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**Performance Where it Matters**

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# Performance Where it Matters

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*This article focuses on two related management concerns: (1) is consistent/sustained high performance possible and (2) what might account for it? The primary focus of this paper is to understand sustained high levels of performance -- the holy grail of management and the ultimate dependent variable in business research and writing. The frequency of mention and the pervasiveness of traditional financial economics suggest that total shareholder return (TSR) against a market index is the sine qua non of benchmarks. However, the data is quite variable about whether any corporation, no matter how good or great, has been able to consistently outperform "the market" for extended periods of time. Following the lead of other researchers, and using 30 years of data from 12 industries, changing the frame of reference from the market to the firm's environment reveals a different and persistent set of performance patterns that beg explanation.*

*The secondary focus explores three alternative explanations for these patterns. The population ecology perspective suggests that large organizations can sustain high levels of performance that are the result of initial advantages, organization inertia, and low levels of environmental change. The strategic choice perspective suggests that the effective execution of a particular set of management practices is responsible for sustained performance. Neither of those arguments holds up to the empirical data. A third, under-researched, and derivative perspective - adaptation/agility - emerges as an alternative explanation. Management implications and a research agenda based on these results are proposed.*

## Introduction

Sustained organization performance is a primary objective of management, and shelves groan under the weight of best-selling books purporting to explain how this can be achieved. Peters and Waterman (1982) proposed the initial formula for success in their classic In Search of Excellence, and more recently, Collins and his colleagues (Collins and Porras, 1994; Collins, 2001), Joyce, Nohria, and Roberson (2003), and others

have extended the genre. These “secrets of business success” may be simple or complex but, like exercise programs or diets, they all hold out the promise of results by applying the laws of organizational physics: Do these things and improved performance will surely follow.

The academic literature, not surprisingly, has been split over the issue. One perspective argues that understanding the problem is a function of the measure of performance used (Foster and Kaplan, 2001; McGahan, 1999; Devinney, Yip, and Johnson, 2010). Any particular recipe may or may not work depending on how you define “sustained performance.” Another perspective argues for greater precision in understanding the drivers of long-term performance (Kotter and Heskett, 1992; Collins, 2001; Collins and Porras, 1994; Joyce, Nohria, and Roberson, 2003). That is, sustained performance depends on which recipe you follow.

This article explores these two issues and reports on our attempts to reconcile the different perspectives, research, and practice. We begin by reviewing the literature that attempts to define sustained performance and propose our own solution to the “quixotic quest” (Kirby, 2005). Based on that proposal, we turn to an exploration of such sustained performance. Three broad perspectives – population ecology, strategic choice, and adaptation – are proposed and we note that the first two perspectives do not explain sustained performance well in the case of large corporations.

### **Measuring and Explaining Sustained Performance**

There is no consensus on the measurement of sustained performance. The dimensions of the argument are conveniently categorized by a) metrics, b) benchmarks, and c) time horizons (Kirby, 2005; Devinney, Yip, and Johnson, 2010). For example, traditional financial economics and the oft-cited management goal of “maximizing shareholder return” supports total shareholder return (TSR) as the best performance metric and the S&P500 stock index as the appropriate benchmark, but is relatively silent on how long performance must be above the index to be considered “sustained.”

Richard, Devinney, Yip, and Johnson (2009) provide the most recent review of performance metrics. Noting the wide variety of measures concerning organization effectiveness (c.f., Campbell, 1977), their focus on organization performance suggested three broad categories: financial market, accounting, and mixed measures, such as balanced scorecards or Tobin's q. Financial market measures are often preferred because they are considered "objective," difficult to manipulate over anything but the very short term, reflect outside investors' perceptions of value, and have the benefit of being a single measure against which *any* public firm can be judged. However, their review of 213 articles published between 2005 and 2007 found that 53% used accounting measures, such as ROA and ROE, 17% used financial market measures, such as TSR, and 8% used "survival" measures. The most commonly used measure, ROA, was used in 6% of the studies. The second most common measure, TSR, was used in 3%. There was clearly no agreed upon measure.

They concluded that a variety of measures can be used, but those selected should be theoretically justified rather than just readily available. They also argued for several measures given the multi-dimensional character of performance, and for longitudinal measures given the dynamic influence of environmental and other forces.

The second category, benchmarks, is less fragmented but closely related to the choice of metric. For studies that are seeking to measure and explain a financial market rate of return, such as TSR, the S&P500 (Foster and Kaplan, 2001) or industry TSR (e.g., Chatterjee and Hambrick, 2007), are logical choices. Similarly, accounting metrics are often compared to industry averages (e.g., Shimizu, 2007; Zhang, 2006).

The use of industry average as a benchmark naturally raises the issue of "what's an industry?" Each of the existing classification schemes (e.g., Standard Industrial Classification (SIC), North American Industrial Classification Systems (NAICS), and Industry Classification Benchmark (ICB)) or other less formal systems has its own strengths and weaknesses that are mostly related to the homogeneity of the firms within a category. It makes little sense to compare Nike and Unilever, although both are included in the "31" NAICS industry classification.

The final category, time horizon, demonstrates considerable variation. Few, if any, studies have claimed to be exploring sustained performance for anything less than 3 to 5 years while population ecology studies using survival as the dependent variable have used decades. De Geus's (1997) study required a firm to exist for at least 100 years to be included in his dataset. Kirby (2005) has proposed that 10 years be the minimum.

A number of popular studies have combined all three categories into a scheme and definition of sustained performance. Table 1 presents several prominent schemes.

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Table 1 about here  
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Foster and Kaplan (2001) drew on the McKinsey Corporate Performance Database of 1008 large companies (among the largest 80% of US companies) from 15 industries over a 36-year period 1962-1998. Total shareholder return (TSR) for their database closely tracked the S&P500 stock index. The firms were relatively "pure plays" in that more than 50% of their revenue came from a primary industry.

According to their research:

... long-term studies of corporate birth, survival, and death in America clearly show that the corporate equivalent of El Dorado, the golden company that continually performs better than the markets, *has never existed*. It is a myth. Managing for survival, even among the best and most revered corporations, does not guarantee strong long-term performance for shareholders. In fact, just the opposite is true. In the long run, markets always win. (Foster and Kaplan, 2001, p. 9)

They concluded that sustained long-term performance is impossible; mean reversion is an irresistible force. Equity markets are subject to fads, irrational exuberance, and panics that have little to do with the quality of the business strategy, management insight, and organization designs that produce profits.

