed. After sorting, each company is assigned a cumulative market capitalization score based on the midpoint of a company’s market capitalization over time, to ensure it is assigned to the CRSP index in which most of its market capitalization lies. The CRSP’s US Small Cap index makes up the second rung on the CRSP ladder of capitalization breakpoints, with the CRSP Micro Cap below it, and the Mid, Large, and Mega Cap indices making up the rungs above it.

The buffering process allows some of the market caps of stocks at the bottom of the Mid Cap range to bleed into the Small Cap Index, and vice versa. Thus, while the median stock in the Small Cap index has a market cap of only \$2.07 billion, the largest stock represented in the index has an \$11 billion market cap and the smallest is \$38 million. By comparison, the CRSP Mid Cap index median stock has an \$11.2 billion market cap, but the smallest company in the index has only a \$501mm market cap.

### CRSP US Small Cap - Sector Allocation



Reconstitution of all CRSP US indices occurs quarterly after the market close on the third Friday of March, June, September, and December. The transition period begins two days earlier, and ends (final transition day) three days after the reconstitution date<sup>3</sup>.

## **Index Composition – Sector Allocations**

Because of the differing security inclusion methodologies, sector allocations amongst the three indices differ significantly (from 1% to 4.5%) and contribute to performance differentials.

	<b>Russell 2000 (%)</b>	<b>S&amp;P SmallCap 600 (%)</b>	<b>CRSP US Small Cap (%)</b>
Consumer Cyclical	12.9	14.7	13.3
Financial Services	17.2	16.1	13.6
Real Estate	8.2	6.9	11.4
Communication Services	1.2	1.3	0.8
Energy	4.2	3.6	4.8
Industrials	14.5	17.5	15.7
Technology	15.1	15.8	16.4
Consumer Defensive	3.4	3.0	3.6
Healthcare	14.3	10.8	11.2
Utilities	3.1	2.2	3.4
Other	5.9	8.0	5.9

## **Observations**

- The CRSP US Small Cap index is the newest of the three, incepted in 2011. Comparisons for this paper used the longest common time period for all three indices (7 years).
- The meaningfully different approaches Russell, Standard & Poor’s and CRSP each take when constructing their indices have produced a disconnect in performance over the short and medium term.
- As noted earlier, performance differentials also occur among mid and large cap indices, but to a lesser extent. The turnover in the small and mid-cap indices as securities “graduate” or fall out of the index is greatest in small cap and leads to larger differences.
- There is no universally accepted definition of what a small cap stock is. With an increasingly broad array of investable indexed solutions (mutual funds, ETFs, CITs) using these indices as benchmarks, it is important to be aware of how composition differences may affect investor experiences, both relatively and absolutely.
- *Which is the best index for a small cap index fund to track?* There is not one right answer; the “right” index fund should complement your overall portfolio and provide coverage of the requisite market segment. For example, companies in the CRSP index range from micro to lower mid-cap (\$38mm to \$11bn). The fund can provide some coverage of those two additional segments. If your portfolio already has midcap exposure, the narrower cap range of the R2000 (\$450mm to \$2.1bn) provides more dedicated small cap exposure.

## **Bibliography**

- 1.) FTSE Russell, [www.ftse.com/products/downloads/Russell-US-indices.pdf?615](http://www.ftse.com/products/downloads/Russell-US-indices.pdf?615).
- 2.) Standard & Poors, [US.spindices.com/indices/equity/sp-smallcap-600](http://US.spindices.com/indices/equity/sp-smallcap-600).
- 3.) Center for Research in Security Prices, [www.crsp.com/products/investment-products/crsp-us-small-cap-index](http://www.crsp.com/products/investment-products/crsp-us-small-cap-index)