Fundamental Index® strategies: When momentum stumbles

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Key takeaways

- **Irrational investing can lead to unsustainable market momentum,** asset bubbles, and inflection points.
- **As market momentum stumbles after asset bubbles and market inflection points,** Fundamental Index strategies can potentially enhance relative portfolio performance.
- **Amid the fallout from the coronavirus and equity market correction,** now might be an opportune time to consider Fundamental Index strategies.

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When seemingly unexplainable investing behaviors stretch market prices beyond sustainable levels, a bubble is born. Inevitably, these bubbles burst as rational practices return, eventually forcing equities to revert to their longer-term, fundamentally based valuations. Unlike market cap-weighted index strategies that fully mirror the run-up in prices and market whims during periods of irrational exuberance, Fundamental Index strategies may provide comparative diversification benefits by maintaining a lower exposure to the momentum-driven stocks that tend to rise the most during bubble-building periods.

Some important notes regarding our methodology

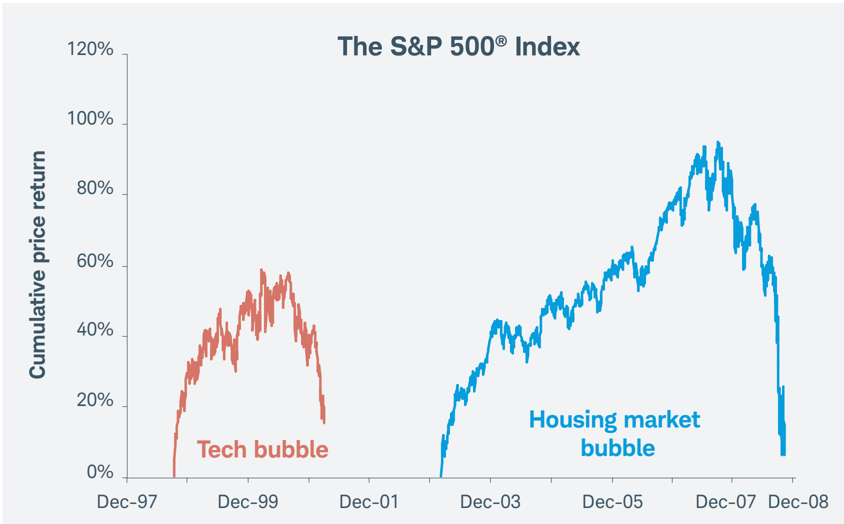
To help inform the suggestions in this paper, we used back-tested performance for Fundamental Index strategies across five major asset classes—using the Russell RAFI™ Index Series—around the time of the tech bubble and the housing market bubble, periods during which these Fundamental Index strategies did not yet exist (their inception date was February 24, 2011), and compared these hypothetical results with the actual performance of market cap-weighted indexes that existed during these bubbles.[1,2] The performance of the same Fundamental Index strategies and market cap-weighted indexes were then compared after the market inflection point from low interest rates[3] using actual results. The five asset classes that we selected included U.S. large-cap stocks (USLC), U.S. small-cap stocks (USSC), international large-cap stocks (INTLLC), international small-cap stocks (INTLSC), and emerging markets stocks (EM). Back-tested performance used for the Fundamental Index strategies is hypothetical, done with the benefit of hindsight, and may not represent what would have actually occurred, or what might happen in the future.[4]

When asset bubbles burst

Two relatively recent market inflection points where equities stretched beyond their justifiable valuations are illustrated in Exhibit 1: The tech bubble and the housing market bubble. The exhibit portrays the unsustainable rise of equities during these periods and the inevitable subsequent fall.

Exhibit 1: Asset bubbles in perspective

The tech and housing market bubbles showed the potential building and bursting of equity valuations when irrational exuberance proves unsustainable.



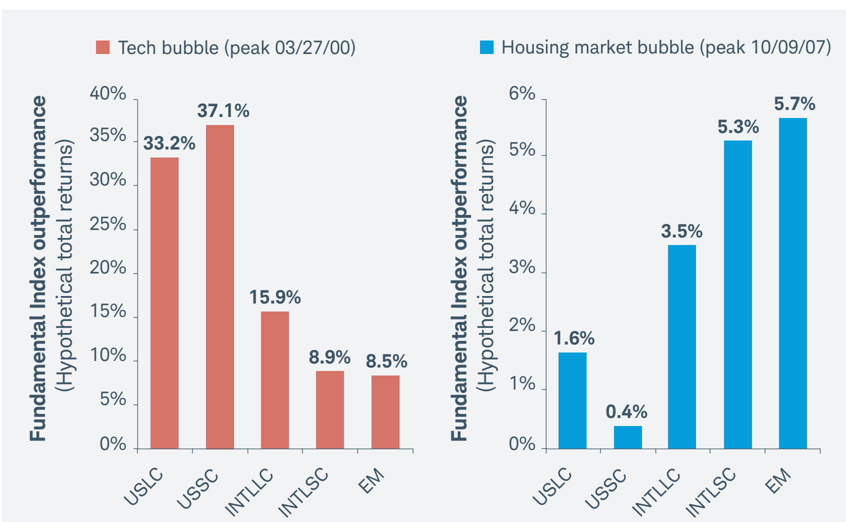
Sources: Charles Schwab Investment Management; Bloomberg. The bubble lines are based on cumulative price returns normalized to a starting value of 0%.
Past performance is no guarantee of future results.