Foster and Kaplan's results must be reconciled with other studies that also used TSR but claim that sustained performance is possible. Collins and Porras' (1994) list of 18 visionary companies produced cumulative stock returns that were 15 times the general

market and 6.6 times paired comparison companies over a 64 year period (1926-1990). Collins (2001) retained the “matched pair” methodology in Good to Great, where the definition of high sustained performance was a 15-year period of cumulative stock returns more than three times the general market preceded by a 15-year period of good returns. Finally, Joyce, Nohria, and Roberson (2003) used cumulative TSR over a 10-year period and their “winners” returned 945% whereas losers returned only 62%. Foster and Kaplan’s results differ from these others in the use of cumulative shareholder return over a particular time period. Cumulative TSR showed sustainable high performance but year over year TSR did not.

Some researchers have challenged these results (e.g., Niendorf and Beck, 2008) demonstrating that the choice of dates to begin and end the cumulative calculation drastically affects the outcome. Our concern is with the cumulative tactic itself. While the market TSR is an index of multiple firms – 500 in the S&P case – and accurately reflects the financial environment, any individual firm’s cumulative TSR can be greatly skewed by results that do not reflect the intent of the term “sustained superior performance.” For example, abnormally high returns early in the time series are compounded into the cumulative return figure. Similarly, consistently above average returns early in the time series can also skew the result. Finally, the absence of any years where TSR is negative provides a distinct advantage. While each of those outcomes is an element of sustained high performance, their presence in a cumulative sense can skew perceptions of sustained performance.

McGahan (1999) mined the Compustat database for 1981 to 1997 looking for patterns of performance to help guide expectations for managers and researchers. She screened 13,574 reporting entities with annual sales or assets of at least \$10 million within 8,018 U.S. corporations in 664 industries. Because firms tend to group similar operating units for reporting purposes, McGahan called her reporting entities “business segments” rather than “business units.” The study ranked business segments according to accounting profitability (the ratio of operating income to assets, or ROA) in the first four years the segment appeared (but mostly 1981-1984 since most firms were present for the

entire period) and last four years the segment appeared (but mostly between 1993-1997). McGahan defined sustained high performance as being in the top quartile of profitability (ROA) in the first four years and the last four years of the time series. Her results are shown in Table 2.

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Table 2 about here  
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What surprised McGahan was the persistence of the relative rankings. Looking at the diagonal cells from upper left to lower right, 79.7% of the firms that began a period as a top, medium, or bottom performer ended the period in the same category. Only 10.5% of the firms (lower left three cells) were able to “move up” in performance and only 0.5% made the jump (over a 16 year period) from bottom to top.

McGahan’s conclusion of sustained performance is vulnerable to at least one important challenge. By looking only at the first four years and last four years of a time series, potentially important variation in the intervening period is ignored. A sustained high performer could have suffered a very bad decline in the intervening years that would negate such a label.

Finally, Devinney, Yip, and Johnson (2010) argued that the appropriate measure of performance was not a single measure but a combination of measures arranged as a performance frontier against which all others in the same industry could be compared. Using data from the Osiris database (similar to Compustat, but more global), they created a “performance frontier” from five measures: profit margin (return on sales), return on shareholder funds (return on equity), return on assets, return on capital employed, and cash flow to operating revenues for a 20-year period between 1984 and 2003. Their definition of long-term performance required a firm to: a) exist for at least 20 years; b) be in the top one-third of the performance distribution in its industry peer set during the 20 year period; and c) not record more than two years of consecutive performance declines, only one of which could be outside the top one-third of the

distribution. Of the 215 firms in their database, only 28 firms met this test, but their research supports the idea that sustained outperformance is possible.

Other studies have used different analytical techniques to identify sustained performance (e.g., Joyce, Nohria, and Roberson, 2003; Kotter and Heskett, 1992). These studies, when combined with the research described above, are important because they also took the extra step of proposing the organization correlates of sustained high performance.

Following in the footsteps of Peters and Waterman (1982), Collins and Porras (1994) and Collins (2001) popularized concepts such as Big Hairy Audacious Goals (BHAGs), getting the right people in the bus, hedgehogs, and “and, not or” mindsets among others. Similarly, Kotter and Heskett (1992) suggested that cultural attributes held the key to sustained performance. They concluded that adaptable cultures -- those with strong leaders throughout the organization and organizational values that were oriented toward serving key constituencies (e.g., shareholders, customers, and employees) -- were associated with long-term performance. Finally, Joyce, Nohria, and Roberson (2003) proposed a “4+2” framework. For them, sustained high performance was a function of adopting four core principles – a clear, focused strategy, strong execution capability, flat structure, and a performance oriented culture – in addition to two other characteristics from a pool of four practices.

Together, prior research paints a confusing picture for managers. It is unclear what measures/metrics are best, what is the appropriate standard or benchmark, and what length of time is considered sustained. The strengths and weaknesses of these different studies prompted us to ask three questions:

- Do the conclusions of sustained performance change depending on the benchmark used? Prior studies suggest that comparisons of performance against an industry benchmark are more likely to support the possibility of sustained performance than market benchmarks.
- Do the conclusions of sustained performance change if the pattern of performance is viewed continuously? Each of the studies above viewed long

periods of performance data (over 20 years) but did not look at the performance profile itself, choosing instead some kind of summary (first four vs. last four years; comparison against a frontier; cumulative results, etc.). We chose to look at the data directly, by industry, and to apply an integrated definition of sustained high performance.

- Does one business perspective, recipe, or success formula explain sustained performance better than others? A variety of advice exists and many of the studies have been criticized for identifying “great” companies that subsequently declined. What are the implications for CEOs and their top management teams?

### **Methodology**

Data for this study were drawn from the Compustat database over the 30 year period from 1979 to 2009 – about twice as long as Collins (2001), Joyce, Nohria, and Roberson (2003), and Kotter and Heskett’s (1992) time frame, a third longer than McGahan and Yip, Devinney, and Johnson, and inclusive of the 2008-2009 “great recession.” Although we sampled the thirty year period, a firm had to have at least 10 years of performance data to be included. For the final data set, the average number of years in the TSR data was 26.0 years the modal number of years was 30, and the range was 10 to 30. For the ROA data, the average number of years was 26.0, the modal number of years was 30, and the range of years was 10 to 30.

McGahan (1999) noted several weaknesses in the Compustat database, including no private companies and no international companies unless listed on a US exchange. Two other weaknesses are also mentioned and addressed in this study. The Compustat database uses the NAICS to characterize industry membership. The weaknesses regarding the SIC or NAICS coding schemes are well known (Montgomery, 1982; Robins and Wiersema, 1995). While an important improvement over the old SIC system, the NAICS system has its flaws, and explaining performance variation with such a broad definition of industry may wash out some pure industry effects. In response, and like Devinney, Yip, and Johnson, we were guided by the ICB classification which was

specifically developed to assist investors and analysts. The IBC system often breaks up a NAICS industry category into competitive peer groups with more “face validity” and provides a better proxy for environment.

