



Index Insights | Methodology

Four Decades of Russell US Indexes Reconstitution

How the Russell US Indexes deliver an objective view of the ever-changing US equity market

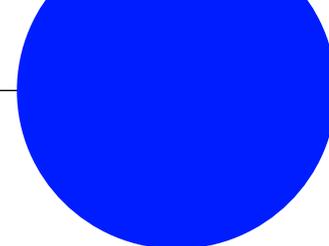
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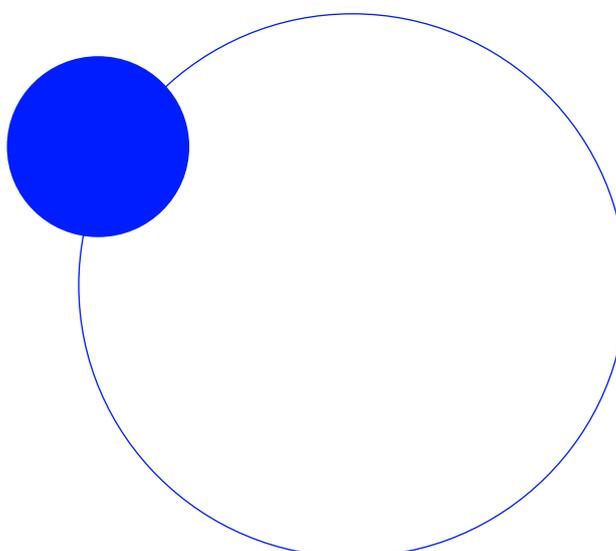
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Key points

- In 1984, Russell Investments introduced the Russell US Indexes, the first indexes to provide an accurate, objective representation of the investable US equity market
- Index constituent weights were adjusted for free float (a Russell innovation) to accurately reflect shares available to investors
- The indexes used a revolutionary, modular approach to ensure investors could target large-cap and small-cap stocks separately or in combination
- This modular approach was extended in 1987 to the Russell US Style indexes, the first of their kind to segment the US equity market into growth and value stocks
- Every year in June, Russell completely rebuilds the indexes from the ground up, ensuring the continuing, accurate representation of the ever-changing equity market and its segments
- Russell’s annual reconstitution is a vital step in the construction of objective, representative benchmarks, as it ensures that no distortions occur in the Russell indexes due to size or style bias
- Russell Indexes have undergone a series of methodology enhancements over the years, aiding index fund and ETF managers



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The 1980s: when technology and markets saw lift-off

In 1973-75 and 1979-81, the world experienced two major recessions following oil price shocks. But after this period of economic stagnation, the 1980s were a decade of dynamism. Barriers to capital flows came down, interest rates and inflation fell, economic growth rates picked up and equity markets around the world rose on a wave of optimism.

The 1980s were also notable for key advancements in industries like such as technology, music and finance, the impacts of which are still felt four decades later.

In 1981, the launch of the first reusable space shuttle, Columbia, opened new possibilities for space travel and exploration. Cable television became the source for pop culture in many American households, bringing in MTV, which transformed the music industry. Video cassette recorders (VCRs) became household staples, allowing users to record live TV broadcasts or rent and watch now-classic films like “Back to the Future”, “Wall Street” and “Ferris Bueller’s Day Off” in the comfort of their own homes.

In 1981, IBM launched one of the first personal computers, which incorporated Microsoft’s new operating system, MS-DOS, and paved the way for the now-ubiquitous Microsoft Windows operating system. In 1984, Apple introduced its first Macintosh personal computer; the firm has since gone on to revolutionize the way we interact with (and depend on) computers and cellular phones. Since the eighties, Microsoft and Apple have repeatedly traded places as the top tech company in the US—a competition that extends to this day.

In 1984, Russell Investments marked a new era in equity benchmarking by launching the first Russell US Indexes—the Russell 1000[®], Russell 2000[®] and Russell 3000[®]—which set a new standard for the way equity markets are represented, segmented and measured. One of the original Russell 3000 constituents, Apple Computer, had a float-adjusted market capitalization in the newly developed index series of \$1.5 billion as of June 1984. As of March 2024, Apple’s float-adjusted market cap was an incredible 1,665 times that amount (\$2.5 trillion), testament to the growth that the indexes, and the US equity markets they represent, have experienced over the last four decades.

