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# Why Have Small Caps Lagged Amid Economic Growth and Recovery?

Morningstar Indexes' analysis questions the conventional wisdom about small-cap stocks and asks whether they're still worth the trouble.

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Small-cap stocks are economically sensitive; they rally in recoveries and lag heading into recessions.

If only investors had a nickel—or better yet a share of large-cap stock—for every time they've heard this old saw. Small caps have badly lagged the broad U.S. equity market for years now, even during periods of growth and recovery. The Morningstar US Small Extended Index,<sup>1</sup> which includes the smallest 10% of stocks by market capitalization, hasn't meaningfully outperformed in a calendar year since 2016.

This is an asset class that is supposed to possess a long-term performance advantage. Decades ago, Nobel Prize-winning economists identified a "small-cap effect," the idea that smaller stocks compensate for their riskiness. These days, investors can be forgiven for wondering if small caps are worth the trouble.

What can Morningstar equity indexes tell us about the past and future of small-cap investing?

## Key Takeaways

- ▶ Not only have small caps underperformed the broad U.S. equity market for the one-, three-, five-, 10-, 15-, and 20-year periods, but they have also lagged during periods of economic growth and recovery, including the postpandemic era. This defies a common investment assumption.
- ▶ Lighter exposure to technology and higher exposure to "Old Economy" sectors have disadvantaged small-cap stocks relative to the broad market and their larger counterparts. Small caps have not reaped the full rewards from trends like digitization and artificial intelligence.
- ▶ Small-cap stocks now look cheaper relative to the market than at any other point for 20 years from a price/earnings perspective. The years of small-cap outperformance before the 2008 financial crisis seem a distant memory at this point.
- ▶ Morningstar Equity Research currently sees small caps as the most attractive U.S. size segment.
- ▶ Morningstar data shows that active management has been more successful in small caps, a sprawling and diffuse asset class, where profitability issues are common.
- ▶ The Morningstar US Small-Mid Cap Moat Focus Index represents a selective approach to identifying companies lower down the capitalization ladder with durable competitive advantages and attractive valuations.

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<sup>1</sup> For a full discussion of index methodology, see: [Construction Rules for the Morningstar US Market Extended Index](#)

### What Happened to the Small-Cap Effect?

Rolf Banz of the University of Chicago is typically credited for first identifying small-cap stocks' historic performance advantage.<sup>2</sup> A decade after this 1981 research, Fama and French showed that U.S. small caps had beaten large caps by a wide margin since 1927.<sup>3</sup> Explanations for the premium are typically rooted in risk. Smaller, less-liquid, less-proven companies are more volatile than their larger cousins and should compensate investors for the extra risk they bear.

The "small-cap effect" identified by the academics has birthed an asset class tracked by trillions in investor capital. Active managers claim that the smaller section of the market is less studied and less efficient, offering more alpha opportunities than large caps. Passive strategies provide exposure to the "size factor," in a low-cost systematic fashion. Investment marketers love to tell us such cliches as "good things come in small packages" or tout "big opportunities for small fry."

Small caps have gone through several cycles over the past 25 years. In the technology-, media-, and telecom-obsessed market of the late 1990s, they badly lagged large caps. But when the dot-com bubble burst in 2000, small caps lost far less than the broad equity market, and then they trounced their larger counterparts for years. The period preceding the financial crisis of 2008 was characterized by small-over-large, value-over-growth, and non-U.S. equities, especially emerging markets, on top.

Small caps soared during the recovery of 2009-10. But the trends of the early 2000s eventually reversed, as displayed in Exhibit 1. Large caps took over leadership from small, growth-trounced value, and U.S. equities reigned supreme.

#### Exhibit 1 U.S. Small Caps Shone in the 2000-08 Period but Have Struggled Since



Source: Morningstar Direct. Data as of Aug. 31, 2023. Morningstar US Small Cap Extended Index and Morningstar US Market Extended Index performance is expressed in total-return USD terms. The indexes' performance history displayed here includes back-cast returns.

2 Banz, Rolf. "The Relationship Between Return and Market Value of Common Stocks." *Journal of Financial Economics*. 1981.

3 Fama, Eugene and French, Kenneth. "Common Risk Factors in the Returns on Stocks and Bonds." *Journal of Financial Economics*, Vol. 33. 1993.