For each industry, we chose the “largest” firms as the sample. The number of firms in an industry thus varied depending on the size distribution. For example, in energy utilities, there were 33 relatively equally sized firms in terms of assets and revenues. In other industries, there were natural breaks in size and a “scree plot” was used to determine the cutoff.

Finally, and following Foster and Kaplan, we used the annual data base (not the segment data base) to look at performance of the corporation and chose not to include highly diversified businesses to control for the effects that extreme diversification might have on profitability. Thus, GE, United Technologies, ITT, Matsushita, 3M, and other broadly diversified firms are not included. Rather, firms that derive a majority of their revenues from a particular business or set of related businesses allows us to more cleanly understand firm and industry performance patterns.

We examined the two most frequently mentioned and used measures of performance: annual ROA (annual net income/total assets) and annual TSR (the sum of 12 monthly share price returns adjusted for dividends and stock splits). We used three benchmarks: the annual S&P500 stock index change, annual industry median TSR, and annual industry median ROA for the firms in our sample.<sup>1</sup>

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<sup>1</sup> The median splits the sample in half; we did not use the mean of the sample because it is easily influenced by extremely high or low values. Using the sample median, instead of the median of all firms in the industry, also represents a choice. As with the mean, the full industry population contains many small firms whose profitability were extremely high and low and could bias the median unfairly in an upward or downward fashion. Finally, the largest firms in the industry are likely to view small firms as niche players and less relevant and legitimate competitors in the short run.

In addition, missing data plays an important role in the interpretation of the results. Since our measure of “average” is the median value for the firms in our selected industries, as the number of missing data points goes up, the probability that the median value equals the value for any particular firm also goes up. Every attempt was made to have a complete set of data for each firm in each industry. However, in some industries, the number of firms used in the calculation of the median was lower for the early years because some firms were not reporting results to Compustat or Compustat was not recording results.

We defined “sustained organization performance” as winning in a particular environment. This is a management rather than an investor orientation. Following the lead of Devinney et al. (2010), and to work around the problem identified in the McGahan data, we defined “winning” firms as those that posted annual ROA or TSR above the environment median at least 80% of the time (24 out of 30 years).

## RESULTS

A variety of summary statistics are provided in Table 3. Our final data set covered 12 industries and 243 firms. We tried to draw from a variety of industry types, including oil and gas, retail, pharmaceuticals, utilities, automotive, industrials, transportation, consumer products, and high technology. Owing to the varying accounting treatments of assets and the difficulty of making reliable comparisons, our sample does not include financial services, software, entertainment, or healthcare/medical devices.

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Table 3 about here  
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The first step in our analysis was to re-test the Foster and Kaplan, Collins, Collins and Porras, and Joyce et al. conclusions regarding a firm’s ability to consistently beat the market. Of the 243 firms in our TSR sample, only six firms were able to beat the S&P500 index 80% or more of the time over this 30 year period. Three of the firms were in the consumer products industry (Unilever, Kimberly Clark, and Colgate Palmolive). The other three, Praxair (14 out of 17 years of data), Wal-Mart of Mexico (9 of 11 years), and Canadian National Railway (12 out of 14 years) are all distinguished by their more limited years of data. On average, firms in our sample were only able to beat the S&P500 an average of 63% of the time. Only one of those firms, Kimberly Clark, showed up on any of the “excellent” company lists.

To contrast our results with these other studies, we display the In Search of Excellence, Built to Last, Good to Great, and “winning” firms that were included in our sample in Table 4. The first data column shows the percentage of years that these companies’ total shareholder return exceeded the S&P 500 stock index from 1980 to 2009. (The table also shows the percentage of years these firms exceeded their industry’s average (median) TSR and profitability (ROA).)

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Table 4 about here  
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With the exception of Kimberly Clark, none of these companies consistently beat “the market,” when measured this way, over these 30 years. While all industries are subject to the effects of recession, inflation, and social change, the relative performance of industries changes according to their own events and cycles, causing even industry darlings to revert to market means. For all practical purposes, every firm faltered over the long haul and support Foster and Kaplan’s conclusion that there is no “El Dorado.” Although not a direct test, this result challenges the conclusion of sustained high performance when that conclusion is based on cumulative TSR.

The second step shifts the frame of reference from the overall market to the industry. The comparison of firm ROA and TSR to industry medians is shown in the last two columns of Table 3. When the measure of performance is TSR, no firm beats its industry median more than 80%. The average for the 243 firms in the sample was 25.8%. That is, the data suggest that it was harder to beat consistently the industry average than the market average. Eighty-nine percent of the firms (217/243) had higher values for beating the S&P500.

When the measure of performance is ROA, we anticipated finding similar patterns as McGahan (and we did), but were further surprised by their nature and persistence. In every industry we analyzed over this 30 year period, we found three patterns of performance:

- Firms that consistently outperformed the industry median ROA (at least 80% of the time);
- Firms that consistently underperformed the industry median (at least 80% of the time); and
- Firms that “thrashed” between periods of under-performance and over-performance relative to the industry median.

Unlike performance against “the market,” relative performance against the industry median can be long-lived. As with McGahan’s results, over-performers tend to remain over-performers and under-performers remain under-performers. However, unlike McGahan’s “moderate” group, the middle 50% of her distribution, our third group is more descriptive of the performance pattern. Thrashers remained thrashers and, unlike the moderate performance label, suggests considerable inconsistency rather than mediocrity. Across all industries we studied, we found only two firms, Harley-Davidson and DaVita (formerly TRC), which “broke through” the median and changed to achieve consistently high-performance for the remainder of the period.

As shown in Figures 1-5, a different picture of sustained performance emerges. For demonstration purposes, these figures display the sustained performer(s) and selected thrashers or chronic underperformers. Rather than attempting to beat a market rate of return, a relative view of performance suggests that organizations can and do consistently outperform industry-based rates of return. This perspective challenges our traditional thinking about strategy and organization.

Figure 1 graphs the ROA data for the oil and gas industry. ExxonMobil outperforms the industry median for 29 of the 30 years (97%) and Royal Dutch Shell posted above median returns 75% of the time. Both of these firms exceeded the standard despite significant and well-publicized environmental, safety, and international blunders. On the other hand, BP, which was also in the news over the period as an equity market darling, sustainability leader, and environmental criminal, exceeded the industry

median only 8 of the 30 years (27%). ConocoPhillips is a classic thrasher, outperforming the median 43% of the time and showing a steep performance drop from 2005 to 2008.