Fundamental Index hypothetical outperformance one year after bubble peaks

Putting the post-period fall after these bubbles burst into further perspective, Exhibit 2 demonstrates the hypothetical, back-tested performance of Fundamental Index strategies compared with market cap-weighted index strategies for the 12-month periods after the equity markets peaked.

Exhibit 2: Fundamental Index performance in post-bubble periods

The 12-month periods after the tech and housing market bubbles peaked illustrated the potential benefits of including Fundamental Index strategies in a portfolio.



Sources: Charles Schwab Investment Management; Bloomberg. Fundamental Index performance represents hypothetical, back-tested total returns for the five Fundamental Index strategies selected minus the actual total returns of their comparative cap-weighted index counterparts during the 12-month periods after the specified bubble peaks.
Past performance—whether hypothetical or actual—is no guarantee of future results.

Fundamental Index support when momentum stops

As Exhibit 2 on the prior page revealed, Fundamental Index strategies would have generated excess returns relative to cap-weighted index strategies after the previously discussed bubbles burst.

Excess returns would have been especially evident in the post-tech-bubble period, illustrating some of the important differences between market cap-weighted and Fundamental Index strategies. As the tech bubble expanded, U.S. tech stock prices rose far beyond their fundamental valuations amid a prolonged period of major outperformance. As a result, tech stocks grew to represent a significant portion of many markets, generally translating into a greater embedded tech sector exposure for market cap-weighted indexes than would have been the case for their Fundamental Index counterparts.

When the tech bubble burst, market cap-weighted index strategies weathered the full brunt of the downturn. However, Fundamental Index strategies would have been comparatively insulated, primarily due to a lower relative allocation in tech stocks. This reduced allocation would have reflected the Fundamental Index approach of relying upon a rules-based discipline to select and weight securities.

Adding value beyond post-bubble periods

The inflection point from the prolonged, historically low interest rate environment in the U.S. to a period of rising rates provided an example of the benefits that Fundamental Index strategies may potentially provide even after less pronounced market corrections. After reducing the federal funds target range to near zero percent in December 2008, the Federal Reserve's Open Market Committee (FOMC) left short-term interest rates historically low until mid-December 2015. At that point, the FOMC announced that the U.S. economy had achieved enough self-sustaining momentum to begin the long process of interest rate policy "normalization," and therefore began raising short-term interest rates.

Exhibit 3 illustrates the rise in U.S. short-term interest rates and the concurrent actual performance of Fundamental Index strategies compared with their market cap-weighted index counterparts. Next to the chart showing the upper limit of the federal funds target range is a bar chart demonstrating the subsequent 12-month outperformance of Fundamental Index strategies.

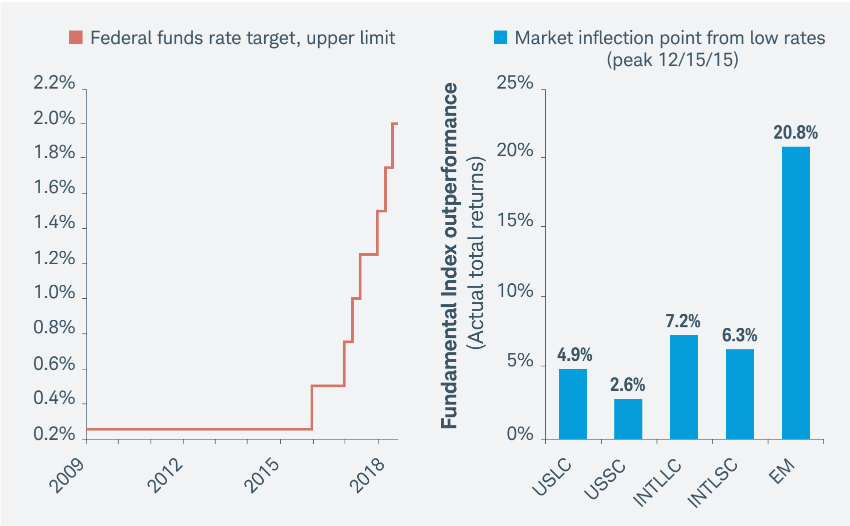


Exhibit 3: Potential Fundamental Index benefits after market inflection points

Fundamental Index strategies outperformed during the 12 months after the market inflection point from historically low U.S. interest rates to a rising-rate environment.

Sources: Charles Schwab Investment Management; Federal Reserve; Bloomberg. Fundamental Index performance represents the actual total returns for the five Fundamental Index strategies selected minus the actual total returns of their comparative cap-weighted index counterparts during the 12-month period after the specified market inflection point peak.
Past performance is no guarantee of future results.