While the small-cap index has badly lagged for the trailing three-, five-, 10-, 15-, and 20-year periods, it's useful to examine how it has fared during different economic environments. Small caps are widely perceived to be more economically sensitive than their larger counterparts. They are more domestically focused and less diversified in their business lines than large caps, and they are thought to have more exposure to interest rates, consumer demand, and commodities prices. "When recessions end, small caps have led the way" is a commonly heard investment insight. Yet, as displayed in Exhibit 2, the record over the past 15 years, across different economic environments, is decidedly mixed.

**Exhibit 2** U.S. Small Caps Have Not Consistently Led During Periods of Economic Growth and Recovery

Year	U.S. GDP Growth %	Small Cap Index Return %	Broad Equity Market Return %
2008	0.1	-36.27	-37.05
2009	-2.6	40.07	28.82
2010	2.7	28.75	17.09
2011	1.5	-4.41	1.38
2012	2.3	16.75	16.28
2013	1.8	39.75	33.43
2014	2.3	5.98	12.64
2015	2.7	-5.13	0.53
2016	1.7	20.84	12.69
2017	2.2	14.56	21.28
2018	3.0	-11.60	-5.17
2019	2.3	25.83	31.14
2020	-2.8	16.87	20.93
2021	6.1	16.49	25.63
2022	2.1	-19.26	-19.48
2023	2.4 (Q2)	11.00 (YTD)	18.20 (YTD)















Source: FRED Database for U.S. Economic Growth Rate. Morningstar Direct for Index data. Data as of Aug. 31, 2023. Morningstar US Small Cap Extended Index and Morningstar US Market Extended Index performance is expressed in total-return USD terms. The indexes' performance history displayed here includes back-cast returns.

Small caps fell in line with the broad equity market in 2008, then outperformed in 2009-10 as the market anticipated, and then experienced, economic recovery. Through years of moderate economic growth in the 2010s, small caps rarely outperformed. When the pandemic began in the first quarter of 2020, small caps fell further than the market, but they lagged during the bounceback. They've also lagged during the equity rebound of 2023, as the economy has defied forecasts of both hard and soft landings. Clearly, small caps don't always rally during periods of growth and recovery.

So, what accounts for small caps' travails? Low interest rates after the financial crisis were thought to be a boon to fast-growing large caps. But 2023 has challenged this explanation, as large stocks have thrived despite high rates. In 2016, it was postulated that the long-running popularity of growth over value and large over small "reflected a risk-averse, weak economic environment where investors favored established companies possessing secular growth drivers."<sup>4</sup> How then to explain small-cap underperformance in 2021 when the economy grew 6%? Some have speculated that asset owners are allocating to private-market assets instead of small caps. Morningstar's John Rekenhaller once invoked income inequality to explain large-cap growth dominance.<sup>5</sup>

It's worth examining the small-cap segment's fundamental characteristics, primarily sector exposure. Exhibit 3 shows that smaller caps are lighter on technology than the market overall, but heavier in industrials, real estate, financial services, and consumer cyclicals.

**Exhibit 3** Small Caps Have an Old Economy Orientation Compared With the Equity Market Overall

Sectors	Morningstar US Small-Cap Index	Morningstar US Equity Market Index
 <b>Cyclical</b>		
 Basic Materials	4.04	2.44
 Consumer Cyclical	13.75	11.15
 Financial Services	14.27	12.28
 Real Estate	7.42	3.02
 <b>Sensitive</b>		
 Communication Services	2.94	8.08
 Energy	5.46	4.45
 Industrials	17.26	9.29
 Technology	16.24	28.02
 <b>Defensive</b>		
 Consumer Defensive	3.76	5.94
 Healthcare	12.75	13.00
 Utilities	2.06	2.38

Source: Morningstar Direct. Data as of Aug. 31, 2023. Morningstar US Small Cap Extended Index and Morningstar US Market Extended Index performance is expressed in total-return USD terms. The indexes' performance history displayed here includes back-cast returns.

