Strategic Investment Group®

Strategic Perspectives

THE QUEST FOR QUALITY:

How Strategic Tilted Toward High Quality Stocks

IN 2006, STRATEGIC INVESTMENT GROUP DECIDED TO INVEST IN HIGH QUALITY STOCKS, AND DEVISED A CUSTOM BENCHMARK FOR THAT PURPOSE. This paper recounts the story of how the new benchmark was created and implemented, and how it behaved during one of the most volatile periods in stock market history.

The Tactical Opportunity in Quality Stocks

The story of Strategic's foray into quality stocks began in the middle of 2006, a time when capital markets were in a great credit bubble characterized by a fondness for leverage and a lack of concern for risk. Money was easy to borrow, private equity funds were flush with capital, and announcements of big leveraged M&A deals were frequent. Bond yield spreads were unrewarding. With volatility at historical lows, investors were reaching for incremental return by taking more and more risk, often by means of leverage. An unprecedented housing boom had been expanding for years, fueled by subprime mortgages requiring little proof of creditworthiness. Consumers were borrowing to the hilt, using their houses as ATMs to extract home equity. The U.S. savings rate was negative.

In the U.S. stock market, equity managers complained that stocks of the riskiest, least profitable firms were trouncing their portfolios of financially stronger companies. Small value stocks, after years of outperforming, had become expensive. Large growth stocks, whose valuations had been declining steadily in the years after the implosion of the technology bubble in 2000, were selling at a below-average premium to value stocks.

With risky stocks so much in vogue, it was no surprise that high quality stocks were about two standard deviations cheaper than their historical average. In effect, quality was on sale, as investors were unwilling to pay for the insurance value of owning the strongest companies. To exploit this opportunity, we decided to implement a tactical investment in quality.

A Problem of Definition

Our first problem was pinning down exactly what quality is, or at least what we and others meant by the term. From our research into the quality strategies offered by U.S. equity managers, we knew that quality is a very loosely defined dimension of the equity market. Managers with radically different equity styles can plausibly claim to invest in high quality stocks to some degree. None admit to running low quality portfolios.

Aside from the definitional problem, finding a broad-based quality strategy proved to be difficult. The market opportunity that we were interested in exploiting was a very broad and pervasive undervaluation of quality across the entire stock market. Therefore, we wanted an appropriately broad quality-oriented portfolio, so as not to miss our target by taking on unintentionally narrow stock-specific risk. Yet, in this case, we were disappointed to find that available quality strategies tended to be concentrated and highly exposed to stock-specific risks. It was not uncommon to see a nominally quality-oriented portfolio with only 25 stocks or one with 70% of its weight in just 15 names.

Another possible approach was to ask our quantitative managers to develop a high quality benchmark for our accounts, using their models and risk measurement systems. We pursued this course, but in our discussions with managers we found that our notion of quality did not overlap closely with the factors in their alpha models, making it hard for them to translate our concept into their investment processes. Here, too, there was a substantial risk of missing the opportunity by using the wrong tools to implement the investment strategy.

We also considered using quality definitions created by others. One set of quality ratings for stocks was readily available. For 50 years, Standard and Poor's had published quality ratings on stocks, but their rating system proved to be a blunt instrument. A major difficulty was that the S&P definition was largely based on long-term reliability of

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earnings and dividends, without any penalty for leverage. This caused banks and other financial stocks to be the highest rated and most heavily represented because their earnings and dividend reliability until that time had been excellent. For example, AIG, Fannie Mae, and Freddie Mac were all rated A+ at various times between 2004 and 2008. Using the S&P rating system would mean overweighting the most leveraged firms in the market just when we were most concerned about excessive leverage. We also worried that S&P's backward-looking historical measures were missing the growing instability of the volcano then swelling under the seemingly placid surface of the credit system.

S&P's insistence on dividends punished firms with very strong fundamentals but no dividends, such as Apple and Google. Moreover, stocks without 10 years of history were not rated at all, including several high quality names such as Visa and MasterCard.

