

Q WEALTH ASSET MANAGEMENT
FOUNDATION SERIES

RETHINKING RISK IN EQUITY MARKETS

A CLOSER LOOK AT
LOW VOLATILITY
INVESTING

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LOW VOLATILITY INVESTING: AN INTRODUCTION

Investing is not a one-size-fits-all strategy. While many investors can efficiently access market returns (“beta”) through index-tracking funds or exchange-traded funds (ETFs), the volatility of these traditional vehicles may not be suitable for all. Broad market indices can be turbulent—marked by periods of strong gains followed by sharp drawdowns and elevated volatility. For some investors, the objective isn’t simply to gain exposure to market beta, but to do so in a manner that avoids being derailed by market instability.

Low volatility strategies offer an alternative. Rather than attempting to eliminate risk, these approaches seek to optimize the trade-off between risk and return—seeking to reduce downside exposure while maintaining participation in equity market growth. This makes them particularly compelling for outcome-oriented investors who value consistency, capital preservation, and smoother compounding over time.

Originating within the institutional investing world, low volatility strategies have long been employed as core allocations by sophisticated asset owners such as pension plans, endowments, and sovereign wealth funds. These investors often deploy low volatility equities within a risk-budgeting framework, enabling them to allocate to equities without disproportionately increasing overall portfolio risk. In doing so, they aim to enhance portfolio efficiency and avoid exposure to uncompensated volatility. By systematically targeting stocks with historically more stable price behavior, low volatility strategies provide a disciplined, transparent,

In recent decades, low volatility investing has gained broader popularity due to several key developments:

- **A shift from Strategic Asset Allocation (SAA) to Total Portfolio Approach (TPA):** Many institutional investors are moving away from rigid benchmark-relative mandates toward holistic, objective-driven strategies. This shift has enabled greater flexibility in pursuing risk-managed equity exposure that better aligns with client goals.
- **Faster information flow and higher market sensitivity:** The proliferation of technology, real-time data, and social media has increased the speed and magnitude of market reactions, contributing to more frequent and pronounced volatility episodes. This has made stable return profiles more valuable to both institutional and individual investors.
- **Access through ETFs and pooled funds:** The rise of ETFs and other pooled investment vehicles has democratized access to low volatility strategies, making institutional-quality risk management tools available to a broader investor base.

Low volatility investing is no longer a niche strategy—it has become a mainstream allocation choice for investors seeking to remain fully invested in equities while helping reduce exposure to market extremes.



