

The Nasdaq-100® Ecosystem: Providing Flexible and Efficient Implementation for Institutional Investors

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At a Glance:

- The Nasdaq-100® (NDX®) has historically developed a multi-decade track record of strong performance, helping to enable a variety of investment vehicles to use for core equity allocation.
- With most US mega-cap companies being Nasdaq-listed, NDX derivatives have emerged as a capital efficient proxy to mega-cap exposure for risk and liquidity management.
- Defined contribution (DC) plan providers have an opportunity to further expand access to the Nasdaq-100 that reflects strong investor demand across a multitude of retirement vehicles.

This white paper, the second of a series, displays three ways institutional investors may employ the Nasdaq-100 ecosystem to accomplish a broad set of investment mandates. [Click here to view the first white paper.](#)

Over the past four decades, the Nasdaq-100® (NDX®) has evolved from a technology-oriented equity benchmark into a global large-cap equity ecosystem serving over [\\$1.4 trillion](#) of product exposure. As outlined in the [initial Nasdaq-100 Ecosystem paper](#), this evolution has been driven not only by the growth of the index itself, but by the development of a deep and diverse set of investment vehicles and instruments. These span a variety of fund wrappers, benchmarking tools, and capital-efficient derivative solutions which help enable market participants to deploy capital across a wide range of investment objectives.

Institutional investors are increasingly shaping their engagement with the Nasdaq-100 Ecosystem to obtain a variety of investment exposures that align with their respective approaches to investment allocation. Asset owners, investment consultants, and DC plan sponsors may regard NDX as a valuable avenue for targeted access to large-cap innovation, supported by substantial liquidity and versatile implementation pathways. The range of implementation pathways has been further supported by regulatory framework improvements (e.g. [SEC Dual Share Class Relief](#)), the need for reduced operational complexity, and the growing need for cost and capital efficiency. At a high level, the mandate for the Nasdaq-100 is often framed as a broadening of core US equity exposure, with an emphasis on companies that have driven a disproportionate share of large-cap market capitalization growth over time.

This paper examines strategies that institutional investors can deploy to use the ecosystem in practice. It explores how NDX can be utilized across strategic, tactical, and operational frameworks within multi-asset portfolios and defined contribution plans.

Core Allocation – The Nasdaq-100® as a US Large-Cap Growth Offering

Over the past 2 decades, US large-cap equity markets have become more efficient, making it difficult for active strategies to outperform passive benchmarks. Recent data (source: eVestment) shows that an increasing number of investment consultants are considering moving away from active manager selection in the US large-cap equity space given the underperformance of most active funds. This has provided an opportunity to divert a greater amount of resources to index-based strategies. Additionally, the Nasdaq-100 has exhibited many of the qualities of a reliable US large-cap growth strategy (i.e. strong performance, lower fees, alpha generation and greater diversification) that can easily be accessed.

Using QQQ® (Invesco Nasdaq-100 ETF Trust) as a proxy for the Nasdaq-100, less than 5% of 193 US large-cap growth funds beat the Nasdaq-100 over 10 years. However, none of the funds that outperformed QQQ® offered a lower expense ratio. Additionally, QQQ exhibited strong relative risk-adjusted performance, with a Sharpe Ratio of 0.94 (Figure 1).

In comparison to the S&P 500 (SPX) and Russell 1000 Growth (RLG) – recognized as benchmarks for US large-cap and US large-cap growth equity respectively – a Fama French 6 Factor Analysis reveals that the Nasdaq-100 has also produced larger alpha over the past two decades (Figure 2).

Notably, NDX demonstrates alpha generation while maintaining less concentration than RLG across four metrics (Figure 3). This is attributable to NDX's explicit company weighting constraints within its [methodology](#), which serve as guardrails for concentration risk.

