ETF Report

Prepared by
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Report Date
September 12, 2024

Key Stats

Name	1 Year	5 Year	10 Year	Dividend Yield	Expense Ratio
QQQ		20.26%	17.65%	0.46%	0.20%

Top Holdings

QQQ

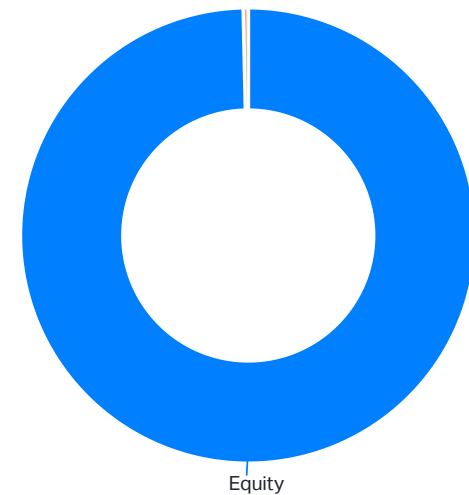| Ticker	Name	Current Weight	Dividend Yield	Expense Ratio
AAPL	Apple Inc.	9.16%	0.45%	-
MSFT	Microsoft Corporation	8.35%	0.71%	-
NVDA	NVIDIA Corporation	7.21%	0.03%	-
AMZN	Amazon.com, Inc.	5.07%	-	-
AVGO	Broadcom Inc.	4.81%	1.34%	-
META	Meta Platforms, Inc.	4.77%	0.39%	-
TSLA	Tesla, Inc.	2.96%	-	-
COST	Costco Wholesale Cor…	2.78%	0.52%	-
GOOGL	Alphabet Inc.	2.37%	0.53%	-
GOOG	Alphabet Inc.	2.29%	0.26%	-
NFLX	Netflix, Inc.	2.03%	-	-
ADBE	Adobe Inc.	1.80%	-	-
PEP	PepsiCo, Inc.	1.71%	3.08%	-
AMD	Advanced Micro Device…	1.62%	-	-
TMUS	T-Mobile US, Inc.	1.61%	1.31%	-
LIN	Linde plc	1.56%	1.20%	-

