

The Case for Quality, Stability, and Income®

WHITEPAPER

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Factor-based investing involves targeting securities based on specific attributes, or “factors.” While factor investing is certainly not a new concept, it is far more widely used today as a means to achieve superior returns and portfolio diversification through specific, identifiable factors.

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Most institutional investors have an investment return target that is well above the returns available from the safest investment-grade bonds. As a result, sizable strategic investments in higher-returning equities are necessary to meet investment goals. Based on the research presented below, Meketa Investment Group believes that a US equity portfolio tilted towards three factors – higher quality, higher stability, and higher income stocks – can increase risk-adjusted returns for equity-oriented investors.

In some environments, investors may expect to be extremely well compensated for equity risk. In others, such as the late 1990s and late 2010s, investors may expect to be less well compensated for equity risk based on substantially elevated valuation metrics, such as price-to-earnings (P/E) ratios. Figures 1 and 2 depict two important predictors of long-term equity returns over time: the ten-year normalized P/E ratio¹ and the dividend yield.²

¹ The normalized P/E ratio is the cyclically adjusted price to earnings ratio as reported by Shiller.

² Other well-known predictors, such as the Q measure, paint a similar picture of less-than-satisfactory long-term equity returns.

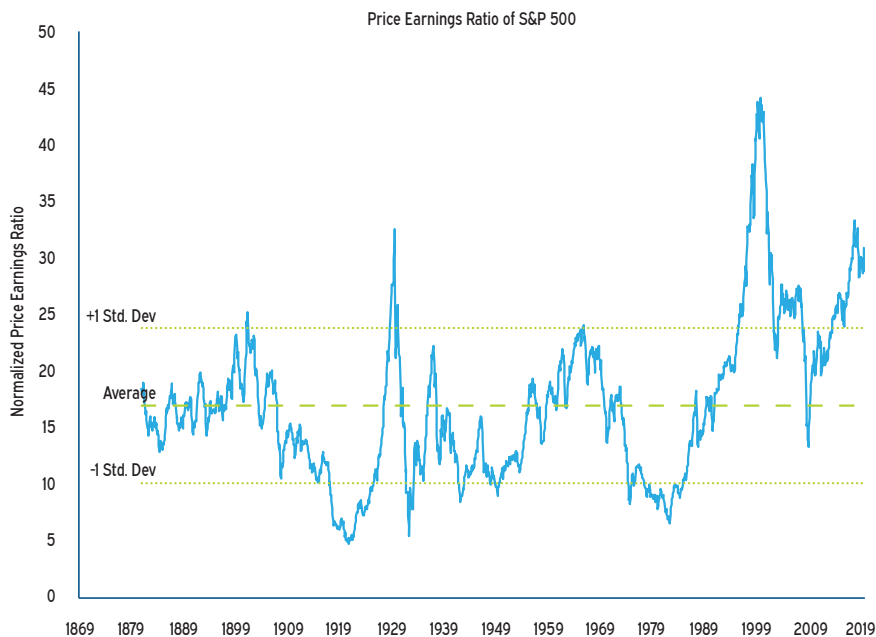


FIGURE 1
Ten-Year Normalized P/E Ratio, 1880-2019

Source: Shiller, Global Financial Data, S&P, Meketa Investment Group

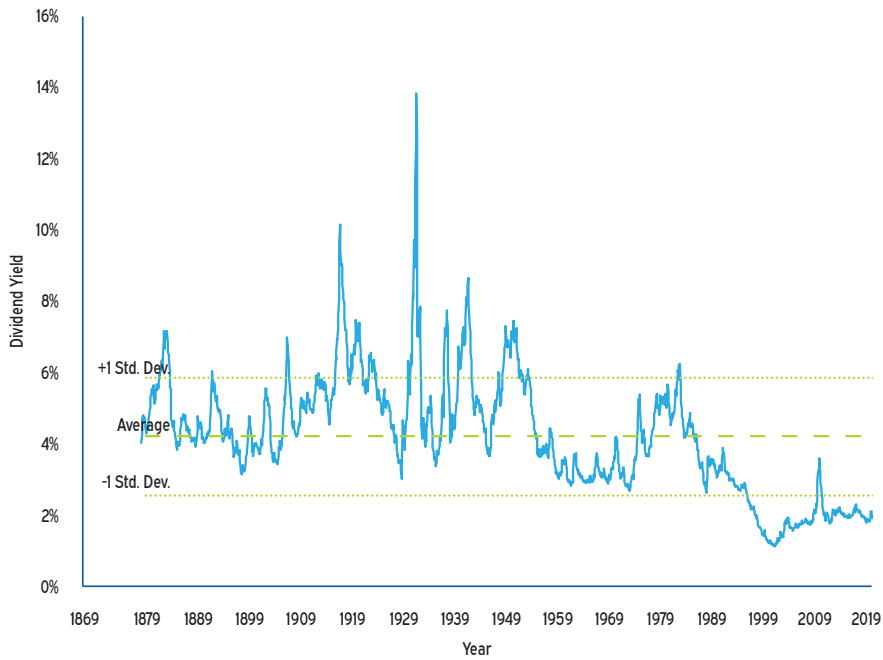


FIGURE 2
Dividend Yield, 1880-2019

Source: S&P

When the ten-year normalized P/E ratio is high compared with its historical average, long-term returns to equities tend to be low compared with their historical average (see Figure 3). As shown in Figure 1, the normalized P/E ratio is currently well over one standard deviation above average, implying a sub-standard long-term return is likely. Similarly, when the dividend yield is low, future long-term returns to equities tend to be low (see Figure 4). Figure 2 indicates that the current dividend yield is close to historic lows, again implying expected equity returns that may be significantly below the average historical experience.

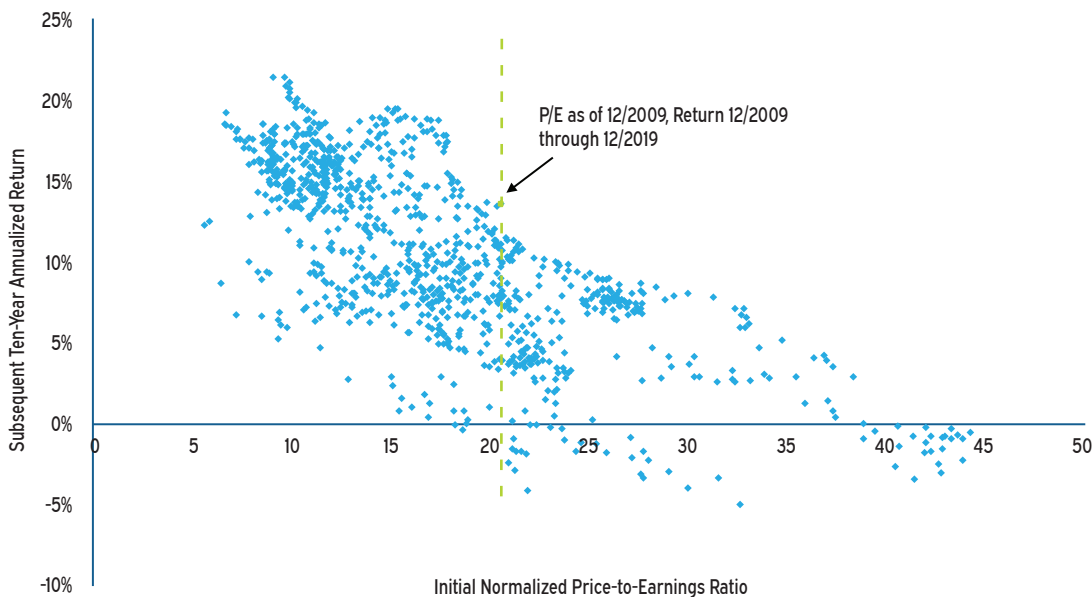


FIGURE 3
Initial Normalized Price-to-Earnings Ratio and Subsequent Ten-Year Annualized Return

