

Most admired companies' performance and CEO compensation during 2007-2009 recession

Obeua S. Persons
Rider University

ABSTRACT

This study investigates financial performance and compensation of chief executive officer (CEO) of the world's 50 most admired companies and their matched not-admired peers during 2007-2009 recession. The study has two purposes. The first purpose is to examine whether these 50 high-reputation companies are truly admirable, i.e., outperforming their competitors during this worst recession since World War II. The second purpose is to investigate how well these companies aligned the compensation of their CEO with firms' performance during this recession. Financial performance is based upon financial statement data, seven financial ratios, and changes in these ratios that measure profitability, solvency and CEO power.

There are two significant findings. First, most admired companies had significantly better financial performance, i.e., higher profitability, solvency and CEO power than their matched firms during the recession. Second, most admired companies' CEO compensation had a stronger correlation with their net income and revenue than that of their matched peers. The first finding has an implication for investors, and the second finding has an implication for other companies to emulate this exemplary compensation practice. This study contributes to corporate reputation literature and is the first one to focus on performance and CEO compensation of these 50 most admired companies during these tough and trying years.

Keywords: Admired companies, performance, compensation, recession, profitability, reputation

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INTRODUCTION

This study examines financial performance of 50 most admired high-reputation companies and their matched peers during the recession that was the longest (18 months from December 2007 through June 2009) and the worst one (with 7.3 million jobs lost) since World War II. Such examination stems from two motivations. The first one is to verify whether these 50 all-star companies identified by *Fortune* are truly admirable in terms of their financial performance. Such verification should be of interest not only to their shareholders but also to the public because these companies have been the focus of investment communities and the media around the world as their products, services and operations are well-known worldwide. The tough and trying 2007-2009 recession represents a great opportunity to test whether most-admired companies truly performed financially better than their matched peers. This is because most entities likely do well during economically prosperous years, but only exceptionally managed companies with close alignment of executive pay and firms' performance could shine through such trying times of recession. No earlier studies about most admired companies have examined their financial performance during 2007-2009 recession. None of these studies used financial statement data and financial ratios to measure performance as in this study.

The second motivation is to explain why these 50 most admired companies may have better financial performance by investigating how well they aligned the compensation of their CEO with firms' performance. The finding of this investigation could provide a benchmark of best compensation practices for other companies if these most admired companies outperformed their matched peers during these economically adverse years. Such finding should contribute to the literature on executive compensation. It can also provide insight into how to improve reputation via a better alignment of CEO compensation and a firm's performance because sound financial performance seems to be an important driving force for reputation (Flatt and Kowalczyk, 2011). This study is the first one to empirically examine the relationship between most admired companies' performance and their CEO compensation.

The next section provides further support for why this study is important by discussing how *Fortune* identified most admired companies. It is followed by five sections: theoretical discussion and hypothesis development, literature review and research design, data collection, results, and finally, conclusions and contributions

HOW FORTUNE IDENTIFIED MOST ADMIRE COMPANIES

According to Bernasek (2010), *Fortune* relied on the Hay Group, a global management consulting firm, to conduct a survey that started with about 1,400 companies: the *Fortune* 1,000 (the 1,000 largest U.S. companies ranked by revenue), non-U.S. companies in *Fortune's* Global 500 database with revenue of \$10 billion or more, and the top foreign companies operating in the U.S. Hay Group sorted them by industry and selects the 15 largest for each international industry and the 10 largest for each U.S. industry. A total of 667 companies from 33 countries were surveyed. To create the 55 industry lists, the Hay Group asked executives, directors, and analysts to rate companies in their own industry on nine criteria: innovation, people management, use of assets, social responsibility, management quality, financial soundness, long-term investment, product quality and global competitiveness.

Bernasek (2010) further stated that "To arrive at the top 50 Most Admired Companies overall, the Hay Group asked 4,170 executives, directors, and securities analysts who responded

to the industry surveys to select the 10 companies they admired most. They chose from a list made up of the companies that ranked in the top 25% in last year's surveys, plus those that finished in the top 20% of their industry. Anyone could vote for any company in any industry. The difference in the voting rolls is why some results can seem anomalous. For example, although Toyota is one of the top 10 Most Admired Companies, it is only third in the Motor Vehicle industry-after BMW, which is ranked 22nd on the top 50 overall, yet is No. 1 among Motor Vehicles.”