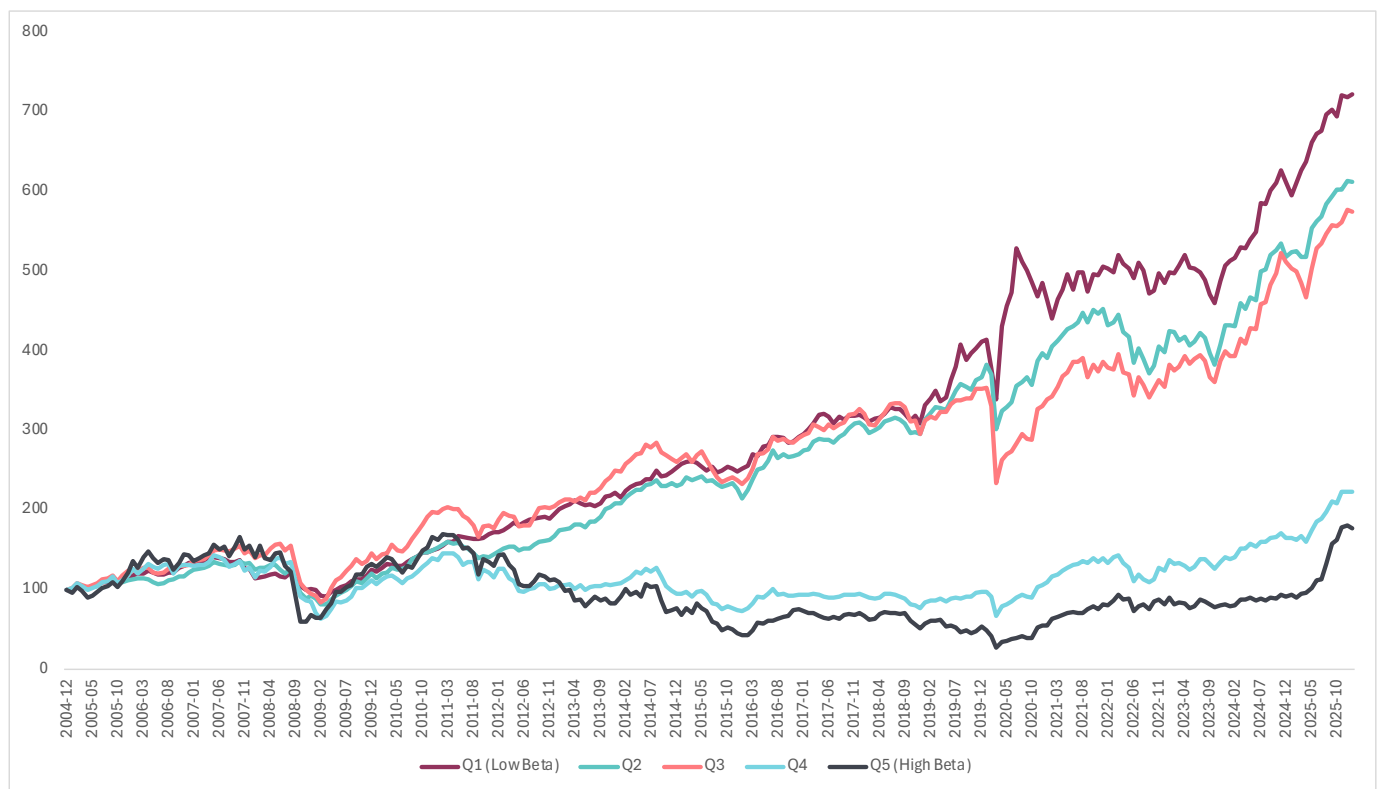
LOW VOLATILITY ANOMALY

In finance, we are taught that risk and return are linear—that to earn higher returns, investors must accept higher risk. This foundational idea underpins the concept of the equity risk premium, where equities are expected to deliver superior returns in exchange for their greater volatility. Traditional models such as the Capital Asset Pricing Model (CAPM) assert that portfolios with higher volatility should, on average, produce higher returns. However, empirical evidence has consistently challenged this assumption, revealing that the relationship between risk and return is not as straightforward as theory suggests.

Decades of academic research have consistently documented the low volatility anomaly:

the historically observed outperformance of low-risk stocks relative to their higher-risk peers on a risk-adjusted basis.

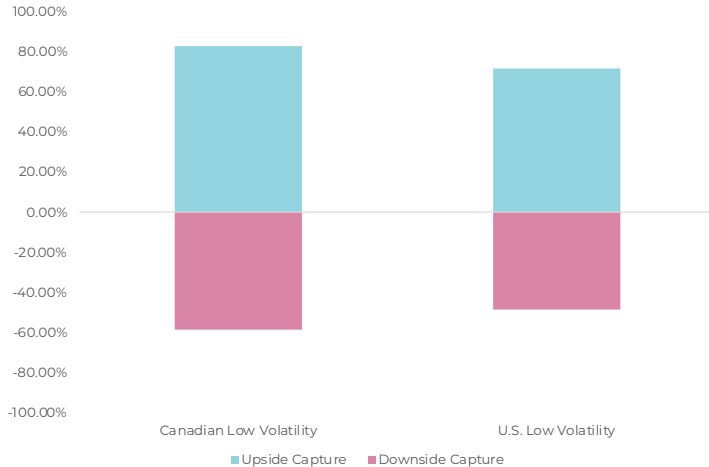
This anomaly has been observed across different markets, time periods, and methodologies.