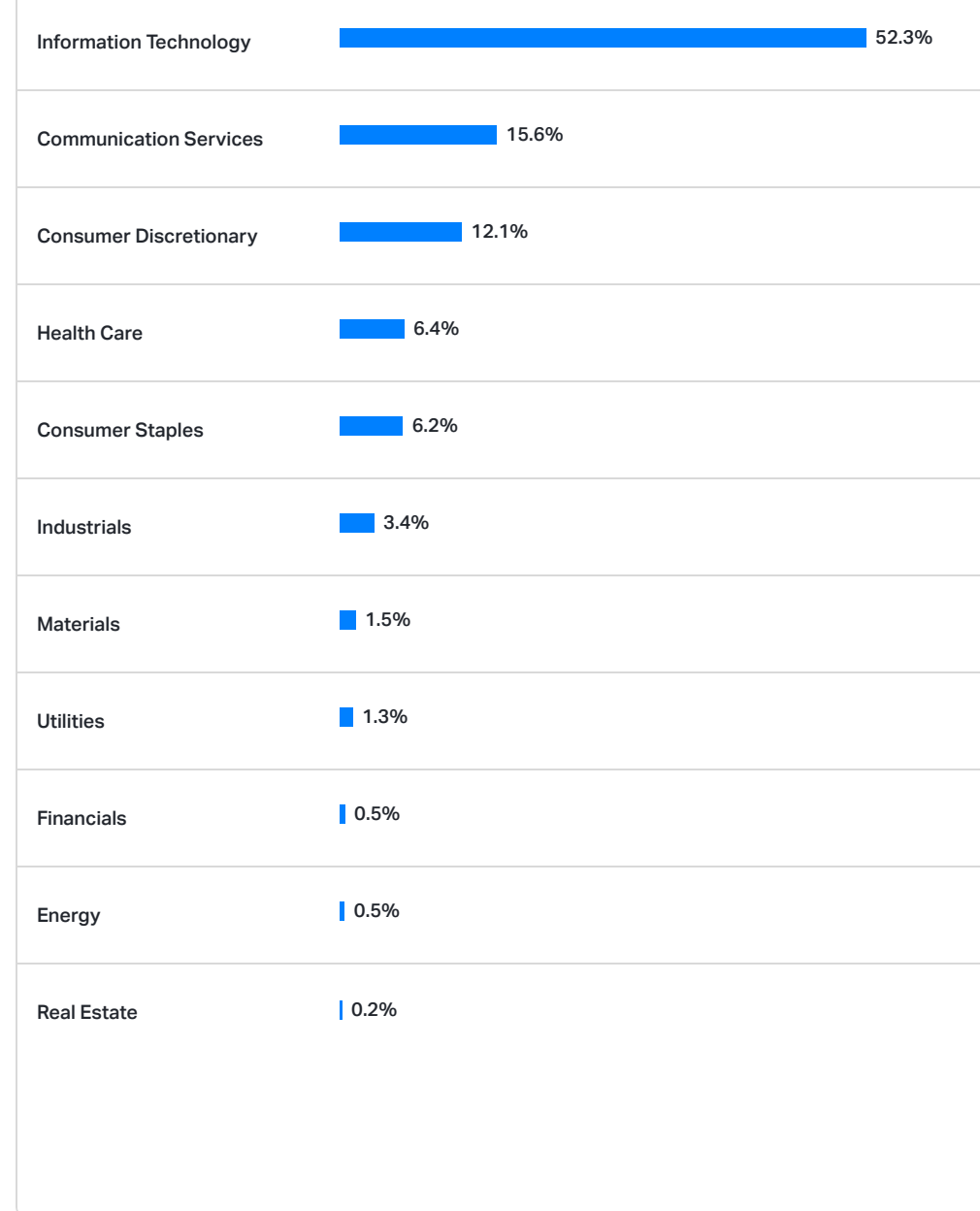## Holdings Chart

QQQ
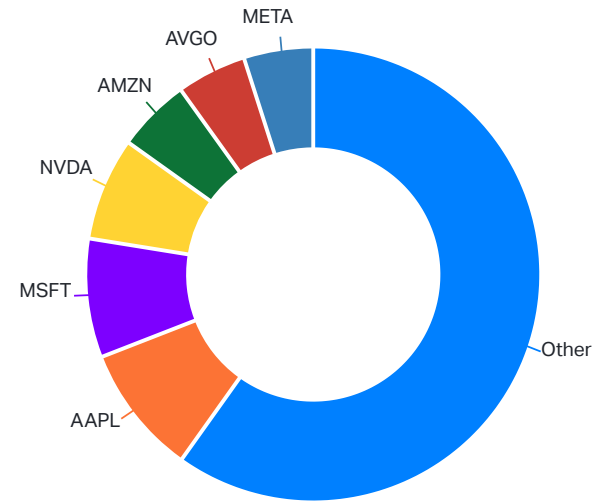
Asset Allocation

QQQ

Equity Stylebox

QQQ

	Value	Core	Growth
Large	4%	31%	54%
Mid	3%	3%	5%
Small	0%	0%	0%

Sector

QQQ

Information Technology	52.3%
Communication Services	15.6%
Consumer Discretionary	12.1%
Health Care	6.4%
Consumer Staples	6.2%
Industrials	3.4%
Materials	1.5%
Utilities	1.3%
Financials	0.5%
Energy	0.5%
Real Estate	0.2%

