

Profits for the Long Run: Affirming the Case for Quality

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Low-risk investing is one of the hot topics in equity investing these days. This is a far cry from the environment that prevailed when we launched the Quality Strategy in early 2004. Back then, low-risk investing was a nascent concept. Arguing that risk was priced backwards was a rarity in our industry (although, oddly, it was more accepted in academia). With the passing of time, the benefits of low-risk investing have become more widely accepted. Today, a wide array of low-risk strategies is now available.

Of course, it should be absolute risk on a forward basis that one seeks to minimize. We differ with many practitioners in how this is best achieved. The vast majority seem to follow a quantitative approach to risk, obsessed with its measurement rather than its meaning. Yet, as our colleague James Montier consistently argues, risk is a multifaceted concept, and it is foolish to try to reduce it to a single figure. Like James, we prefer a more fundamental approach. We believe, and have to date demonstrated, that the best ex-ante indicator of low forward absolute risk is found not by studying historical market price data, but through the study of corporate profits. This harks back to the way in which Ben Graham talked of risk. He argued that real risk was “the danger of a loss of quality and earnings power through economic changes or deterioration in management.”

Following this logic would argue for a portfolio constructed of companies with high and stable profits, which should, by controlling “real risk,” result in low and stable “price risk.” Hence one needs a framework for identifying future corporate profitability. This might seem like Mission Impossible when one considers the truly appalling track record of Wall Street analysts when it comes to forecasting future profits. However, some classic microeconomic theory can provide a good starting point.

There is ample evidence that many corporations are able to resist the forces of competitive equilibrium and have predictably higher future profits independent of market conditions. The ramifications of this observation hit at the heart of corporate finance. Standard orthodoxy such as the positive relationship between leverage and profitability is demonstrably backwards. Contrary to modern corporate finance theory, higher returns to corporations and equity holders result from unassailable corporate moats, not from corporate leverage. This is the world as described by Warren Buffett, not Modigliani-Miller.

At the end of the day, the returns (or lack thereof) earned by stock investors are entirely a function of the underlying corporate profits of the stocks held in a portfolio. The exchanges offer no more than a pass-through of earnings to investors. In the absence of earnings, there will eventually be abysmal returns and no dividends. If there are earnings, any price volatility will ultimately net out, delivering those earnings to investors with a long-term time horizon.

This argues strongly for a risk and investing framework focused on the survivability of corporate profits under any scenario. Companies with high and stable profits do not go bankrupt. Companies with exceptional profitability generate exceptional returns. Likewise, those with low profits will fare poorly. This holds true not only at the company level, but at the market level as well. The fact that the Nikkei has suffered from lackluster historical returns while Japan has experienced notably low levels of corporate profitability is not a coincidence (although a starting point of extreme valuations in the 1990s hasn’t helped). Profits ultimately drive returns.

Persistent, above-market corporate profitability results from a number of factors, which can be identified *a priori*. Superior branding, franchise value, and intellectual capital can all create a corporate moat that protects profitability from competitive pressures. Companies with these attributes don’t have to be global mega caps. Take Tootsie Roll

and WD-40, for example. Chances are you can immediately picture the candy wrapper and conjure up the distinct smell of the spray. Each of these companies has huge brand recognition and the profitability to match. While anti-trust laws prevent monopolies from engaging in blatant anti-competitive behavior, oligopolies can and do create barriers to shield themselves legally from competitive forces. For example, the tech sector has become quite adept at the pre-emptive acquisition as a form of moat maintenance. The competitive equilibrium model so beloved of standard economics is much less relevant than we are taught to believe.

