Investing in the Nasdaq-100:

How Expensive is "Too Expensive"?

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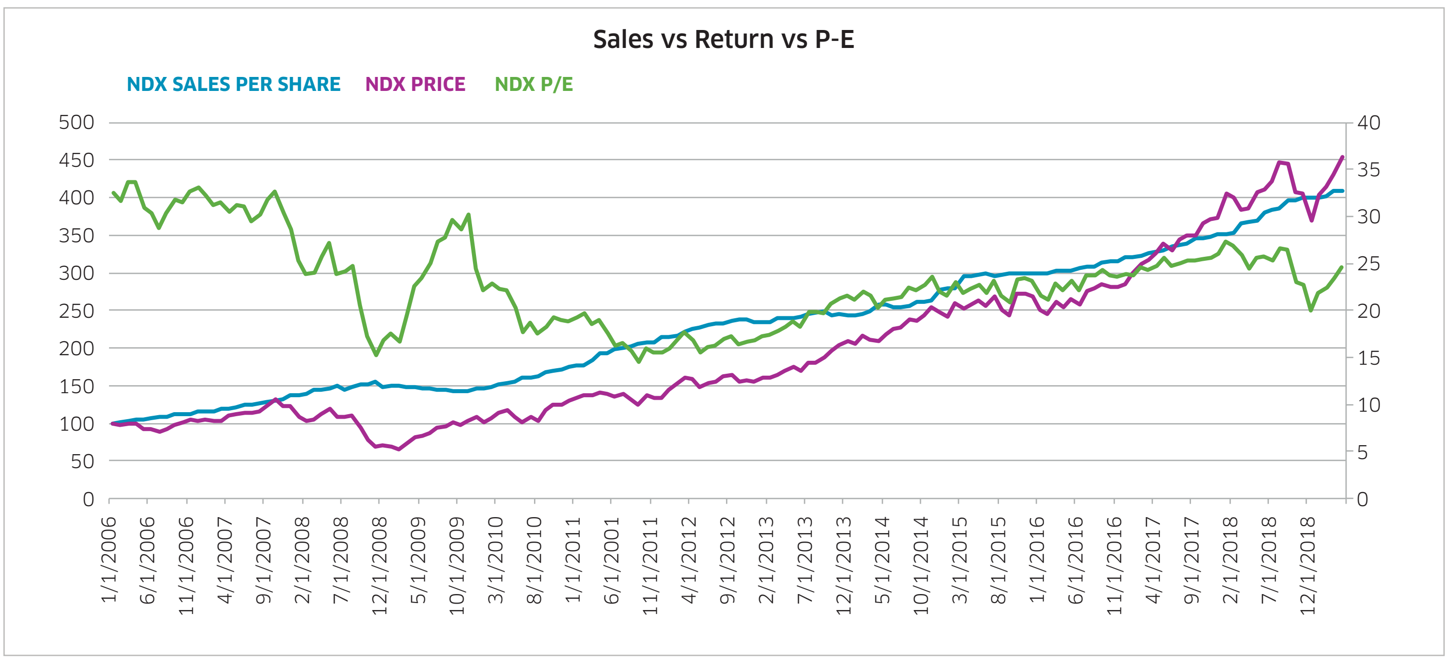
The Nasdaq-100 Index (NDX) has seen some exceptional returns in recent years. As of April 30, 2019, the Index traded at a trailing 12-month price-to-earnings (P/E) multiple of approximately 24.5, vs. the broader S&P 500 at approximately 19.3. Is this valuation justified?