Therefore, a major weakness is that *Fortune* used a survey that relied strictly on subjective opinions of executives, directors, and securities analysts. *Fortune* and the Hay group did not at all use data in the companies' audited financial statements as their rating criteria. Another weakness is stated above by Bernasek (2010) that some results can seem anomalous. The high subjectivity and the anomaly of some results warrant an investigation of financial performance and compensation of these 50 most admired companies relative to their matched peers.

THEORETICAL DISCUSSION AND HYPOTHESIS DEVELOPMENT

This study relies on the resource-based theory which considers corporate reputation as a valuable and rare intangible resource that leads to important strategic competitive advantages because it helps a firm to differentiate itself from its rivals, is difficult to imitate by other organizations, and without a substitute (Barney, 1991). Following Fombrun (1996, p. 72), this study defines reputation as ‘a perceptual representation of a company’s past actions and future prospects that describe the firm’s overall appeal to all its key constituents when compared to other leading rivals’. Being rated as the world’s 50 most admired companies clearly indicates that these firms have higher reputations than their peers. Walker (2010) refines this definition by asserting that reputation is stable and enduring over time. Consistent with Walker’s assertion, Sabate and Puente (2003) conclude that firms with higher reputations are more likely to achieve better financial performance over time than their rivals. Reputation becomes an increasingly valuable asset that provides a number of advantages in turbulent economic times (Stuebs and Sun, 2010, p. 268)). These advantages can buffer financial performance in a variety of ways that insulate reputable companies from the full impact of tough economic times (Dowling, 2001). First, reputation can protect revenues from economic downturns (Fombrun, 1996). Because reputation is valued in its own right, customers value relationships and transactions with high-reputation firms (Roberts and Dowling, 2002). Therefore, high reputation supports and enhances sales force effectiveness, new product introductions and recovery strategies in the event of crises (Dowling, 2001). Because reputation also serves as a signal of the underlying quality of a firm’s products and services, consumers are more willing to pay a premium for the offerings of high-reputation firms, especially in markets characterized by high levels of uncertainty such as during a recession (Shapiro, 1983).

Second, good reputation can create cost advantages, and is associated with firm efficiencies (Stuebs and Sun, 2009). This is because good reputation can improve trust and relationships with a number of stakeholders leading to reductions in: (1) advertising costs because consumers tend to receive advertising claims more favorably if the reputation of the firm making those claims is more positive (Goldberg and Hartwick, 1990), (2) transaction costs with suppliers because suppliers are less concerned about contractual hazards when transacting with high-reputation firms, and (3) financial costs with capital providers because investors perceive

high-reputation firms as having lower risks (Dowling, 2006). Finally, Podolny (1993) suggests that firms with high reputations have a greater incentive to engage in actions that further enhance their reputations. Roberts and Dowling (2002) support Podolny's suggestion by showing that these firms are better able to sustain superior profit outcomes over time. These purported benefits of a high reputation lead to the first hypothesis.

H1: Most admired companies had better financial performance during the recession than their matched peers.

This study also empirically examines the relationship between financial performance and CEO compensation of most admired and matched not-admired companies. Relying on the resource-based theory, a high reputation is a valuable resource because, among other benefits, it can create labor resource efficiency advantages (Fombrun, 1996 and Podolny, 1993). Roberts and Dowling (2002) posit that good reputation can attract and motivate good employees. Such attraction likely results in a larger labor supply, therefore driving down the firm's compensation costs. In addition, employee motivation results in a productivity benefit, i.e., employees may work harder for high-reputation firms. The lower labor costs and higher labor productivity result in increased labor efficiency (Stuebs and Sun, 2010). Consistent with this argument, McMullen (2010) states that *Fortune*'s most admired companies do a better job ensuring that: (1) their reward programs are clearly aligned with their organization's goals, strategy and culture, and (2) their reward programs support efforts to retain their best talent and attract the talent they need. McMullen's statement is based upon recent Hay Group research with *Fortune* magazine on reward program effectiveness. Hay Group's Vice President, Melvyn J. Stark, indicates that "In addition, these companies do a better job of rewarding top performers – delivering the best pay increases to those who are truly deserving and holding the line on pay for marginal performers." (Anonymous, 2008). Stark (2002) also asserts that most admired companies have a more direct tie of executive compensation and financial performance, e.g., they are more likely to take corrective action against an executive who was ineffective in implementing company strategy. A strong correlation between CEO compensation and firms' performance is especially important for these 50 high-reputation companies to excel through this longest and worst recession since World War II.

H2: Most admired companies are better than their matched peers at aligning their CEO compensation with firms' financial performance.