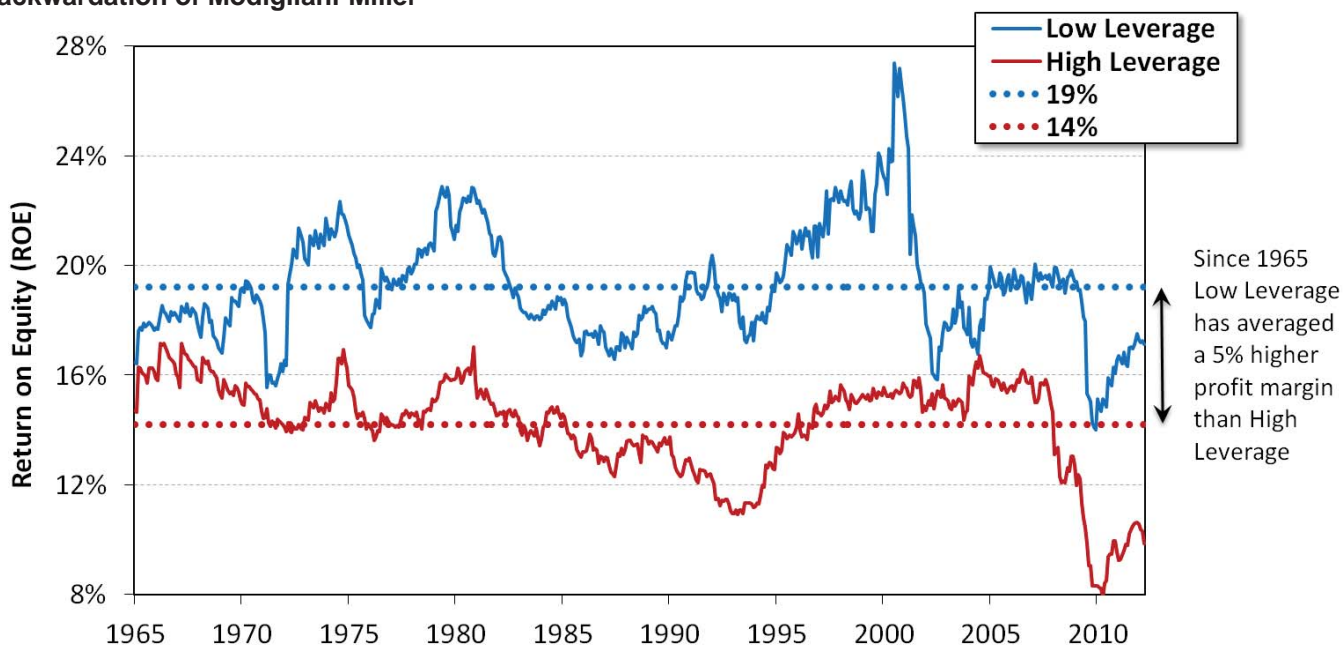
In fact, true competitive equilibrium is a rarity in the global economy. Instead, we find persistent winners and persistent losers. The competitive paradigm says that highly profitable activities attract capital, and that capital flees those with low profits. This is the market mechanism behind mean reversion, which is supposed to close the profitability gap. In reality, certain companies earn persistently high returns on equity. Superior returns are delivered to investors in the form of dividends, stock buybacks, and accretive growth. At the same time, unconstrained abusers of capital squander equity at the expense of investors through dilution, non-accretive growth, and bankruptcy.

Take a look at the current state of our global financial industry for a textbook example of capital abuse. Banks robbed the investors twice. First, in their reckless pursuit of loan growth leading up to the financial crisis, and then again, when they printed shares in order to survive. Their behavior is a little like that of a mugger who, having nicked you once, drags you to the ATM in order to mug you again. This is ignored by the market to an astonishing degree. The market persistently underprices quality companies while repeatedly giving capital injections to money-losing enterprises, which survive to destroy capital in the future. The next time a financial or any company comes looking for outside capital, ask yourself, “Am I providing corporate charity?”

Forecasting Profits: Evidence in Favor of Oligopolies and Against Modigliani-Miller

Modigliani-Miller’s theory on capital structure irrelevance provides a model for explaining corporate profitability. As the theory would have it, if an equity holder wants more profits, he would simply lever up. In their model, higher profits are achieved through higher risk (in the form of leverage) of the entity. In fact, in the real world the opposite is true. We find striking evidence that Messrs. Modigliani and Miller have the sign wrong. Empirically, companies with persistently high profitability have lower leverage, and companies with persistently low profitability have higher leverage (Exhibit 1). The extent to which the risk/return anomaly exists at the operating level of corporate finance is striking indeed.

Exhibit 1
Backwardation of Modigliani-Miller



For the graph above, the 1000 largest companies in the U.S. were sorted for each point in the graph into quartiles based on leverage. Low Leverage consists of those companies in the quartile with the least leverage. High Leverage consists of those companies in the quartile with the greatest leverage.