<sup>4</sup> Lefkowitz, Dan. "2016 vs. 2015: A Stock Market Flip-Flop in 5 Charts." Jan. 8, 2017. <https://www.morningstar.com/markets/2016-vs-2015-stock-market-flip-flop-5-charts>

<sup>5</sup> Rekenhaller, John. "Why Growth Stocks Are Winning?" Nov. 12, 2020. <https://www.morningstar.com/portfolios/archives-why-growth-stocks-are-winning>

Performance attribution conducted in Morningstar Direct research software shows the biggest detractor for the small-cap index over the past 15 years has been its lighter exposure to technology, which has been the best-performing sector of the market by a long shot since the financial crisis. Then there's the omission of some of the market's biggest tech-related winners. The FANG acronym was coined back in 2013 to refer to a small cohort of superstar mega-cap growth stocks: Facebook (now Meta), Amazon.com, Netflix, and Google (now Alphabet).

Ten years later, we are still talking about such a clique, though it's now referred to as the "Magnificent 7." Netflix is out. Tesla, Apple, Nvidia, and Microsoft are in. The seven behemoths were collectively responsible for nearly three quarters of the market's gain for the first half of 2023. Whether their shares are overvalued or not, their growth and profitability are undeniable. It has been an age of digitization, when many of the transformations projected by the 1990's dot-com bubble have come to fruition. Artificial intelligence has been the key theme of 2023.

Meanwhile, the heavily represented small-cap sectors have badly lagged in recent years. Energy is the worst-performing sector in the U.S. equity market over the trailing 15 years, thanks to years of weak oil prices. Real estate, which claims twice the weight in the small-cap index as the broad market, is the second worst performer. Brick-and-mortar retail woes and postpandemic changes to commercial property are to blame. Materials, financials, and industrials—all heavily represented in small caps—have trailed a tech-obsessed market since the financial crisis.

It's helpful to examine 2016, the last year the small-cap index beat the market. Old Economy stocks enjoyed a so-called "Trump Bump" after the November election. The president had campaigned on tax cuts, regulatory rollbacks, infrastructure spending, a protectionist trade policy, and economic growth above 4% (the U.S. economy never grew more than 3% per year during the Obama years). Economically sensitive, domestically oriented companies in sectors like energy, basic materials, and financial services soared. But market leadership quickly rotated, as agenda items like infrastructure spending failed to advance.

Meanwhile, the very notion of a size-related performance advantage has been called into question. In a January 2014 article<sup>6</sup> "Does the Small-Cap Premium Exist?," Morningstar's Alex Bryan concluded that: "since the early 1980s, the small-cap premium has diminished" and "Even if the premium still exists, it is unreliable at best." Investors who shifted from small-cap to large-cap U.S. stocks after reading Bryan's article were rewarded in the decade that followed.

What about now? While we wait for decades' more data to help validate the efficacy of the size premium, does allocating to small-cap stocks make sense in the current environment?

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<sup>6</sup> Bryan, Alex. "Does the Small Cap Premium Exist?" Jan. 22, 2014. <https://www.morningstar.com/articles/631329/does-the-small-cap-premium-exist>

### Small Caps Are Attractively Valued

Cyclicality is inherent to markets. Small caps underperformed in the 1990s, outperformed in the 2000s, then underperformed in the 2010s. Perhaps this is just an extended cycle and small caps will rotate back into leadership. Fans of value stocks and ex-U.S. equities have been similarly frustrated since the financial crisis.

Valuations are clearly supportive of small caps (as they are for value and ex-U.S. stocks). Exhibit 4 displays the current gap between the broad U.S. equity market and its small-cap segment in terms of price/earnings. The Morningstar US Small Cap Extended Index traded at more than a 40% discount to the broad market as of Aug. 31, 2023. It's a gap not seen for more than 20 years. Keep in mind, the small-cap index traded at a premium to the market, not just during the small-cap boom in the years preceding the financial crisis, but also for several years after 2008.

**Exhibit 4** The Valuation Gap Between Small Caps and the Market Resembles the Late 1990s/Early 2000s



Source: Morningstar Direct. Data as of Aug. 31, 2023. Morningstar US Small Cap Extended Index and Morningstar US Market Extended Index price history displayed here includes back-cast returns.

Of course, just because small caps are cheap relative to their history does not mean a rebound is imminent or inevitable. The following two situations are examples of this, where it took gold more than 25 years to recover its 1980 peak, and Japanese equities have come nowhere near the heights they reached in 1989.

This is where forward-looking valuation work based on company-level cash flow projections is useful. Morningstar Equity Research, which covers roughly 800 U.S. stocks across the market capitalization spectrum, sees real upside potential in the small-cap segment of the U.S. equity market. It may take time before this potential is realized, but when stock-specific fair value estimates assigned by Morningstar analysts were aggregated, small caps appeared to be 20% undervalued as of the end of August 2023.