Using style indices was another option. To add quality to our clients' portfolios, we could simply overweight the highest quality equity style, which would be large cap growth stocks. The S&P 500 Growth Index, for example, could be viewed as a proxy for quality, and could be used passively in the form of an exchange-traded fund or index account. This index and others like it, however, were not specifically designed to model quality, and included many stocks that we preferred to exclude.

Creating Our Own Quality Benchmark

Eventually, dissatisfaction with our alternatives led us to the conclusion that we needed to innovate. In the spirit of Strategic's history of seeking innovative approaches to add value to client portfolios, we would construct a quality benchmark.

In this effort, we would create a definition for quality that would reflect our notion of it: high profitability, high stability of profitability, and low leverage. By constructing our own quality benchmark, we could control its definition completely. We could assign the benchmark to our benchmark-sensitive quantitative managers to increase their exposure to quality stocks. The quantitative managers, by adjusting their portfolios to track the quality benchmark, would tilt our overall U.S. equity exposure toward quality stocks. Of course, the performance of each of the managers would deviate somewhat from that of the benchmark, but our actions would still have the effect of driving our clients' total equity positions in the desired direction. By not interfering with the managers' investment processes, we would avoid sacrificing their alpha to implement our strategy.

As the first step, we devised a quality ranking system and applied it to the S&P 500 Index to identify the index's 150 highest-ranking stocks, which account for about half the index's market capitalization. Each of the stocks in the S&P 500 was evaluated on profitability, stability of profitability, and leverage. Financial stocks, which naturally have very high leverage, were measured with different indicators than non-financials.

We specifically defined our three quality characteristics — profitability, stability of profitability, and leverage — in a proprietary algorithm. The three metrics were corrected for various accounting distortions, such as removing non-operating income and recognizing pension underfunding.

Quality would have significant sector bets embedded in it. The high quality list of 150 stocks was dominated by technology, health care, energy, and consumer staples stocks, featuring stable, self-financing franchises with consistent earnings. Names such as Apple, Microsoft, Google, Johnson & Johnson, and ExxonMobil figured prominently. Financials were heavily underweighted, as were industrial firms with large debt loads and volatile earnings. One of our managers suggested that 150 stocks would not be enough to serve as a good benchmark, so we expanded the universe. To do this, we blended our high quality set of 150 stocks into the full S&P 500 Index in a ratio of 75% high quality and 25% S&P 500. This step, in effect, tilted the S&P 500 heavily toward quality. We could change the ratio at any time to increase or decrease the intensity of quality.

Exhibits 1 and 2 show the sector and BARRA risk exposures of the resulting custom benchmark. In relation to the S&P 500, the benchmark tended to be larger in market cap, less volatile in both price and earnings, higher in price/book ratio, lower in leverage, and overweighted in technology, health care, and consumer staples.

To implement the benchmark, several other operational details had to be dealt with. Because quality is a characteristic naturally slow to change, we decided that quarterly rebalancing would be preferable to monthly rebalancing, as it would reduce turnover costs. Between quarterly rebalancings, the weights of the stocks in the benchmark would simply float with their market values, because the benchmark was capitalization-weighted.

Specific rules for handling dividends and corporate actions such as mergers were set up. We automated the calculation of the benchmark so that we could publish its return internally every day. The job of maintaining the benchmark on an ongoing basis was assumed by Strategic, in order to retain control of the benchmark's composition and facilitate quarterly rebalancing and monthly performance reconciliation with the managers.

In November 2006, the blended index was delivered to our quantitative managers. They rearranged their portfolios accordingly, to track the custom benchmark within the limits of the tracking error targets set forth in their guidelines, which varied between 1.5% and 4%.