Source: GMO

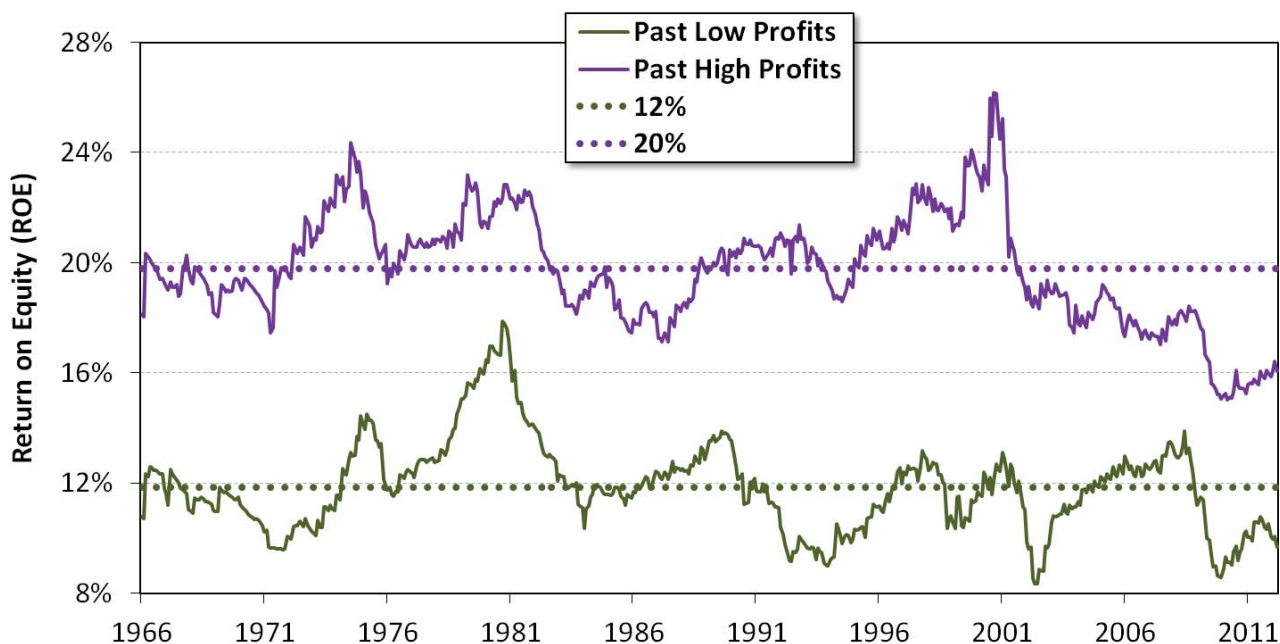
The data presented in Exhibit 1 suggests that higher profitability is associated with decreased leverage risk. This creates an opportunity where investors can have both lower risk and higher returns. While this may seem contradictory to the teachings of finance professors around the globe, we are not alone in our skepticism. In fact, according to Merton Miller¹ himself,

“Direct statistical calibration of the goodness of fit of the MM value-invariance propositions has not so far been achieved by us or others for a variety of reasons...”

Oligopolies Do Not Revert

While slaying academic dragons is good sport, we hope to avoid tilting at windmills. One bit of orthodoxy that we enthusiastically embrace is the microeconomics of oligopolies. In this framework, companies that have limited competition are more profitable due to their ability to keep competition at bay. As evidence, we provide a chart demonstrating the persistence of corporate profitability (Exhibit 2). We sort the largest 1000 companies by their profitability 5 years ago and then check to see if it has persisted. In a competitive equilibrium, the profits of high ROE companies will regress, on average, to market level profitability. Likewise, the ROE companies that were less profitable 5 years ago will revert, on average, up to market levels. The evidence does not support this thesis. Instead, those that were profitable stay that way, and vice-versa...exactly what an oligopolistic equilibrium would predict.

Exhibit 2
Persistence of Profitability (ROE)



Since 1966, high margin businesses have maintained a striking competitive edge over their counterparts. For the graph above, the 1000 largest companies in the U.S. were sorted for each point in the graph into quartiles based on return on equity (ROE). Past Low Profits consists of those companies in the quartile with the lowest ROE. Past High Profits consists of those companies in the quartile with the greatest ROE.