Region

QQQ

United States	97.2%
Eurozone	1.0%
Latin America	0.7%
United Kingdom	0.7%
Asia Emerging	0.4%
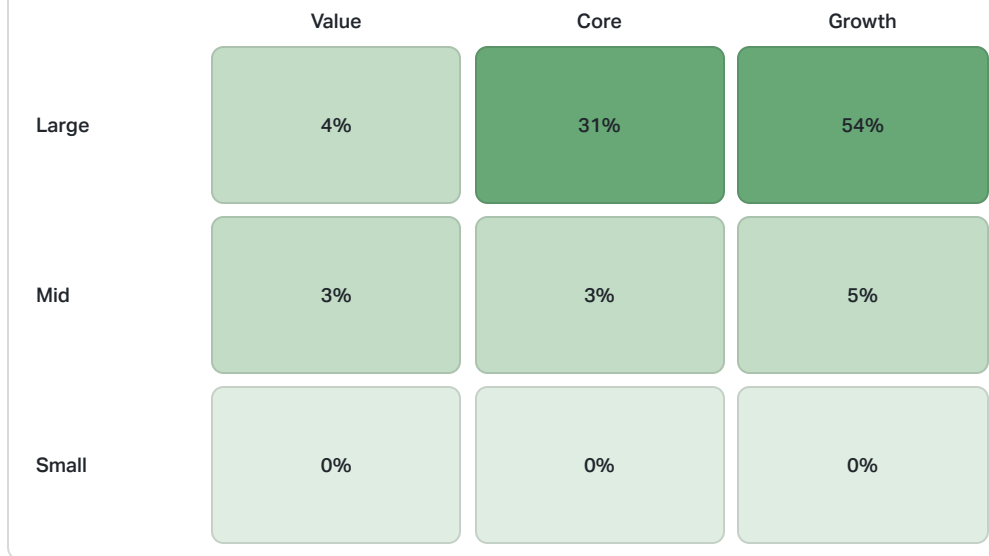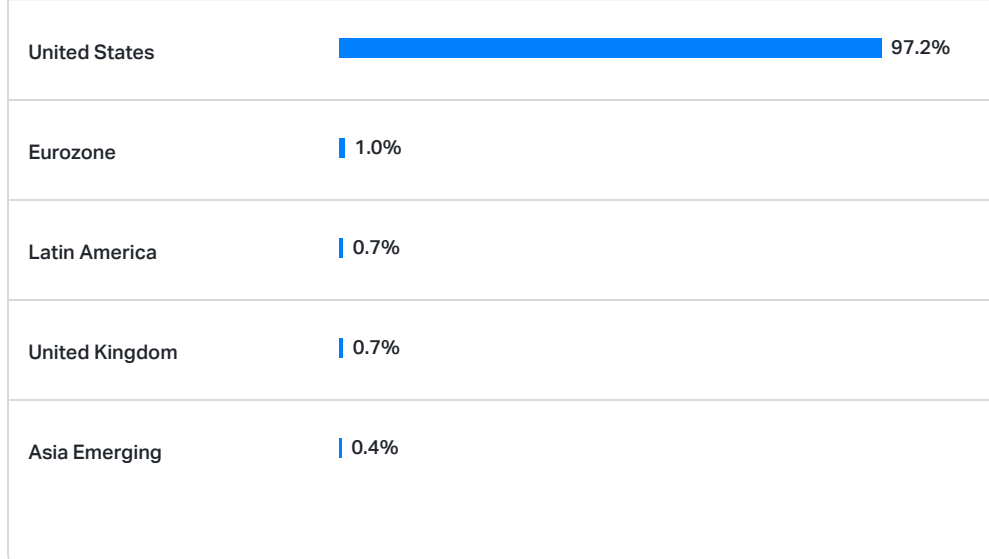
Total Return by Calendar Year

QQQ

Year	Return
2015	9.4%
2016	7.1%
2017	32.7%
2018	−0.1%
2019	39.0%
2020	48.6%
2021	27.4%
2022	−32.6%
2023	54.9%
2024	14.8%
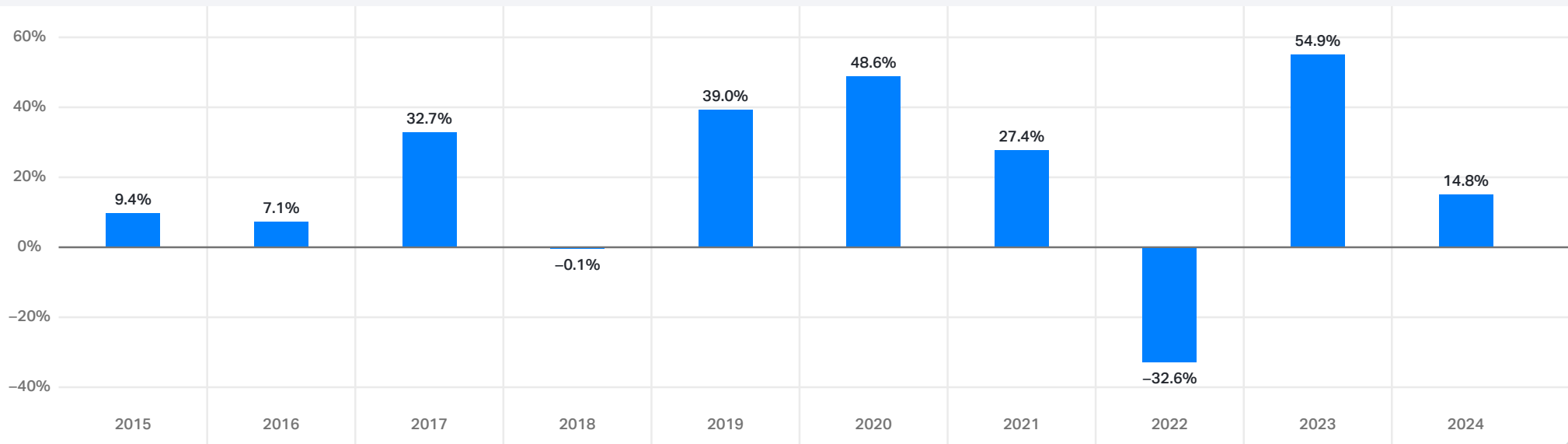
Trailing Total Return