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Figure 1 about here  
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Figure 2 depicts ROA performance for the automotive industry. The under-performance of GM and Ford's all-to-brief moments of profitability are clearly visible; GM beat the industry median in only 7 of 28 years before filing for bankruptcy protection in 2008. Ford beat the industry median in 8 of the 30 years. Over the same period, Toyota, which received many business press column inches for its Toyota Production System, Toyota Management System, and market share objectives of "global 10" and "global 15" only beat the median 75% of the time while Honda quietly beat the median 27 years (90%). Nissan and Audi display the thrasher pattern.

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Figure 2 about here  
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Figure 3 shows ROA performance for selected pharmaceutical companies. Partially reflecting all of the press awarded to Merck as a "Good to Great" company, it exceeded the industry median ROA 73% of the time. Bristol-Meyers Squibb exceeded the median 80% of the time and GlaxoSmithKline beat the standard 77% of the time. Pfizer is a consistent under-performer that transformed into thrasher around 1994, and Eli Lilly shows a similar pattern.

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Figure 3 about here  
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Figure 4 shows the ROA performance patterns for the retail apparel industry. Gap, Inc., despite its mercurial stock price performance, beats the industry average 83% of the time. Both Nike and Limited Brands consistently performed at or above the

industry median 80% of the time. Although Nordstrom has a strong reputation, its profitability only exceeded the industry median 23% of the time. The industry thrashers, Levi Strauss and TJX Companies, have seen their profitability waiver above and slightly below average for most of the period, achieving above median performance 45% and 50% of the time, respectively.

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Figure 4 about here  
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Figure 5 presents the ROA performance of firms in the computer and office products industry. Xerox has consistently underperformed in the industry while Dell and Lexmark have solid records of above-median performance. For all the attention they get, the thrashers in this industry are IBM and Apple, neither of which has been able to sustain above average performance.

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Figure 5 about here  
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### **Explaining Sustained Performance**

The second focus in this study was, “What accounts for sustained performance?” Understanding the conditions where and when the term “sustained performance” is meaningful is one thing; understanding why or how performance is maintained is another. In an effort to extend the discussion on the drivers of sustained high levels of performance, we adopted three alternative explanations and discuss their likely explanatory power given these performance patterns. The three perspectives – population ecology, strategic choice, and agility – represent two traditional and one more recent view on organizational evolution and effectiveness.

The population ecology (Hannan and Freeman, 1977, 1989; Aldrich, 2008) perspective suggests that organization survival over long periods of time is problematic. The environmental and organizational mechanisms of variation, selection, and retention

drive organizational life and death at the population level. Organization inertia – the inability to change because of commitments to courses of action – constrains responses to environmental change. As organizations grow larger and live longer, they become more inert. However, an organization could sustain high levels of performance if it possessed an advantage at the beginning of a time period. Organization inertia would not be a liability if the environment remained stable. The organization could sustain high levels of performance.

A broad review of environmental change during the 30 year period considered here does not support this line of reasoning as a viable explanation. In 1980, it was “morning in America,” and Paul Volcker was about to unleash the first of four recessions in the period. The Soviet Union was intact, albeit on life support. China was a closed economy, India a socialist country with significant Soviet trade. Japan was ascendant. The Asian Tigers were cubs. GM had over 40% of U.S. light vehicle market share. The IBM anti-trust investigation had dragged on for 11 years. Utilities markets in the U.S. and Europe were highly regulated. The era of investor capitalism and the corporate raider was just beginning. There were no cell phones, personal computers, internet, or satellite navigation systems. There was no WTO; the GATT Uruguay Round would not take place until 1986. Over these 30 years, there have been tremendous changes in the political, technical, and economic landscape as well as significant increases in the breadth and depth of global competition.

At the population level, there was significant change in every environment over these 30 years. Mergers, break-ups, spin-outs, alliances, new entrants, and changing boundaries have altered the face of most industries.

Within industry, change has been equally mind numbing. The oil and gas industry has experienced technological changes in exploration, refining, and transportation. In 1980, there were no “mini-marts” on every corner, no shale gas, no horizontal drilling, no deep-water exploration, and no 3-D seismic tools. Natural gas markets have deregulated, federal taxes on gasoline in the US have increased 325%, and environmental regulation in response to industry incidents has proliferated. Still, over-

performers adapted to maintain or enhance their environmental fit. ExxonMobil's performance was industry-leading when oil was \$8 bbl. and when it was \$147 bbl.

Finally, some recent global studies and research papers (Deloitte 2009, Wiggins & Ruefli 2005) found that market environments have become increasingly turbulent over the past decade, and that the persistence of competitive advantage and sustained performance has gotten shorter. Hypercompetition (D'Aveni, 1994) has become an environmental force in every industry. The idea that environmental stability and organizational inertia is responsible for sustained patterns of performance does not stand up for the industries we examined.

The traditional alternative to a population ecology argument is the "strategic choice" perspective (Child, 1972). Contrary to organization inertia, this perspective suggests that managers have considerable sway over organizational operations and can chart strategies and courses of action to achieve high performance despite environmental change. Reflecting this perspective, a second possible explanation is that managers develop and execute a set of practices, such as those laid out in In Search of Excellence, Built to Last, Good to Great, or What Really Works, that differentiate and enable the firm to deliver sustained performance over time. We have already seen that the companies touted as examples falter when compared to the equity market benchmarks as well as against industry median benchmarks. If the "strategic choice" theory held, then these firms should consistently demonstrate our definition of sustained performance.

When the "benchmark" is TSR, no firm beat the industry median more than 63% of the time (Target and Oracle). The second highest performer vis-à-vis industry TSR median was Walgreens (60%). Even when benchmarked against one's own industry, it is difficult to be a consistent outperformer with respect to TSR. Of the 39 firms in our data base lauded as excellent, less than half of them (47%) were unable to beat industry medians more than half the time.

When the benchmark is industry median ROA, a slightly different picture emerges, although the conclusion does not change. ROA performance at five firms - Walgreens, Wal-mart, Emerson Electric, Johnson & Johnson, and Oracle -- was above industry median over 90% of the time, and three more firms made the 80% mark (Bristol-Myers-Squibb, Home Depot, and Campbell's Soup). In addition, 23 out of 39 firms (59%) were able to do it more than 50% of the time. Thus, while more "excellent" firms were able to perform better than average against ROA, firms that followed the guru's advice were just as likely to perform poorly before they were written about as after they were written about. Just being an "excellent" company was no guarantee of performance over time.