EXHIBIT 1:
Relative Sector Exposures of Strategic Quality-Tilted Index

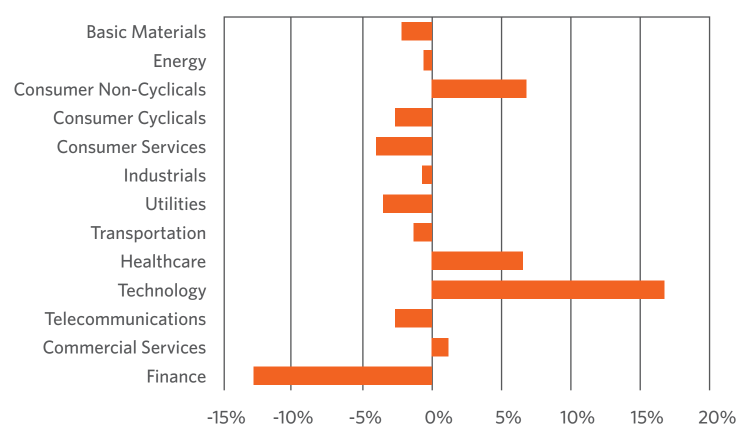
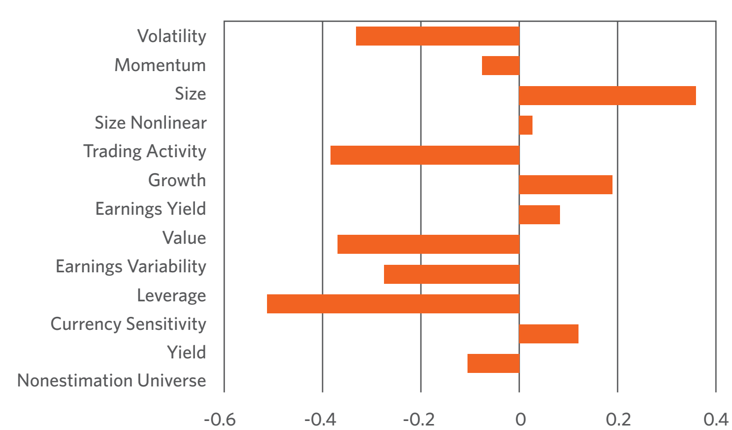


EXHIBIT 2:
Relative BARRA Risk Exposures of Strategic Quality-Tilted Index



By the latter half of 2007, the custom benchmark had outpaced the S&P 500 by eight percentage points.

Early Performance Results

It took a while for our newly planted strategy to bear fruit. For the first seven months after launch, the relative performance of the Strategic Quality-Tilted Index relative to the S&P 500 was fairly flat. Then suddenly, in June 2007, the credit crisis of 2007-2009 began. Capital markets reacted with growing alarm to defaults on subprime mortgages. The credit quality of many of the large financial institutions active in mortgage markets became suspect. Investors quickly grew risk-averse, abandoning lower quality and highly leveraged stocks, especially banks and other financials. The Strategic Quality-Tilted Index, shown in Exhibit 3, began to outperform the S&P 500, reflecting the market's flight from risk. By the latter half of 2007, the custom benchmark had outpaced the S&P 500 by eight percentage points.

Following this initial success, profit-taking in quality stocks set in at the beginning of 2008, and a period of consolidation followed that lasted until the middle of that year. Then, a second major upsurge in the relative performance of quality stocks took hold in the summer and fall of 2008, when the financial crisis deepened, engulfing Freddie Mac, Fannie Mae, AIG, Washington Mutual, and the largest U.S. commercial and investment banks.

Neutralizing the Financial Sector

By late September 2008, the credit crisis was shaking the very pillars of the U.S. financial system. Lehman Brothers collapsed, setting off a full-blown credit panic. The rest of the U.S. investment banking industry was teetering on the brink of disaster. At the height of the crisis, the Federal Reserve and Treasury were forced to step in to back up the nine largest banks in the U.S., in effect guaranteeing their solvency by allowing them unlimited access to Federal funds.