Recognizing that markets are constantly changing, Russell conducts an annual reconstitution—a complete rebuilding of our indexes—every June. This ensures that Russell Indexes accurately reflect their intended market segments and remain free of unintended size and style biases.

Russell US Indexes

At the time of their introduction in 1984, the Russell US Indexes filled a gap in the market by offering an objective, accurate and transparent benchmark for US equities. Existing US equity indexes, such as the S&P 500 and the Wilshire 5000, offered either a sampled or non-investable representation of the market. For example, an index committee selects the S&P 500 index’s constituents, which are not necessarily the largest 500 stocks in the US equity market, while the Wilshire 5000 index includes a number of micro cap stocks with limited liquidity.

The Russell US Indexes also pioneered the float-adjustment of stocks included in the equity index, meaning that only shares available for purchase by institutional investors are included in the index. In contrast, S&P applied float adjustment to their indexes beginning in 2005.¹ Float-adjustment of equity index constituents is now considered an industry standard.

¹ [Key dates and milestones in the S&P 500’s history | Reuters](#)

From the outset, the Russell Indexes have followed a “naïve” construction methodology, meaning that the rules by which they are put together should not require any exceptional knowledge of a market or its constituents, and the method by which the indexes’ constituents are selected should be free of subjectivity.²

In addition, the Russell 3000’s size components—the Russell 1000 and Russell 2000—were the first indexes to segment the broad US equity market into large cap and small cap stocks in a manner consistent with the way professional money managers invest (see Figure 1). With the launch of the Russell 2000, Russell Investments identified and created a revolutionary index representing the small cap segment of the US equity market. As of December 2022 (nearly four decades after their launch) Russell US Indexes were used as performance benchmarks for 9.2 trillion of US equity benchmarked assets.³

Figure 1: Russell 1000 + Russell 2000 = Russell 3000



Source: FTSE Russell. Data as of April 28, 2023. Russell Index constituents represent the preliminary reconstitution constituents as of rank day, April 28, 2023, which were effective after market close on June 23, 2023. May not equal 100% due to rounding.

FTSE Russell still recognizes the fundamental need for an index to provide a complete picture of the desired market segment, investment strategy or exposure it is measuring. This belief forms the basis for the design of each Russell index, whether its intended use is as a performance benchmark or as the basis of an investment strategy.

To ensure the accurate and comprehensive market representation provided by the Russell 3000, it is critical to have a process in place to reflect the ever-changing equity markets. Russell’s annual reconstitution addresses this need. Other indexes, such as the S&P 500, may not have any regularly scheduled reconstitution process, whereby all index constituents are re-ranked and evaluated for inclusion in the index on the same rank date.

² For more on the principles behind the Russell Indexes’ methodology, see ‘Building a better benchmark’, FTSE Russell, June 2021.

³ Data as of December 31, 2022 as reported on April 1, 2023 by eVestment for active institutional funds, Morningstar for active retail mutual funds, insurance products, and ETFs, and passive assets directly collected by FTSE Russell. AUM includes blended benchmarks and excludes futures and options. AUM data does not include active and passive assets not reported to a 3rd party source or FTSE Russell. For funds where the AUM was not reported as of December 31, 2022, the previous period AUM was used as an estimate. No assurances are given by FTSE Russell as to the accuracy of the data.

What is Russell Reconstitution?

Russell reconstitution, which occurs every year in June, is a top-to-bottom recalibration of the Russell indexes. It is possibly the most widely followed event in the whole US annual equity market calendar.⁴

The annual reconstitution ensures that the indexes continue to accurately reflect the current state of equity markets and their market capitalization segments (large cap, mid cap, small cap, micro cap), industry breakdowns and style structure.