Source: Shiller, Global Financial Data, S&P, Meketa Investment Group



FIGURE 4
Initial Dividend Yield and
Subsequent Ten-Year
Annualized Return

Source: Shiller, Global Financial Data, S&P, Meketa Investment Group

If equity risk were expected to be low, these currently muted expectations for equity returns might be acceptable for many investors. In such a case, equity investors would expect to be fairly compensated for the risk they have assumed. But it is hard to imagine that equity risk will in fact be consistently low, and institutional investors are rightly concerned that they are not being fairly compensated for equity risk. As a result, institutional investors may wish to mitigate their exposure to downside equity risk.

A proposed approach

Based on our research, institutional investors should consider an investment in *high quality stocks with high dividends that perform relatively well in adverse economic environments*. Such an investment should help mitigate downside risk and improve the risk-adjusted return of an equity allocation.

Quality

In industry parlance, *high quality* stocks are those issued by companies that display relatively consistent earnings, strong balance sheets, low leverage, and have positive or stable growth outlooks. Quality is often considered a stand-alone factor, akin to style (i.e., value or growth) and capitalization.³

³ See references section for a list of relevant publications.

The following three figures show how high quality stocks have historically provided better shelter during difficult environments. Figure 5 summarizes the performance of high quality stocks⁴ relative to the broad equity market from January 1990 through December 2019, as separated into “down” and “up” markets.⁵ During down markets, a basket of high quality stocks outperformed the market by 4.3% on an annualized basis. And while they lagged by 1.0% during up markets, high quality stocks outperformed by 1.9% over the entire period.

⁴ Throughout this section, the Market is represented by the MSCI USA index and High Quality is represented by the MSCI USA Quality.

⁵ “Down” markets are defined as months in which the broad market lost value (i.e., the MSCI USA index had a negative total return). “Up” markets are defined as months in which the broad market gained value.

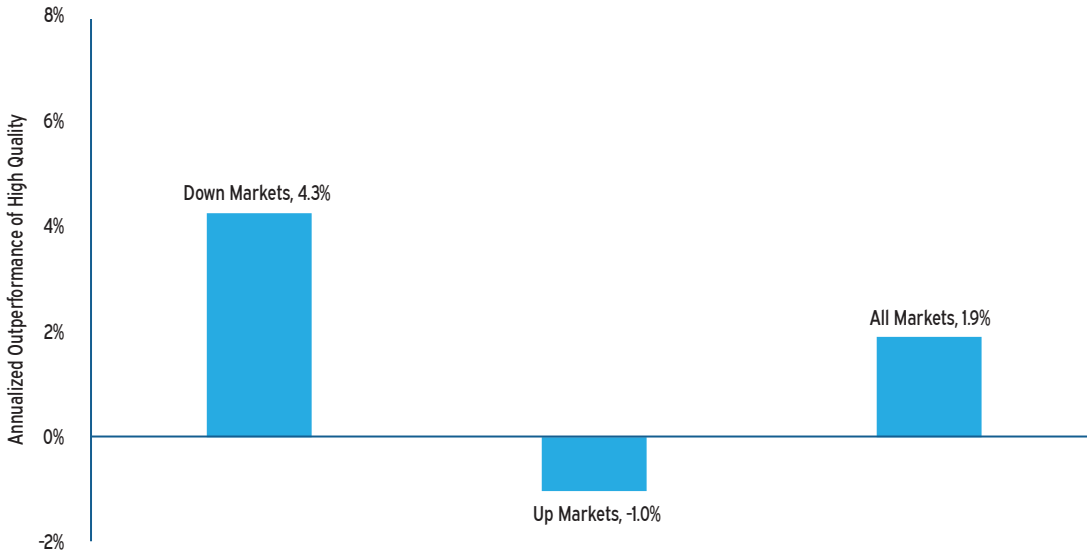


FIGURE 5
High Quality Relative Performance in Down, Up, and All Markets

Source: Meketa Investment Group

Figure 6 provides another related view into the benefits of high quality stocks. In this case, performance is divided into rising and falling volatility environments. In rising volatility environments, high quality stocks outperformed low quality stocks by 3.5%—providing better protection in adverse conditions. The cost of this protection is that high quality stocks underperformed by 0.3% during more benign, falling volatility environments.

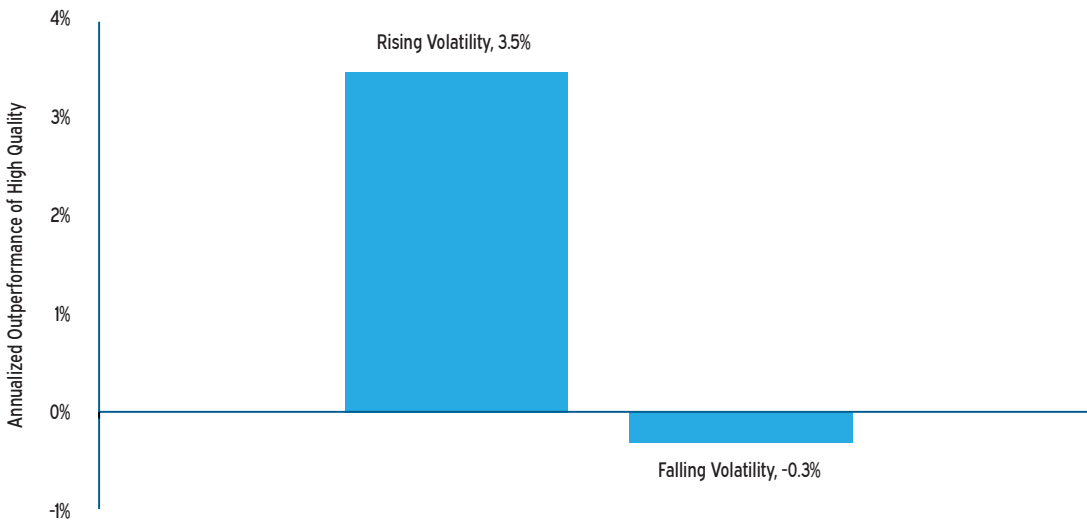


FIGURE 6
High Quality Relative Performance in Periods of Rising and Falling Volatility⁶

⁶ Rising/falling volatility months are those months during which the CBOE VIX increases/decreases from January 1990 to March 2019. High quality is represented by the MSCI USA Quality Index.

Source: Meketa Investment Group

A similar pattern emerges when focusing specifically on the most significant market event of this century, the Global Financial Crisis (“GFC”), as depicted in Figure 7. In 2008, high quality stocks provided a safer haven than low quality stocks, but in this case actually outperformed during the rally of 2009 as well. The result was greater annualized returns over the combined period.