QQQ

Period	Return
1 Month	4.0%
3 Months	0.3%
6 Months	7.5%
YTD	14.8%
1 Year	25.1%
3 Years	8.2%
5 Years	20.3%
10 Years	17.6%
15 Years	18.6%
20 Years	14.7%

Total Returns

QQQ

+976.44%

Prepared By	Date Range
David Brown	March 10, 1999 - September 12, 2024

Drawdown from Peak

QQQ

20.00%

10.00%

0.00%

-6.83%

-10.00%

-20.00%

-30.00%

-40.00%

-50.00%

-60.00%

-70.00%

-80.00%

2000   2010   2020
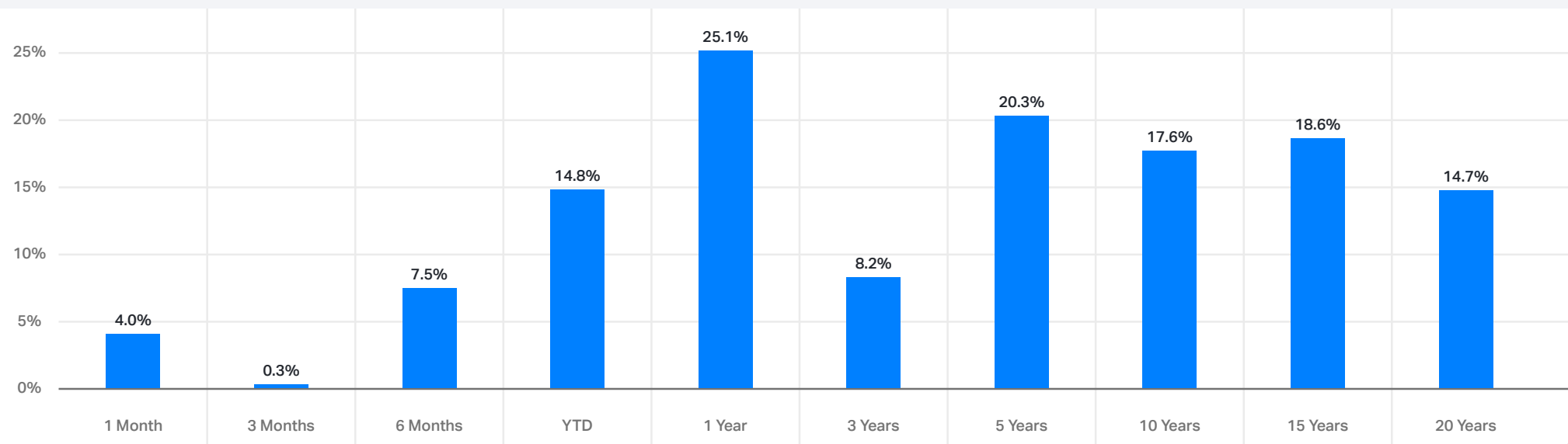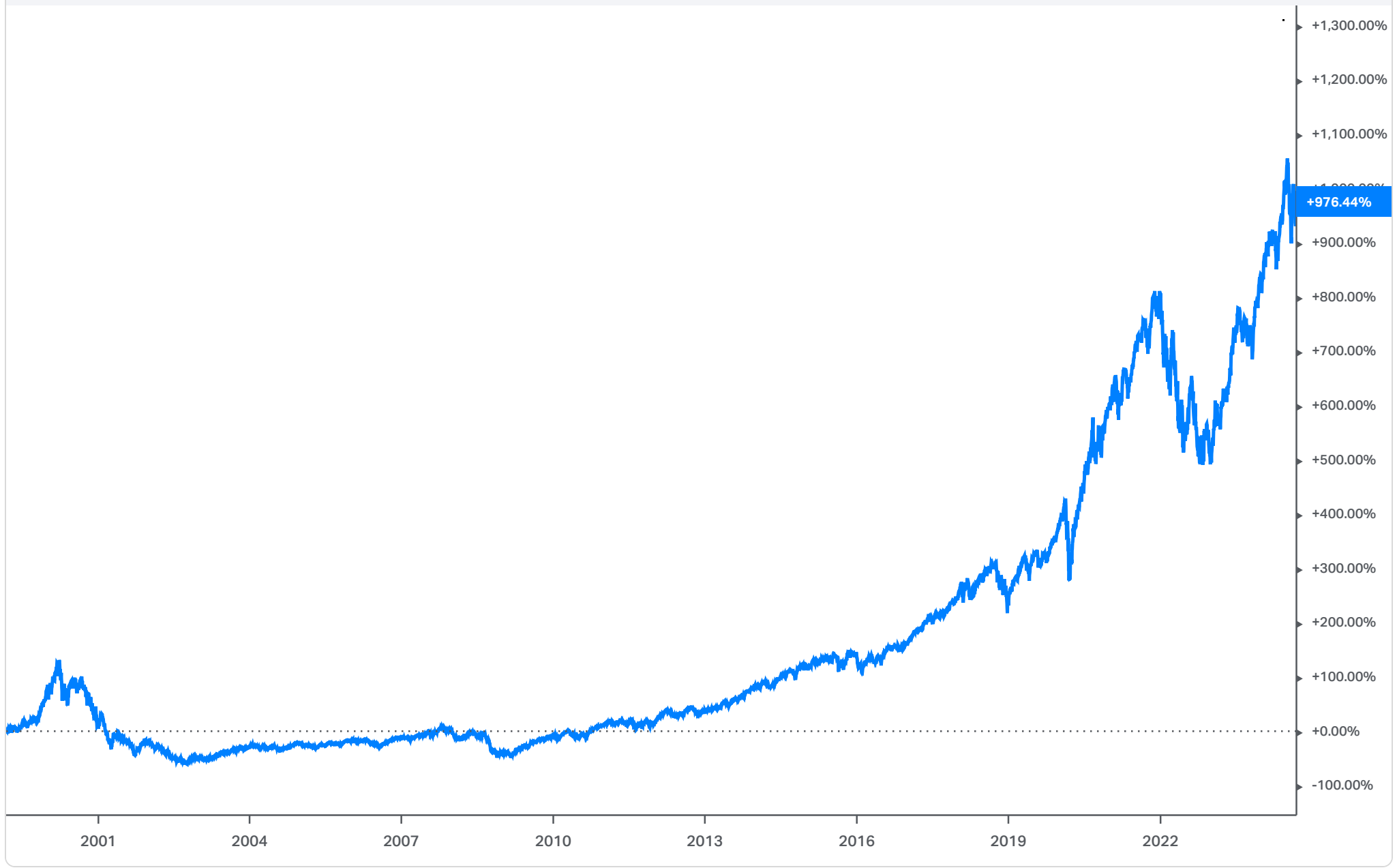
Stress Test

QQQ

Tech Bubble 01 Mar 2001 - 31 Oct 2002
Overly inflated stock prices of internet and technology companies rapidly declined, leading to a severe market downturn, causing widespread investor panic, and a prolonged economic slowdown.

−49.7%

9/11 World Trade Center 10 Sep 2001 - 21 Sep 2001
The 9/11 attacks caused financial turmoil, including market closures, property damage, and long-term economic effects.

−17.3%

Lehman Collapse 12 Sep 2008 - 03 Nov 2008
This caused a global financial crisis, leading to recession, panic, and credit freeze, prompting government bailouts and reforms.