Their large-cap counterparts traded at just a 2% discount to their intrinsic worth.<sup>7</sup> A caveat must be issued: Valuation is a poor timing device; it can take years for share prices and fair values to converge.

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**Exhibit 5** Small Caps Are the Cheapest Size Segment of the U.S. Equity Market

**Morningstar Equity Research Price/Fair Value by Stock Size**

(1.00 = Fair Value)



Source: Morningstar. Data as of Aug. 31, 2023.

After the past several years, many investors have a large-cap bias to their portfolios. Popular U.S. stock benchmarks tracked by passive strategies often ignore small caps entirely. According to Morningstar Direct Asset Flow data, \$12.1 trillion in investor capital worldwide resides in strategies focused on U.S. large-cap equities strategies, whereas U.S. small caps have just \$1 trillion in assets. This ratio is out of proportion to small caps' share of the equity market, which is 10% as defined by Morningstar.

It can be difficult to maintain an allocation to portfolio laggards. Investors calculate how much better they would have done if they were fully exposed to winners and chased performance habitually. Yet, in a diversified portfolio, some asset classes are always underperforming. Spreading one's bets is a sensible response to uncertainty.

Market inflection points arrive unexpectedly and can be violent. If the cycle turns, as it did in the early 2000s after the dot-com bubble burst, small caps will play a useful role in a portfolio. As with most asset classes, a low-cost, broad-based index-tracking strategy is a sensible route to small-cap exposure.

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<sup>7</sup> Sekera, David. "U.S. Stock Market Looks More Attractive in September Following Pullback." Sept. 5, 2023. <https://www.morningstar.com/markets/us-market-is-more-attractive-following-pullback>

### What About Going Active in Small Caps?

Does stock-picking stand more of a chance in small-cap equities? In theory, the small-cap segment is fertile ground for active management. It's a sprawling and diffuse asset class. The Morningstar US Small Cap Extended Market Index contained 1,735 stocks as of Aug. 31, 2023, with the top 10 representing less than 3% of index weight. The Morningstar US Large-Mid Index, by contrast, contained 671 stocks with its top 10 representing 29% of index weight. Whereas the key determinant of success for many large-cap managers is whether to overweight or underweight the Magnificent 7, performance drivers in small-caps are more disparate. What's more, many small-cap companies are unprofitable. In fact, more than 27% of the small-cap index constituents had negative operating margins in 2022; among large and mid-cap stocks, it was just 8%. So, screening small caps for quality is appealing.

That's all fine in theory, but how has active small-cap management worked in practice? The Morningstar Active/Passive Barometer Report is a semiannual report that measures the performance of U.S. active funds against a composite of index peers in their respective Morningstar Categories. For the 12 months through June 2023, 65% of active U.S. small-cap funds beat their passive peers. As displayed in Exhibit 6, for the trailing 10-year period, the majority of active small-cap managers underperformed. But they fared far better than active large-cap managers. In Morningstar's small-cap blend category, where the Morningstar US Small Cap Extended Index plots, 46% of funds in the lowest cost bracket outperformed.<sup>8</sup>