LITERATURE REVIEW AND RESEARCH DESIGN

There are several studies that examined most admired companies' performance *prior to* 2007-2009 recession. Anderson and Smith (2006) and Antunovich et al. (2000) find that stocks of companies highly ranked by *Fortune* had higher subsequent returns than stocks that were ranked as low. However, Anginer and Statman (2010), Shefrin and Statman (2003) and Statman et al. (2008) find that the higher-ranked companies on *Fortune* rating had subsequent lower returns than those with lower ranking. The inconsistent findings of these studies that used stock returns warrant an investigation that uses alternative measures of financial performance based upon financial statement data. The high volatility of stock markets during the recession provides further support for the use of these non-market data from financial statements. This study uses the following four measures of financial performance to test whether most admired companies had better financial performance during the recession than their matched peers.

1. Selected financial statement items: total revenue, net income, total assets, total liabilities, operating cash flows, capital expenditure, total dividends paid, and free cash flows.
2. Changes in these items from 2007 to 2008, and from 2008 to 2009.
3. Financial ratios that measure three aspects: (1) profitability based upon return on assets, return on equity, profit margin, and assets turnover, (2) solvency based on debt to assets, and cash debt coverage, and (3) CEO power measured as free cash flows to total assets (Anderson et al., 2011).
4. Changes in financial ratios from 2007 to 2008, and from 2008 to 2009.

The use of financial ratios is supported by Roberts and Dowling (2002) who find that the most admired companies were more able to sustain superior profitability from 1984 to 1998. However, the list of most admired companies during 1984-1998 is greatly different from the list in 2010 used in this study. For example, Apple, Google and Berkshire Hathaway that are the top three companies on the 2010 list were not at all on the list of 50 most admired companies during 1984-1998. Furthermore, unlike Roberts and Dowling (2002) who focus only on profitability measured by return on assets (ROA), this study examines solvency and CEO power in addition to profitability that is measured by four different ratios including ROA. In addition, the 1984-1998 period studied by Roberts and Dowling (2002) is a relatively prosperous period with only one short recession lasting only eight months from July 1990 to March 1991.

To test the first hypothesis, this study uses t-test and Wilcoxon rank-sum test to assess the significance of the difference in financial performance between most admired companies and their matched peers. For the second hypothesis, a correlation analysis is used to evaluate how well these firms aligned the compensation of their CEO with the firms' financial performance.

Data Collection

This study uses the ranking in *Fortune* article, "The World's Most Admired Companies", (Bernasek, 2010) to conduct a comparison between the 50 most-admired high-reputation companies with another 50 control companies that are not on this prestigious list. Although this article was published in March 2010, the survey was conducted in fall 2009 shortly after the end of the recession. It is highly likely that survey subjects rated these 50 firms as the world's most admired companies based upon these companies' superior ability to weather the recession from the start to the end. Forty of these 50 all-star companies are U.S. firms that use U.S. generally accepted accounting principles (GAAP), and the other ten are foreign firms: three from Japan, two from Germany, one from French, one from Switzerland, one from Finland, one from Singapore, and one from South Korea. The five European companies use international financial reporting standards (IFRS), the three from Japan use Japanese accounting standards, one from Singapore uses Singapore accounting standards that are consistent with IFRS, and one from South Korea uses Korean accounting standards.

A control company was matched with each of the world's most admired companies on the basis of industry (SIC code) and firm size measured by total assets. This study also tried to match on a company's home country or geographical region if a control company of comparable size in the same industry could be identified. Out of 50 control companies, 34 are U.S. firms and 16 are foreign firms (three from Japan, five from Germany, one from French, two from Switzerland, two from U.K., one from Sweden, one from Netherlands, and one from Italy). Thirteen of these foreign control firms use IFRS, and the other three use Japanese accounting standards. It would be ideal to have exactly the same geographical composition for both world's

most admired companies and their control companies. However, this ideal situation is not achieved because the world's most admired company is typically the largest company in the industry in their home country. Therefore, this study had to select a control company of comparable size in the same industry from another country. Because the 2007-2009 recession adversely affected virtually all countries, this different geographical composition is not likely to have a significant bias on the financial performance results. Regarding the difference in accounting standards, Persons (2009) stated that net income and assets under IFRS are typically larger than those under U.S. GAAP. Therefore, the fact that only six most-admired companies vs. 13 control firms use IFRS or standards consistent with IFRS will likely bias against the first hypothesis that most admired firms did better in terms of profitability and solvency than their matched peers.