Reconstitution is closely tracked by professional money managers as they rebalance their portfolios with the goal of minimizing unwanted benchmark risk. Other close observers include brokerage houses, who, in the weeks leading up to reconstitution, prepare for large blocks of trades by researching and reporting on the shifts that may occur, and managing their inventory accordingly. To support these activities, FTSE Russell provides products like the Russell Monitor List (RML), a monthly file containing Russell Nationality data for equities listed on eligible US exchanges, including newly listed companies.⁵

Annual reconstitution also ensures accurate market representation by reflecting the changes that have occurred over the course of each year. Equity markets are continually changing as new companies are listed, existing firms are acquired or merged, successful companies grow from small to mid cap (or from mid cap to mega cap) in size, and other companies shrink or go bankrupt. Specific industries and sectors come into and go out of favor, depending on consumer trends, investor sentiment and market cycles. Political developments can trigger market movements and, as we saw in 2020, unexpected events like the COVID-19 pandemic can cause a major shift in the level of equity markets and in the relative valuations of individual stocks.

Given this continual evolution of the equity markets, the annual Russell reconstitution:

- ensures the Russell Indexes deliver an objective, accurate and transparent view of the US equity opportunity set
- establishes new thresholds for market capitalization size segments
- adjusts where companies lie along the growth/value and defensive/dynamic style continuums

Indexes that lack formal reconstitution protocols may have unintended sector, capitalization and style biases, all of which compromise their ability to represent the market. In turn, such biases complicate asset allocation for investors.

How does Reconstitution work?

The basic steps of Russell reconstitution are illustrated in Figure 2, below. Every year as of the rank day (the last business day in April), all eligible stocks in the US are ranked by total market cap, in descending order.

We start with all US equity securities (around 7,000 individual names), then remove ineligible securities (such as those with a market capitalization below \$30 million or those with inadequate float or liquidity) from the list. This step reduces the list to approximately 5,000 names. The next step captures and ranks the largest 4,000 stocks by total market cap, the largest 3,000 of which form the Russell 3000 Index.

The largest 1,000 stocks in the Russell 3000 become the large cap Russell 1000 Index, and the next 2,000 stocks become the small cap Russell 2000 Index.

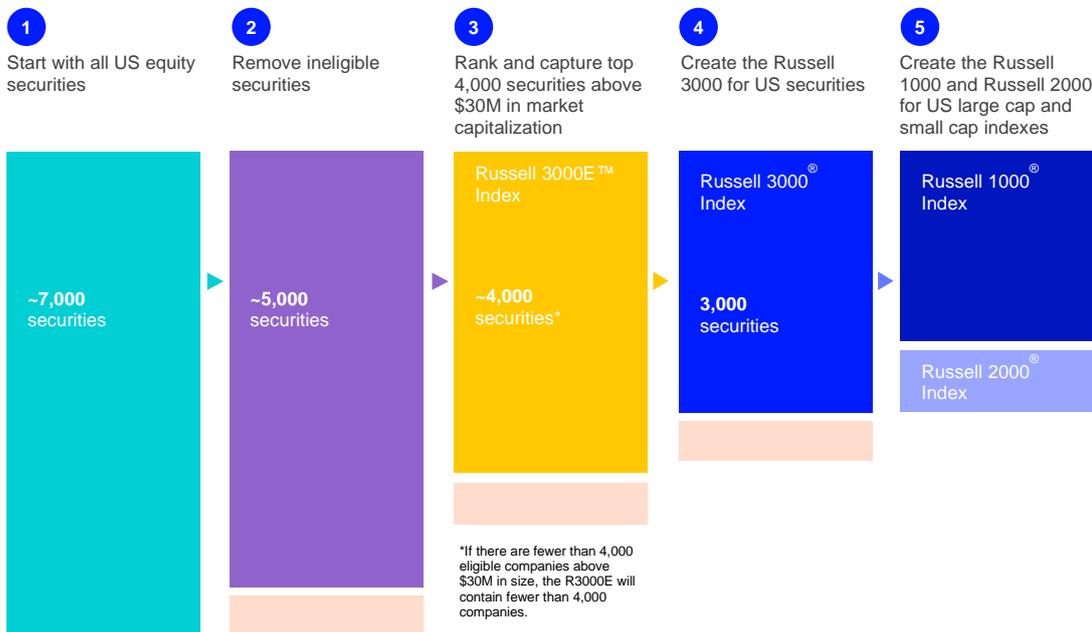
Other indexes (e.g., the Russell Top 50, Russell Top 200, Russell Top 500 and Russell 2500) are formed the same way, thereby creating the entire series of Russell US indexes.

