MARK MAREX | PRODUCT DEVELOPMENT SPECIALIST

Investing in the Nasdaq-100:

Why an Equal-Weight Version Presents a Tactical Choice

For the Nasdaq-100 Index (NDX), 2019 marked the culmination of an extraordinary decade of performance driven by its constituents' unparalleled growth and innovation. It also coincided with the 20th anniversary of the launch of the QQQ ETF, which tracks NDX and has become one of the largest exchange traded funds in the world. At the end of 2009, NDX was not even a full year into the recovery from the Great Financial Crisis of 2008, which triggered the worst recession in 80 years and one of the all-time scariest bear markets in history. For those who were invested in NDX at year-end 2009, the rewards during the subsequent decade were superb: 372% on a price-return basis, and 430% on a total return basis through year-end 2019.

The index's outperformance of the S&P 500 (SPX) is likely beyond what most financial forecasters could have guessed 10 years ago, and even gives the dot-com bubble of the 1990s a run for its money. The difference now being, of course, that NDX constituents are generally much more mature, diversified companies with exceptional fundamentals – from revenues to cash flow to dividends – underpinning their market valuations. 2020's global pandemic backdrop has supercharged the trend, with the NDX up 25.5% on a total-return basis versus only 2.4% for the SPX, as of July 31, 2020. The question beckons, then: why not continue to be invested in NDX during the next decade?

A Brief History of the Biggest Names in NDX

One can remain optimistic about the future performance of NDX, but it is always useful to look at the historical evolution of the index for some additional context. Doing so reveals a simple truth that is not unique to the Nasdaq-100, or even the US: it is not easy to stay on top.

NDX Top 10	Year-End 1999	NDX Top 10	July 31, 2020
Market Cap ($bn)	**Company Name**	**Market Cap ($bn)**	**Company Name**
602.4	Microsoft Corporation	1817.3	Apple, Inc.
366.5	Cisco Systems, Inc.	1585.2	Amazon.com, Inc.
275.0	Intel Corporation	1552.1	Microsoft Corporation
159.5	Oracle Corporation	1013.5	Alphabet, Inc.
150.6	WorldCom, Inc.	723.2	Facebook, Inc.
130.8	Dell, Inc.	266.6	Tesla, Inc.
125.5	Ericsson	261.1	NVIDIA Corporation
121.8	Sun Microsystems	230.0	PayPal Holdings
116.2	QUALCOMM Incorporated	215.6	Netflix, Inc.
113.9	Altaba, Inc. (fka. Yahoo!)	213.1	Adobe, Inc.

Of the top 10 biggest names in the Nasdaq-100 20 years ago, only one remains there today: Microsoft. Intel and Cisco have migrated just outside the top 10, into 11th- and 12th-biggest, respectively. Oracle and Qualcomm continue to remain market leaders, although Oracle is no longer Nasdaq-listed thus ineligible for index inclusion. Dell has undergone multiple corporate transformations into being privately owned, separated into enterprise-focused vs. consumer-focused units, etc. The rest either faced ignominious ends through corporate scandal or years of painfully drawn-out mismanagement and decline. What about if we look at a few more historical snapshots as a sanity check against the unique nature of dot-com bubble valuations?

NDX Top 10	Year-End 2004	NDX Top 10	July 31, 2020
Market Cap ($bn)	**Company Name**	**Market Cap ($bn)**	**Company Name**
290.5	Microsoft Corporation	1817.3	Apple, Inc.
147.9	Intel Corporation	1585.2	Amazon.com, Inc.
127.2	Cisco Systems, Inc.	1552.1	Microsoft Corporation
104.7	Dell, Inc.	1013.5	Alphabet, Inc.
81.5	Amgen, Inc.	723.2	Facebook, Inc.
77.1	eBay, Inc.	266.6	Tesla, Inc.
69.6	QUALCOMM Incorporated	261.1	NVIDIA Corporation
32.5	Nextel Communications, Inc.	230.0	PayPal Holdings
25.9	Apple, Inc.	215.6	Netflix, Inc.
24.9	Starbucks Corporation	213.1	Adobe, Inc

Nearly five years after the peak of the dot-com bubble, a couple non-Tech constituents reached the top 10 rankings (Amgen, Starbucks) while Apple, eBay, and Nextel (eventually merged with Sprint) climbed into the ranks. Of these new names in 2004's top 10, only Apple remains in the top 10 today. That does not take away from nonetheless impressive performance, with Amgen (currently ranked 16th) up 372% on a total-return basis through July 31, 2020, and Starbucks (ranked 23rd) up 482%. While these companies have grown substantially and tend to support the overall valuation of the index in periods during which Tech underperforms as a sector, they have simply been supplanted by newer, even faster-growing names.