This study used the SEC online EDGAR database to collect data on financial statement items and CEO compensation of the 100 sample firms. Financial statement data for the three years were from annual reports: Form 10-K for U.S. firms and Form 20-F for foreign firms. Compensation data for the three years were from proxy statements (Form def-14a) for U.S. firms and Form 20-F for foreign firms. If a firm was not in the database, its data were collected from its web site.

RESULTS

Table 1 shows that the world's 50 most admired companies had significantly larger total revenue, net income, total assets, operating cash flows, capital expenditure, total dividends and free cash flows than their matched companies. Among these measures, net income had the biggest gap between the two groups. In particular, net income of most admired companies was, on average, two to five times larger than that of the matched firms. Detailed examination reveals that only two most admired companies had net loss in 2008, the year entirely in recession, whereas 12 matched companies had net loss in 2008. Although a matching criterion is total assets, and the t-test does not show a significant difference in total assets of the two groups, the Wilcoxon rank-sum test indicates that most admired companies have significantly larger total assets than their matched peers. This is because a number of most admired companies such as Google, Berkshire-Hathaway, Wal-Mart, McDonald, General Electric, and Walt Disney are globally the largest companies in their industries. The only financial aspect that does not significantly differ between the two groups is total liabilities. This means that even though most admired companies are significantly larger, they do not have significantly more liabilities than their matched peers.

Table 2 reports percentage changes in the eight financial aspects shown in Table 1. There are two types of significance tests in Table 2. The first one is testing whether the mean of each percentage change differs significantly from zero. The other one is testing whether the mean and the median of these two groups is significantly different from each other. From 2007 to 2008, the first type of significance tests on the mean values indicates that the most admired companies had a significant increase in revenue, assets, liabilities, capital expenditure and dividends, whereas their matched companies had a significant increase in liabilities and dividends only. This increase in liabilities and dividends without a corresponding increase in revenue and assets likely made these matched companies financially worse off than the most admired companies during the year of recession, 2008. It is amazing that the most admired companies were able to increase their revenue and capital expenditure even during this recession year of 2008. From 2008 to 2009, the most admired companies had a significant increase in assets and a significant

decrease in capital expenditure, whereas their matched companies faced a significant decrease in revenue and capital expenditure. The other type of significance tests on the between-group median values (the Wilcoxon rank-sum test) indicates that from 2007 to 2008, the most admired companies had a significantly higher increase in assets and a significantly smaller decline in their operating cash flows than their matched peers. This smaller decline in operating cash flows among the most admired companies is likely attributable to their revenue increase that helped offset increased interest expenses as a result of the significant increase in liabilities. From 2008 to 2009, the most admired companies experienced a significantly smaller decline in their net income than their matched peers because of their significantly smaller decline in revenue.

Table 3 contrasts most admired companies and their matched peers on the basis of the mean and the median of their seven financial ratios over the three years. The strongest results, supported by both t-test and Wilcoxon rank-sum test, pertain to the solvency aspect measured by debt to assets ratio and cash debt coverage ratio. That is most admired companies consistently exhibited significantly higher solvency as evidenced by their significantly lower debt to assets ratio and significantly higher cash debt coverage ratios across the three years. These solvency results are consistent with Table 1 results that indicate significantly larger assets among the most admired companies and about the same level of liabilities between the two groups. Most admired companies also had better profitability than their matched peers because: (1) their profit margin is significantly higher across the three years based on Wilcoxon rank-sum test and higher in 2009 & 2007 based on t-test, (2) their return on assets is significantly higher in 2008 and 2009 based on both tests, and (3) their return on equity is significantly higher in 2008 and 2009 based on Wilcoxon rank-sum test. In addition, the CEO of most admired companies seemed to have more power because of their significantly larger free cash flows to total assets in 2008 and especially in 2009.

Table 4 reports percentage changes in the seven financial ratios shown in Table 3. Similar to Table 2, two types of significance tests were conducted on results in this table. The first one is testing whether the mean of each percentage change is significantly different from zero. The other one is testing whether the mean and the median of these two groups differ significantly from each other. The first type of significance tests indicates that both most admired companies and their matched peers had a significant increase in debt to assets ratio from 2007 to 2008 and a significant decline in this ratio from 2008 to 2009. It is plausible that both groups of companies might not yet adversely affected by the recession, that started in December 2007, until in later months of 2008. Not expecting the recession to be so bad, these companies might have obtained more debt earlier in 2008. They then engaged in substantial debt reduction in 2009 once they had severely felt the pinch of the recession after the doom of Lehman Brothers that greatly shook the public confidence in the financial sector, and drastically crippled securities markets worldwide. In addition, from 2008 to 2009, both groups also experienced a significant drop in their asset turnover ratio that measures an ability to use assets to generate revenue. The second type of significance tests suggests that, from 2007 to 2008, most admired companies had a significantly smaller increase in debt to assets and a significantly smaller decrease in return on equity and cash debt coverage ratio (based on Wilcoxon rank-sum test) than their matched peers. From 2008 to 2009, Wilcoxon rank-sum test indicates that most admired companies experienced a significantly smaller decline in return on assets and return on equity, and did much better in terms of profit margin.