Source: GMO

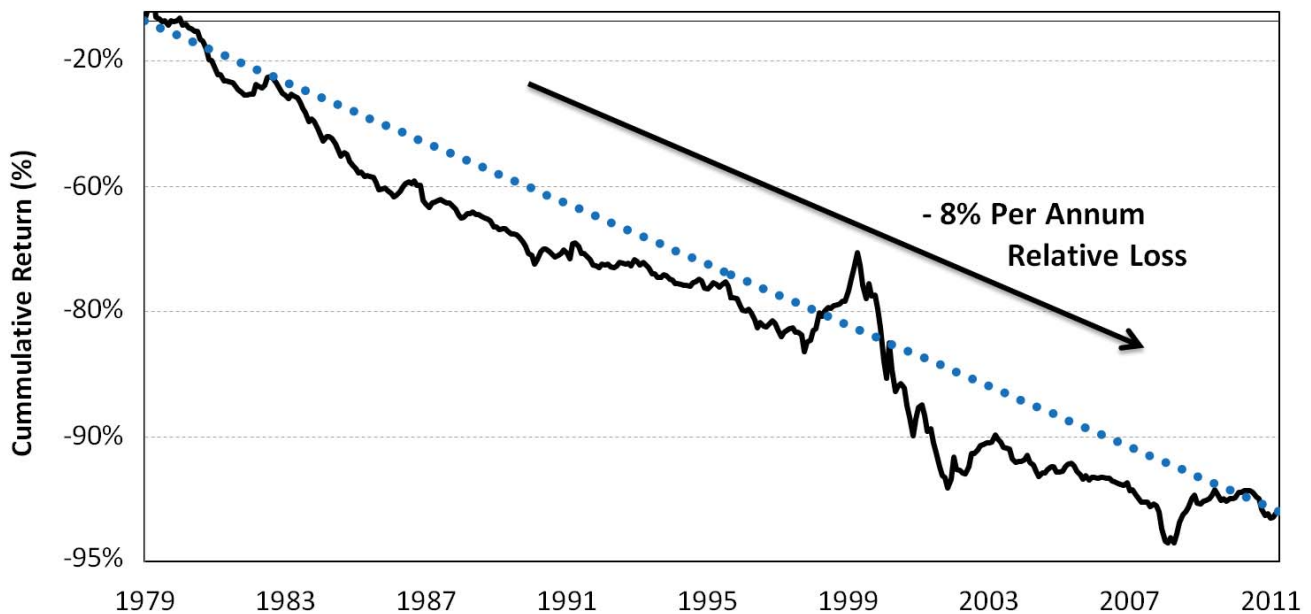
Low-risk fundamentals lead to higher corporate profitability, and high profitability is persistent. The ramifications of these two observations taken together are clear: profitability can indeed be predicted, but standard corporate finance must first be stood on its head. Accordingly, the market offers up predictably higher profits for lower-risk companies.

¹ Merton H. Miller, “Modigliani-Miller Propositions After Thirty Years,” *Journal of Economic Perspectives*, Volume 2, Number 4, Fall 1988, page 103.

And the Market Misprices This

Even if corporate finance gets risk and reward backwards, it is not necessarily relevant for equity investors. If markets were truly efficient, they would appropriately price the risk of fundamentals, i.e., leverage in this case. High leverage would be cheap enough that it would outperform and low leverage would be expensive enough that it would underperform. This is not the case. While it has become conventional wisdom that the market misprices price-based risk factors (that is to say, low beta outperforms high beta), we find that it also misprices fundamental risk. This is exactly what investors are doing when they repeatedly give capital injections to money-losing enterprises, thereby allowing for their survival. Let's take a look at an extreme example of fundamental risk: companies that report negative net income. This group of companies underperforms the market by a whopping 8% per annum (Exhibit 3). Try it yourself: form a portfolio within Russell 3000 of stocks with reported negative net income and consider their forward return. The link is clear. The market overpays for risk at the corporate level in much the same way that it overvalues the risk of high beta stocks.

Exhibit 3
Return of Negative Earnings



The universe consists of the 3000 largest companies in the U.S. based on market cap.