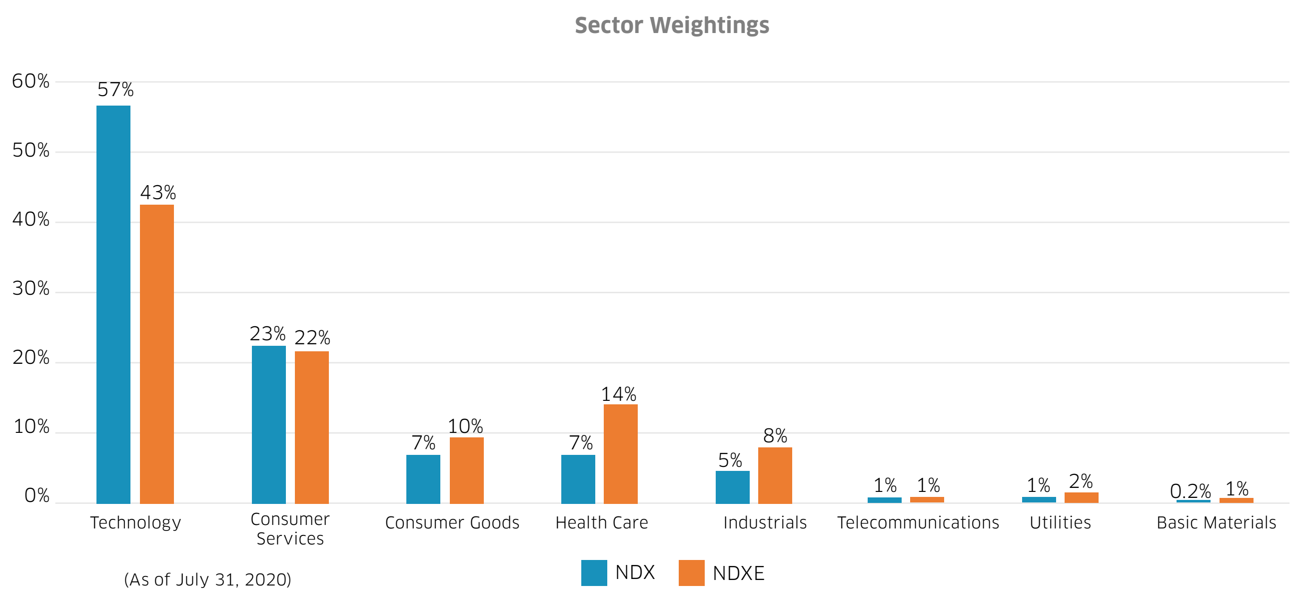
NDX Top 10	Year-End 2009	NDX Top 10	July 31, 2020
Market Cap ($bn)	**Company Name**	**Market Cap ($bn)**	**Company Name**
270.6	Microsoft Corporation	1817.3	Apple, Inc.
196.6	Alphabet, Inc.	1585.2	Amazon.com, Inc.
190.8	Apple, Inc.	1552.1	Microsoft Corporation
137.7	Cisco Systems, Inc.	1013.5	Alphabet, Inc.
122.9	Oracle Corporation	723.2	Facebook, Inc.
112.6	Intel Corporation	266.6	Tesla, Inc.
77.3	QUALCOMM Incorporated	261.1	NVIDIA Corporation
58.2	Amazon.com, Inc.	230.0	PayPal Holdings
51.9	Teva Pharmaceutical Industries	215.6	Netflix, Inc.
37.7	BlackBerry Limited	213.1	Adobe, Inc.

Nearly 10 years after the peak of the dot-com bubble, Alphabet (Google) had emerged as one of the most formidable companies in Tech, BlackBerry reached its peak popularity and began its decline, and Amazon was just getting started in its expansion beyond online bookselling. Meanwhile, Facebook and Tesla had not even publicly listed yet, NVIDIA was about to hit its stride, Netflix was still mostly in the DVDs-by-mail business, Adobe was trading at one-tenth of its current valuation, and PayPal was still a subsidiary of eBay.

Corporations and entire industries go through natural stages of ascent and decline. Some go through multiple such stages and emerge stronger as a result; others fade away into the dustbins of financial history. Why should an investor tracking the Nasdaq-100 care?

Equal-Weighting vs. Market-Cap Weighting

Because NDX is a modified market-cap-weighted index, it essentially “doubles down” on its best-performing constituents. Over the past decade, this has been a good thing for investors, as large-cap Tech has trounced most other corners of the public equity markets. Looking ahead, though, it is useful to keep in mind the context of the historical turnover at the top, especially given today’s outsized weightings to the top 10 NDX firms (57.5% of the index). If an investor is looking to diversify within the universe of the Nasdaq-100, she can consider allocating to NDXE, the equal-weighted version of the NDX. While not proven to be always superior from a return or risk perspective, NDXE offers investors the benefit of maintaining stable, 1%-each weightings to all 100 of NDX’s companies, rebalanced quarterly (as opposed to NDX’s annual rebalancing schedule). This means that, instead of allocating more than half its weight to the top 10 constituents, NDXE allocates only 10%. It also means that, on a sector level, weights are more diversified and less concentrated in Technology.