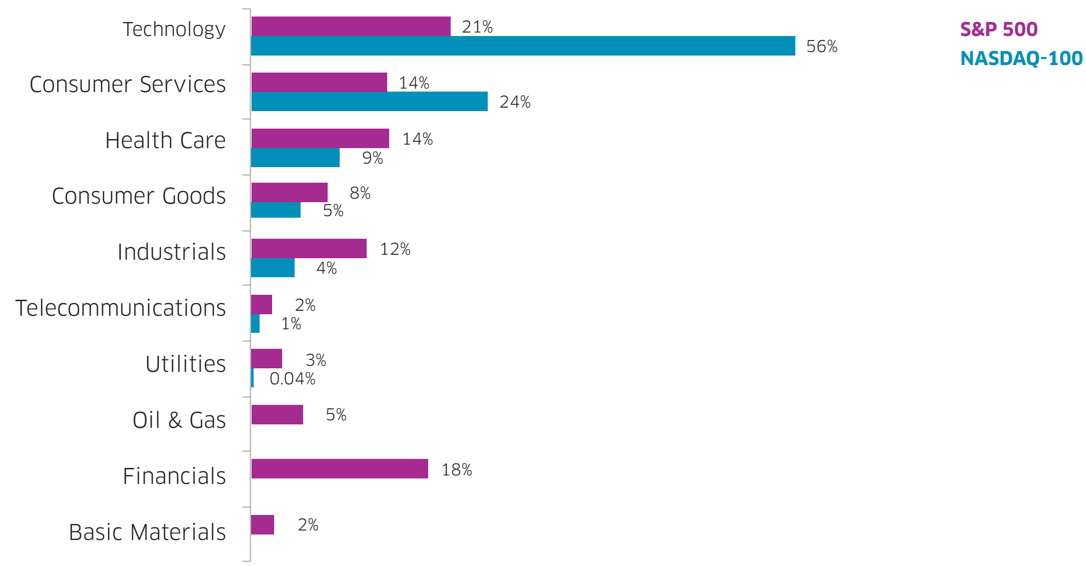
First, we should look at the current valuation relative to what we have witnessed historically. The chart below compares the price performance (not including dividends) of the Nasdaq-100 dating back to January 2006. Over a roughly 13-year period, the price increased by over 350% – which sounds like a lot – until it's compared with the associated increase in Sales per Share, which also grew by over 300%. When viewed in conjunction with the change in P/E over the same period, current valuations look reasonable: in the mid-2000's, the P/E was in a range in the upper-20s to low-30s. Thus, the Index is trading at something close to a 25% relative discount, at a time when the fundamentals of its constituents have greatly improved, and are still accelerating upward.



Strength in Fundamentals, Driven by Sector Exposures

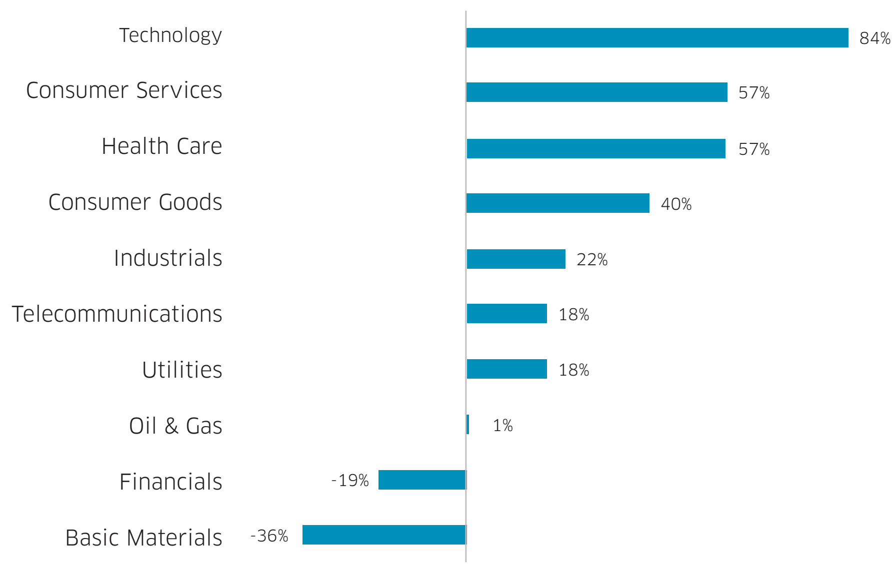
Relative to the S&P 500, the Nasdaq-100 may look a bit expensive. But that is largely by design: the Nasdaq-100 is weighted disproportionately towards high-performing companies in the "new economy," with combined weightings across Technology, Consumer Services and Healthcare totaling approximately 90%. In comparison, the S&P 500's combined weights to these three sectors total approximately 50%, with the rest made up of "old economy" constituents in sectors such as Industrials, Basic Materials, Oil & Gas, and Utilities (as well as Financials, which seem to straddle the "old" and the "new").