All index constituents are weighted in the index according to their float-adjusted market capitalization.

⁴ See [What to Know About the Annual Russell Index Changes | Nasdaq](#)

⁵ US nationality is a prerequisite for companies to be eligible for Russell index inclusion.

Figure 2: How Russell captures the US equity universe



Source: FTSE Russell.

Representing market cap segments

Allocating the largest 1,000 stocks in the Russell 3000 to the Russell 1000 produces an index that typically represents 90-95 percent of the US equity market. The remaining, smaller 2,000 stocks in the Russell 3000 (i.e., the Russell 2000) typically constitute an index representing around 5-10 percent of the US equity market by capitalization.

In Figure 3 we show how the market cap ranges for the Russell 1000 and the Russell 2000 changed between 2009 and 2023, and how a hypothetical company can move between the two indexes over time.

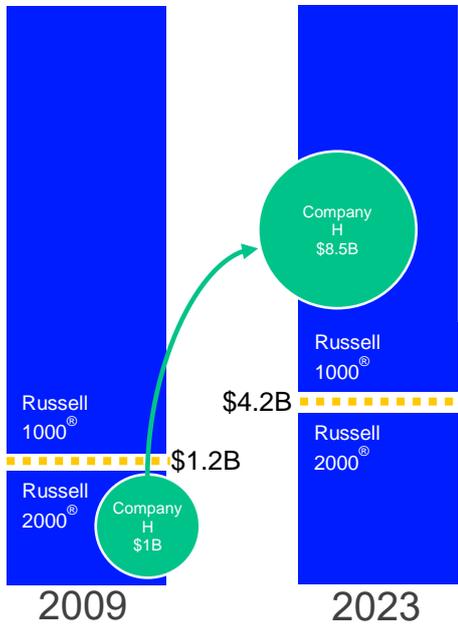
As of the 2009 rank date, the market cap breakpoint between the Russell 1000 and the Russell 2000 was \$1.2 billion. Stocks above this breakpoint were allocated to the Russell 1000 and those below the breakpoint were allocated to the Russell 2000 (in practice, the breakpoint is not an absolute dividing line between the Russell 1000 and 2000, since a “banding” methodology around the breakpoint was introduced in 2007, helping reduce unnecessary index turnover⁶).

As of the 2023 rank date, the market cap breakpoint between the Russell 1000 and the Russell 2000 had risen to \$4.2 billion, reflecting the overall rise in US equity prices since 2009.

A hypothetical US company (“H”) had a market capitalization of \$1 billion in 2009 and was therefore allocated to the Russell 2000 at that time. By 2023, its market capitalization had risen to 8.5 billion, so by now it had become a member of the Russell 1000 index.

⁶ For further information, please refer to the Russell US Indexes construction and methodology document

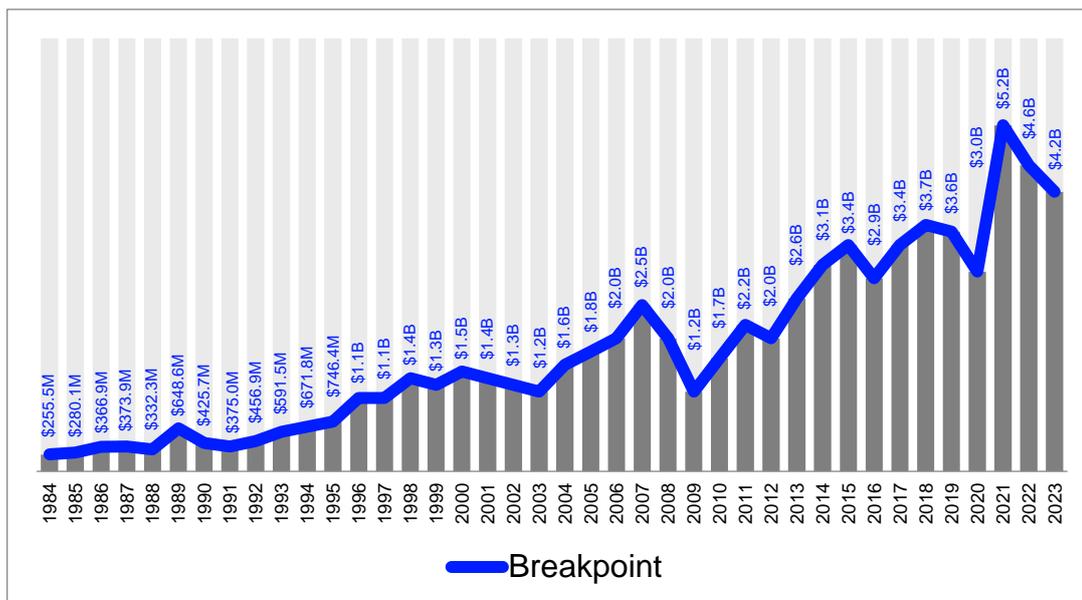
Figure 3: 2009 and 2023 breakpoint between the Russell 1000 and Russell 2000 Indexes