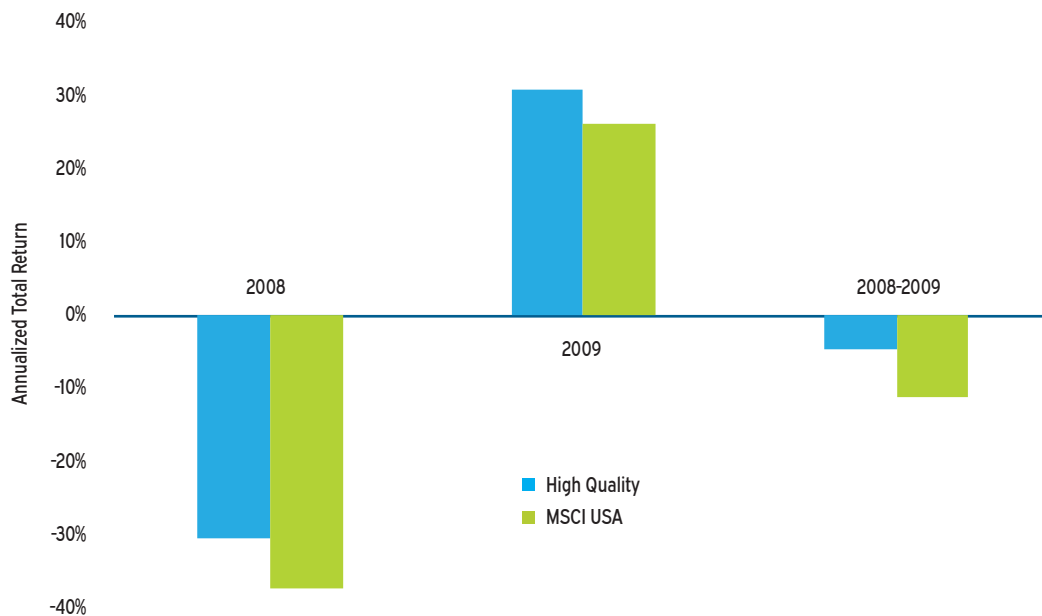


FIGURE 7
High Quality During the GFC (2008-2009)⁷

⁷ Market is represented by MSCI USA index, High Quality represented by MSCI USA Quality.

Source: Meketa Investment Group

Stability

Stability refers broadly to stocks that exhibit low price or market volatility. While sharing several characteristics with quality, stability is considered to be distinct enough to deserve a separate line of research.⁸ There is fairly widespread recognition that stability, or low volatility, is another important driver (often termed a market “anomaly”) that may contribute to higher risk-adjusted equity returns (Baker et al., 2011; De Silva, 2010; Ang et al., 2008; Blitz and van Vliet, 2007). This is an especially interesting finding, because one of the basic assumptions of conventional financial theory is that stocks with greater price or market risk should give greater return. Many theories have been proposed to explain the anomaly, including behavioral biases that prompt investors to invest in lower-returning, risky stocks (see Kumar, 2009), leverage or benchmarking constraints that make arbitrage difficult (see Baker et al., 2011), or the volatility drag that hampers the returns of a portfolio of highly volatile stocks (see Bouchev, 2013).

⁸ See references section for a list of relevant publications.

⁹ Deciles are composed of equal-weighted Russell 3000 stocks as broken down by beta from December 1998 to March 2019.

The figures below summarize some findings on stability as a factor. Figure 8 displays stocks by “beta” decile. Beta measures how much a stock moves relative to the broader equity market and is one common measure of stability. Over the period from 1999 through 2019, those stocks with low betas—which implies high stability—exhibited significantly higher annualized average returns than those with high betas.

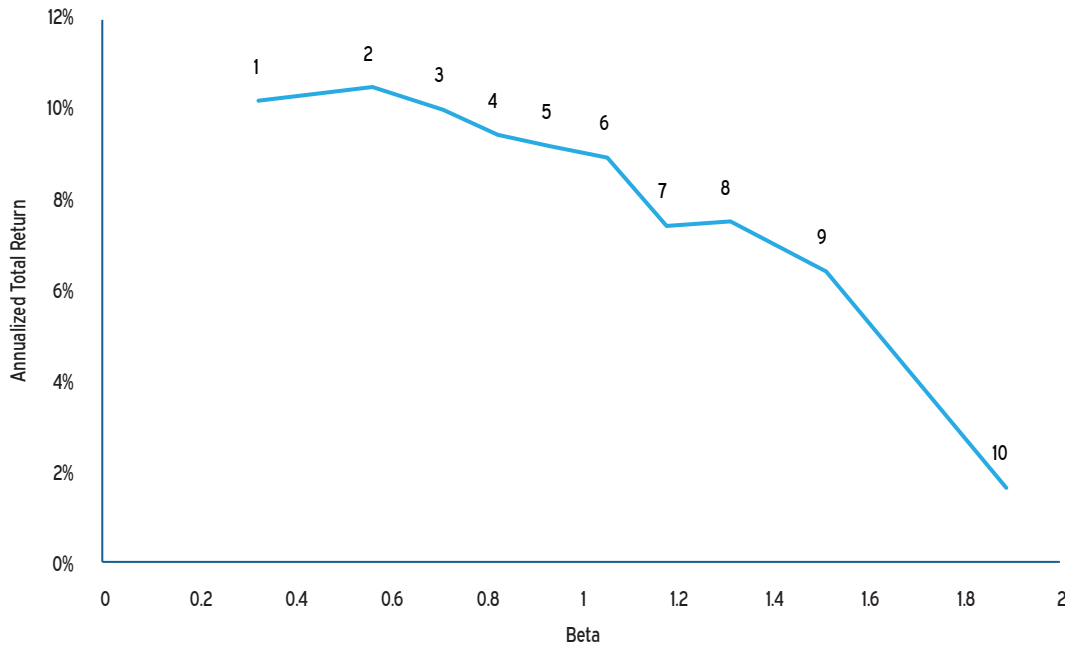


FIGURE 8
Low and High Stability
Performance, by Beta
Decile

Source: Bloomberg

Figure 9 shows how high stability stocks performed relative to low stability stocks during recessions and expansions. From the period 1999 through 2019, high stability stocks generated a -4.1% annualized return during recessions—compared with -18.8% for low stability stocks. High stability stocks performed similarly during the 2008-2009 period, as shown in Figure 10, outperforming during 2008’s crash and subsequently underperforming during 2009’s rally, though unlike high quality, slightly underperforming the lower stability stocks overall.

