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ABOVE THE FRAY

When Tracking Error Is a Fix, Not an Error

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Tracking error is typically measured between an investment strategy and a benchmark index. But benchmark indices have tracking error among themselves. Within US small cap stocks, for example, return dispersion over 12-month periods has exceeded ten percentage points between certain index pairs.

If tracking error is inevitable, why not use it to fix the potential shortcomings of indexing and meaningfully increase expected returns? Broad market and small cap index funds often hold small cap stocks with low profitability[1] or high asset growth[2], which are segments shown by research to underperform the market.[3] Excluding these stocks boosts expected returns in exchange for tracking error. That seems a reasonable tradeoff in the context of what index funds are already incurring relative to one another. After all, we rarely mourn the difference in mineral concentration between regular tap water and delicious filtered water.

Exhibit 1

When Tracking Error Is a Fix, Not an Error

Maximum and minimum 12-month return dispersion among small cap indices, July 2001–December 2022

INDEX 1 \ INDEX 2	Russell 2000 Index	Dow Jones US Small-Cap Total Stock Market Index	S&P United States Small Cap Index	S&P Small Cap 600 Index	MSCI US Small Cap 1750 Index	MSCI USA Small Cap Index	CRSP US Small Cap Index
Russell 2000 Index		-4.53%	-7.75%	-10.14%	-3.20%	-3.70%	-7.17%
Dow Jones US Small-Cap Total Stock Market Index	15.93%		-11.75%	-16.35%	-5.77%	-6.54%	-7.66%
S&P United States Small Cap Index	7.70%	4.70%		-8.13%	-3.37%	-8.77%	-2.58%
S&P Small Cap 600 Index	12.00%	10.49%	13.37%		-8.39%	-8.91%	-14.91%
MSCI US Small Cap 1750 Index	10.85%	5.16%	8.74%	10.58%		-5.89%	-9.15%
MSCI USA Small Cap Index	12.65%	6.20%	14.02%	16.92%	7.19%		-10.42%
CRSP US Small Cap Index	12.94%	4.32%	8.41%	14.54%	4.35%	6.73%	

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Max Outperformance (Index 1 vs. Index 2)

Max Underperformance (Index 2 vs. Index 1)

The sample period shown reflects a common period for which data is available for all indices presented.

Past performance is not a guarantee of future results. All indices are gross dividends.

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1. Profitability is a measure of current profitability, based on information from individual companies' income statements.

2. Asset growth is defined as the change in a company's total assets from the prior fiscal year to the current fiscal year.
3. "The Small Caps That May Be Holding Back Your Portfolio's Returns," Insights (blog), Dimensional Fund Advisors, February 2022.

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