Figure 1: QQQ ETF vs US Large-Cap Growth Equity Funds

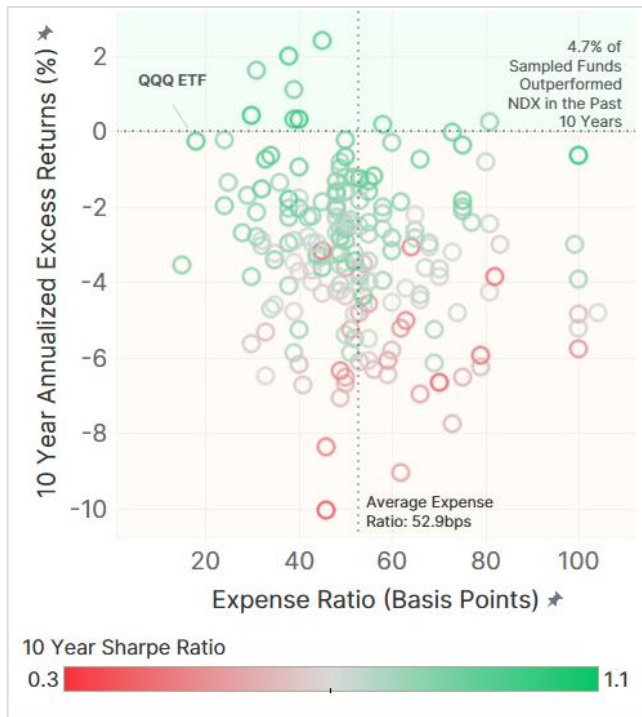


Figure 2: Fama-French 6-Factor Analysis

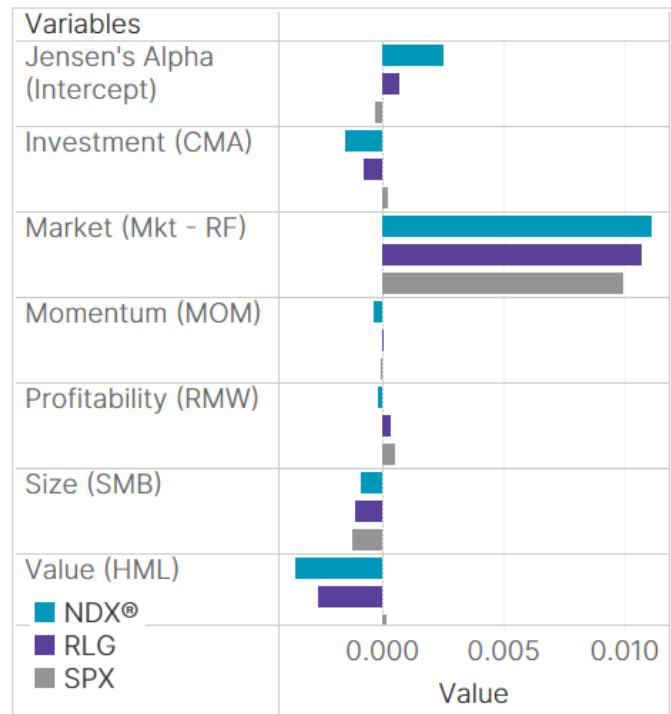


Figure 1 Source: Nasdaq Index Insights, Nasdaq eVestment. Excess Returns calculated as (10Y Annualized Fund Return – Nasdaq-100 Return). Funds in Scatterplot mix of Mutual Funds and Separate Accounts. Data between 12/31/2015 and 12/31/2025.

Figure 2 Source: Nasdaq Index Insights, Bloomberg, Kenneth R. French Data Library. Data between 11/30/2005 and 12/31/2025.

Figure 3: Nasdaq-100 vs Russell 1000 Growth Concentration

Index	12/31/2025 Post NDX Reconstitution		6/30/2025 Post RLG Reconstitution	
	RLG	NDX	RLG	NDX
Herfindahl-Hirschman Index (HHI)	499.0	339.7	533.7	359.2
Inverse HHI (Effective Constituents in Portfolio)	20	29	19	28
Top 5 Sum of Constituent Weights (% of Portfolio)	42.8%	33.2%	45.0%	35.9%
Top 10 Sum of Constituent Weights (% of Portfolio)	59.3%	49.6%	58.8%	50.8%

Figure 3 Source: Nasdaq Index Insights, Bloomberg. IWF used as proxy for RLG. Data as of 6/30/2025 and 12/31/2025.

Institutions have flexibility to access Nasdaq-100 through a large range of products, including ETFs, mutual funds, and separate accounts. The SEC's recent dual share class relief has also made it easier for asset owners to potentially access the Nasdaq-100, with many asset managers offering multiple Nasdaq-100 related products in their lineup. These all pose as efficient ways to obtain NDX exposure as a core/strategic allocation in a US large-cap growth equity sleeve. For investors with a shorter-term view, tactical allocation using the same products remains a common and viable strategy as well.

Figure 4: NDX Products that Can Be Utilized for Strategic Allocation



Source: Nasdaq Index Insights.