In sum, the results in Tables 1-4 suggest that most admired companies did better financially in terms of profitability and solvency than their matched not-admired firms during the

2007-2009 recession even though the matched group has more foreign firms that prepared their financial statements in according to IFRS, and net income and assets under IFRS tends to be larger than those under U.S. GAAP.

Table 5 presents results concerning CEO compensation of most admired vs. not admired companies. The reported amounts in Panel A are total compensation including cash compensation (salary, bonus and non-equity incentive plan compensation), reported value of granted options, value of stock compensation, change in pension plan value, and other benefits such as life and health insurances, use of company automobiles and aircraft, home security, and financial/tax services. The first half of Panel A does not indicate any significant difference in CEO total compensation between the two groups. This insignificant pay difference is surprising given the significantly larger revenue, net income and operating cash flows of most admired companies. The finding of insignificant difference in total CEO compensation seems to support an earlier discussion about a reputation benefit of reduced compensation costs.

Correlation results in the first half of Panel A suggest that CEO compensation of most admired companies was significantly and positively correlated with their net income in all three years of recession, whereas CEO compensation of not-admired companies was significantly and positively correlated with their net income in 2009 only. In addition, CEO compensation of most admired companies was significantly correlated with their revenue in 2008 and 2009, whereas not-admired companies did not have any significant correlation between their CEO compensation and revenue in any of the three years.

The second half of Panel A, Table 5 shows that, based on mean values, both groups had a significant increase in CEO compensation from 2007 to 2008, whereas only not-admired companies had a significant increase in their CEO compensation from 2008 to 2009. Given that not-admired companies had a significant drop in revenue, and a steeper decline in net income than admired companies from 2008 to 2009, this significant increase in their CEO compensation is certainly not welcoming news for their shareholders. Regarding correlation tests, most admired companies had a significantly positive correlation between: (1) the 2008-2007 change in their CEO compensation and change in net income, and (2) the 2009-2008 change in their CEO compensation and change in revenue. On the contrary, not-admired companies had a significantly *negative* correlation between the 2008-2007 change in their CEO compensation and change in net income, i.e., their CEO compensation increased when their net income decreased. Again, this is not welcoming news for their shareholders. In sum, the correlation results clearly suggest that most admired companies' CEO compensation (and its percentage change) are more aligned with their net income and revenue (and its percentage change) than their matched not-admired peers.

Similar to the results of the amount of CEO total compensation in Panel A, Panel B of Table 5 shows no significant difference in the percentage of cash, option, and stock compensation between the two groups. This finding is not surprising because companies normally try to make their executive compensation structure comparable to that of their peers. A further investigation reveals that, for both groups, the most popular way to compensate CEO is using all three major means: cash, options and stock. The second most popular way for most admired companies is using cash only, and for not-admired companies is using cash and stock.

CONCLUSIONS AND CONTRIBUTIONS

This study investigates financial performance and CEO compensation of the world's 50 most admired companies and their matched not-admired firms during 2007-2009 recession. Financial performance is based upon financial statement data and seven financial ratios, and changes in these ratios that measure profitability, solvency and CEO power. This study also examines (change in) CEO compensation and its correlation with (change in) net income and revenue. There are two significant findings. First, most admired companies had significantly better financial performance than matched firms, i.e., higher profitability, solvency and CEO power. Second, most admired companies' CEO compensation was more aligned with their net income and revenue than that of their matched peers during the recession. In all, these findings suggest that the recession did not adversely affect these 50 most admired companies as much as their matched peers because these 50 firms have better reputations, and are more successful in implementing a pay-for-performance strategy that makes their executives more accountable for firms' performance. As a result, these companies were able to outperform their competitors during this worst recession since World War II.