More recently, a variation on the strategic choice perspective has emerged suggesting that effective organizations are adaptable, ambidextrous, or agile (Tushman and O'Reilly, 1996; Volberda, 1998; Sull, 2008; Lawler and Worley, 2006; Haeckel, 1999). A third possibility -- in contrast to the assumption of organization inertia in population ecology and in contrast to some "management formula" in the strategic choice perspective -- is that consistently high performers have the ability to both sense and adapt to environmental threats and opportunities as well as intentionally execute on strategic initiatives. What is commonly known as *agility* is a dynamic capability that enables timely, effective, and sustainable adaptations to environmental change such that the organization is able to capture rents from a series of temporary competitive advantages. Rather than adhere to a particular set of management practices that serve them well under all circumstances, agile firms build (and drop) capabilities, possess structures that adjust, and so on.

In every industry we studied, there was at least one firm that was able to post consistently above median performance over a 30 year period. Campbell's Soup in foods and beverage, Glaxo SmithKline in pharmaceuticals, Johnson & Johnson in consumer products, Emerson Electric in electronics, and Walgreens in drugstore retail have all posted consistently high levels of performance. Do these firms -- in many cases

not the ones we hear about in the business press -- possess some unique capability that allows them to consistently outperform their peers?

Contrast this with “thrashers” that have a pattern of breaking out of periods of under-performance, often through major transformations, only to fall back more than once over the 30 year period. Each transformation was a high-risk, one-time occurrence that often started or ended with a CEO transition, technological change, or other key event (Romanelli and Tushman, 1994; Lant and Mezias, 1992). The organization emerged exhausted rather than energized, complacent rather than paranoid. Critical changes were not institutionalized, capabilities were not embedded, inertia triumphed, and the cycle repeated.

Agile firms have found ways to internalize the external environmental mechanisms of variation, selection, and retention. They have an acute sense of their environments and are able to translate perceptions of opportunities and threats into management action. They provide resources to develop variations in products, processes, capabilities, and business models, but also possess the discipline to pull the trigger on variations deemed unsuccessful (selection). They embed change and organizational learning capabilities throughout the firm (retention).

Our ongoing research has identified some potential attributes that distinguish agile organizations from the pack.

## **Conclusions**

Sustained periods of superior economic performance are not only possible, they are prevalent and persistent when a management frame of reference is applied. Over a 30-year period of analysis (1979-2009), we found firms that consistently out-performed their industries, firms that consistently under-performed their industries, and firms that “thrashed” between under- and over-performance but never achieved sustained levels of over-performance. When viewed through the right lens, the lens of management and not capital markets, sustained performance where it matters is possible, but it is not easy.

A stable industrial environment does not explain these performance patterns. Since 1980, all industries have been subject to technological change, restructuring, regulatory change, and increasing global competition. These patterns are also not explained by the recommendations of “organizational physics.” Example companies from Built to Last and Good to Great are not consistent, long-term winners in their industries.

We suspect that organizations that achieve this level of performance have a capability to continuously adapt to their environments, exploiting opportunities, and addressing threats. This contrasts sharply with the change dynamic likely employed by the “thrashers” that employ transformations or other major change initiatives to temporarily achieve higher levels of performance, only to fall back in a few years. It is the “something” that distinguishes over-performers from thrashers that is important. Superior performance is possible when there is a high degree of fit between the requirements of the environment and the capabilities of the firm. In increasingly turbulent environments, this fit is temporary at best. *Agility* is the dynamic capability that enables over-performing firms to sense and respond to their environments, to rapidly reallocate resources, build new capabilities, and, perhaps most importantly, jettison the assets and activities that no longer create value.

Table 1  
Schemes of Sustained Performance Measurement

Authors	Foster and Kaplan (2001)	McGahan (1999)	Collins (2001)	Collins & Porras (1994)	Kotter & Heskett (1992)	Joyce, Nohria & Roberson (2003)	Yip, Divinney, and Johnson (2009)
<b>Performance Metric</b>	TSR	ROA	Cumulative stock returns	Cumulative stock returns	Average annual increase in net income, ROI, and stock price	Cumulative TSR	Multiple – by industry
<b>Benchmark</b>	Market	Industry Segment	Market	Industry leaders	None	Industry peers	Industry competitive frontier
<b>Time Horizon</b>	36 years	20 years	15 years	64 years	12 years ('77-'88)	11 years (86-96)	20 years
<b>Level of analysis</b>	Corp	Business Segment	Corp	Corp	Corp	Corp	Corp
<b>Sustained performance?</b>	No	Yes	Yes	Yes	Yes	Yes	Yes
<b>Recipe</b>	<ul style="list-style-type: none"> <li>Act like a market. Change at the pace and scale of the market</li> <li>Build “creative destruction” internally</li> </ul>	Not applicable	<ul style="list-style-type: none"> <li>Level 5 leadership</li> <li>First who, then what</li> <li>Confront brutal facts</li> <li>Hedgehog concept, good BHAGs</li> <li>Culture of discipline</li> <li>Technology accelerators</li> <li>Flywheel, not doom loop</li> </ul>	<ul style="list-style-type: none"> <li>Clock building</li> <li>“And, not Or”</li> <li>Purpose beyond Profits</li> <li>BHAGs</li> <li>Cult-like Cultures</li> <li>Try a lot of stuff and keep what works</li> <li>Home-grown management</li> <li>Good enough never is</li> </ul>	<ul style="list-style-type: none"> <li>Managers throughout the organization should be able to lead change</li> <li>Organizations that value customers, employees, shareholders are more adaptable</li> </ul>	<ul style="list-style-type: none"> <li>Clear, focused strategy</li> <li>Flawless execution</li> <li>Performance-oriented culture</li> <li>Fast, flexible, flat structure</li> </ul> PLUS two of the following: <ul style="list-style-type: none"> <li>Hold talented employees &amp; find more</li> <li>Keep leaders committed</li> <li>Industry transforming innovations</li> <li>Grow thru mergers &amp; partnerships</li> </ul>	Not applicable

Table 2

McGahan's Performance Results

		Ending Performance (Last 4 years)		
		Top 25%	Medium 50%	Bottom 25%
Beginning Performance (First 4 years)	Top 25%	Sustained High Performers 2,628 (19.4%)	Declining High Performers 599 (4.4%)	Fallen High Performers 160 (1.2%)
	Medium 50%	Rising Moderate Performers 685 (5.1%)	Steady Moderate Performers 5,517 (40.7%)	Declining Moderate Performers 572 (4.2%)
	Bottom 25%	Turnarounds 74 (0.5%)	Rising Under Performers 658 (4.9%)	Chronic Under Performers 2,654 (19.6%)