Source: FTSE Russell, data as of "rank day" of each year.

Since the Russell Indexes' creation in 1984, the breakpoint between the Russell 1000 and Russell 2000 has varied dynamically to reflect the shifting valuations of US stocks (see Figure 4). At \$5.2 billion, the 2021 breakpoint was over four times higher than in June 2009, in the immediate aftermath of the global financial crisis, and over 20 times higher than in June 1984, when the Russell Indexes were launched.

Figure 4: Historical breakpoint between Russell 1000 and Russell 2000



Source: FTSE Russell, as of "rank day" each year.

Other index providers may reset market cap segments on an ad hoc basis. For example, there is no formal timescale for the resetting of the S&P US equity indexes' market cap bands. Since March 2017, S&P increased its market capitalization targets eight different times using six different time periods, i.e. on the following dates (and months since the previous update): in February 2019 (23 months), December 2020 (22 months), March 2021 (3 months), June 2021 (3 months), March 2022 (9 months), January 2023 (10 months), July 2023 (6 months) and January 2024 (6 months).

It's hard to envision what the Russell Indexes might look like today in the absence of our reconstitution process.

Figure 5 provides examples of companies that started in the Russell 2000 Index and have since graduated to the Russell 1000. If the Russell Indexes had not been reconstituted to reflect changing market conditions and to capture the growth occurring in these individual companies, the stocks of these companies could have remained in the Russell 2000 long after they grew large enough to become Russell 1000 constituents, distorting the top end of the small cap index and thereby altering the risk/return characteristics of the index. Index providers that do not reconstitute their indexes annually experience these types of distortions among market cap tiers.

Figure 5: Russell 1000 members that started in the Russell 2000

Stock	Added to the Russell 2000	Moved to the Russell 1000 at Reconstitution
Harley-Davidson	12/31/1986	6/29/1990
Amazon.com	6/30/1997	6/30/1998
Nvidia	6/30/1999	6/30/2000
Netflix.com	6/28/2002	6/26/2009
Domino's Pizza	9/30/2004	6/29/2013

Source: FTSE Russell.

Capturing changes in style

The Russell US Style indexes, introduced in 1987, measure the performance of the commonly identified growth and value investment styles.

Growth managers look for stocks that have experienced relatively strong historical growth and that are forecast to have relatively high future growth rates. Value managers tend to look for stocks that are priced cheaply relative to others, expecting their value to rise. An index designed to represent the opportunity sets representing growth and value manager styles must be readjusted to capture significant changes in companies' valuations. The Russell Indexes reconstitution does just this, striking a balance between keeping turnover at bay and representing up-to-date market conditions.

The Russell Style Indexes use three variables, using book-to-price, I/B/E/S 2-year forecast growth and historical 5-year sales per share growth, to determine whether a company is part of the growth or value index.

When company stock characteristics don't allow for an absolute style distinction, the Russell Style Indexes allocate portions of the company's market capitalization to both growth and value (approximately 30% of the Russell 1000 Index's market cap is represented in both the Russell 1000 Value Index and the Russell 1000 Growth Index). However, there is no double-counting: the Russell 1000 Value Index and the Russell 1000 Growth Index always sum to the Russell 1000 Index.