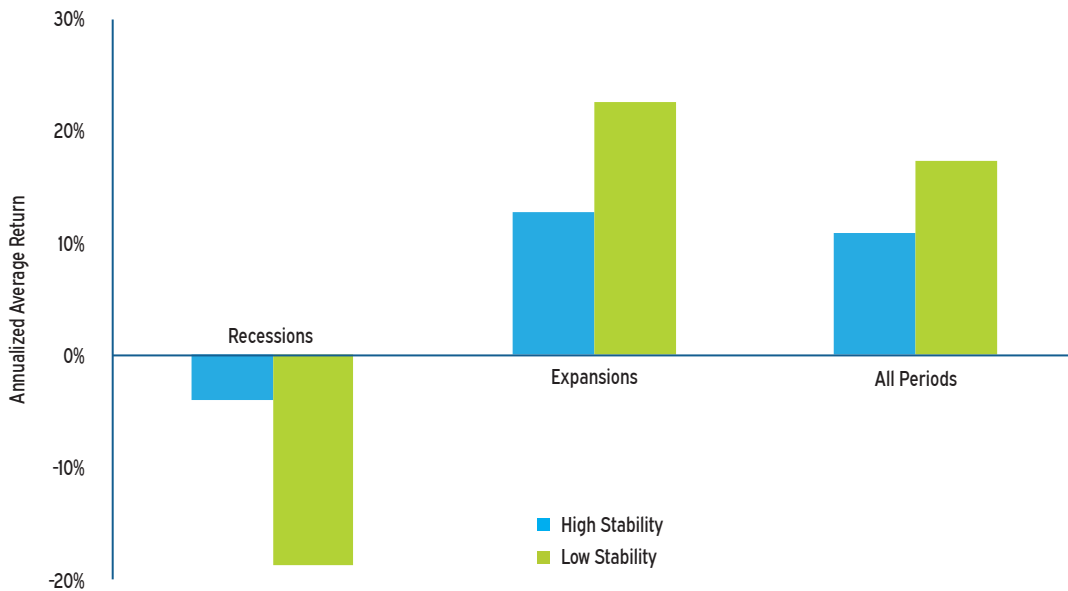


FIGURE 9
High and Low Stability
During Recessions and
Expansions, 1999–2019¹⁰

¹⁰ Annualized average return for the lowest/highest quintile of Beta in Russell 3000 stocks that were constituents for the entire time period.

Source: Meketa Investment Group

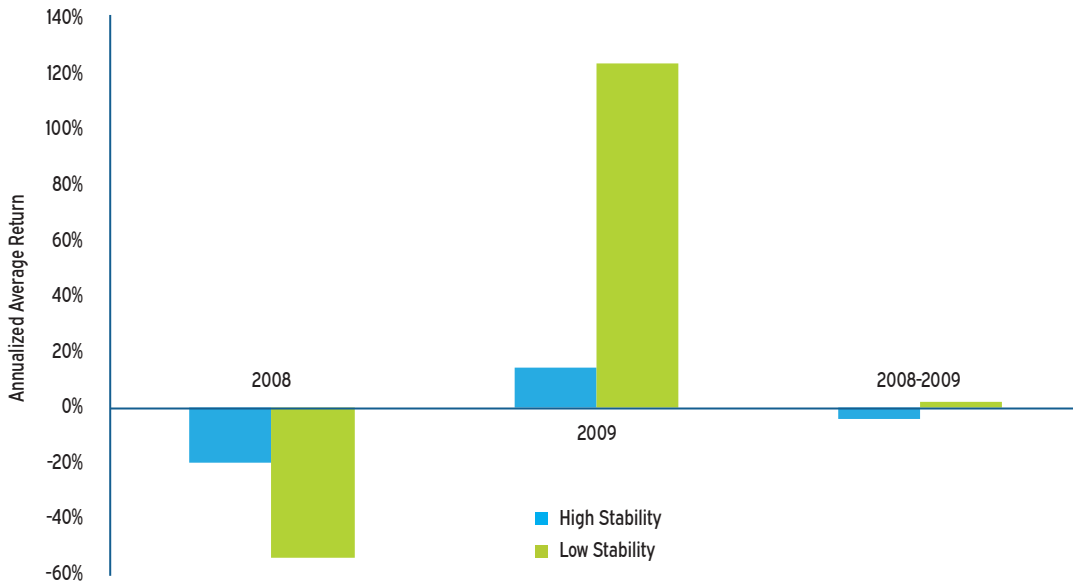


FIGURE 10
High and Low Stability
during the GFC (2008-
2009)¹¹

¹¹ Annualized average return for the lowest/highest quintile of Beta in Russell 3000 stocks that were constituents for the entire time period.

Source: Meketa Investment Group

Income

As Figure 11 shows, dividends have historically been a major contributor to equity returns. This is because whenever a dividend is paid and reinvested, it contributes to returns first as the dividend but later compounds with both price and future dividend return on that initial dividend. Recently, however, dividends have constituted a smaller percentage of total return. Those companies that still pay high dividends tend to share many characteristics with high quality and high stability companies: consistency of dividends and earnings, stable operating models, and positive outlooks. It is no surprise, therefore, that investments in high income stocks have provided downside protection in tough markets (see Figure 12). Though high income stocks generally lagged the market during up years, both total returns and risk-adjusted returns were higher for high income stocks over the entire period.