Quintile	Ann. Return	Ann. Volatility	Sharpe Ratio	Max Drawdown	% Pos. Months	Best Month	Worst Month	Terminal (\$100)	Months
Q1 (Low Beta)	9.83%	11.80%	0.833	-35.22%	63.2%	27.20%	-10.51%	722	253
Q2	8.97%	11.71%	0.766	-39.95%	68.0%	8.24%	-18.64%	612	253
Q3	8.65%	15.35%	0.564	-46.57%	63.2%	15.87%	-29.33%	575	253
Q4	3.89%	19.46%	0.200	-55.78%	58.5%	17.54%	-25.78%	223	253
Q5 (High Beta)	2.76%	29.70%	0.093	-84.33%	56.9%	31.80%	-36.62%	177	253

Source: Q Wealth Partners, Bloomberg BQNT (S&P/TSX Composite broken down by beta quintiles and constituents equal weighted. Period between January 2005 to January 2026)

EMPIRICAL EVIDENCE



	Canadian Low Volatility	S&P/TSX Composite	Edge
Annualized Return	10.4%	8.3%	2.1%
Annualized Volatility	11.7%	13.7%	-2.0%
Sharpe Ratio	0.72	0.46	0.26%
Max Drawdown	-35.7%	-43.4%	7.7%
Beta	0.73	1.00	0.27%
	U.S. Low Volatility	S&P 500 Composite	Edge
Annualized Return	12.2%	13.0%	-1.0%
Annualized Volatility	10.7%	12.0%	-2.0%
Sharpe Ratio	0.95	0.91	0.04
Max Drawdown	-21.4%	-31.8%	10.4%
Beta	0.65	1.00	-0.35

Source: Bloomberg BQNT, Q Wealth Partners (Data using Q Wealth Canadian Low Volatility Strategy and the Q Wealth U.S. Low Volatility Strategy using monthly data between March 31, 2008 and March 31, 2026, Sharpe Ratio assumes a risk-free rate of 2.0%). Upside and downside capture ratios are relative to their respective indices.

Numerous studies, including seminal work by Ang, Hodrick, Xing, and Zhang (2006), have shown that stocks with lower historical volatility or lower beta have historically outperformed on a risk-adjusted basis. Further research has validated this phenomenon internationally and across different market regimes.

- **Lower drawdowns:** Low volatility portfolios have historically experienced smaller losses during market downturns.
- **Higher Sharpe ratios:** These portfolios often deliver superior risk-adjusted returns, even if absolute returns are comparable or modestly lower than broad indices.
- **Persistent performance:** The anomaly has persisted across decades despite being well known and widely accessible.

Despite being well-documented and widely accessible, the low volatility anomaly continues to endure across markets and time periods. Several explanations—rooted in behavioral finance, institutional structure, and portfolio dynamics—help explain its persistence:

BEHAVIORAL AND STRUCTURAL DRIVERS

"Leverage constraints and behavioural biases lead investors to overinvest in high-beta securities."

Frazzini & Pedersen (2014)

Behavioral Biases

Investors often exhibit a preference for high-volatility, high-beta stocks due to their perceived "lottery ticket" appeal. This overconfidence can lead to inflated valuations and lower future returns for volatile stocks, while more stable equities remain undervalued.

Institutional Constraints

Many institutional investors are benchmark-centric, leading to allocations that overweight higher-beta stocks in an attempt to match or exceed index performance. These structural incentives can crowd capital into riskier parts of the market, leaving lower-volatility segments under exploited.