Mega-Cap Proxy – Leveraging Nasdaq-100® Derivatives for Risk and Liquidity Management

As the [adoption of ETFs](#) continues to grow in institutional investor portfolios primarily for their trading flexibility and liquidity management benefits, derivatives are becoming a logical progression for institutions seeking both flexibility and capital efficiency when implementing their market views. While S&P 500 Index derivatives have seen some use in this space, [the index’s higher proportion of mid-cap holdings](#) primarily positions it for broad US market exposure. A review of recent investment mandates across U.S. asset owners and investment consultants (source: eVestment) highlights an increasing focus to mega-cap allocations within their portfolios. For such objectives, the Nasdaq-100 may provide more targeted and capital-efficient exposure.

As noted in Figure 5, the Nasdaq-100 offers the highest correlation to the 8 largest U.S. equities and 2 mega-cap indexes (NDXMEGA and SP5T1) despite being less concentrated than the Russell 1000 Growth (Figure 3).

Figure 5: Correlations of US Large-Cap Indexes vs Mega-Cap and Top 8 Largest US Equities

	NDX	SPX	RLG	NDXMEGA	SP5T1	NVDA	AAPL	MSFT	AMZN	GOOGL	TSLA	META	AVGO
NDX	1.00	0.92	0.98	0.96	0.97	0.72	0.76	0.82	0.79	0.71	0.58	0.61	0.60
SPX	0.92	1.00	0.95	0.82	0.88	0.60	0.65	0.70	0.65	0.63	0.48	0.53	0.53
RLG	0.98	0.95	1.00	0.93	0.96	0.68	0.72	0.79	0.76	0.69	0.56	0.59	0.59

Source: Nasdaq Index Insights. Data between 11/30/2015 and 12/31/2025. Monthly price returns used for correlation. Security Symbols represent the following: NDX (Nasdaq-100), SPX (S&P 500), RLG (Russell 1000 Growth), NDXMEGA (Nasdaq-100 Mega), SP5T1 (S&P 500 Top 10), NVDA (Nvidia Corp), AAPL (Apple Inc), MSFT (Microsoft Corp), AMZN (Amazon.com Inc), GOOGL (Alphabet Inc Class A), TSLA (Tesla Inc), META (Meta Platforms Inc Class A), AVGO (Broadcom Inc)

With [nearly \\$650 billion held and over \\$130 trillion traded across its suite of exchange-traded derivative products](#) as of December 31, 2025, the Nasdaq-100 derivative ecosystem also firmly sits as the second largest US equity index derivative ecosystem behind the S&P 500. By including the broader OTC derivatives market for custom strategies, NDX derivatives provide a sophisticated market for mega-cap portfolio risk and liquidity management.

[Because NDX has been approximately 15% more volatile than SPX](#), using NDX derivatives can help improve capital efficiency for portfolios with fixed risk tolerance, assuming comparable margin requirements. This

can be leveraged via NQ e-mini futures to efficiently proxy-scale mega-cap exposure as well as provide cash equitization and portable alpha to reduce cash drag. Additionally, the higher volatility in NDX means investors may sell options for higher risk-premia to fund total portfolio objectives. Regardless of a market view on US mega-cap equities, NDX provides a highly traded derivatives market to support risk and liquidity management.

Figure 6: Nasdaq-100 Futures and Options Institutional Use Cases



Source: Nasdaq Index Insights.

Defined Contribution Plans – Nasdaq-100® In Target-Date and Standalone Funds

With Defined Contribution (DC) plans facing secular growth drivers from the [SECURE 2.0 Act](#), pooled employer plans (PEPs), target-date funds (TDFs), and a multi-decade shift in assets away from private sector defined benefit (DB) plans, there has been increased market focus on providing investment menus that better reflect plan participant preferences.

Figure 7: US Total Retirement Market Assets (\$tn)