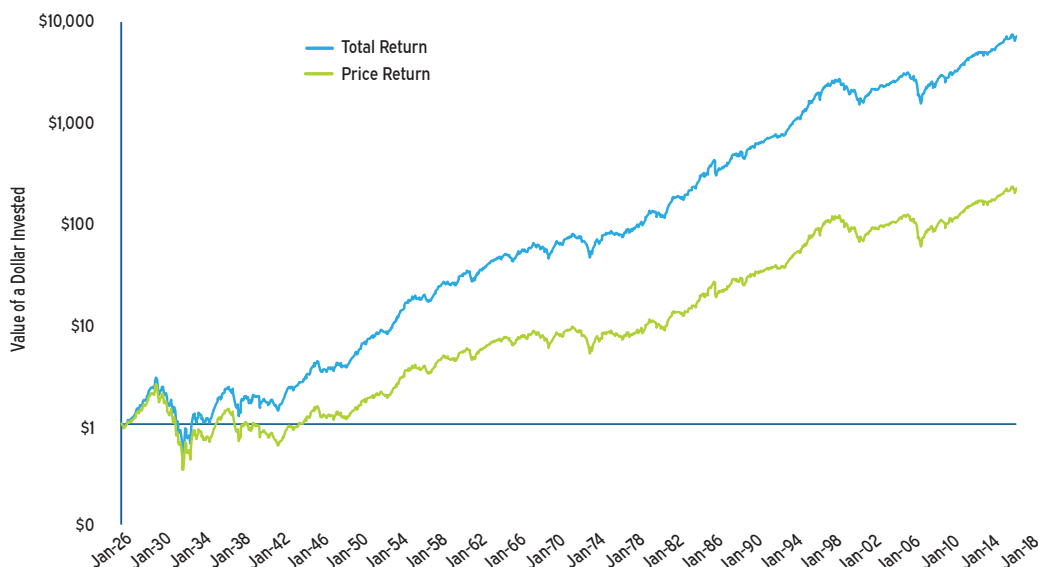


FIGURE 11
Dividends' Contribution to
Total Return

Source: S&P 500, Global Financial Data

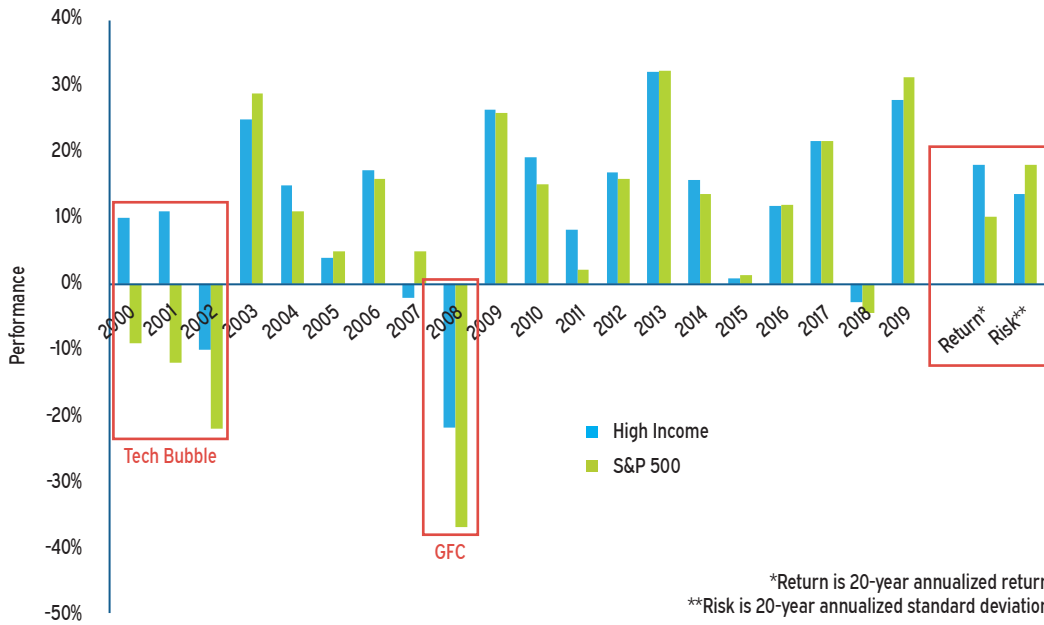


FIGURE 12
High Income Stocks and
the Broad Market, 2000-
2019

Source: S&P; S&P 500 Dividend
Aristocrats

The case for quality, stability, and income®

Our original research into quality, stability, and income was prompted by our desire to find options to mitigate downside equity risk in the fragile market environment during and after the GFC without giving up a significant portion of the upside potential that equities usually offer. In analyzing domestic stock performance during the GFC, we discovered that three factors, namely quality, stability, and income, had substantial and statistically significant effects on performance during those years. These results prompted a review of outside research, which highlighted the importance of these factors.

We felt that an investment approach that combined these three factors was worth pursuing. Therefore, we developed a cap-neutral and sector-neutral portfolio¹² of stocks that were selected based on several metrics related to quality, stability, and income (QSI). Some characteristics of the QSI portfolio as of September 30, 2019 are presented in Tables 1 and 2.

¹² Relative to the Russell 3000.

Capitalization Structure ¹³	QSI Portfolio September 2019	Russell 3000 September 2019
Number of Issues	203	2,988
Weighted Average Market Cap. (US \$bn)	128.4	195.3
Large (% over US \$10bn)	66	70
Medium (% US \$2bn to US \$10bn)	28	24
Small (% under US \$2bn)	6	6

TABLE 1
QSI Portfolio
Capitalization Structure

¹³ Portfolio is designed to be approximately cap- and sector-neutral at time of semi-annual reconstitution, and will deviate throughout the subsequent year. The reconstitution occurs in February and August.

Fundamental Structure	QSI Portfolio September 2019	Russell 3000 September 2019
Average Quality	A-	B
Beta	0.90	1.00
Dividend Yield (%)	2.3	1.9
Price-to-Earnings	20.0	24.0
Price-to-Book	3.5	2.8
Debt-to-Equity (%)	75.4	93.4

TABLE 2
**QSI Portfolio Summary
Statistics**

As can be seen from Table 1, the QSI portfolio of 203¹⁴ stocks is generally cap-neutral, but can be slightly skewed toward smaller issues (i.e., the weighted average market cap is lower than the benchmark). Table 2 indicates that the QSI portfolio is higher quality, higher stability (i.e., lower beta), and higher income than the Russell 3000 index. The following Figures 13–16 show how several of these metrics have evolved over time.

¹⁴ The number of stocks will vary from year to year, but should generally be between 190 and 220.

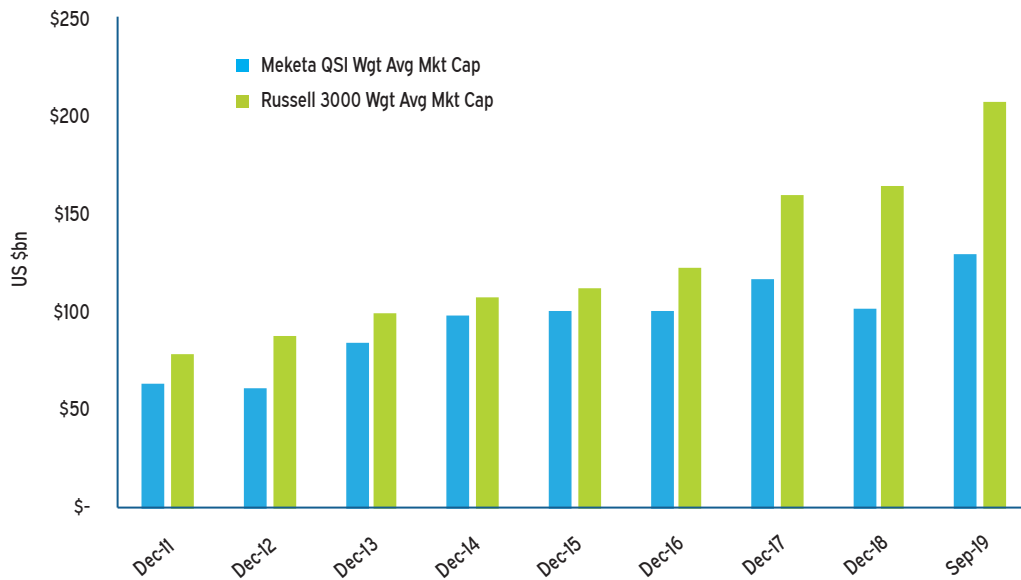


FIGURE 13
**Weighted Average Market
Cap, QSI vs. Russell 3000,
December 2011 through
September 2019**

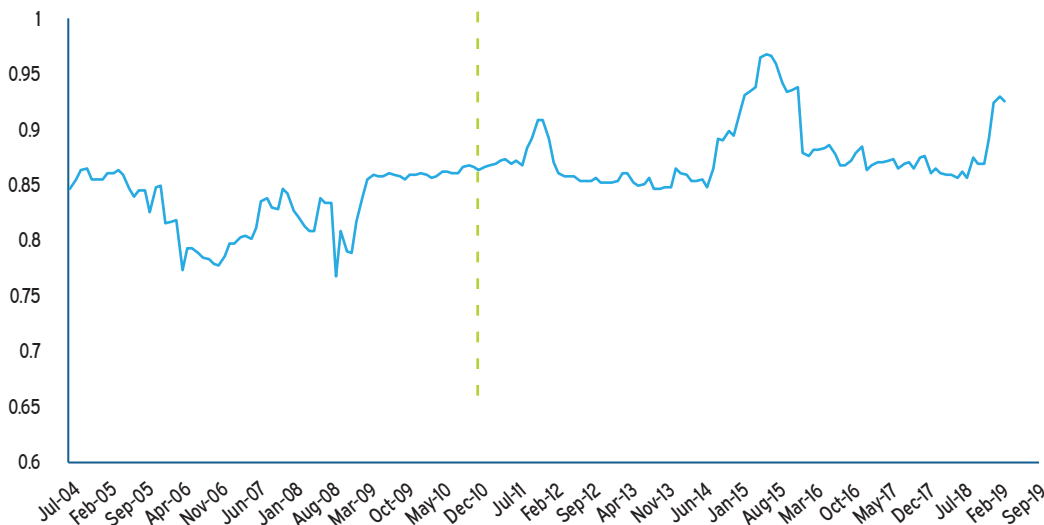


FIGURE 14
**Rolling 3 Year Beta vs.
Russell 3000, July 2004
through September 2019**