Table 3

## Sample Industries

Industry (Primary ICB Sector)	Number of Firms*	Largest/Smallest (in 2009)
Oil/Gas/Mining (0530)	22	BP/Tesoro
Chemicals (1350)	17	Dow/Hexion Specialty Chemicals
Aerospace and Defense (2710)	12	Boeing/Rockwell Collins
Railroads (2775)	6	Union Pacific/Canadian Pacific
Automotive Mfg and Supply (3350)	25	Toyota/Tenneco
Food/Beverage (3500)	24	Nestle/Hormel
Consumer Products (3720)	8	Procter & Gamble/Clorox
Pharmaceuticals (4750)	15	Pfizer/Novo Nordisk
Electronics (3740)	9	Sony/Eastman Kodak
Retail Apparel (5371)	10	Nike/Guess
Specialty Retail (5379)	15	Home Depot/Borders
Grocery/Drug Store Retail (5330)	16	CVS Caremark/Winn-Dixie Stores
General Retail (5373)	12	Wal-Mart/Saks
Airlines (5751)	7	American/Jet Blue
Utilities (7500)	27	Exelon/PPL Electric Utilities Corp
Computers/Office Products (9572)	11	IBM/Lexmark
Network/Communications (9578)	9	Cisco/Harris
Total Firms	<b>245</b>	

\*with at least 10 years of data

Table 3

## Company Performance Vs Various Benchmarks between 1980 and 2009

<b>Good-to-Great Companies</b>	<b>Industry Group</b>	<b>% Years above S&amp;P500 Index</b>	<b>% Years Above Median TSR</b>	<b>% Years Above Median ROA</b>
Abbott Laboratories	Pharmaceuticals	67	47	70
Circuit City	Specialty Retail	67	57	32
Fannie Mae	Financial Services	n/a	n/a	n/a
Kimberly-Clark	Consumer Products	80	37	33
Kroger	Grocery Retail	70	53	27
Pitney Bowes	Computer Systems	63	50	30
Walgreens	Grocery/Drug Retail	70	60	93
Wells Fargo	Financial Services	70	59	57
<b>Built-to-Last Companies</b>				
3M		n/a	n/a	n/a
American Express	Financial Services	70	45	77
Boeing	Aerospace/ Defense	67	57	40
Citicorp	Financial Services	61	54	50
Ford	Automotive	47	50	27
Hewlett-Packard	Computer/ Office	67	43	57
IBM	Computer/ Office	63	37	60
Johnson & Johnson	Consumer Products	77	47	93
Merck	Pharmaceuticals	67	43	73
Motorola	Network/ Comm	50	43	43
Nordstrom	General Retail	67	50	17
Procter & Gamble	Consumer Products	73	43	33
Sony	Electronics	47	40	37
Wal-Mart	General Retail	63	57	100
<b>Other "In Search of Excellence" Firms</b>				
Pepsi (Frito Lay)	Food/Beverage	60	53	60

Avon	Consumer Products	57	47	60
Schlumberger	Oil/Gas	57	43	73
Xerox	Computer/ Office	57	37	03
Bristol-Myers-Squibb	Pharmaceuticals	70	43	83
Dana	Automotive	53	30	43
Delta Air Lines	Airlines	48	34	53
Dow Chemical	Chemicals	53	33	47
DuPont	Chemicals	60	37	40
Eastman Kodak	Electronics	47	33	67
Emerson Electric	Electronics	60	57	97
K-mart*	Retail	52	35	23
Texas Instruments	Electronics	63	57	73
<b>Winners (Joyce, Nohria, and Roberson)</b>				
Dollar General	Car Rental	n/a	n/a	n/a
Target	Retail	63	63	70
Duke Energy	Energy	73	53	77
Home Depot	Retail	61	57	80
GE	Diversified	n/a	n/a	n/a
Oracle	Computer/Office	63	63	92
Campbell's Soup	Food/Beverage	70	43	87
USAA	Insurance	n/a	n/a	n/a
Nucor	Steel	n/a	n/a	n/a
Schering-Plough	Pharmaceuticals	72	48	41

