



Explaining the GARP approach to stock selection

The GARP (growth at a reasonable price) approach can be defined as an investment strategy that seeks to explicitly combine elements of both growth and value investing. The approach is often attributed to Peter Lynch, who popularized the strategy in the 1980s through his successful track record of active fund management. This investing style has been adopted in the passive-investment arena only more recently.

The GARP investing approach gained popularity during the 1990s and thereafter, partly as a response to the unmet growth expectations of those decades. The crash of 1987 and the bursting of the dot-com bubble in early 2000 brought down many overvalued growth stocks, dampening enthusiasm for speculative growth investing. As a result, investors increasingly sought a more balanced approach that combined growth potential with reasonable valuations.

Although value and growth are sometimes perceived as contrasting philosophies, the GARP approach selects stocks with strong growth characteristics and lower valuations.

Growth. Growth as an investing style has enjoyed numerous adherents across both practice and academia for decades.¹ Growth investors seek companies that have demonstrated above-average earnings growth compared to the market or their industry peers and are expected to sustain this growth trajectory.

Strong growth potential may arise from a company's innovative products or services, expanding markets, growth in market share or another source of robust competitive advantage. Active managers have typically used metrics based on past and future earnings and sales, among other fundamental measures, to inform their stock-selection preferences.

Value. The value investing style, pioneered by Benjamin Graham, typically relies on picking stocks that are trading at a discount to their intrinsic value (or a proxy for that, such as price-to-book or price-to-earnings ratios). Like growth investing, it has also been a popular choice for many active managers. Over the long term, value-investing strategies have been shown to outperform over business cycles as valuations revert to the mean. The MSCI World Enhanced Value and MSCI Emerging Markets Enhanced Value Indexes have outperformed the MSCI World and MSCI Emerging Markets Indexes by 1.49% and 4.04%, respectively, since their launch dates in November 1997 and December 2000, respectively.²

Adding quality. Research has shown that considering a security's quality characteristics (for example, metrics such as profitability, financial leverage and earnings stability) to construct portfolios has led to higher risk-adjusted returns.³ Integrating quality when selecting growth stocks can help ensure that the earnings growth is more likely to be persistent over time.

Similarly, considering a security's quality characteristics, such as consistent cash flow and high return on equity, in implementing value investing has produced positive results.⁴ Warren Buffett is renowned for incorporating quality in his style of value investing.

The MSCI USA Quality GARP Select Index is designed to provide a diversified exposure to growth companies that have lower valuations and are of higher quality. The approach uses a rules-based framework that selects high-growth stocks based on several growth metrics and then tilts their market-cap weights so that the stocks with lower valuations and higher quality characteristics are overweighted. The index also aims to mitigate concentration within and across individual sectors⁵ by applying a capping mechanism.

¹ The growth factor has been investigated in several empirical studies, for example, Bauman and Dowen (1988), Fama and French (2002, 2006) and Arnott and Asness (2003).

² This is an analysis of historical data, which may include hypothetical, backtested or simulated performance results. There are frequently material differences between backtested or simulated performance results and actual results subsequently achieved by any investment strategy. Past performance is not indicative of future results.

³ Asness, Frazzini and Pedersen (2019) demonstrated quality's outperformance, defining quality based on profitability, growth and safety for the period 1963-2010.

⁴ Novy-Marx (2013) showed that portfolios which combined quality and value signals outperformed quality-agnostic value portfolios.

⁵ Sectors are defined using the Global Industry Classification Standard (GICS®). GICS is the industry-classification standard jointly developed by MSCI and S&P Global Market Intelligence.

Overview of the index methodology

The index design is primarily driven by security selection based on certain growth characteristics. The selection process begins with the constituents of the MSCI USA Index, which are large- and midcap securities. The methodology then selects the securities corresponding to the top 50% of the starting pool by weight⁶ when ranked by their growth score.⁷

The selected securities are then weighted in proportion to the product of their float-adjusted market capitalization and a tilt score. The tilt score accounts for dimensions such as the security's valuation, fundamental quality and market capitalization relative to its universe peers.