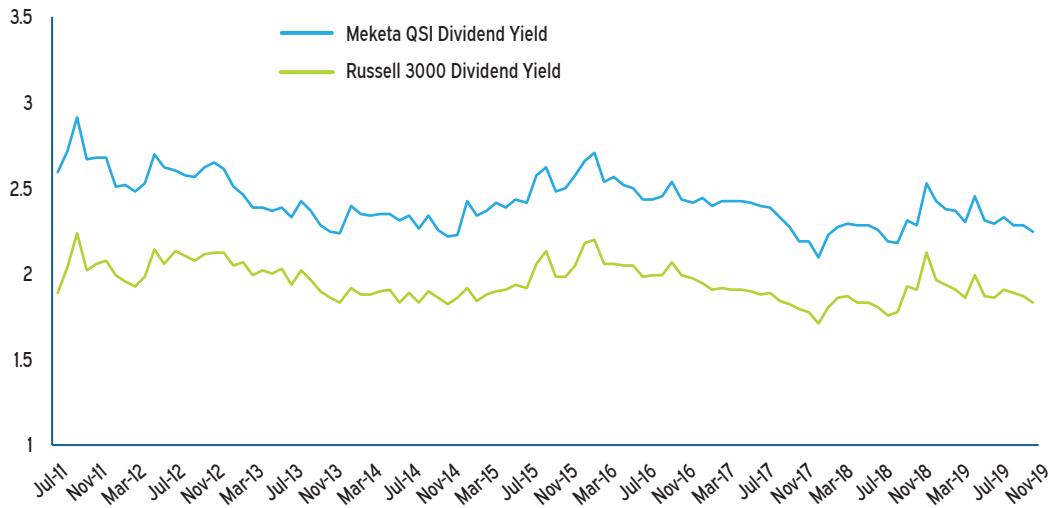


FIGURE 15
Dividend Yield (%), QSI vs. Russell 3000, July 2011 through November 2019

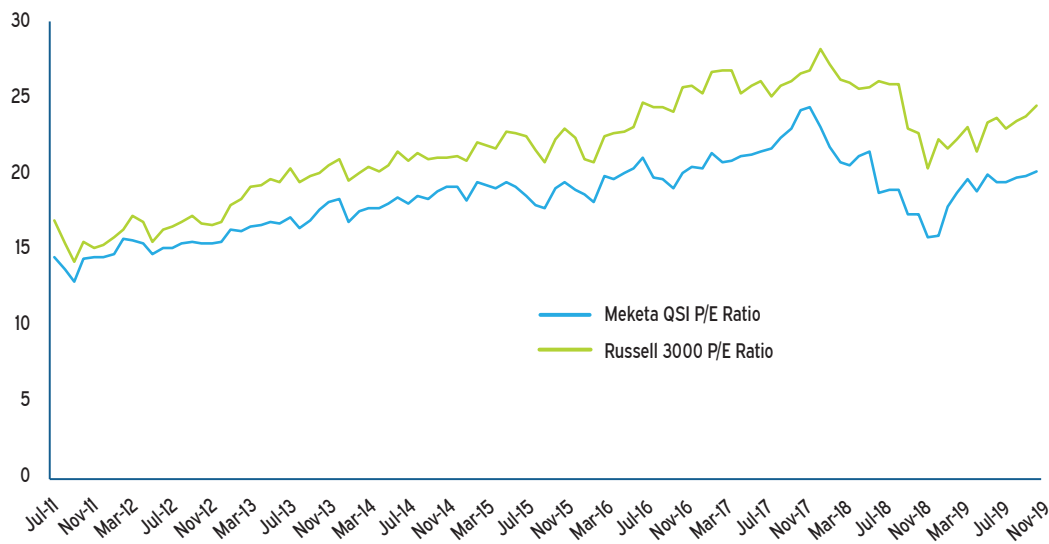


FIGURE 16
P/E Ratio, QSI vs. Russell 3000, July 2011 through November 2019

We back-tested the QSI portfolio for as long a period as we felt we had useful data, which started in calendar year 2001. The back-tested performance of the QSI portfolio methodology and subsequent live performance (starting February 1, 2011) is shown in Table 3 below, followed by calendar year comparisons in Figures 17 and 18.

	Backtest (August 2001 – January 2011)		Live (February 2011 – September 2019)	
	QSI Index	Russell 3000	QSI Index	Russell 3000
Annualized Return	5.1%	3.4%	13.0%	12.1%
Annualized Standard Deviation	14.4%	16.6%	12.3%	13.6%
Sharpe	0.22	0.08	1.01	0.85

TABLE 3
Performance and Risk Comparison of Backtest and Live QSI Index Performance vs. Russell 3000

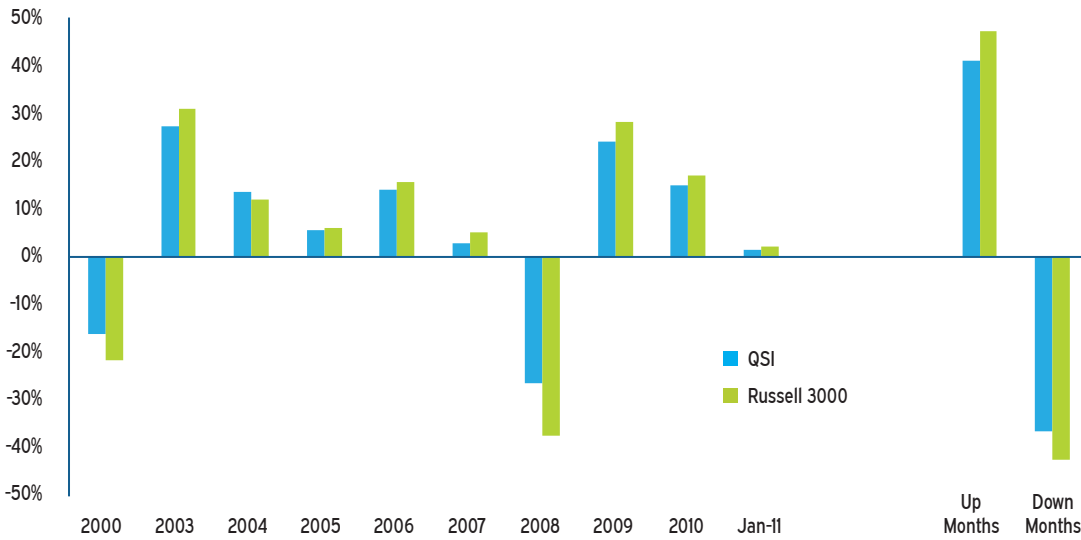


FIGURE 17
QSI Backtested
Performance: August
2001 through January
2011

Source: Meketa Investment Group; QSI Index® backtest from August 2001 through January 2011.