For Strategic, this meant that the Strategic Quality-Tilted Index's underweight to financials, which had accounted for most of value added from the custom benchmark until then, had unintentionally become a risky bet. The underweight was tantamount to betting against the vast power of the U.S. government to ensure the stability, liquidity, and recovery of the country's largest financial institutions.

EXHIBIT 3:
Performance of the Quality Benchmark

Performance information for the Strategic Quality-Tilted Index and the Strategic Quality-Tilted Index, Financials-Neutral are shown for illustrative purposes only and do not represent the performance of any actual investment in any security or instrument. Hypothetical performance has inherent limitations and is not indicative of future results. No representation is being made that any investment will achieve performance similar to that shown. None of the indices shown charges management fees or brokerage expenses, and no such fees or expenses were deducted from the hypothetical performance shown. An investor cannot invest directly in an index. Index returns assume that dividends are reinvested monthly.

The bet made us uncomfortable, as we expected the government to eventually succeed in saving the banks – because it had to. We knew that in the 1991 banking crisis, the financial sector had doubled in value in the year after hitting bottom, even without massive government intervention. A rally of that magnitude would cause the Strategic Quality-Tilted Index to lag significantly.

Furthermore, the government's actions did not seem predictable. One week, the Bush Administration had allowed the investment bank Lehman Brothers to fail for fear of promoting a moral hazard. Soon after, the administration announced its intention to stand foursquare behind the largest banks, but not all bank-like institutions. There was just too much uncertainty.

Therefore, on September 30, 2008, we removed the underweight to financials from the benchmark, restoring that sector to the same weight that it had in the S&P 500 itself. This change caused our quantitative managers, tied to the quality-tilted benchmark, to buy financials to keep their portfolios in line with its sector weights.

As it turned out, our move to neutralize financials was about five months too early. The economy continued to crumble, hemorrhaging millions of jobs in just a few months. Despite the government's backing, some major financials sank further. Even so, the quality benchmark outperformed, as the bear market of early 2009 deepened and investors dumped the riskiest stocks outside the financial sector.

A Huge Momentum Reversal

In March 2009, with the market having fallen by half, investors began to see glimmers of a bottoming in the beleaguered U.S. economy. The stock market was selling at a P/E of 10, tempting bargain-hunters to return. As they did, the riskiest, most beaten-down stocks, with the weakest earnings prospects and the worst price momentum in the previous year, began to soar. Financial stocks rebounded with a vengeance.

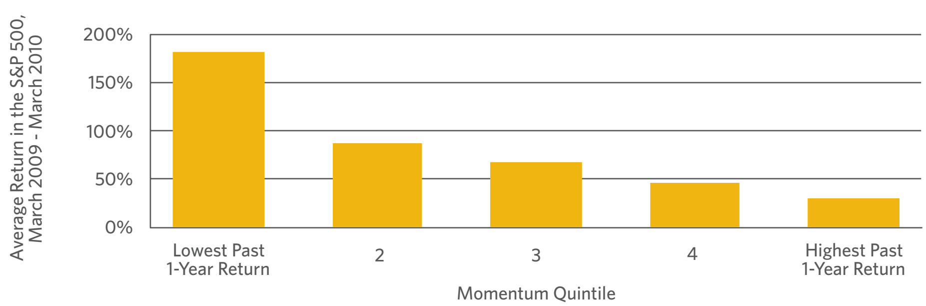
The biggest momentum reversal in stock market history was underway. Investors rushed to buy risk back into their portfolios, dumping defensive, higher quality stocks and causing them to underperform. Exhibit 4 shows the effects of the momentum reversal on the performance of stocks in the S&P 500, as ranked by momentum quintile.

Not all high quality stocks suffered from the momentum reversal. Although investors shifted out of many of them, technology stocks, which are cyclicals as well as high quality, benefited from the rebound in market confidence. The cumulative performance of our quality index remains well ahead of the S&P 500. Still, the market's direction for more than a year after March 2009 continued to favor the riskiest segments of the market. At the time of this writing in mid-2010, quality remains undervalued, and we continue to maintain our high quality stance in expectation of an eventual mean reversion.