\*data prior to acquisition by Sears

Figure 2: Oil and Gas Industry ROA Performance

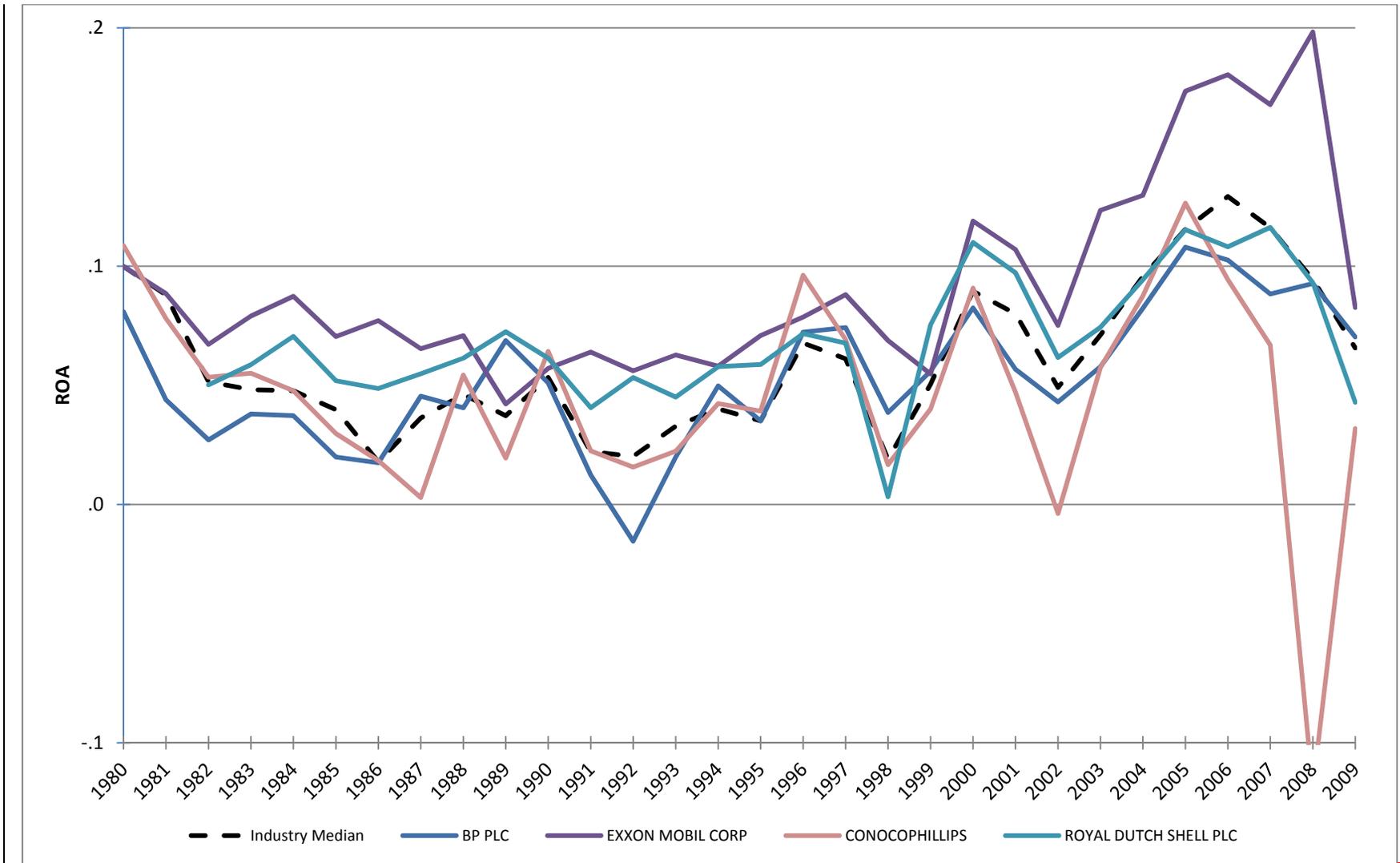


Figure 3: Automobile Industry ROA Performance

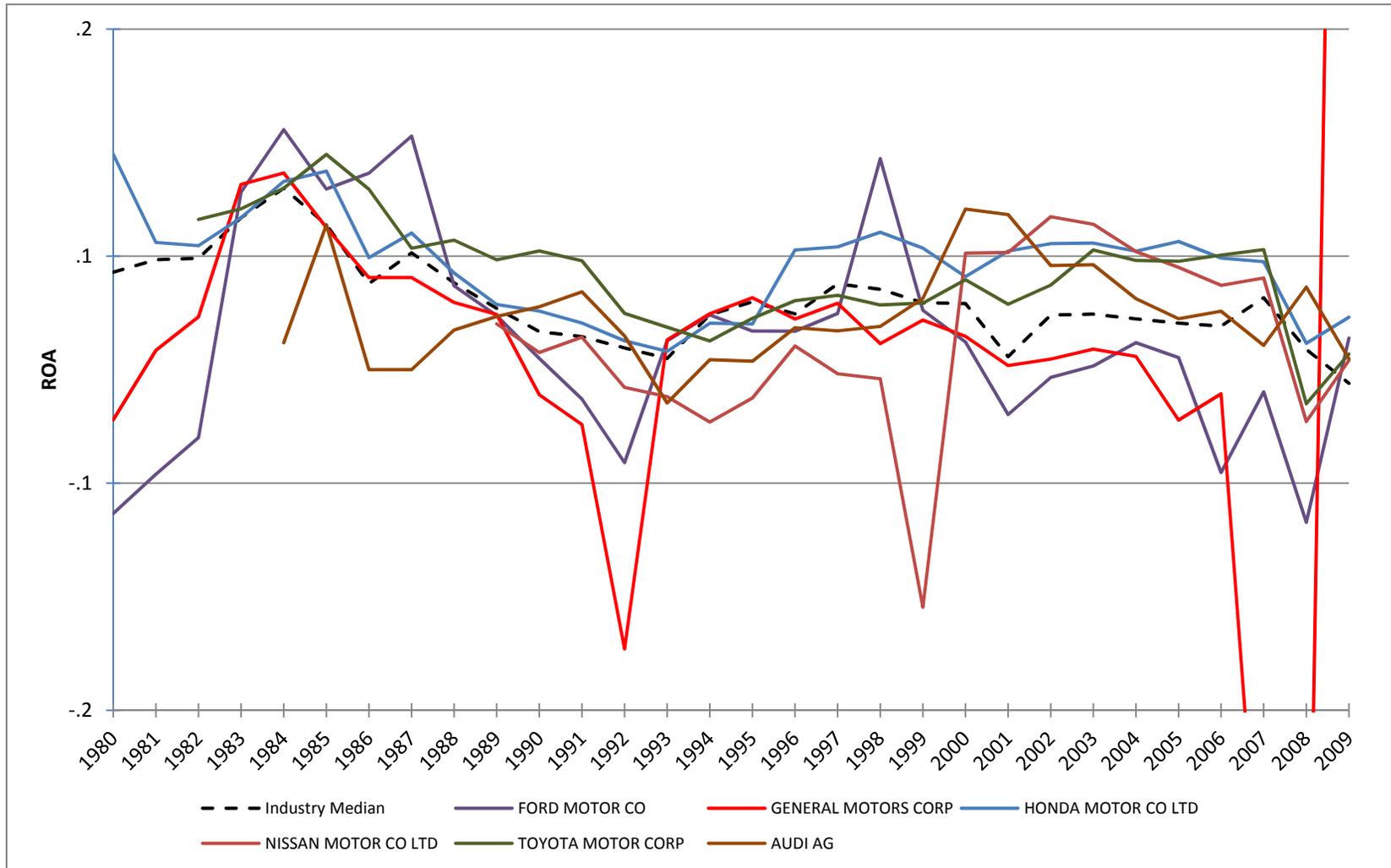