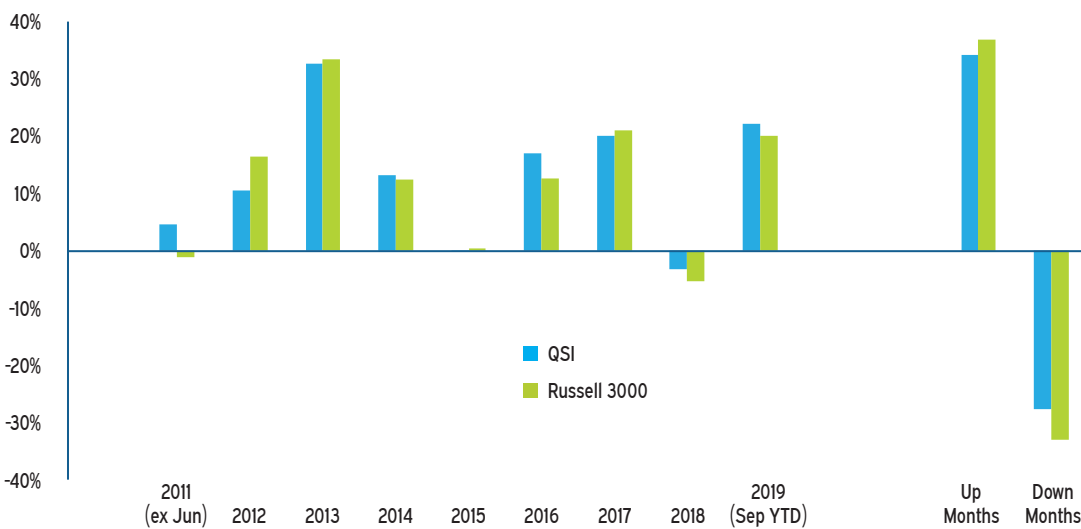


FIGURE 18
Live QSI Performance:
February 2011 through
September 2019

Source: Meketa Investment Group; QSI Index® actual results.

Back-tested performance was as expected: the results demonstrated downside protection (86% downside capture) at the cost of sacrificing some upside (87% upside capture). Importantly, the QSI portfolio provided a better return over the combined period – 5.1% versus 3.4% per annum – with less risk. Note that we do not believe that achieving a higher return should be a necessary expectation for an investor in a QSI portfolio, as they should (theoretically) be willing to accept modestly lower returns for a reduced risk level (as they do with an allocation to bonds).

The live performance of the QSI Index has been at least as expected and perhaps better than the backtest over the past eight years, a period of an extended bull run. QSI has effectively participated in 100% of the market upside while still providing downside protection (81% downside capture). The QSI portfolio has outperformed the index since it went live, though the spread is much tighter, at about 90 basis points. Importantly, the QSI portfolio has exhibited less risk than the Russell 3000, albeit a

smaller difference again than during the backtest (130 bps lower volatility vs. 220 bps lower in the backtest). This is not totally unanticipated given how much less volatile the markets have been since 2011.

As an added benefit, correlations with other risky asset classes were slightly lower than for the Russell 3000 (see Figures 19 & 20). While the QSI portfolio's correlation with the Russell 3000 Value was higher than with the Russell 3000 Growth (0.98 vs. 0.96), the difference was not significant enough for us to be concerned that we had essentially replicated a value index. Furthermore, what slight value effect is present is arguably not enough to explain the risk adjusted return we witnessed (see Clarke, de Silva, and Thorley, 2006; Thomas and Shapiro, 2009).

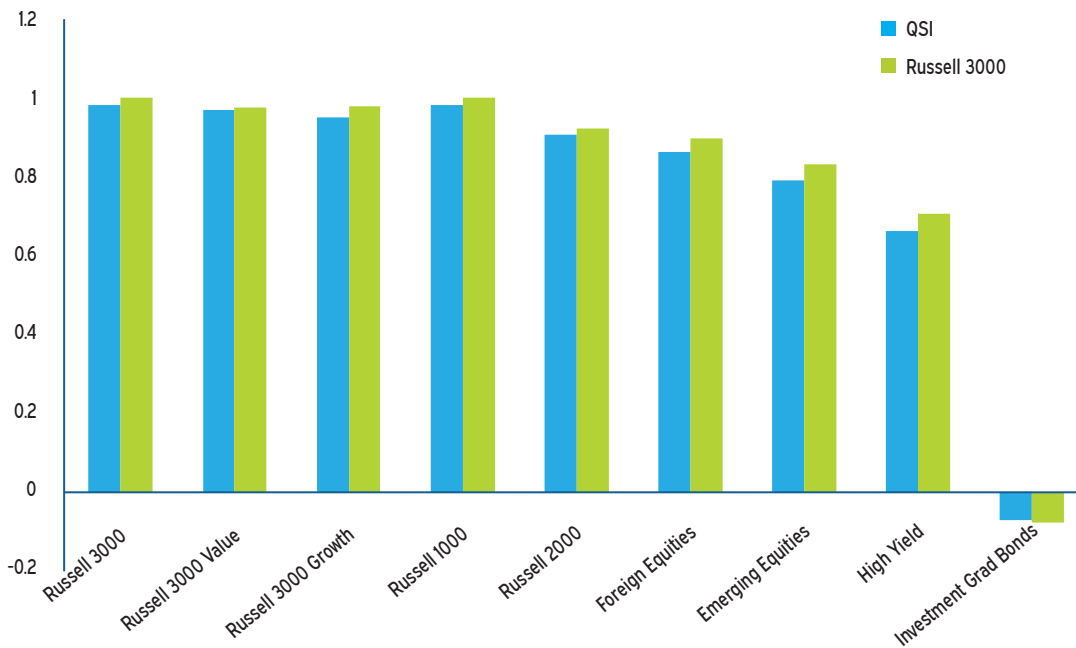
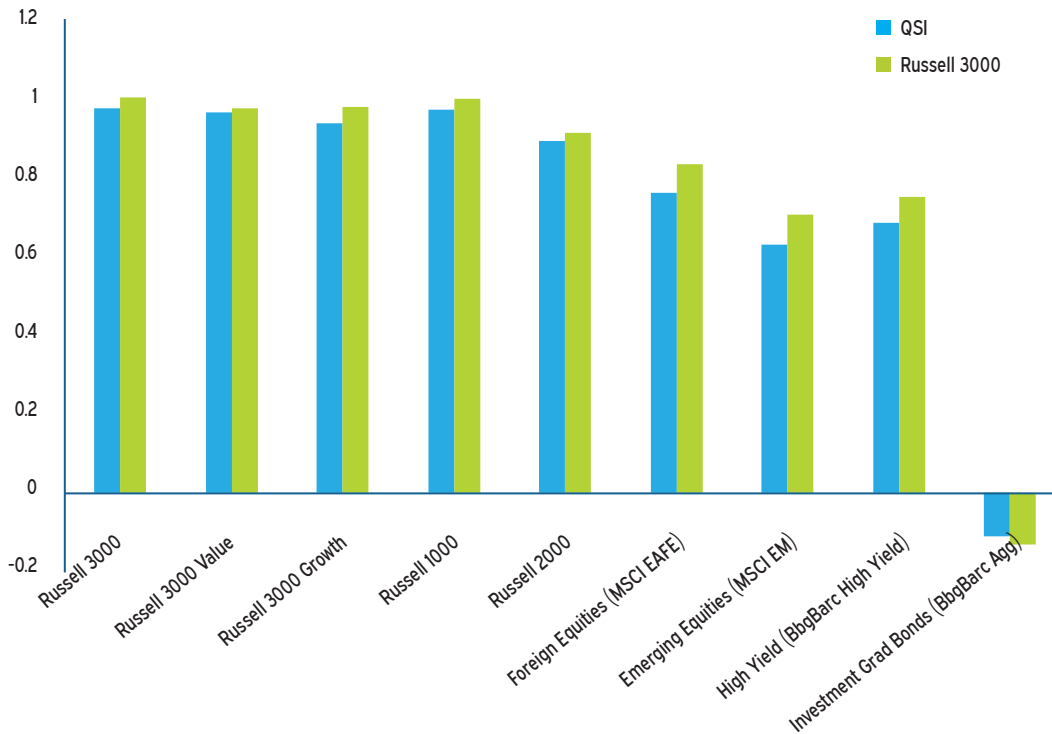