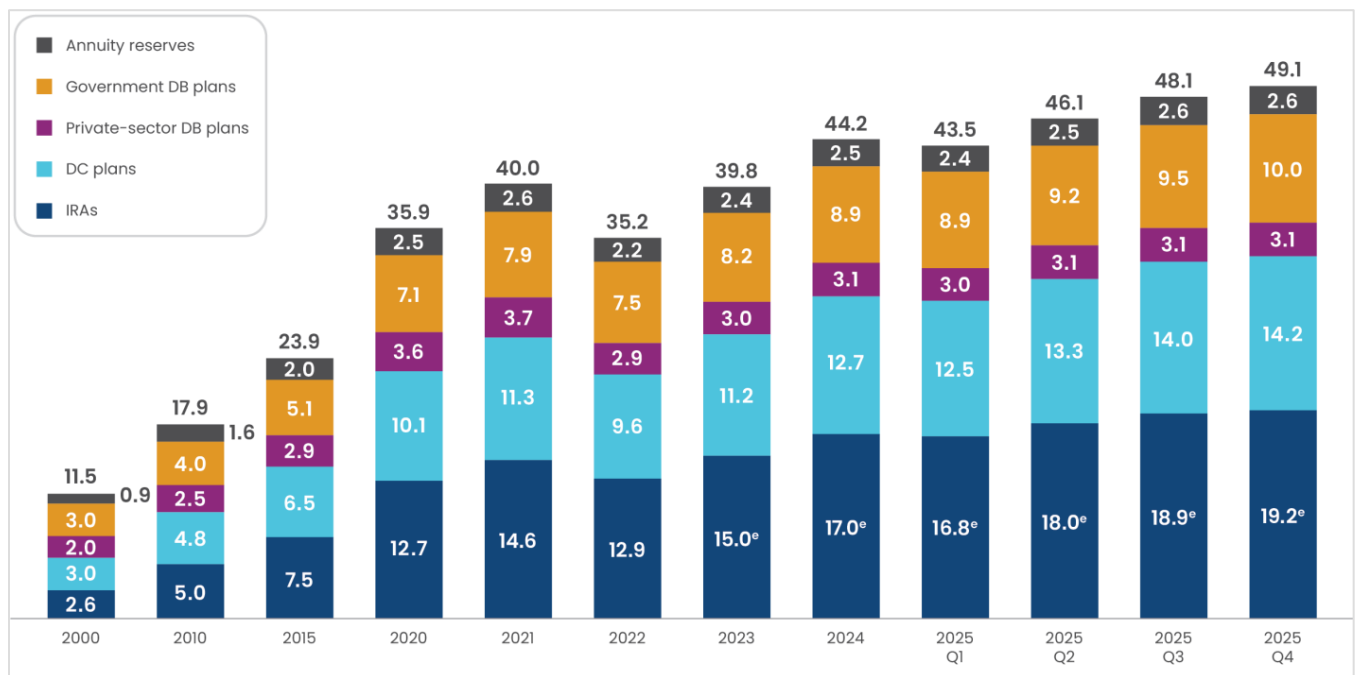


Figure 7 Source: Investment Company Institute, Federal Reserve Board, Department of Labor, National Association of Government Defined Contribution Administrators, American Council of Life Insurers, and Internal Revenue Service Statistics of Income Division. Data between 1/1/2000 and 12/31/2025, at the end of selected periods in the chart.

A [2025 Retirement Plan Survey](#) by Shelton Capital Management found that 80% of respondents considered having Nasdaq-100 products in their 401(k) lineup as important, and 45% already owned a Nasdaq-100 product elsewhere. These findings have been fortified over the past 20 years, during which NDX has displayed slightly elevated aggregated risk-adjusted returns relative to the rest of the US Stock Market (Figure 8). The survey also points to participants appreciating the track record and simplicity of NDX, which is further reinforced by the lower concentration relative to the Russell 1000 Growth Index (Figure 3) and outperformance relative to over 95% of the US large-cap growth space (Figure 1).

To realign investor needs with investment offerings, DC plan sponsors have the opportunity to incorporate the Nasdaq-100 in both target-date and standalone fund offerings. NDX, with an aggregate Sharpe ratio of 0.9 compared to VTI's 0.85 (Figure 8), offers a risk and return profile that makes it well-suited for the risk-on segments of a target-date fund glide path. In particular, NDX is aligned with the aforementioned investor interest in offering the index within a 401(k) plan. Alternatively, a standalone NDX fund may serve as a US Large Cap Growth Equity Fund, designed to outperform and limit constituent concentration through rules-based guidelines.