These findings contribute to the literature on the relationship between reputation and financial performance by focusing on the performance during the most economically trying times of recession. In addition, the findings complement the growing body of strategic-management research that relates high-quality intangible assets to sustained high performance. This study also contributes to research on reputation persistence by investigating whether high reputation could help sustain financial performance during the recession. The findings here suggest that firms with high reputation find themselves with competitive advantages that buffer them from the full impact of the recession and help them achieve persistently better performance than their rivals.

Besides its contributions to the research literature, this study has a direct implication for investors, i.e., these 50 most-admired high-reputation companies are good investment choices during a recession. This study also has a direct implication for executives and board of directors on how to potentially improve their firm's reputation. This implication is related to Flatt and Kowalczyk (2011) suggestion that firms that are unclear about how to improve their reputation should consider ways to improve their financial performance first, since this appears to be a major driving force. This study's finding about a stronger correlation of CEO compensation and net income & revenue among most admired companies implies that a firm may improve its reputation by improving its performance via strengthening an alignment between the CEO compensation and its net income and revenue. Future research on how to improve reputation may want to extend this study by examining characteristics of firms that join the 50 most-admired companies list or become industry leaders for the first time.

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APPENDIX

Table 1. Selected Financial Statement Data of Most-Admired Companies vs. Their Matched

Variables	Mean (in Millions US\$)			Median (in Millions US\$)		
	2009	2008	2007	2009	2008	2007
REVENUE						
Admired	70,269	74,913	73,853	46,258	49,777	46,620
Not-Admired	47,108	51,458	52,406	28,392	24,410	23,471
Significance test	1.858**	1.555*	1.519*	2.047**	2.041**	1.813**
NET INCOME						
Admired	5,437	5,531	6,869	2,842	3,261	4,348
Not-Admired	1,728	1,025	3,424	970	1,419	2,033
Significance test	3.989***	3.123***	2.869***	3.861***	3.509***	3.026***
ASSETS						
Admired	173,685	175,706	153,331	53,473	53,601	53,614
Not-Admired	156,484	157,734	164,939	39,203	40,451	29,992
Significance test	0.223	0.234	-0.161	1.758**	1.537*	1.641**
LIABILITIES						
Admired	134,048	139,004	117,357	29,766	29,612	28,959
Not-Admired	131,951	136,113	142,308	22,124	22,100	21,301
Significance test	0.030	0.041	0.370	0.876	0.793	0.862
OPERATING CASH FLOWS						
Admired	13,611	9,769	6,424	7,486	5,681	6,354
Not-Admired	6,011	8,562	2,356	3,034	2,438	2,571
Significance test	1.908**	0.338	2.869***	3.940***	3.192***	2.957***
CAPITAL EXPENDITURE						
Admired	3,372	4,281	4,261	1,741	2,247	2,269
Not-Admired	1,961	2,647	2,774	822	1,001	960
Significance test	1.687**	1.662**	1.478*	2.868***	2.689***	2.378***
DIVIDENDS						
Admired	1,921	2,088	1,889	882	1,015	838
Not-Admired	1,117	1,488	1,378	583	679	603
Significance test	1.876**	1.174	1.050	1.922**	1.504*	3.026***
FREE CASH FLOWS						
Admired	8,318	3,400	274	3,272	1,550	2,243
Not-Admired	2,934	4,427	-1,795	1,243	733	837
Significance test	1.425*	-0.327	0.569	3.592***	-1.682**	-3.026***

Significance test is t-test for mean values and Wilcoxon rank-sum test for median values.

* , ** , *** Statistically significant at $p < 0.10$, $p < 0.05$, and $p < 0.01$, respectively.

Table 2. Changes in Selected Statement Data of Most-Admired Companies vs. Their Matched