Source: Compustat, GMO

When we started the Quality Strategy in 2004, we published our findings that investors had historically underpaid for the low-risk attributes of high quality companies. In the years that we have been managing the strategy, the market has continued to undervalue the lower-risk fundamentals and the lower volatility of Quality stocks. Exhibit 4 shows the long-term relative returns of companies with low-risk fundamentals and high-risk fundamentals in the U.S. and in international developed markets.

While the relative attractiveness of Quality does ebb and flow over time, our data shows that since the beginning of our dataset in 1965, there has always been a component of the Quality universe that has been attractively priced. Furthermore, Quality stocks have cheapened considerably relative to the market since the inception of our strategy in 2004, and yet they have outperformed the market due to their superior earnings power. The systematic valuation advantage of Quality companies is an important component of our investment thesis. While it is possible that at some point Quality could become universally overvalued, we currently view that as unlikely because so few market participants adhere to our Quality framework. Meanwhile, academia continues to promulgate Modern Portfolio Theory, ensuring a steady supply of new market participants who follow the logic that risk is necessary for outperformance.

Exhibit 4

Safer Characteristics Tend to Outperform: The Relative Performance of Low-Risk Stocks vs. High-Risk Stocks

U.S. Large Cap		Leverage	Profitability	Profit Volatility	Combined Quality	Beta
Low Risk Stocks	Large Cap	Low 0.8%	High 0.4%	Low 0.4%	High 0.7%	Low 0.5%
High Risk Stocks	Large Cap	-1.7% High	-0.7% Low	-0.7% High	-1.7% Low	-2.2% High
EAFE		Leverage	Profitability	Profit Volatility	Combined Quality	Beta
Low Risk Stocks	MSCI EAFE	Low 0.7%	High 1.2%	Low 1.8%	High 2.2%	Low 2.4%
High Risk Stocks	MSCI EAFE	-1.6% High	-1.1% Low	-1.7% High	-2.4% Low	-2.8% High

For the table above, U.S. Large Cap Stocks (the largest 1000 companies in the U.S.) and all companies within the EAFE index were sorted into approximate quartiles based on the factors above. The low and high bars represent the relative returns of those companies in the quartiles with the lowest and highest scores in each factor.

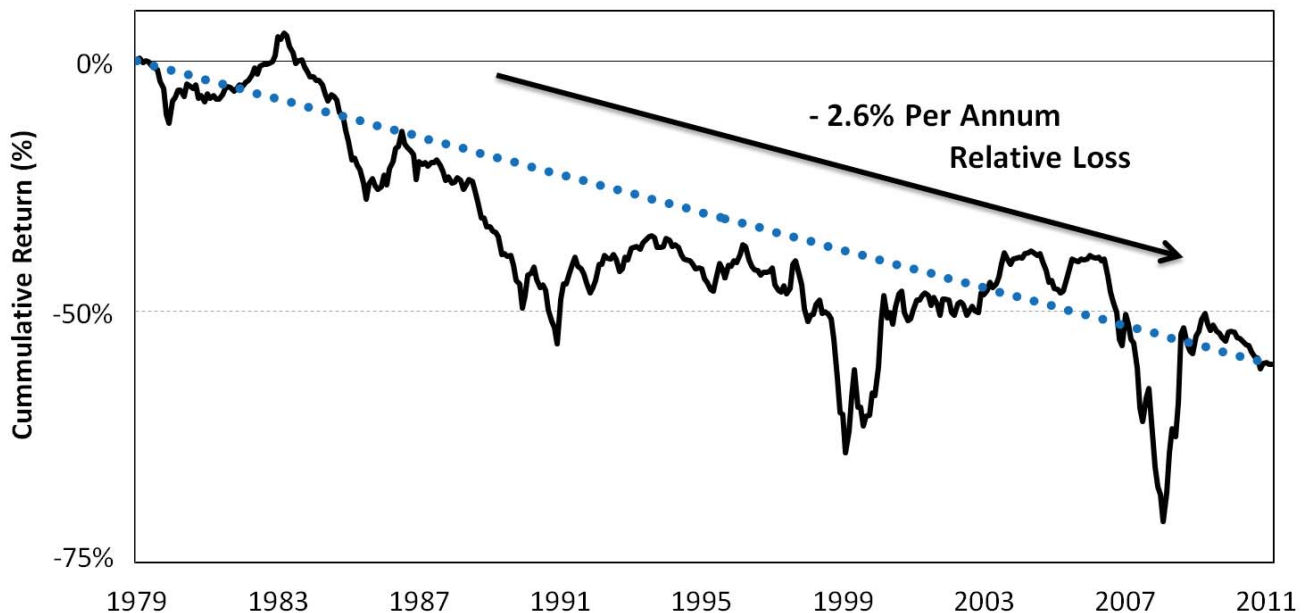
Source: GMO. GMO annualized data from 1/65 – 12/11 (U.S.) and 1/85 – 12/11 (EAFE)