Figure 3: Pharmaceutical Industry ROA Performance

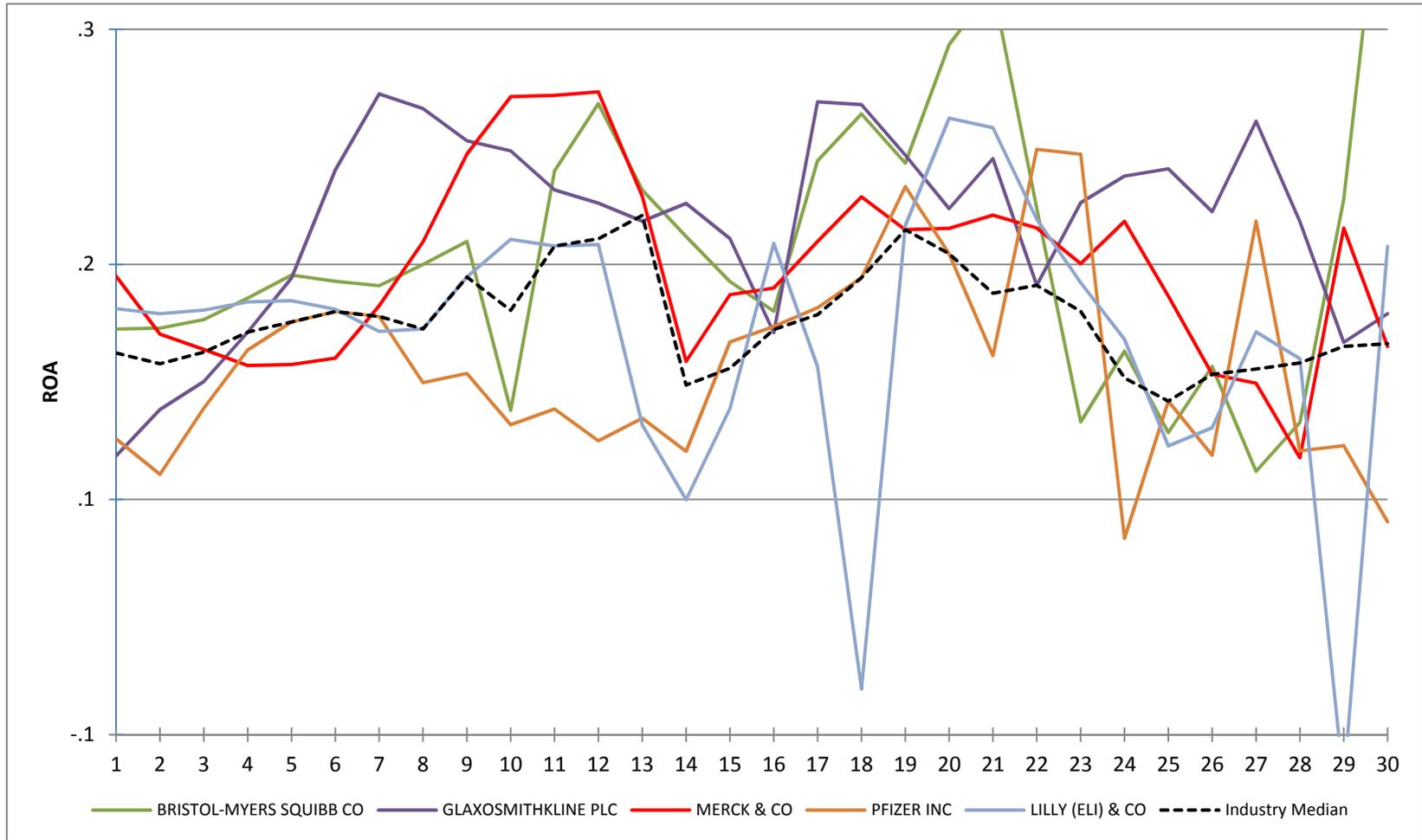


Figure 4: Retail Apparel Industry ROA Performance

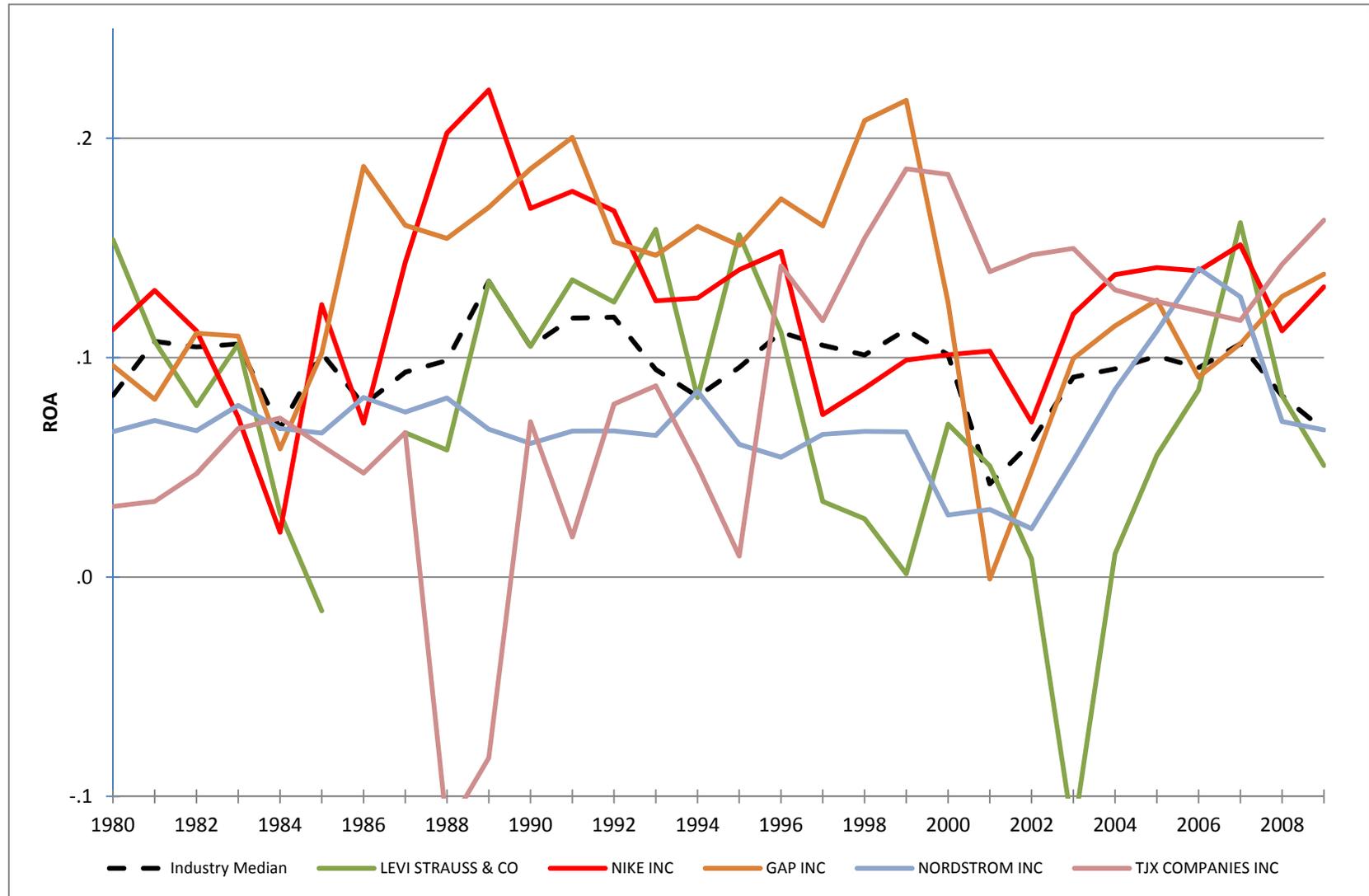


Figure 5: Computer/Office Product Industry ROA Performance