Variables	<u>Mean (Percentage)</u>		<u>Median (Percentage)</u>	
	2009-2008	2008-2007	2009-2008	2008-2007
Δ REVENUE				
Admired	-1.964%	3.364% **	-3.104%	3.735%
Not-Admired	-5.693% ***	0.998%	-5.772%	2.946%
Significance test	1.103	0.856	1.489*	0.779
Δ NET INCOME				
Admired	28.012%	1.493%	-3.723%	-19.316%
Not-Admired	-23.415%	-27.982%	-20.165%	-18.770%
Significance test	1.141	0.694	1.875**	0.917
Δ ASSETS				
Admired	5.691% ***	6.069% **	3.570%	1.280%
Not-Admired	2.440%	9.920%	0.124%	-2.071%
Significance test	1.061	-0.325	1.151	1.854**
Δ LIABILITIES				
Admired	2.261%	10.347% ***	1.499%	4.239%
Not-Admired	-0.526%	17.086% *	2.635%	3.370%
Significance test	0.825	-0.583	0.938	0.503
Δ OPERATING CASH FLOWS				
Admired	61.922%	1.441%	10.552%	-3.472%
Not-Admired	-132.235%	-31.612%	3.584%	-10.547%
Significance test	0.953	-1.092	1.165	1.517*
Δ CAPITAL EXPENDITURE				
Admired	-21.650% ***	4.963% **	-21.404	2.494%
Not-Admired	-23.155% ***	5.809%	-27.364%	2.550%
Significance test	0.243	0.118	0.794	0.339
Δ DIVIDENDS				
Admired	-4.191%	13.247% ***	0.730%	9.524%
Not-Admired	18.663%	11.947% **	-3.663%	7.060%
Significance test	0.637	0.181	1.671	0.975
Δ FREE CASH FLOWS				
Admired	-79.193%	1.198%	19.604%	-22.435%
Not-Admired	-69.061%	4.261%	0.559%	-35.491%
Significance test	0.082	0.571	0.917	0.393

Significance test is t-test for mean values and Wilcoxon rank-sum test for median values.

* , ** , *** Statistically significant at $p < 0.10$, $p < 0.05$, and $p < 0.01$, respectively.

Table 3. Financial Ratios of Most-Admired Companies vs. Their Matched Companies

Variable	Mean (Percentage)			Median (Percentage)		
	2009	2008	2007	2009	2008	2007
RETURN ON ASSETS						
Admired	6.883%	7.562%	8.553%	6.733%	7.120%	7.903%
Not-Admired	4.196%	5.028%	7.195%	2.377%	4.401%	5.886%
Significance test	2.299***	1.872**	1.268	2.482***	1.965**	1.241
RETURN ON EQUITY						
Admired	16.964%	19.467%	22.659%	16.509%	17.829%	19.741%
Not-Admired	-25.750%	-436.988%	21.791%	7.631%	12.062%	20.586%
Significance test	1.195	0.993	0.224	2.365***	1.965**	0.386
PROFIT MARGIN						
Admired	9.239%	8.580%	10.435%	7.265%	7.104%	10.161%
Not-Admired	2.982%	3.638%	8.308%	3.069%	4.748%	7.792%
Significance test	2.796***	2.651%	1.603*	2.909***	2.351***	1.854**
ASSETS TURNOVER						
Admired	94.939%	103.842%	100.51%	74.555%	80.452%	80.544%
Not-Admired	89.197%	98.602%	97.035%	77.964%	94.338%	97.309%
Significance test	0.478	0.399%	0.283	0.207	0.269	0.379
DEBT TO ASSETS						
Admired	59.598%	61.475%	59.320%	58.004%	61.787%	56.913%
Not-Admired	70.290%	72.745%	68.306%	70.634%	74.747%	68.984%
Significance test	-2.645***	2.780***	2.274***	-2.454***	2.592***	2.165**
CASH DEBT COVERAGE						
Admired	30.264%	28.424%	29.479%	20.703%	19.948%	21.326%
Not-Admired	17.284%	15.423%	18.382%	12.794%	11.140%	15.044%
Significance test	2.417***	2.244**	2.100**	2.895***	2.509***	2.454***
FREE CASH FLOWS TO ASSETS						
Admired	7.556%	4.315%	5.157%	5.708%	3.214%	4.390%
Not-Admired	5.355%	2.456%	3.795%	4.434%	2.036%	2.843%
Significance test	1.885**	1.439*	1.124	1.889**	0.882	1.172

Return on assets = Net income/Average total assets

Return on equity = Net income/Average total stockholders' equity

Profit margin = Net income/Net sales

Assets turnover = Net sales/Average total assets; Debt to assets = Total liabilities/Total assets

Cash debt coverage = Cash provided by operating activities/Average total liabilities

Free cash flows to assets = Free cash flows/Average total assets

Significance test is t-test for mean values and Wilcoxon rank-sum test for median values.

* , ** , *** Statistically significant at $p < 0.10$, $p < 0.05$, and $p < 0.01$, respectively.