Finally, it means that there is less of an implicit bet on mega-cap firms in general. Instead of a weighted-average market cap of $755bn, NDXE’s average market cap of $128bn reflects an 83% reduction in the index’s typical constituent size. Practically speaking, it means that if Microsoft, Amazon, or Apple (currently weighted more than 10% each in NDX) were to experience a particularly bad day or month or year (down 20%, for example), the impact of a loss is muted by more than 90%, reducing total portfolio drag.

Of course, all of these selling points are somewhat moot if an investor formulates a reasonable expectation that large-cap Tech will continue to dominate, from both an absolute performance and risk-adjusted return perspective, in the years to come. It certainly has this year: through July 31, 2020, 22.7% (nearly 90%) of NDX's YTD total return of 25.5% was attributable to the top 10 constituents. However, if concerned about the rise of a new regulatory regime in the aftermath of the 2020 elections, or the continuation of anti-globalization forces regardless of the outcome, it may behoove some investors in the Nasdaq-100 to hedge the extraordinary gains of 2020 and the 2010s via an incremental allocation to NDXE, which has nonetheless managed to generate impressive annualized total returns of 16.2% since December 31, 2009, vs. 19.5% for NDX.

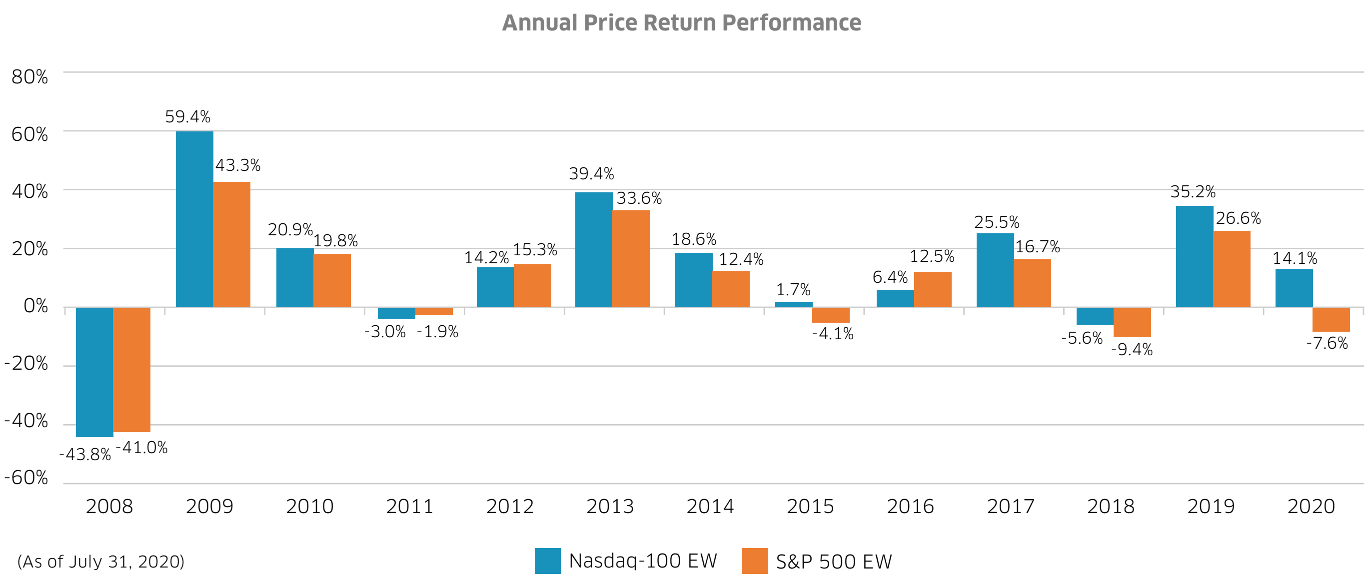
A Quick Note About Dividends

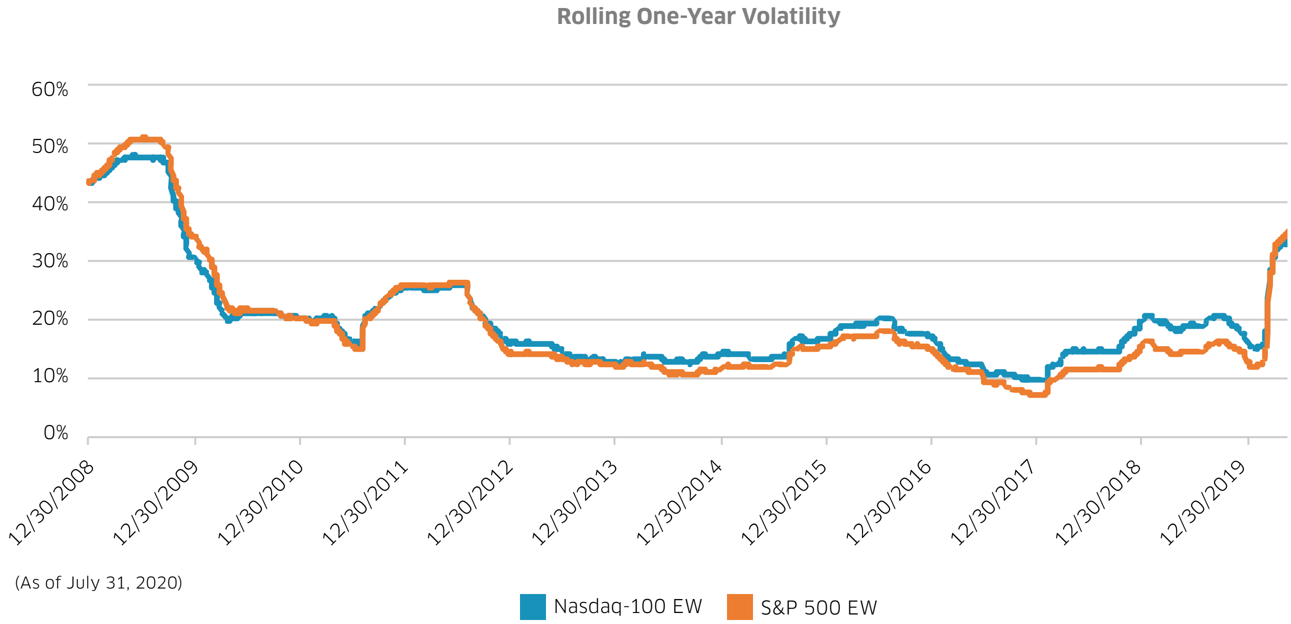
On a total return basis, NDX gained 40.2% in 2019 vs. 38.7% on a price return basis. NDXE, on the other hand, gained 37.4% on a total return basis vs. 35.9% on a price return basis. In both cases, dividends contributed approximately 1.5% to the total return. The return gap from dividends has fluctuated from 19 bps in favor of NDXE in 2010 to 37 bps in favor of NDX in 2013, but has fairly steadily narrowed since then to only 2 bps in 2019.

Comparing NDXE to SPW