#### Exhibit 6 Active Managers Have Had Some Success in U.S. Small Caps

Category	1-Year	3-Year	5-Year	10-Year	15-Year	20-Year	10-Year (Lowest Cost) *	10-Year (Highest Cost)
U.S. Large Blend	50.4	41.1	29.5	9.8	9.3	9.1	16.2	5.6
U.S. Large Value	54.2	39.7	29.5	12.0	5.5	16.1	15.0	8.5
U.S. Large Growth	54.5	32.4	30.8	10.1	2.1	4.9	16.3	6.8
U.S. Mid Blend	48.7	56.9	37.2	14.0	16.7	8.7	27.3	3.8
U.S. Mid Value	64.1	40.7	42.9	9.4	11.7	16.2	5.0	9.1
U.S. Mid Growth	56.1	36.8	63.0	46.1	27.3	—	46.3	35.7
U.S. Small Blend	74.7	57.3	43.3	28.3	19.5	23.4	45.9	27.5
U.S. Small Value	57.3	32.8	39.8	33.0	21.9	23.6	28.6	23.8
U.S. Small Growth	62.3	32.4	57.4	45.8	27.9	19.3	47.2	46.3
Foreign Large Blend	57.6	45.6	33.1	26.0	23.9	17.6	40.6	22.2
Foreign Large Value	75.0	37.5	28.7	38.3	23.7	—	47.1	25.0
Foreign Small-Mid Blend	66.7	27.6	25.8	31.8	53.8	—	40.0	40.0
World Large-Blend	44.1	36.2	24.1	10.0	11.4	—	8.3	8.3
Diversified Emerging Markets	57.1	32.1	36.5	35.2	25.6	—	45.5	27.3
Europe Stock	31.3	31.3	30.4	23.8	40.9	19.6	25.0	40.0
U.S. Real Estate	54.8	38.3	63.1	52.9	30.3	24.1	50.0	42.9
Global Real Estate	84.1	78.4	64.3	51.9	33.3	—	36.4	45.5
Intermediate Core Bond	60.0	65.8	33.9	36.7	22.0	13.1	48.1	20.0
Corporate Bond	40.0	24.5	17.3	41.5	53.6	—	33.3	44.4
High-Yield Bond	56.4	45.2	45.6	28.3	—	—	46.4	6.5

Source: Morningstar Active/Passive Barometer September 2023. Data and calculations as of June 30, 2023. \*Green/red shading indicates that active funds in this fee quintile had above/below average success rates.

<sup>8</sup> Jackson, Ryan. "Actively Managed Funds Surprise in Market Rebound." Sept. 11, 2023. <https://www.morningstar.com/etfs/actively-managed-funds-measured-up-well-market-rebound>



The Morningstar US Small-Mid Cap Moat Focus Index targets small- and mid-cap stocks with durable competitive advantages and attractive valuations, based on the forward-looking insights of Morningstar's equity research team. Exhibit 7 displays 15 small-cap stocks included in the index that were trading below their estimated intrinsic value as of the end of August. The companies come from a range of economic sectors and industries but are all among the smallest 10% of the U.S. equity market. Two small-cap technology companies—Guidewire Software and Blackbaud—have recently moved into fairly valued territory, but they would have been on a list assembled a few months back.

**Exhibit 7** Several Small-Cap Stocks Have Competitive Advantages and Attractive Valuations

Small Caps with Moats and Attractive Valuations	Market Capitalization (\$bn)	Sector	Industry
Gentex	7.52	Consumer Cyclical	Auto Parts
Ingredion	6.62	Consumer Defensive	Packaged Foods
Ionis Pharmaceuticals	6.10	Healthcare	Biotechnology
Sensata Technologies	5.68	Sensata	Scientific & Technical Instruments
Comerica	5.52	Financial Services	Banks - Regional
Evercore	5.34	Financial Services	Capital Markets
Asbury Automotive	4.66	Consumer Cyclical	Auto & Truck Dealerships
Harley-Davidson	4.66	Consumer Cyclical	Recreational Vehicles
Boston Beer	4.54	Consumer Defensive	Beverages - Brewers
Stericycle	4.22	Industrials	Waste Management
Equitrans Midstream	4.13	Energy	Oil & Gas Midstream
Adient	3.50	Consumer Cyclical	Auto Parts
Livent	3.30	Basic Materials	Specialty Chemicals
O-I Glass	2.81	Consumer Cyclical	Packaging & Containers
Tripadvisor	2.23	Consumer Cyclical	Travel Services

Source: Morningstar Direct. Data as of Aug. 31, 2023.

### Big Opportunity in Small-Cap Stocks?

Predictions of a small-cap comeback have been coming for several years now. To paraphrase Yogi Berra, the iconic American baseball player: Predictions are hard, especially about the future. Small caps could continue to underperform, and the market's behemoths could dominate indefinitely. But the mere possibility of a leadership rotation should be enough for investors to consider an allocation to small caps. Valuation is a better justification for small-cap exposure than a forecast for economic growth or recovery. ■■

### About Morningstar Indexes

Morningstar Indexes was built to keep up with the evolving needs of investors — and to be a leading-edge advocate for them. Our rich heritage as a transparent, investor-focused leader in data and research uniquely equips us to support individuals, institutions, wealth managers and advisors in navigating investment opportunities across major asset classes, styles and strategies. From traditional benchmarks and unique IP-driven indexes, to index design, calculation and distribution services, our solutions span an investment landscape as diverse as investors themselves.

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