Since their introduction more than three decades ago, the Russell Style Indexes have served as the foundation for a new ecosystem of investment funds. As of December 2022, out of the \$9.2 trillion benchmarked to the Russell Indexes, \$6.3 trillion were benchmarked to the Russell Style Indexes.⁷

⁷ Data as of December 31, 2022 as reported on April 1, 2023 by eVestment for active institutional funds, Morningstar for active retail mutual funds, insurance products, and ETFs, and passive assets directly collected by FTSE Russell. AUM includes blended benchmarks and excludes futures and options. AUM data does not include active and passive assets not reported to a 3rd party source or FTSE Russell. For funds where the AUM

As an example of how these indexes are constructed, in Figure 6 we show the median book-to-price ratio (B/P) for the Russell 1000, together with the B/P for both Apple and Hewlett Packard between 2015 and 2023. B/P is only one of the three variables used to calculate the Russell Style Indexes, however it accounts for half of the Style score (with the other half comprised of the two Growth variables).

Throughout this period, the B/P of Apple was well below the median Russell 1000 B/P, and Apple was allocated fully to the Russell 1000 Growth Index, rather than to the Russell 1000 Value Index. However, in one year (2016) the Apple book-to-price ratio was closer to the Russell 1000 median and Apple received less than a full weighting (91.6%) in the Russell 1000 Growth Index, with a small (8.4%) weighting in the Russell 1000 Value Index.

By contrast, during the period the Hewlett Packard's book/price ratio was consistently above the Russell 1000 median and this stock received a full weighting in the Russell 1000 Value Index.

Figure 6: Apple and HP Book/Price ratios and Russell 1000 Growth/Value index membership

	Apple Growth % / Value %	Apple B/P	Hewlett Packard Growth % / Value %	Hewlett Packard B/P	Russell 1000 Median B/P
2015	100 / 0	0.172	0 / 100	0.436	0.277
2016	91.6 / 8.4	0.238	0 / 100	0.993	0.278
2017	100 / 0	0.169	0 / 100	1.007	0.253
2018	100 / 0	0.137	0 / 100	1.028	0.235
2019	100 / 0	0.131	0 / 100	0.985	0.234
2020	100 / 0	0.057	0 / 100	1.302	0.180
2021	100 / 0	0.033	0 / 100	0.781	0.145
2022	100 / 0	0.028	0 / 100	1.002	0.172
2023	100 / 0	0.021	0 / 100	1.077	0.187

Source: FTSE Russell.

How has Russell enhanced reconstitution over the years?

Since the inaugural Russell reconstitution in 1984, we have made several methodological enhancements to improve the process (see Figure 7). Many of these enhancements were inspired by the evolving use of the Russell Indexes, and in particular the growth in index-based investing (notably by means of passive investing, such as through ETFs).

As the volume of assets passively tracking the indexes has continued to increase over the years, Russell has taken steps to enable the easier management of reconstitution for those replicating an index, such as index fund and ETF managers.

Some of the key changes to the Russell Indexes' methodology and their dates of introduction were:

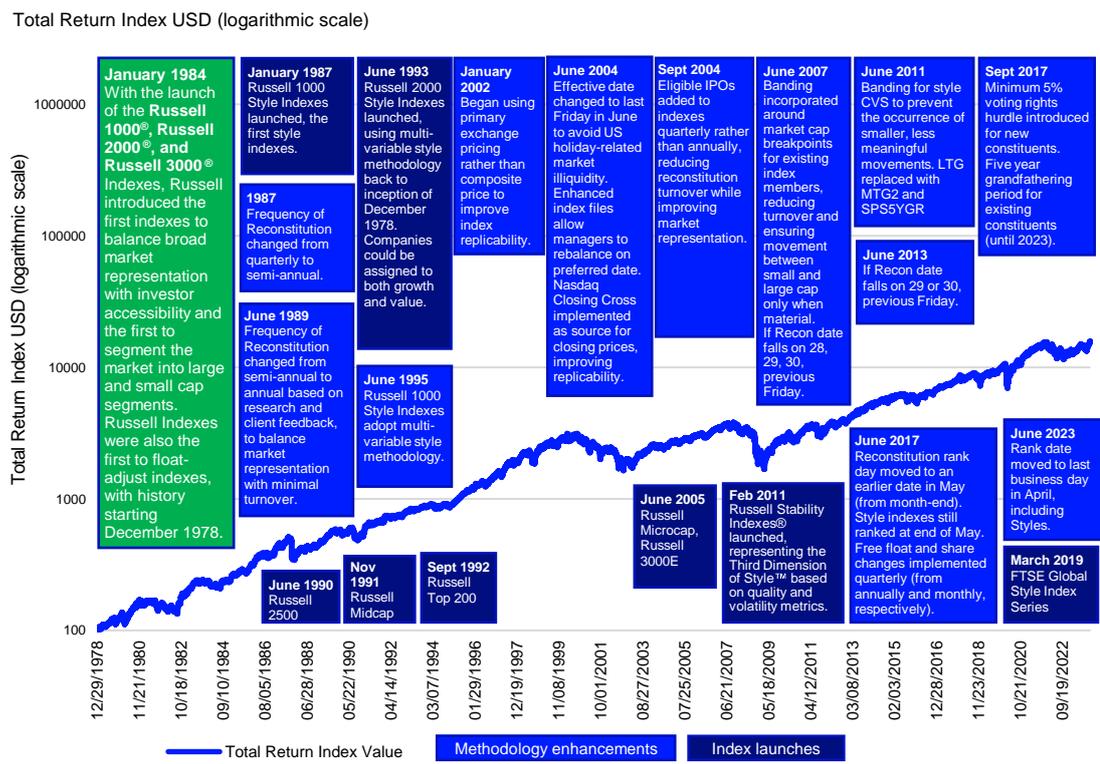
1989 – Frequency of reconstitution changed from semi-annual to annual (prior to this, reconstitution frequency was quarterly at inception in 1984, then reduced to semi-annual frequency in 1987).

2002 – Switch to primary exchange pricing from use of a composite price to improve index replicability.

was not reported as of December 31, 2022, the previous period AUM was used as an estimate. No assurances are given by FTSE Russell as to the accuracy of the data.

- 2004** – Eligible IPOs added to indexes quarterly, beginning September (previously added at reconstitution only).
- 2004** – Nasdaq Closing Cross introduced as source for closing prices, improving replicability.
- 2004** – Reconstitution date changed to last Friday in June (previously June 30th).
- 2007** – Introduction of banding around market cap breakpoints for existing index members, reducing turnover.
- 2007** – Reconstitution date changed to last Friday in June unless it falls on the 28th, 29th or 30th, then move to the previous Friday.
- 2011** – Introduction of banding for style assignment to prevent the occurrence of smaller, less meaningful movements.
- 2013** – If reconstitution date falls on June 29 or 30, then move to the previous Friday, i.e. 4th Friday in June.
- 2017** – Reconstitution rank day moved to an earlier date in May.
- 2017** – Free float and share updates implemented quarterly (previously annually and monthly, respectively).
- 2017** – Minimum voting rights requirement introduced across FTSE Russell equity indexes.⁸
- 2023** – Reconstitution rank day moved from May to end-April, and preliminary announcement day moved from June to May.

Figure 7: Russell Indexes and Reconstitution—Timeline of enhancements



Source: FTSE Russell, December 29, 2023. Past performance is no guarantee of future results. Please see the end for important legal disclosures.

⁸ See 'Minimum Voting Rights Hurdle: Update to Ground Rules', FTSE Russell, 25 August 2017

Conclusion

Annual reconstitution is critical to an index's accurate representation of the market or market segment it is intended to capture. Think back to our example of Apple and the incredible increase in market cap the company has recorded since 1984. Its achievement has been mirrored by the US stock market as a whole, which has also experienced tremendous growth over the last four decades.

Without a system in place to regularly account for (and adapt to) this kind of growth, the Russell Indexes would be stuck in the 1980s. As exciting and revolutionary as that decade was, most of us would prefer the modern world of mobile, streaming video on demand to that old, clunky VCR.

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