THE DECLINING QUALITY OF SMALL CAPS

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The outperformance of higher-quality small caps relative to lower-quality companies has been well documented, notably in AQR's 2015 paper, "Size Matters, If You Control Your Junk."

The intuition behind this anomaly is straightforward: Lower-quality small caps have less capacity to distribute earnings to shareholders or invest for growth, are more likely to issue shares and, in a worst-case scenario, are more likely to go bankrupt.

The table below shows the performance of 25 portfolios ranked by size and operating profitability (i.e., quality) from the <u>Fama-French</u> Data Library back to 1963. Among the small and smallest portfolios (top two rows), there is significant underperformance for the lowest operating profitability portfolios relative to the other portfolios in their respective size segments.

Fama-French U.S. 5 x 5 Portfolios: Size x Operating Profitability

		Operating Profitability				
		Lowest	Low	Mid	High	Highest
Size Segment	Smallest	8.18%	13.88%	13.12%	13.92%	11.37%
	Small	9.04%	12.20%	12.72%	12.25%	13.64%
	PIM	9.27%	11.96%	12.14%	12.23%	13.78%
	Large	9.58%	11.59%	11.50%	12.26%	13.06%
	Largest	7.07%	8.10%	9.98%	9.68%	11.58%

Source: Fama-French Data Library, 6/30/1963-6/30/2020.

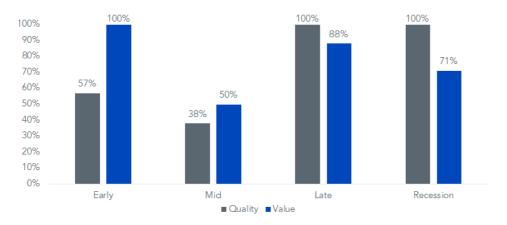
Performance Across Cycles

This long-run outperformance is compelling, but it doesn't capture which market regimes are most conducive to small-quality outperformance.

According to Bank of America Research, high-quality small caps have outperformed low-quality small caps 100% of the time in late-cycle and recession phases over each observation since 1990. Small <u>value</u>, on the other hand, has had its most consistent outperformance in the early stages of an economic cycle.

Small-Cap Quintiles





Sources: FactSet, BofA U.S. Equity & Quant Strategy. Universe of small caps is Russell 2000. Hit rate: % of observations where 1st Quintile performance exceeded 5th Quintile. Small-cap factor group performance during phases of BofA U.S. Regime Indicator (since 1990). From Bank of America Research, "Small/Mid Cap Strategy in Pictures," published on August 26, 2020.

During the current coronavirus-induced recession, high-quality small caps have severely lagged low quality. The outperformers in 2020 have been unprofitable tech and biotech stocks.

Companies with negative <u>return on equity (ROE)</u> have returned 13.03% this year, while the highest ROE quintile has returned -4.91%—albeit still a positive spread of nearly 400 <u>basis points (bps)</u> between the most profitable and least profitable firms when looking at the 1st Quintile versus 5th Quintile.

Russell 2000 Index

Return-on-Equity Quintiles					
1st Quintile	-4.91%				
2nd Quintile	-7.37%				
3rd Quintile	-14.48%				
4th Quintile	-20.13%				
5th Quintile	-8.80%				
Negative Return	13.03%				
Total	-5.53%				

Sources: WisdomTree, FactSet, 12/31/19–8/31/20. You cannot invest directly in an index. Past performance is not indicative of future returns.

Increasing Market-Cap Weights of Negative Earners

The growing importance of negative earners in small-cap indexes has helped propel leverage ratios to all-time highs for the Russell 2000. The highly speculative Pharmaceuticals, Biotechnology, & Life Sciences Industry Group now occupies 13% of the Index, and 90% of the weight in this industry group is in negative-earnings companies—an all-time high.

Russell 2000 - Pharmaceuticals, Biotechnology, & Life Sciences Industry Group





Sources: WisdomTree, FactSet, 6/30/1994–8/31/2020. You cannot invest directly in an index. Past performance is not indicative of future returns.

As an increasing percentage of negative earnings <u>growth</u> companies occupy greater weight in the broad Russell 2000 Index benchmark, we advocate for investors to consider adding a quality filter to small-cap allocations.

Low <u>interest rates</u> tend to favor growth-oriented companies—where far out future profitability looks more attractive on discounted cash flow valuations—but the outperformance of unprofitable growth companies seems to be at an unsustainable extreme.

The <u>WisdomTree U.S. SmallCap Quality Dividend Growth Index</u> selects dividend-paying small caps with high profitability and growth characteristics. This approach significantly mitigates the exposure to negative earners and improves aggregate profitability characteristics.

Index Quality Characteristics

Characteristic	WisdomTree U.S. SmallCap Quality Dividend Growth	Russell 2000
Constituents	224	1,994
Percent Negative Earn	10.59%	35.02%
Return on Assets	1.80%	-0.04%
Return on Equity	10.85%	0.37%
Return on Sales	9.11%	4.06%

Sources: WisdomTree, FactSet, as of 8/31/20. Earnings growth and sales growth based on median growth rates of current Index constituents. You cannot invest directly in an index.

Cyclical Recovery

Equities' recovery from their March lows has been extraordinary. But, as always, the recovery has been uneven.

The winners have been some of the high-growth small caps alongside the FAANG mega caps. This stellar outperformance from the largest companies has led the <u>S&P 500 Index valuations</u> to hit levels unseen since the tech bubble.

The 2.6 price-to-sales ratio for the S&P 500 Index is its highest level since 2002. This compares to a ratio of 1.08x for the Russell 2000 Index, which is far off its high of 1.34x last reached in mid-2018.

The WisdomTree U.S. SmallCap Quality Dividend Growth Index provides an even greater valuation discount, at just 0.90x sales.

For investors looking for <u>multiple expansion during a cyclical recovery</u>, small-cap quality looks far better positioned than both large caps and the broad-based Russell 2000 Index.

Index Price to Sales Ratio





Sources: WisdomTree, FactSet, 4/30/02-8/31/20. You cannot invest directly in an index.

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DEFINITIONS

Quality: Characterized by higher efficiency and profitability. Typical measures include earnings, return on equity, return on assets, operating profitability as well as others. This term is also related to the Quality Factor, which associates these stock characteristics with excess returns vs the market over tim.

Small caps: new or relatively young companies that typically have a market capitalization between \$200 million to \$2 billion.

Fama-French: Refers to a factor-based model to describe stock returns developed by Eugene Fama and Kenneth French. Their original three-factor model breaks down the components of stock returns to market risk, company size and book to market ratio, or value. .

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 tim.

Basis point: 1/100th of 1 percent.

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.

Interest rates: The rate at which interest is paid by a borrower for the use of money.

Mega Cap: Market Capitalization over \$100 Billion.

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.