EXHIBIT 4:

Average Return of S&P 500 Momentum Quintiles

Sources: Compustat, Strategic.



The Future of Quality

Quality has a bright future as an investment tool.

When we started this project, we knew that quality would be a nebulous concept, requiring judgment to define it. In our quest to craft a benchmark to capture its essence, we also found that designing benchmarks from scratch to implement tactical investment strategies demands flexibility. Although we specified what a quality benchmark should be to our initial satisfaction, the concept needed regular tinkering to remain relevant and useful during an extremely volatile and rapidly changing market environment. In such markets, our tactical benchmark for quality could not be left unsupervised for long.

Our experience in managing a quality benchmark during a market meltdown has led us to conclude that quality has a bright future as an investment tool. It is a significant dimension of risk not accurately described by other risk measures and models, and it becomes mispriced at times, creating investment opportunities. We think it will become easier to identify and invest in quality as more vehicles are developed.

One such vehicle was launched in June 2010, when S&P announced the creation of high and low quality indices derived from its longstanding rating system, along with an exchange-traded fund based on the high quality index. We believe that the Strategic Quality-Tilted Index would also be a good benchmark candidate for an ETF. It would differ from the S&P quality indices in important ways. S&P's high quality ETF would have overweighted financials at the brink of the 2008-2010 credit crisis, whereas one based on Strategic's benchmark would have underweighted them. Rather than place a premium on established dividend-paying stocks, a Strategic high quality ETF would include more young firms that do not pay dividends but do possess high quality characteristics. Weighted by market capitalization instead of quality score, the Strategic ETF would be reliably dominated by large cap stocks rather than skewed toward smaller issues. Most importantly, when quality mattered most, Strategic's Quality-Tilted Index delivered protection as desired. During the 2007-2008 flight to quality, the Strategic Quality-Tilted Index outperformed both its S&P counterpart and the S&P 500. In contrast, the S&P high quality ETF would actually have lagged S&P's low quality index.

(Please see the note to Exhibit 3 regarding the limitations of hypothetical performance information.)

Low quality should not be overlooked. It deserves just as much attention as high quality, and its own ETF, because there are clearly times when quality becomes overpriced. In fact, our research shows that low quality tends to outperform high quality over very long periods, and indeed on average over the long run, presumably because investors demand extra return for taking extra risk with low quality, just as they do with value and small cap stocks. In any case, high and low quality, like more conventional equity styles such as growth and value, have shown a pattern of dominating the market in alternating multi-year cycles that can be usefully exploited as a source of structural alpha. In fact, we found that in the volatile 2006-2010 period, the tug-of-war between low and high quality was significantly more important to investor returns than shifts between value and growth.

Strategic Investment Group

Strategic, a pioneer in dedicated Outsourced CIO (OCIO) solutions since 1987, offers a comprehensive service platform for managing customized portfolios for institutional and private investors. Our proprietary process combines active portfolio management, rigorous risk management, and open architecture manager selection.

Strategic functions as our clients' investment partner and co-fiduciary, effectively becoming an extension of their resources. Clients are then free to focus on their core businesses, while we focus on providing the highly specialized portfolio management expertise that clients need to meet their investment goals. Depending on a client's needs and preferences, Strategic can orchestrate the management of an entire portfolio comprising multiple asset classes, focus on specific asset classes, such as alternatives (e.g., hedge funds, real estate, and/or private equity) or international investments, or manage strategies with high potential for adding value (e.g., portable alpha through investor-friendly turnkey structures). Customized liability-driven investing (LDI) solutions, whether through an integrated total portfolio approach or a targeted long-duration strategy, are also available, as are solutions that address mission-related investment objectives.

We strive to build enduring partnerships with our clients by strengthening their investment programs through a dynamic, value-enhancing investment process, sound governance framework, and world class client service. Our mission is to empower investors through experience, innovation, and excellence.

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