A value score⁸ and quality score⁹ are computed for all securities in the eligible

universe. A higher overall tilt score is assigned to the securities that have both a higher value and a higher quality score. To mitigate potential overconcentration in a few securities, the tilt score is reduced by half for the securities with higher float-adjusted market capitalization. These securities are defined by their position in the top 50% by free-float-adjusted market-capitalization weight in the selected universe.

The aim of the three-dimensional view on tilting is to ensure that the weight of a growth company is driven by its relative value and operational robustness, as well as to mitigate potential overconcentration in mega caps. To reduce the level of trading associated with replication, the index methodology also implements a buffer of 15% in the selection process. Finally, security weights are simultaneously capped at the issuer and sector levels to limit undesired concentrations in individual companies or sectors.

More details on the calculation of the metrics used in the methodology, as well as the index-methodology rules, are available in MSCI USA Quality

GARP Select Index.

Exhibit 1: Tilt score accounts for value, quality and size characteristics of eligible securities

	7.1		
		VC score ≤ 50%	VC score > 50%
Top 50% by weight	QC score ≤ 25%	3.5	1.75
	QC score > 25% and QC score ≤ 50%	2.5	1.25
	QC score > 50% and QC score ≤ 75%	1.5	0.75
	QC score > 75%	0.5	0.25
Rest of the selected securities	QC score ≤ 25%	7.0	3.5
	QC score > 25% and QC score ≤ 50%	5.0	2.5
	QC score > 50% and QC score ≤ 75%	3.0	1.5
	QC score> 75%	1.0	0.5

The VC score for each security is calculated as its cumulative weight (calculated using the free-float-adjusted market capitalization) of all the selected securities in each sector, when sorted by the value score in descending order. The QC score for each security is calculated as its cumulative weight (calculated using the free-float-adjusted market capitalization) of all the selected securities in each sector, when sorted by the quality score in descending order.

⁶ Index weight is set as proportional to the security's free-float-adjusted market capitalization

⁷ The growth score is defined using five fundamental variables: 1) long-term forward earnings-per-share (EPS) growth rate, 2) short-term forward EPS growth rate, 3) current internal growth rate, 4) long-term historical EPS growth trend and 5) long-term historical sales-per-share growth trend.

⁸ The value score is a normalized z-score, computed over the starting universe of eligible securities, based on three fundamental ratios: 1) forward price to earnings (P/E), 2) price to book and 3) enterprise value to operating cash flow.

⁹ The quality score is a normalized z-score, computed over the starting universe of eligible securities, based on three fundamental ratios: 1) return on equity, 2) debt to equity and 3) earnings variability.

Simulated performance and characteristics

We compared the simulated performance of the MSCI USA Quality GARP Select Index with that of the MSCI USA Growth Index, 10 which represents a broader opportunity set for growth-oriented investors. Over the period from Nov. 29, 2002, to April 30, 2024, the two indexes had similar return-to-risk ratios.

Exhibit 2: Key metrics from the simulated historical performance of the **MSCI USA Quality GARP Select Index**

	MSCI USA Index	MSCI USA Growth Index	MSCI USA Quality GARP Select Index
Total return* (%)	10.4	11.7	11.3
Total risk (%)	14.9	16.2	16.3
Return/risk	0.70	0.72	0.69
Sharpe ratio	0.59	0.63	0.60
Active return (%)	0.0	1.4	0.9
Tracking error (%)	0.0	4.5	3.3
Information ratio		0.31	0.29
Historical beta	1.00	1.05	1.07
Number of constituents**	598	332	283
Turnover*** (%)	3.2	18.6	61.2
Dividend yield** (%)	1.9	1.0	1.2

Data period from Nov. 29, 2002, to April 30, 2024. * Gross returns annualized in USD. ** Monthly averages. *** Annualized one-way index turnover divided by index reviews. Performance of the MSCI USA Quality GARP Select Index is simulated over its available backtested history.