Leverage Aversion

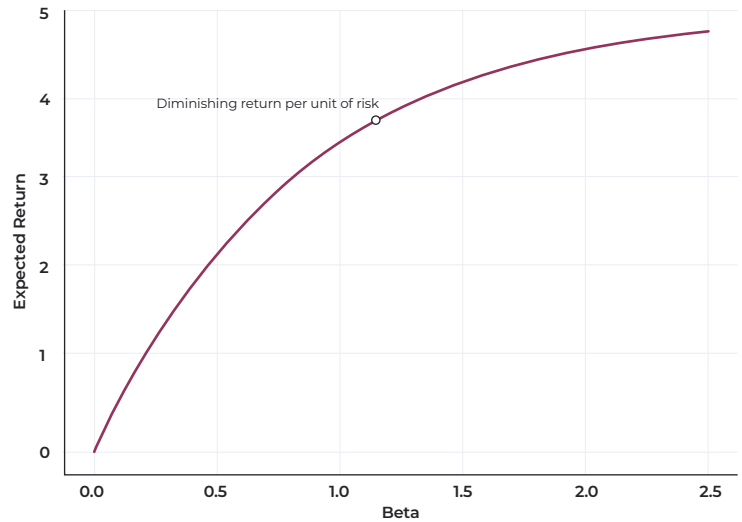
In theory, investors could combine low-risk assets with leverage to achieve desirable return profiles. In practice, regulatory, operational, and psychological constraints limit the use of leverage, causing investors to "reach for risk" by allocating to higher-volatility assets instead.

PORTFOLIO-LEVEL CONSIDERATIONS

Non-linear Risk-return Relationship

While taking on additional risk may offer higher expected returns up to a point, the relationship is not linear. Beyond a certain threshold, the marginal increase in return diminishes relative to the increase in risk. Low volatility strategies seek to position portfolios where the trade-off between incremental risk and return is more favorable.

Risk and Return Are Not Linear



Note: For Illustrative Purposes Only

Downside Risk Management and Compounding

Low volatility strategies often lag in sharply rising markets but tend to offer historically better downside capture during market corrections. By limiting drawdowns, these strategies may help preserve more capital through cycles—providing a higher base from which to compound when markets recover.

Low Volatility ("Low Vol") May Outperform the Market

	Market	Low Vol	Market	Low Vol
Period 0			\$100.00	\$100.00
Period 1	7%	5%	\$107.00	\$105.00
Period 2	10%	6%	\$117.70	\$105.00
Period 3	13%	9%	\$133.00	\$121.32
Period 4	-25%	-10%	\$99.75	\$109.19
Period 5	10%	7%	\$109.73	\$116.83
Period 6	7%	5%	\$117.41	\$122.67
Period 7	9%	6%	\$127.97	\$130.03
Total Return	27.97%	30.03%		
Standard Deviation(SD)	13.14%	6.32%		
Return/ SD	2.13	4.75		

Note: For Illustrative Purposes Only



APPROACHES TO LOW VOLATILITY INVESTING

While the goal of low volatility investing is broadly shared—reducing portfolio risk while maintaining long-term equity exposure—the methods for achieving this vary significantly across providers. These differences impact sector exposure, portfolio efficiency, tracking error, and ultimately investor outcomes.

Low volatility investing can be implemented using various portfolio construction techniques, but two dominant philosophies have emerged: **factor-isolated low volatility strategies** and **minimum variance optimization**. While both aim to reduce portfolio volatility, their methods, exposures, and investor implications differ significantly.

FACTOR-ISOLATED LOW VOLATILITY STRATEGIES

Factor-isolated strategies explicitly target the low volatility factor, typically by selecting stocks with the lowest historical standard deviation or beta. These rules-based approaches isolate the desired risk premium while incorporating additional constraints—such as sector and security caps—to avoid concentration and unintended risk exposures. The result is a transparent, style-pure, and repeatable implementation that captures the low volatility premium while minimizing unintended biases and maintaining broad diversification.

MINIMUM VARIANCE STRATEGIES

Minimum variance strategies aim to construct a portfolio with the lowest possible overall volatility, based on the historical covariance of asset returns. These portfolios are derived using optimization algorithms that minimize total portfolio variance, often subject to constraints—including sector weights that remain close to a market-cap weighted benchmark. While effective in reducing overall portfolio risk, this approach can still result in unintended exposures due to the nature of the optimization process, including overweighting stocks with high leverage or poor fundamentals. The methodology is mathematically driven and less transparent, which can make outcomes harder to interpret.