−24.4%

Great Financial Crisis 12 Sep 2008 - 09 Mar 2009
Led to a global recession, job losses, and housing market collapse, prompting government interventions, increased regulation, and reshaping consumer behavior and investor confidence.

−40.7%

Q4 Volatility Spike 21 Sep 2018 - 21 Dec 2018
Year-end market turbulence due to portfolio adjustments, earnings reports, and geopolitical tensions.

−19.7%

Covid Crisis 19 Feb 2020 - 23 Mar 2020
COVID-19 triggered a global economic downturn, with stock market volatility, widespread unemployment, and industry disruptions, prompting government stimulus.

−28.1%

Inflation Surge 03 Jan 2022 - 12 Oct 2022
This raised economic worries, increasing costs for consumers and businesses. Central banks faced pressure to address rising prices while sustaining growth, influencing global market dynamics.

−34.6%

Top Holdings — QQQ

	Ticker	Name	% of Portfolio	# of Funds Holding
	AAPL	Apple Inc.	9.14%	1
	MSFT	Microsoft Corporation	8.34%	1
	NVDA	NVIDIA Corporation	7.20%	1
	AMZN	Amazon.com, Inc.	5.06%	1
	AVGO	Broadcom Inc.	4.81%	1
	META	Meta Platforms, Inc.	4.77%	1
	TSLA	Tesla, Inc.	2.96%	1
	COST	Costco Wholesale Corporation	2.78%	1
	GOOGL	Alphabet Inc.	2.37%	1
	GOOG	Alphabet Inc.	2.28%	1
	NFLX	Netflix, Inc.	2.03%	1
	ADBE	Adobe Inc.	1.80%	1
	PEP	PepsiCo, Inc.	1.71%	1
	AMD	Advanced Micro Devices, Inc.	1.62%	1
	TMUS	T-Mobile US, Inc.	1.61%	1

Top Performers — QQQ

	Ticker	Name	Last Price	1 Year % Change
	NVDA	NVIDIA Corporation	116.91	158.85%
	AVGO	Broadcom Inc.	158.27	87.46%
	CEG	Constellation Energy Corporation	187.25	71.57%
	META	Meta Platforms, Inc.	511.83	66.76%
	CTAS	Cintas Corporation	204.96	66.12%
	COST	Costco Wholesale Corporation	900.40	65.85%
	ISRG	Intuitive Surgical, Inc.	490.93	62.37%
	SMCI	Super Micro Computer, Inc.	445.40	60.61%
	DASH	DoorDash, Inc.	130.02	56.11%
	QCOM	QUALCOMM Incorporated	166.56	54.19%
	NFLX	Netflix, Inc.	681.47	53.02%
	KLAC	KLA Corporation	748.82	52.88%
	CRWD	CrowdStrike Holdings, Inc.	253.53	47.15%
	MELI	MercadoLibre, Inc.	2,045.88	43.78%
	TMUS	T-Mobile US, Inc.	198.54	43.75%

Annualized Returns

QQQ
9.76%

The average yearly performance of an investment portfolio, shown as a percentage.

Annualized Excess Returns

QQQ
7.74%

The average extra gains of an investment portfolio compared to a benchmark or risk-free rate over a year, shown as a percentage.

Standard Deviation
Annualized

QQQ
23.61%

This measures volatility or variation in a portfolio's returns around its average. A higher number indicates greater potential for larger fluctuations in returns.

Downside Deviation
Annualized

QQQ
15.87%

Measures the extent of volatility or risk associated with negative returns. It helps investors assess the downside risk of their portfolio during adverse market conditions.

Maximum Drawdown

QQQ
-82.98%

Represents the largest peak-to-trough decline in portfolio value over a specific period. It helps investors gauge the potential downside risk and loss exposure of their portfolio.

Stock Market Correlation
Annualized

QQQ
0.84

The degree to which the returns of different stocks or assets move in relation to each other. It helps investors assess the diversification benefits and manage overall portfolio risk.

Sharpe Ratio

QQQ
0.33

Measures the risk-adjusted return of a portfolio. A higher Sharpe Ratio indicates better risk-adjusted performance, reflecting more return for the amount of risk taken.