Other Frameworks to Reduce Risk

Many strategies claim to be Quality or low-risk in nature. The flavors of the day are high yield and quantitatively-derived low volatility strategies. The problem with these approaches is that they depend on the future stability of historical data inputs. Yet their potential future stability has no fundamental economic basis. In the case of yield, one needs only to consider the hidden danger of companies that do not have the profits to sustain their dividend (Exhibit 5).

Exhibit 5

Dividends Exceeding Earnings



The universe consists of the 3000 largest companies in the U.S. based on market cap.

Source: GMO

As for the perennial fascination with observed price movements, co-movements, and cross-movements, it needs to be put in historical context. In our opinion, these easy-to-quantify risk metrics give a seductive, yet false, sense of precision. Too often, what appears to be low risk in terms of price movements flips to high risk faster than can be computed. History has demonstrated time and again that these types of approaches have failed when needed most. We can all agree that the collapse of Portfolio Insurance in 1987, the demise of Long-Term Capital Management, the breakdown of over-the-counter risk models in August 2007, and, finally, the appalling record of Value at Risk across our global financial system are testament to the failures of statistical abstractions.

We believe that the various incarnations of these approaches share common characteristics that ultimately doom them. In addition to lacking a solid economic foundation, statistically-derived constructs of low risk tend to disregard valuation risk and illiquidity risk. Another limiting factor in frameworks that equate risk with volatility is that they fail to account for fundamental risk. The overriding problem shared by all of these approaches is that they employ too simplistic a view of the uncertainty that surrounds us. We strongly recommend that investors focus on the fundamentals of the companies they invest in and employ other metrics for confirmation only.

Taking Advantage of the Anomaly – Quality

To us, investing in Quality companies simply exploits the long-term opportunity offered by the predictability of profits in conjunction with the market's lack of interest in the anomaly. Their predictably higher profits are not quite high enough to command the attention of a market in thrall to the possibility of the next big jackpot. This has led to the systematic undervaluation of Quality stocks, which leads to their systematically higher returns over the long term.

The one useful exception to the market's inattention is found during periods of intense stress. Market participants become suddenly aware (at least subconsciously) of Quality when they are frightened. Accordingly, the term "flight to quality" is used to describe knee-jerk movements toward solid fundamentals during tail events. In our opinion, true risk in investing is the permanent loss of capital. Because companies with superior earnings ability provide insurance during market drawdowns, we fully expect a portfolio of Quality stocks to do very well during these events. Flights to quality are episodic and unique and, as a result, are nearly impossible to model.