Figure 8: NDX + VTI Portfolio – Rolling 1-Year Sharpe Ratios

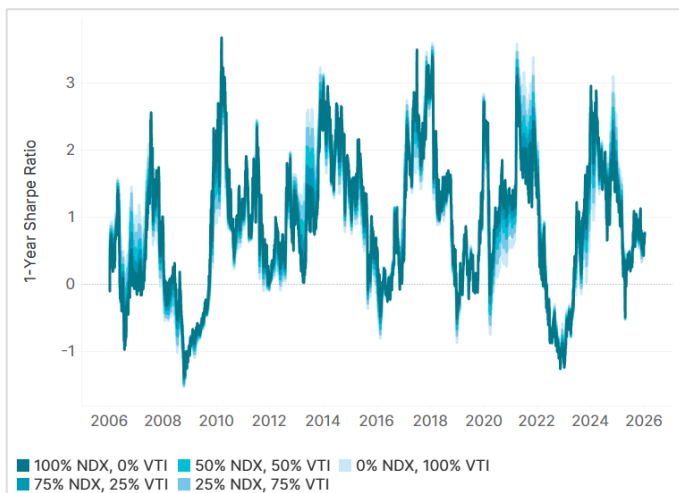


Figure 9: NDX ETP AUM Growth vs 401(k) Target-Date Assets and Contributions

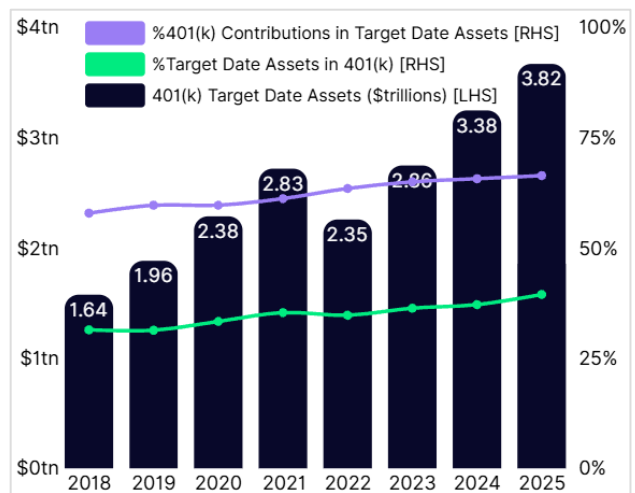
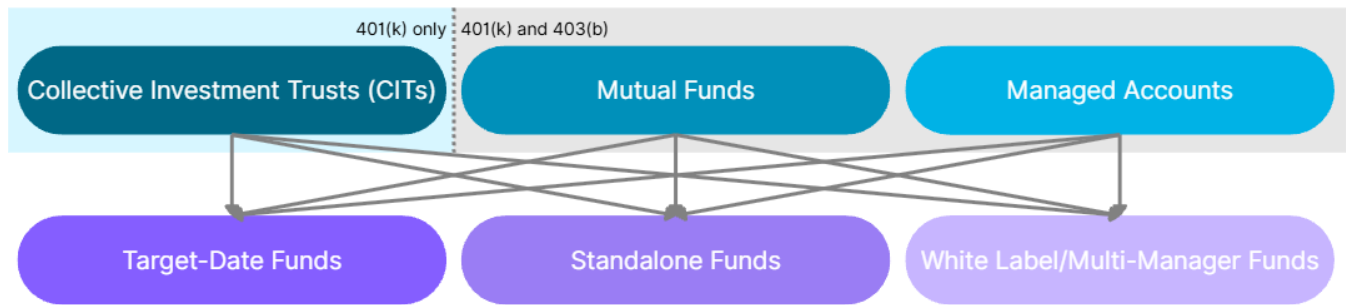


Figure 8 Source: Nasdaq Index Insights, Bloomberg. VTI (Vanguard Total Stock Market Index) used as proxy for US Stock Market Performance. Annualized 3-month Treasury Bill Yields used as Risk-Free Rate. Data between 11/30/2005 and 12/31/2025.

Figure 9 Source: Nasdaq Index Insights, Cerulli Associates, Department of Labor, Investment Company Institute, PSCA, Vanguard. 2025 Target Date Metrics estimated using a 6.56% market appreciation. Data between 1/1/2018 and 12/31/2025.

Figure 10: Defined Contribution Plan Investment Vehicle Matrix



Source: Nasdaq Index Insights.

Conclusion

Amongst core exposure in strategic asset allocation (SAA) frameworks, total portfolio mega-cap risk and liquidity management, and strategy flexibility in DC plans, a comprehensive and tradable ecosystem of Nasdaq-100 product wrappers is available to address the complex needs of institutional investors. Looking ahead, institutions should continue to closely monitor the dynamics between the Nasdaq-100 and both mega-cap and large-cap growth segments, in addition to observing the increasing ecosystem inflows from various market participants. With its characterization as the [Benchmark of the 21st Century](#), the index will continue to play a key role in shaping the investment allocations of global institutional investors.

[Click here to view the initial white paper on the Nasdaq-100 Ecosystem](#)

To learn more about NDX, check out the following resources:

[Landing Page](#) | [One Pager](#) | [Product Guide](#) | [Benchmark of the 21st century](#) | [Day in the Life of the Nasdaq-100](#) | [Index Methodology](#) | [Index Data](#)

For weekly insights, sign up for the “Nasdaq-100 Weekly” email newsletter [here](#).

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