Sortino Ratio

QQQ
0.49

It evaluates the excess return of a portfolio relative to a target. A higher Sortino Ratio indicates better risk-adjusted performance, particularly in terms of minimizing downside volatility or losses.

Calmar Ratio

QQQ
0.09

How much return an investment generates relative to the largest peak-to-trough decline in value. A higher ratio indicates better risk-adjusted returns, with lower relative drawdowns.

Alpha

QQQ
N/A

Measures if a portfolio is performing better or worse than expected given its level of risk. A positive alpha means the portfolio is doing better than expected.

Beta

QQQ
N/A

How much the portfolio's value might go up or down compared to the overall market. If a portfolio has a beta of 1, it means it tends to move in line with the market.

Positive Months
Percentage

QQQ
59.34%

Proportion of months in which the portfolio experienced positive returns. It provides insight into the frequency of positive performance periods for the portfolio.

Disclosures

This report is intended for informational purposes only and should not be used as a substitute for an account statement. The performance data presented is hypothetical and past performance is not indicative of future results. Investments carry risks, and diversification may not protect against substantial losses.

Koyfin does not endorse any specific investment strategies or portfolios and does not provide investment advice. Data in this report is sourced from various vendors and Koyfin cannot guarantee its accuracy. Security metrics, exposures, holdings, and performance data may be incomplete, potentially affecting portfolio report exhibits.

Definitions

Expense Ratio ('Fees'): A weighted average of the Prospectus Net expense ratios for the funds held in the portfolio. This does not include Advisor Fees, Transaction Fees, or Account fees. Canadian Mutual Funds use the Management Expense Ratio (MER).

Dividend Yield: All yields refer to the trailing twelve months (TTM) dividend yields for equities and TTM distribution yields for funds. The portfolio's dividend yield is a holdings-weighted average for each security.

Exposures: Exposure exhibits are based on data that totals 100%. Equity (and fixed income) exposures will sum to 100%, even if the portfolio is only partially composed of equities (or fixed income). Koyfin displays all exposure exhibits from largest to smallest based on the primary portfolio. Small exposures might not be represented in this report due to lack of space.

Stylebox: The Morningstar Style Box categorizes investments based on market capitalization and style for equities, and credit quality and interest rate sensitivity for fixed income. This report shows the weighted average style box of fund holdings. Individual equities are omitted from this analysis.

Risk: Risk metrics are calculated using monthly returns, except for maximum drawdown, which uses daily returns. When comparing two portfolios, Koyfin calculates risk metrics for the report period.

Market: SPY is used to represent the Market for relevant risk metrics.

Risk-Free Rate: Three-month Treasury Bills are used to represent the risk-free rate.

Annualized Returns: Geometric average yearly performance of an investment portfolio.

Annualized Excess Returns: The average extra gains of an investment portfolio over the risk-free rate.

Standard Deviation ('Volatility'): Measures volatility or variation in a portfolio's returns around its average. A sample standard deviation of monthly returns is scaled by the square root of 12 to annualize this metric.

Downside Deviation: Measures the extent of volatility or risk associated with negative returns. This metric is annualized.

Maximum Drawdown: Represents the largest peak-to-trough decline in portfolio value over the period.

Stock Market Correlation: The degree to which your portfolio moves in relation to the market.

Sharpe Ratio: A measure of risk-adjusted excess return of a portfolio. It is calculated by taking the annual return minus the risk-free rate and dividing by the annualized volatility.

Sortino Ratio: Evaluates the excess return of a portfolio relative to risk but uses downside deviation as the risk metric. It is calculated by taking the annual return minus the risk-free rate and dividing by the annualized downside deviation.

Calmar Ratio: Measures return relative to the largest peak-to-trough decline in value. It is calculated by taking the annualized return minus the risk-free rate and dividing by the maximum drawdown.

Positive Months (Percentage): Proportion of months in which the portfolio generated positive returns.

Alpha and Beta: Alpha and beta are calculated using the portfolio's assigned benchmark, not the report's comparison security. Alpha and beta calculations are based on the maximum overlap between the portfolio and its benchmark, which may start after the report's start date. Alpha measures if a portfolio is performing better or worse than expected given its level of risk. Beta indicates how much the portfolio's value might go up or down compared to the benchmark.