FIGURE 19
QSI Correlations
(Backtest)

Source: Meketa Investment Group; QSI Index® backtest from August 2001 through January 2011.

FIGURE 20
QSI Correlations (Live)



Lower correlations with other risky assets imply that a QSI allocation may increase a portfolio’s risk-adjusted returns not only through the potentially better characteristics of the QSI portfolio, but also through its dampening of portfolio-wide volatility. Alternatively, an investor could redeploy its risk budget to other higher risk/expected returning asset classes to seek a higher returning total portfolio without increasing total portfolio risk.

Risks

While portfolios that focus on higher quality, stability, and income factors may reduce equity risk, they are *not* riskless. For example, although the (backtested) QSI portfolio substantially outperformed the market in 2008, it still declined 26%. And quality, stability, and income portfolios tend to lag during up markets—and likely during major liquidity operations, or “easy money” policies, by the central bank. The rationale is simple: high quality companies do not need “easy money,” but low quality companies do. Therefore, the valuation of the lowest quality companies increases much more than quality companies when the central bank (and risk-taking, generally) drive the market.

This return behavior means that portfolios focused on quality, stability, and income have moderate tracking errors—in the range of 2% to 5%—similar to the tracking error of an actively managed portfolio. Comfort with substantial market deviations should be taken into consideration by any plan sponsor interested in implementing this type of strategy.

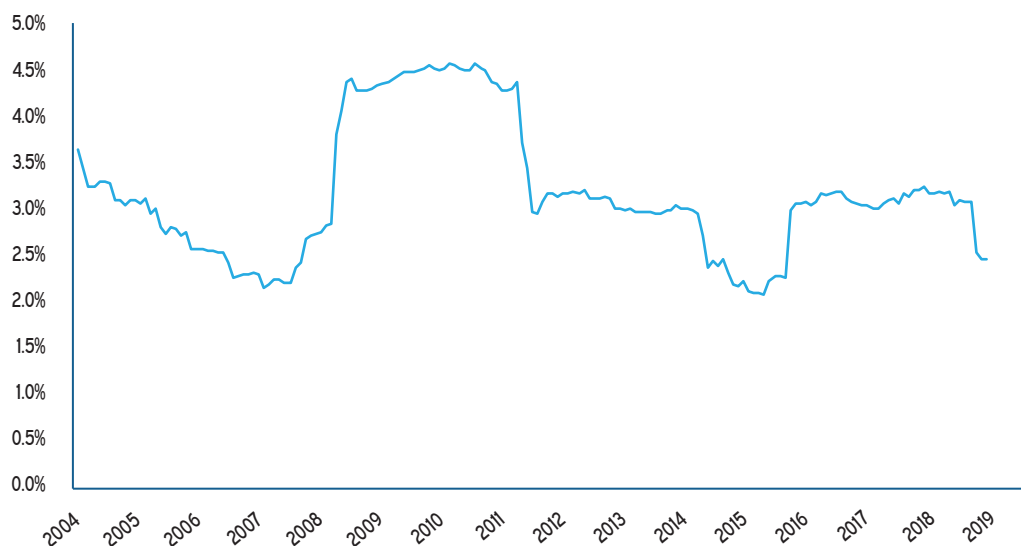


FIGURE 21
Rolling 3-Year Tracking
Error vs. Russell 3000
from July 31, 2004 to
March 31, 2019

Implementation

Active strategies focused on one or more of these approaches will typically charge an active management fee ranging between 0.5% and 1.0%, as well as any attendant transaction and operational costs.

Rules-based strategies, sometimes called “quasi-passive,” are primarily attractive because they are less expensive than active strategies. Furthermore, these strategies could serve as a benchmark for an active quality, stability, or income strategy. A sample of rules-based strategies, including the QSI Index®, is presented in Table 4.

	Factors			Details				
	Q	S	I	Number of Stocks	Sector Neutral?	Cap Neutral?	Expense Ratio (%)	Inception
S&P High Quality	X		X	100-200	No	No	0.19 ¹⁵	6/2010
S&P Dividend Aristocrats		X	X	~50	No	No	0.35 ¹⁶	11/2005
MSCI Minimum Volatility		X		Varies	No	No	0.15 ¹⁷	4/2008
MSCI High Dividend Yield			X	Varies	No	No	0.38 ¹⁸	9/2006
Russell Dividend Achievers		X	X	200-250	No	No	0.54 ¹⁹	6/2009
Meketa QSI Index	X	X	X	200-250	Yes	Yes	0.07 ²⁰	2/2011

The QSI approach is attractive relative to some related rules-based options for several reasons. First, it is the oldest, and thus most tested, approach to combine all three factors. Second, it is broadly diversified, holding approximately 200 to 250 stocks. Finally, because it is both cap and sector neutral, investors can take comfort that performance will not be driven by some other, unintended factor.

TABLE 4
Rules-Based Options
for Quality, Stability, &
Income

¹⁵ Expense ratio reflects Invesco S&P 500 Quality ETF (SPHQ)

¹⁶ Expense ratio reflects SPDR S&P Dividend ETF (SDY)

¹⁷ Expense ratio reflects iShares Edge MSCI Min Vol USA ETF (USMV)

¹⁸ Expense ratio reflects iShares MSCI MSCI World Quality Dividend UCITS ETF (WQDV)

¹⁹ Expense ratio reflects Invesco Dividend Achievers ETF (PFM)

²⁰ The Meketa QSI product is offered by Rumbleline Advisers



Summary

Investing in high quality stocks that provide high income and perform well in adverse environments may be an attractive option for institutional investors who wish to lessen their overall equity risk without sacrificing equity returns. There is substantial evidence that a focus on quality, stability, and income will decrease the downside risk of an equity allocation. In an environment characterized by relatively low expected returns, investments in these stocks appear especially attractive. Nevertheless, such portfolios will experience a relatively high tracking error and may lag in strong bull markets.

Provided that such an allocation fits within an investor's overall objectives and constraints, Meketa Investment Group recommends a strategic allocation to quality, stability, and income portfolios.

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