Industry Breakdown in Nasdaq-100 and S&P 500 as of December 31, 2018

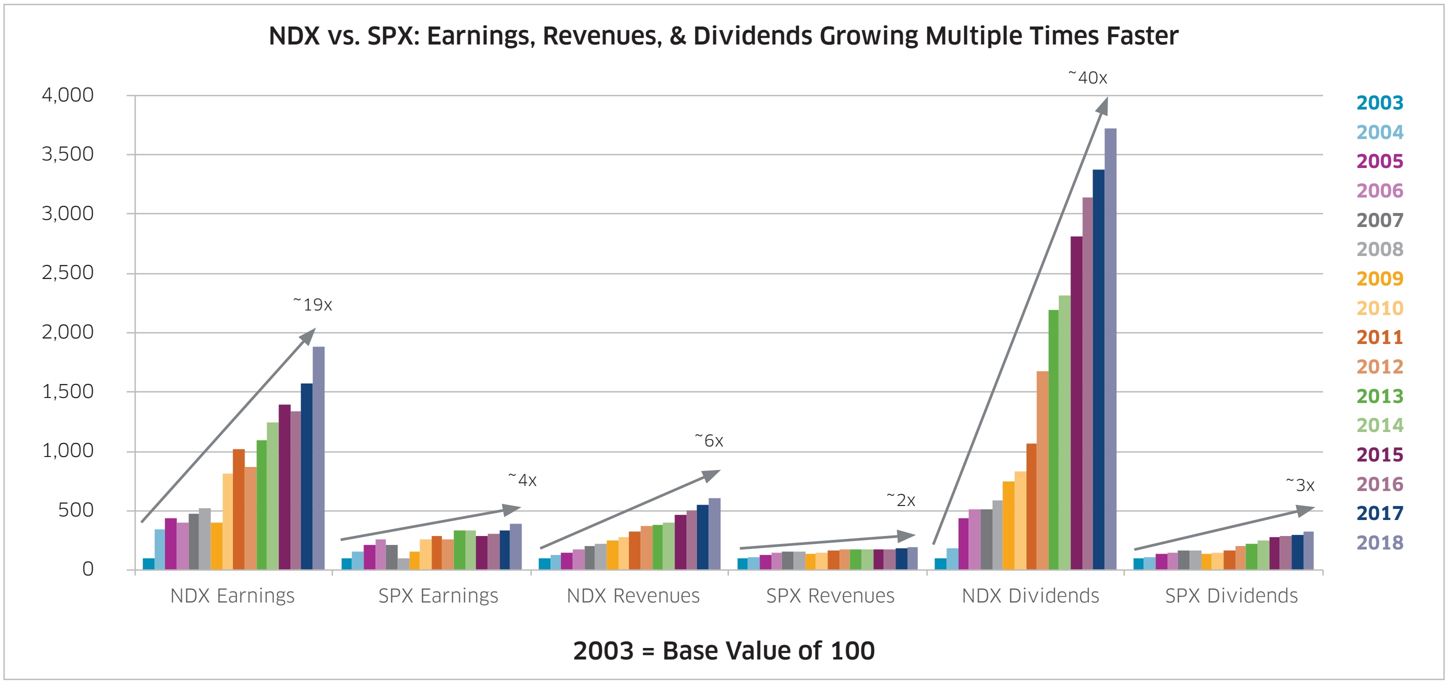


Why does this matter? Because the key fundamental components of valuation in the broader stock market – revenues, earnings, and dividends – have been disproportionately driven by a few key sectors, which happen to be the most heavily weighted in the Nasdaq-100. Revenue growth is a prime example of this disparity across sectors, as shown below:

10-Year Revenue Growth Across Industries in the Nasdaq US Large Mid Benchmark as of Year-End 2018