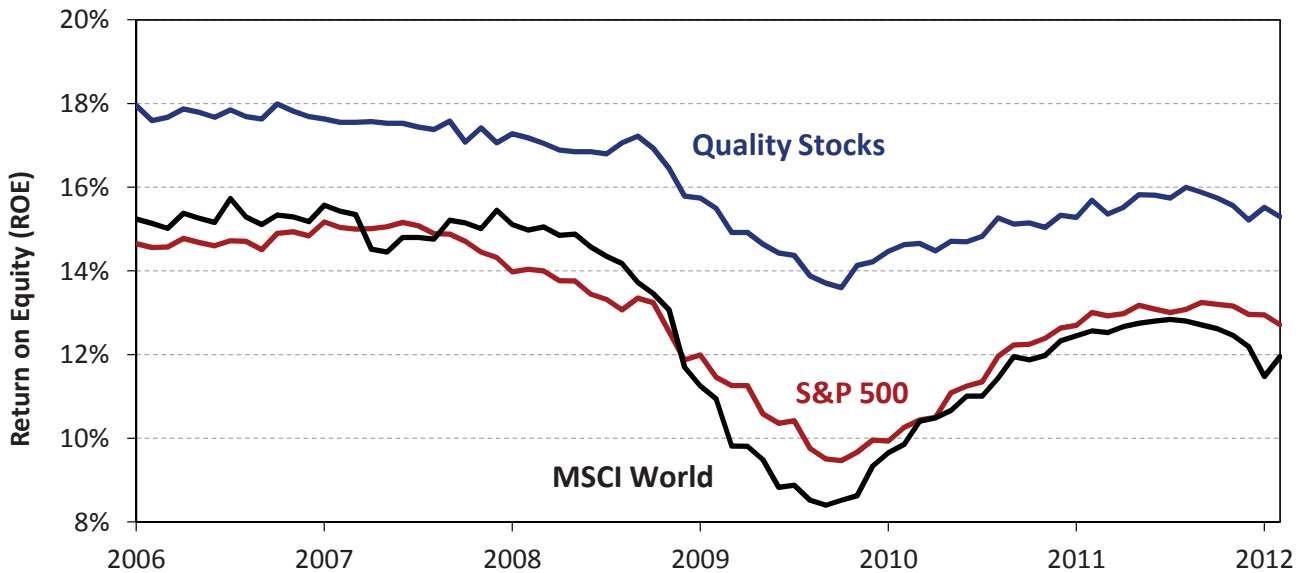
A good test of whether or not your portfolio is truly Quality is to measure its performance during tail events. For example, we would expect a portfolio of Quality stocks to have significantly outperformed broader market indices during the financial crisis in 2008. Similarly, if you own International Quality stocks, look at how they fared versus EAFE during the height of the European sovereign debt crisis in 2011. True Quality stocks should have survived that event relatively unscathed.

Despite the benefits of this approach to low-risk investing, it appears that not many have the willpower to stay true to the concept. Stability is simply not exciting enough for most investors. Many investment managers find it hard to resist the temptations of minimizing tracking error, following the herd, or going for a little excitement offered by "story stocks" (those false pretenders to true growth). End investors – who really should be focused on real returns – want absolute returns in bear markets, but tend to seek relative performance in bull markets, an example of what J.K. Galbraith described as the "extreme brevity of financial memory." All of these factors act as distractions, forcing the focus from the fundamentals.

Added to that is the ever-increasing difficulty of distilling true economic profitability from reported numbers. The complexity of modern-day accounting combined with the lack of demand for long-term economic precision has allowed corporations to report numbers that have a very weak link to reality. History has shown that when there is a disconnect between accounting and true economics, the result will always (eventually) land in favor of economics. Yet, the difference is obscured until the investment tide goes out, at which point it is too late.

Quality is inherently a fundamental concept and requires an economic lens to evaluate. Exhibit 6 shows the future profitability of our definition of Quality stocks vs. the market since we first published our thesis in 2004. To us, this is evidence of the power of a disciplined and fundamental approach to the selection of Quality.

**Exhibit 6
Quality Stocks Deliver Future Profitability**



Note: Lines above depict ROE 2 years after formation of constituent portfolio and indexes. GMO defines quality companies as those with high profitability, low profit volatility, and minimal use of leverage.

Source: GMO

Conclusion

Put simply, profitability is the ultimate source of investment returns. Contrary to popular belief, profitability can be forecasted and superior profitability persists. Investors systematically undervalue the unexciting stability of Quality stocks (except during times of financial crisis). Rather than being beholden to some black box model of low volatility, or held hostage to some arbitrary optimizer, we prefer to focus on real economic risk. We would argue that a fundamental focus on profitability remains the best way to minimize the true risk with which investors should be concerned.

Mr. Joyce is the lead manager for quality quantitative portfolios. Prior to joining GMO in 1998, he worked for IBM and the U.S. Semiconductor Consortium, Sematech. Mr. Joyce earned his B.S. from Cornell University and his M.B.A. in Finance from the MIT Sloan School of Management. Mr. Mayer is engaged in portfolio management and product management for the Quality strategy within the global quantitative equity group. Previously at GMO, he was involved in institutional client relations. Prior to joining GMO in 2006, he held numerous positions at Morgan Stanley, most recently managing the U.S. fixed income syndicate desk. Mr. Mayer earned his B.A. in History from Princeton University.

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