Table 4. Changes (Δ) in Financial Ratios of Most-Admired Companies vs. Their Matched

Variables	Mean (Percentage)		Median (Percentage)	
	2009-2008	2008-2007	2009-2008	2008-2007
Δ RETURN ON ASSETS				
Admired	22.568%	0.835%	-10.289%	-20.408%
Not-Admired	-28.262%	-24.930%	-24.017%	-24.749%
Significance test	1.052	0.566	1.930**	0.979
Δ RETURN ON EQUITY				
Admired	18.179%	6.256%	-8.281%	-18.391%
Not-Admired	29.255%	-3,199.934%	-19.546%	-31.191%
Significance test	0.153	1.039	1.565*	1.565*
Δ PROFIT MARGIN				
Admired	25.241%	-4.712%	1.620%	-22.201%
Not-Admired	-21.822%	-37.265%	-16.513%	-24.825%
Significance test	0.919	0.714	1.675**	0.931
Δ ASSETS TURNOVER				
Admired	-6.683%***	0.854%	6.953%	3.369%
Not-Admired	-6.607%***	-0.490%	4.762%	2.676%
Significance test	0.029	0.488	0.938	0.662
Δ DEBT TO ASSETS				
Admired	-3.192%***	4.110%***	-2.402%	1.718%
Not-Admired	-3.412%***	7.341%***	-2.584%	4.967%
Significance test	0.174	1.631*	0.207	1.324*
Δ CASH DEBT COVERAGE				
Admired	69.222%	-1.386%	5.894%	-7.547%
Not-Admired	-176.371%	-34.262%	-3.182%	-18.967%
Significance test	1.067	1.020	1.075	1.903**
Δ FREE CASH FLOWS TO ASSETS				
Admired	-97.276%	119.783%	19.048%	-25.836%
Not-Admired	-69.391%	434.045%	-0.299%	34.302%
Significance test	0.210	0.582	0.869	0.586

Return on assets = Net income/Average total assets

Return on equity = Net income/Average total stockholders' equity

Profit margin = Net income/Net sales

Assets turnover = Net sales/Average total assets; Debt to assets = Total liabilities/Total assets

Cash debt coverage = Cash provided by operating activities/Average total liabilities

Free cash flows to assets = Free cash flows/Average total assets

Significance test is t-test for mean values and Wilcoxon rank-sum test for median values.

* , ** , *** Statistically significant at $p < 0.10$, $p < 0.05$, and $p < 0.01$, respectively.

Table 5. CEO Total Compensation: Most-Admired Companies vs. Their Matched

Panel A: Amount, Percentage Change, and Correlation with Net income and Revenue

Variables	2009	2008	2007	2009	2008	2007
CEO Compensation	<u>Mean (in Millions US\$)</u>			<u>Median (in Millions US\$)</u>		
Admired	11.50	13.60	13.40	10.10	10.10	11.00
Not-Admired	10.60	12.20	12.40	8.54	10.00	9.88
Significance test	0.428	0.575	0.379	0.616	0.514	0.611
Correlation:	<u>CEO Compensation and Net Income</u>			<u>CEO Compensation & Revenue</u>		
Admired	0.366***	0.365***	0.326**	0.248*	0.325**	0.181
Not-Admired	0.305**	-0.119	0.109	-0.105	-0.052	-0.056
<u>Mean Δ%</u>						
Δ CEO Compensation	<u>2009-2008</u>	<u>2008-2007</u>		<u>2009-2008</u>	<u>2008-2007</u>	
Admired	7.86%	10.91%*		-0.73%	1.23%	
Not-Admired	19.06%*	33.71%*		-0.94%	0.11%	
Significance test	0.636	0.837		0.038	0.270	
Correlation:	<u>ΔCEO Compensation & ΔNet Income</u>			<u>ΔCEO Compensation & ΔRevenue</u>		
Admired	0.023	0.571***		0.356**	0.153	
Not-Admired	-0.009	-0.389***		0.004	-0.226	

Panel B: Cash, Options and Stock as a Percentage of CEO Total Compensation in 2009

Variables	Minimum	Mean	Median	Maximum	T-Test	Wilcoxon
%Cash Compensation						
Admired	0.68%	42.77%	33.38%	100.00%		
Not-Admired	0.00%	43.22%	33.57%	98.59%	0.080	0.117
%Option Compensation						
Admired	0.00%	17.58%	16.81%	78.70%		
Not-Admired	0.00%	19.19%	12.93%	88.31%	0.373	0.106
%Stock Compensation						
Admired	0.00%	22.09%	13.85%	66.13%		
Not-Admired	0.00%	26.47%	25.44%	93.07%	0.873	0.811

Significance test is t-test for mean values and Wilcoxon rank-sum test for median values.

* , ** , *** Statistically significant at $p < 0.10$, $p < 0.05$, and $p < 0.01$, respectively.