Inflections and bubbles at a glance

Exhibit 4 captures the hypothetical, back-tested performance of Fundamental Index strategies for the 12 months following the tech bubble and housing market bubble peaks, and the actual performance for the 12 months following the peak of the inflection point from historically low interest rates. Actual market cap-weighted index performance over the same periods is provided for comparison.

The 2020 coronavirus inflection point

In the first quarter of 2020, a novel coronavirus struck, ending one of the longest U.S. bull markets on record as the world grappled with a new global pandemic. Slower global growth and the forecasted trickle down effects on everything from corporate profits and CapEx to consumer and investor sentiment sent stocks tumbling, with one leading U.S. stock index after another correcting and Wall Street facing its worst single-day losses since 2008.

Although the coronavirus was the primary catalyst for the selloff, select stocks had been trading at multiples reminiscent of the tech bubble just before the outbreak, which was raising a red flag regarding the sustainability of the market's momentum.

For context, from 2017 to 2019, the FAANG stocks—Facebook, Amazon, Apple, Netflix, and Google—generated three-year cumulative total returns that averaged 129.3%. By comparison, the S&P 500's technology sector garnered an outsized 99.4% return, while the broader index itself generated an impressive but comparatively modest 44.3% total return over the same three-year period. Then came the market correction.

> "The stock market's reaction to the 2020 coronavirus inflection point illustrates that a momentum-based climb may ultimately become unsustainable."
>
> Omar Aguilar, CIO of Passive Equity and Multi-Asset Strategies

We believe that the U.S. stock market's reaction to the 2020 coronavirus inflection point illustrates that a momentum-based climb may ultimately become unsustainable. With this point in mind, we believe that diversification benefits are always worth discussing with clients and that Fundamental Index strategies merit a place in such discussions.

Exhibit 4: Fundamental Index benefits in a post-market-inflection environment

Fundamental Index strategies would have outperformed during the 12-month periods following the tech bubble and housing market bubble, based on hypothetical, back-tested data compared with actual data for market cap-weighted indexes. In addition, Fundamental Index strategies outperformed during the 12-month period after the market inflection point from low rates based on actual data.

Total returns for the 12-month periods following the peaks		USLC	USSC	INTLLC	INTLSC	EM
Tech bubble (peak 03/27/00)	Market cap-weighted index	-21.5%	-20.0%	-23.7%	-15.8%	-36.8%
	Fundamental Index strategy (Hypothetical total returns)	11.7%	17.0%	-7.8%	-6.9%	-28.3%
Housing market bubble (peak 10/09/07)	Market cap-weighted index	-40.6%	-40.2%	-41.5%	-48.0%	-49.6%
	Fundamental Index strategy (Hypothetical total returns)	-39.0%	-39.8%	-38.0%	-42.8%	-44.0%
Market inflection point from low rates (peak 12/15/15)	Market cap-weighted index	13.2%	22.6%	2.8%	5.1%	13.2%
	Fundamental Index strategy	18.1%	25.2%	10.1%	11.4%	34.0%

Sources: Charles Schwab Investment Management; Bloomberg. Actual total returns unless otherwise noted.
Past performance—whether hypothetical or actual—is no guarantee of future results.

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About the author

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Charles Schwab Investment Management

With a straightforward lineup of core products and solutions for building the foundation of a portfolio, Charles Schwab Investment Management advocates for investors of all sizes with a steadfast focus on lowering costs and reducing unnecessary complexity.

[1] We used the following indexes to assess performance in the five major asset classes discussed in this paper:

Asset class	Market cap-weighted index		Fundamental Index
USLC-U.S. Large-cap stocks	S&P 500® Index	vs.	Russell RAFI™ US Large Company Index
USSC-U.S. Small-cap stocks	Russell 2000® Index	vs.	Russell RAFI™ US Small Company Index
INTLLC-International large-cap stocks	MSCI EAFE® Index	vs.	Russell RAFI™ Developed ex US Large Company Index
INTLSC-International small-cap stocks	MSCI World ex USA Small Cap Index	vs.	Russell RAFI™ Developed ex US Small Company Index
EM–Emerging markets stocks	MSCI Emerging Markets Index	vs.	Russell RAFI™ Emerging Markets Large Company Index

[2] For the purposes of this paper, the tech bubble is being defined as the period from 10/08/1998 to 04/04/2001, and the housing market bubble is being defined as the period from 03/11/2003 to 11/12/2008.

[3] For the purposes of this paper, the peak of the market inflection point from low interest rates is being defined as 12/15/2015.

[4] Dividends and capital gains were assumed to be reinvested. Commissions and other fees were not taken into consideration, and if they had, would have reduced performance. Also, historical performance of a back-tested model does not guarantee similar results in the future. All of the calculations were produced by Charles Schwab Investment Management, Inc., with most based on monthly total return data from Bloomberg L.P.

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