Characteristic	Factor Isolated Strategies	Minimum Variance Strategies
Objective	Capture the low volatility factor explicitly	Minimize total portfolio variance
Methodology	Rules-based selection focused on stocks with lower individual volatility	Uses historical covariance matrix and optimization algorithms
Transparency	High: selection criteria are intuitive and repeatable	Low: optimized outputs can be opaque
Style Purity	Isolates low volatility while controlling for unintended factor exposures	Mixed factor exposures (quality, size, dividend yield often appear as by-products)
Sector Exposure	Unconstrained to market	Constrained to market
Potential Tracking Error vs. Market	Higher active share will lead to higher expected tracking error	Lower active share will lead to lower expected tracking error
Downside Risk Mitigation	Lower expected downside capture given higher active share	Higher expected downside capture given lower active share
Implementation Use	More robust across regimes; easier to rebalance	Sensitive to estimation error and input instability
Use Case	More practical for Total Portfolio Approach (TPA) where investor is more concerned with reducing risk	More practical for Strategic Asset Allocation (SAA) where investor is more concerned with tracking market



THE Q WEALTH APPROACH: FACTOR iQ LOW VOLATILITY

At Q Wealth, we take a deliberate and risk-aware approach to low volatility investing—one that prioritizes transparency, discipline, and alignment with long-term client objectives. **The Factor iQ Low Volatility strategies** are built to explicitly capture the low volatility factor while maintaining diversification and avoiding unintended risks.

Unlike optimization-driven approaches, Factor iQ is a **rules-based, factor-isolated strategy**. It systematically targets stocks with lower historical price volatility, while applying a clear set of filters and portfolio constraints to ensure a more robust implementation.

KEY FEATURES OF FACTOR iQ LOW VOLATILITY

Explicit Low Volatility Targeting Using Beta

The strategy selects stocks with consistently low beta, focusing on companies that exhibit lower sensitivity to overall market movements. Beta captures systematic risk—the type of risk that is expected to be rewarded over time—whereas standard deviation (volatility) includes both systematic and unsystematic (idiosyncratic) risk, which is generally considered unrewarded.

By targeting low-beta stocks, the strategy isolates market-related risk reduction without over-penalizing for company-specific volatility that may not meaningfully affect long-term returns.

Consistent, Rules-based Construction

The process is systematic and repeatable, minimizing discretion and ensuring the strategy remains true to its stated objective across market cycles.

Outlier Screening

We apply filters to remove securities that may appear low volatility due to temporary, non-fundamental drivers—such as announced acquisition targets. These stocks can exhibit low volatility until a deal falls apart, at which point they may revert to high-risk profiles. Excluding such outliers enhances the strategy's integrity and forward-looking risk management.

Sector and Company Specific Constraints for Balance

To prevent overexposure to defensive sectors that often dominate minimum variance portfolios, the strategy includes sector-level constraints to maintain diversification and mitigate concentration risk. Company specific risks is also constrained to ensuring that no single position dominates the portfolio's risk profile.

Semi-annual Rebalancing Discipline

The strategy is rebalanced twice per year, allowing sufficient time for market pricing mechanisms to reward factor exposures. This approach reduces turnover, lowers trading costs, and may help reduce the return decay often associated with overtrading or excessive rebalancing frequency.

TPA-aligned Implementation

Factor iQ Low Volatility is designed with outcome-oriented mandates in mind—particularly for investors following a Total Portfolio Approach where absolute risk reduction and capital stability take priority over benchmark-relative performance.

PERFORMANCE EXPECTATIONS AND ROLE IN PORTFOLIO CONSTRUCTION

“The low-volatility premium reflects a trade-off: reduced participation in market rallies in exchange for meaningful downside risk management and potentially improved risk-adjusted returns over time.”