In theory, a less concentrated portfolio should also be less volatile. Yet, given the stability of large-cap Tech since the 2008-2009 Financial Crisis, we observe the annualized daily volatility of NDXE to be nearly identical to that of NDX (19.5% vs. 19.6%, respectively, for the period from December 31, 2009 through July 31, 2020). But in 2020 in particular, the more interesting story is the volatility differential between NDXE and SPW (the equal-weighted S&P 500 Index). Despite historically registering generally lower volatility than NDXE, SPW has experienced annualized daily volatility of 46.9% thus far in 2020, vs. only 42.2% for NDXE.

This is despite having exposure to more sectors generally, and 5 times as many constituents. While diversification usually lowers volatility ceteris paribus, the near-total exclusion of highly economically-sensitive, lower-growth sectors such as Energy, Financials, and Materials from the Nasdaq-100 has produced a superior risk-adjusted result for both NDX and NDXE, compared to SPX and SPW. In fact, of the 4 indexes we have discussed, only the equal-weighted S&P 500 remains negative in YTD 2020, with a loss of 6.5% on a total-return basis and a loss of 7.6% on a price-return basis. Thus, even for those investors who have considered SPW a good bet on mean-reversion across market capitalization buckets (i.e. expecting that midcaps will start to outperform large caps), NDXE has offered the more compelling alternative in 2020.





(As of July 31, 2020)

Summary

Investors who recognize the exceptional nature of the Nasdaq-100 may look beyond products tracking NDX, the modified market-cap-weighted index, and consider NDXE – an equal-weighted version with the same underlying constituents, but with a reduced concentration in the biggest firms and the Technology sector more generally. History shows that the extended dominance of market leaders is the exception rather than the rule. Products currently tracking NDXE include the First Trust Nasdaq-100 Equal Weighted ETF (Ticker: QQEW) and the Direxion Nasdaq-100 Equal Weighted Shares ETF (Ticker: QQQE).

Sources: FactSet, Bloomberg, Nasdaq Global Indexes.