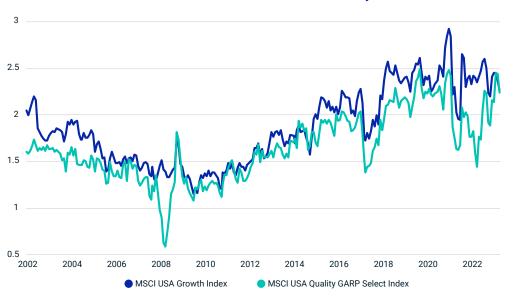
¹⁰ The analysis and observations in this product insight are limited solely to the period of the relevant historical data, backtest or simulation. There are frequently material differences between backtested or simulated performance results and actual results subsequently achieved by any investment strategy. Past performance — whether actual, backtested or simulated — is no indication or guarantee of future performance. None of the information or analysis herein is intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision or asset allocation and should not be relied on as such.





Over the same period, the value dimension of the methodology was reflected in the lower P/E-to-growth (PEG)¹¹ ratio of the MSCI USA Quality GARP Select Index relative to that of the MSCI USA Growth Index.

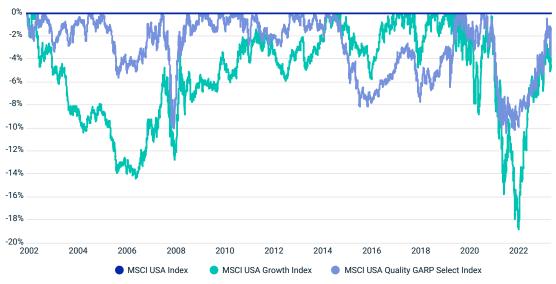
Exhibit 3: PEG ratios of the MSCI USA Growth and MSCI USA Quality GARP Select Indexes



Data period from Nov. 29, 2002, to April 30, 2024.

The quality dimension of the methodology, designed to provide downside protection due to quality's defensive nature, was demonstrated by the MSCI USA Quality GARP Select Index's lower active-return drawdowns (maximum drawdown was 10.5%) compared to the MSCI USA Growth Index over the analysis

Exhibit 4: Active-return drawdowns of the MSCI USA Growth and MSCI USA Quality GARP Select Indexes

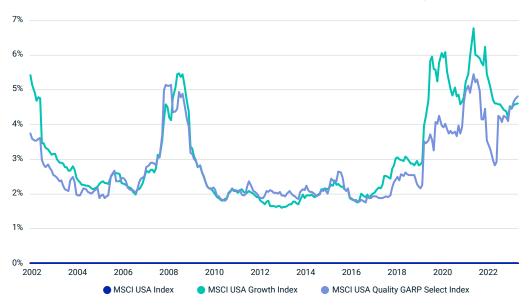


Data from Nov. 29, 2002, to Apil 30, 2024. Drawdowns are based on simulated performance of the MSCI USA Quality GARP Select Index and are calculated relative to the performance of the MSCI USA Index.

¹¹ PEG ratio refers to the index-level ratio of P/E and forward EPS one-year growth rate.

Using the forecast of active risk from MSCI's Global Equity Model for Long-Term Investors (GEMLT), we observed that the MSCI USA Quality GARP Select Index had lower ex-ante tracking error compared to the MSCI USA Growth Index for much of the roughly 22 years ending April 2024.

Exhibit 5: Ex-ante tracking error of the MSCI USA Growth and MSCI USA Quality GARP Select Indexes



Data from Nov. 29, 2002, to April 30, 2024. Tracking error is based on simulated performance of the MSCI USA Quality GARP Select Index and is calculated relative to the performance of the MSCI USA Index.

An analysis of the changes in the weights of the top 10 constituents of the MSCI USA Quality GARP Select Index, as compared to the MSCI USA and MSCI USA Growth Indexes, showed lower concentration in the top 10 constituents than the MSCI USA Growth Index across most of the period studied. The lower concentration could be attributable to the three-dimensional tilt score and capping mechanism incorporated in the methodology of the MSCI USA Quality GARP Select Index.

Exhibit 6: Top 10 constituents' weight in the MSCI USA, MSCI USA Growth and MSCI USA Quality GARP Select Indexes



Data from Nov. 29, 2002, to Apil 30, 2024. Top 10 constituents' weight is based on simulated performance of the MSCI USA Quality GARP Select Index.







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