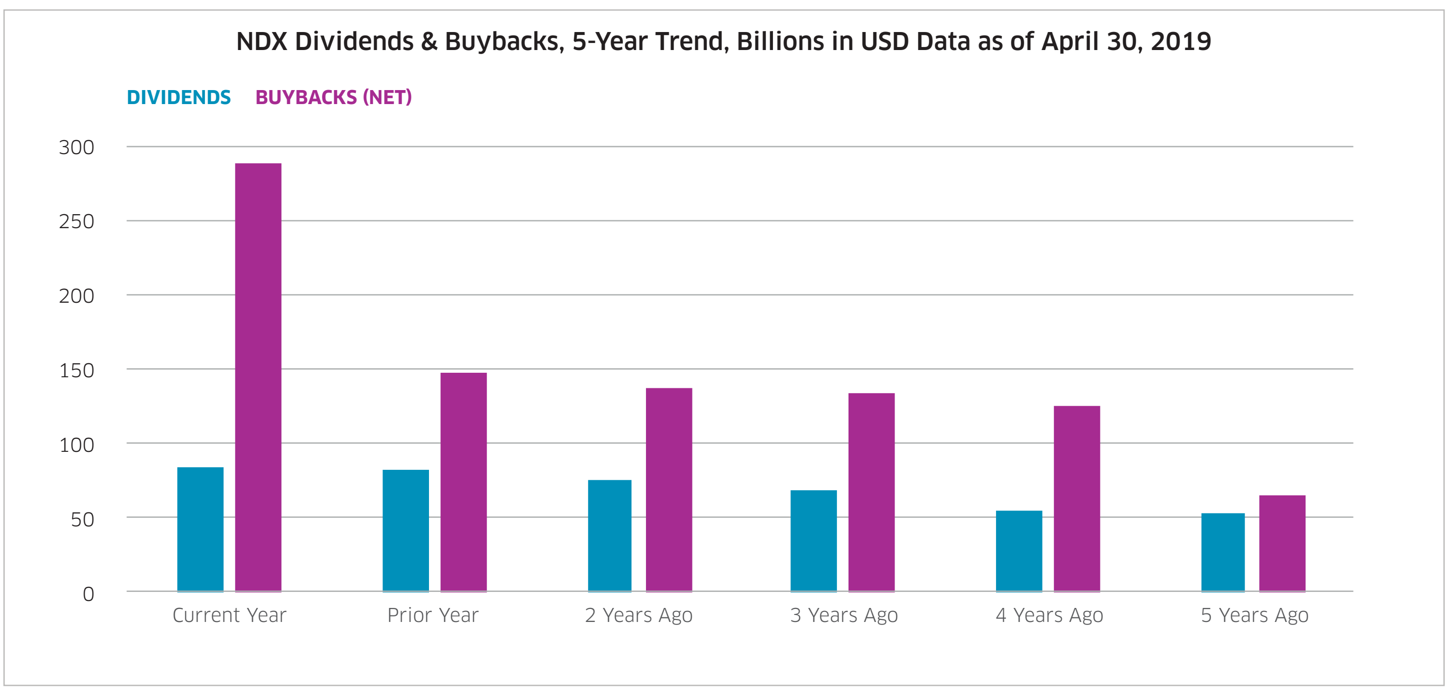


The Nasdaq-100 managed to generate a CAGR of 20% in Earnings, 12% in Revenues and 25% in Dividends since 2003. Compare the trajectory of all three metrics between the Nasdaq-100 and the S&P 500:



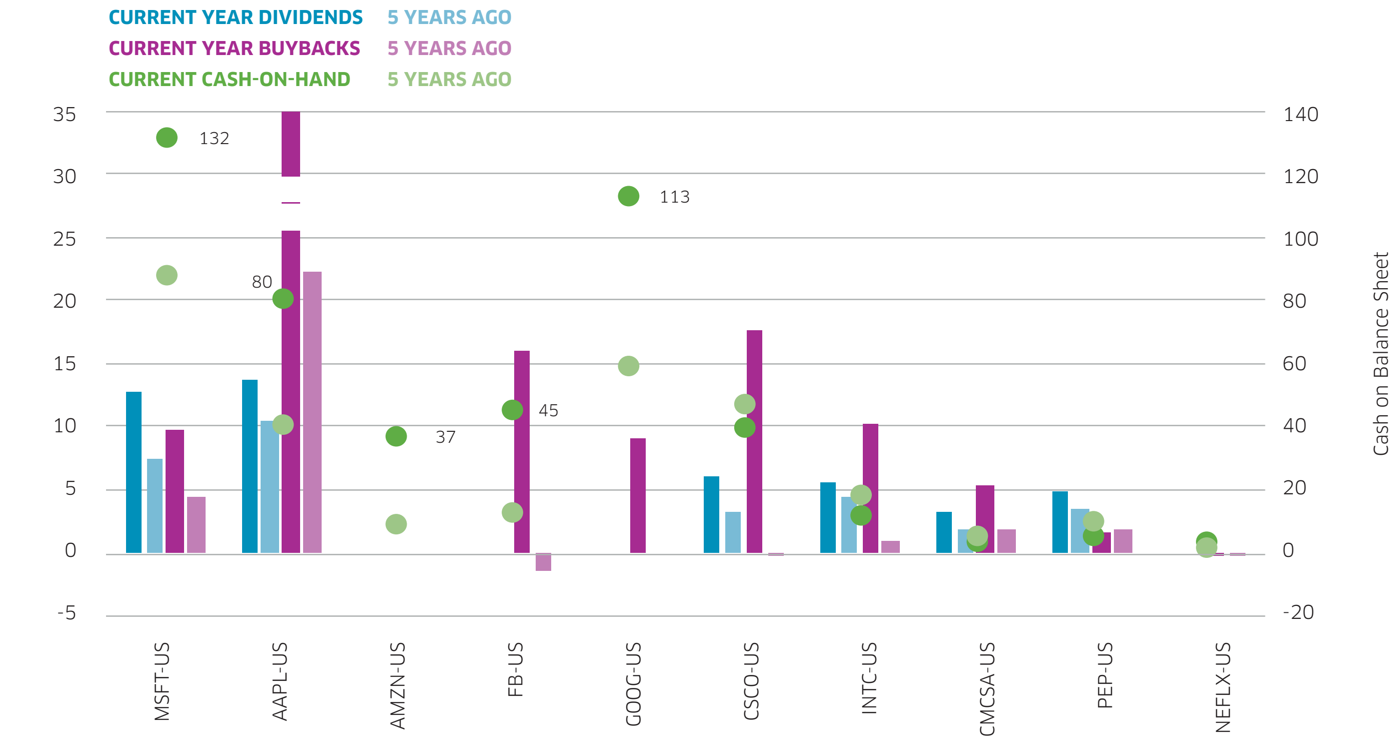
Dividends Tell Only Part of the "Capital Return" Story