Baker, Bradley & Wurgler (2011); Blitz & van Vliet (2007); Ang et al. (2006); and recent empirical evidence (e.g., Grobys, 2025)

Low volatility strategies are not designed to outperform in all market environments, but rather to optimize the path investors take toward their financial goals. These strategies have historically tended to outperform in down markets, during periods of heightened volatility, or in gradually rising markets—scenarios where risk control and capital preservation are most valuable. Conversely, they may lag in strong, momentum-driven bull markets, where higher-beta stocks tend to lead. Importantly, even during these periods of underperformance, low volatility portfolios may still deliver positive returns, just with more muted upside.

The goal of a low volatility mandate is not to chase performance, but to deliver a smoother return profile, minimize uncompensated risk, and enhance portfolio efficiency. Within a Total Portfolio Approach, these strategies are best used to manage risk budgets, reduce portfolio drawdowns, and support long-term client outcomes through more consistent compounding. By serving as a lower-risk equity anchor, they enable investors to remain invested through cycles—without being derailed by market turbulence.

CONCLUSION

A SMARTER WAY TO STAY INVESTED

- Low volatility investing challenges the conventional belief that higher risk is a prerequisite for higher return. Decades of empirical evidence show that investors can reduce portfolio volatility—while seeking to maintain long-term return potential—by systematically targeting stocks with lower market sensitivity.
- At Q Wealth, our Factor iQ Low Volatility strategies offers a modern, disciplined implementation of this anomaly. Through a rules-based approach grounded in beta, sector-aware construction, outlier screening, and prudent rebalancing, we provide clients with a solution designed to help preserve capital, help reduce drawdowns, and support more stable long-term outcomes.
- As part of a broader factor-aware portfolio or within a total portfolio framework, Factor iQ Low Volatility serves as a powerful tool for advisors and institutions seeking to enhance portfolio resilience without overcomplicating implementation. It reflects our commitment to delivering institutional-caliber strategies in a way that's transparent, efficient, and aligned with real-world investor objectives.
- In today's increasingly volatile market environment, staying invested requires more than just access—it requires structure,

ABOUT THE AUTHOR



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Alfred Lee, CFA, CMT, DMS, is the Deputy Chief Investment Officer at Q Wealth Partners, where he is one of the principal architects of the firm's investment platform and asset management business. Alongside the CIO, Alfred is responsible for setting investment direction, overseeing policy and procedural development, and leading portfolio management for Q Wealth's Beta iQ and Factor iQ suite of funds.

Alfred brings over 25 years of investment experience to Q Wealth and has managed some of the largest funds in Canada. Alfred was a Portfolio Manager and Investment Strategist at BMO Global Asset Management. There, he led a team that oversaw the managing and trading over \$50 billion in equity-based strategies—including index, factor, thematic, and sector approaches—and \$30 billion in global fixed income mandates. During the 2020 pandemic, Alfred was seconded to the Bank of Canada, where he served as co-lead manager on one of the central bank's quantitative easing programs, which was authorized to purchase up to \$50 billion in provincial bonds providing funding relief and market stability.

As a senior member of the BMO team, Alfred played a key role in shaping the growth of the firm's ETF franchise—contributing across thought leadership, product development and structuring, portfolio management, trading, business development, and investor education. He was part of the core team that helped build BMO ETFs from a startup platform into one of the largest asset managers in Canada, establishing its position as a dominant force in the domestic ETF market.

Prior to BMO, Alfred led ETF research and manager research at CIBC, where he also supported macroeconomic research for the advisor network. He began his career at RBC, working in its pension consulting division, where he gained foundational experience in institutional portfolio construction and manager oversight.



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Quintessence Wealth (Q Wealth) is a partnership that is registered as a portfolio manager, exempt market dealer and investment fund manager. The portfolio manager registration allows Q Wealth to provide investment advice to its clients. The exempt market dealer registration allows Q Wealth to engage in trading activity. These services are provided by Q Wealth through registered advising representatives and dealing representatives, respectively.

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