While the growth in dividends paid out by Nasdaq-100 constituents has been impressive on an absolute basis, the Index's overall dividend yield has remained fairly constant around 1.2% since 2012. That is because companies have increasingly looked at share buybacks as another form of returning capital to shareholders. In the most recent annual reporting period, net buybacks (share repurchases less issuance) totaled nearly $300 billion, almost 4x greater than the amount of dividends paid:



These amounts are impressive on a standalone basis. However, there may still exist room for growth in both dividends and buybacks. Several of the top 10 constituents (representing 57% of the Index's market cap) have barely been engaged in either, if at all – and of these, Microsoft and Google (>$100Bn each in Cash on Balance Sheet) as well as Amazon and Facebook (~$40Bn each), seem to possess ample capacity.

Dividends & Buybacks, Most Recent Annual Period vs. 5 Years Ago

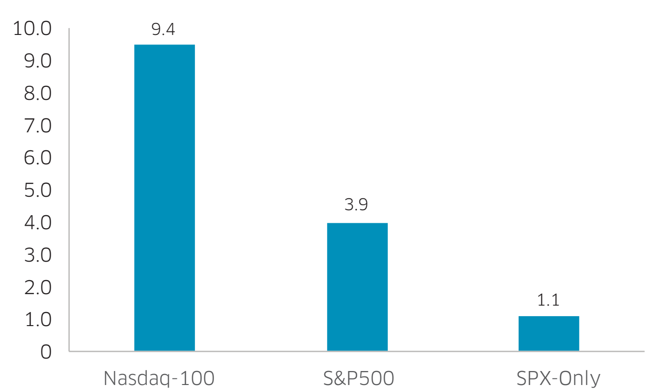


Data as of April 30, 2019, Billions in USD

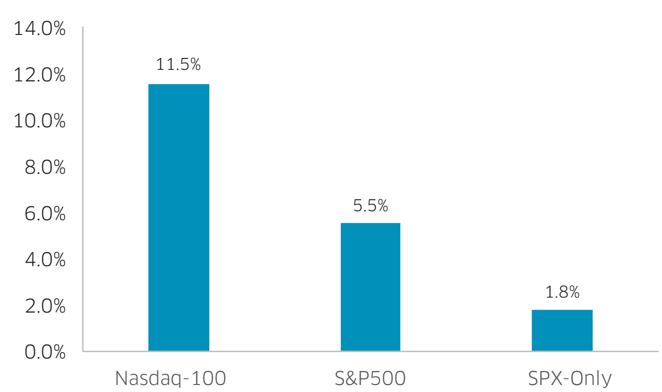
The R&D Premium

As a final point, consider the dramatic differential in how much Nasdaq-100 constituents spend on Research & Development (both on an absolute basis, and as a percentage of sales) relative to the broader S&P 500 Index. As the old saying goes, "you get what you pay for": in the case of the Nasdaq-100, you pay a premium for innovation and get a greater potential total return in the future.

Weighted Average R&D Expense, LTM, $Bn



Weighted Average R&D as % of Sales, LTM



Data and Index Constituents as of April 30, 2019. SPX-Only includes the 415 S&P500 constituents that are not also part of the Nasdaq-100

The Invesco QQQ Trust ETF (QQQ) seeks daily investment results, before fees and expenses, that correspond to the daily performance of the Nasdaq-100 Index.

Data is as of December 31, 2018 unless otherwise stated.

Sources: FactSet, Bloomberg, Nasdaq Global Indexes.

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