

1
3
5
7
9
11
13
15
17
19
21
23
25
27
29
31
33
35
37
39

**PART IV:
REWARDING PERFORMANCE**

1
3
5
7
9
11
13
15
17
19
21
23
25
27
29
31
33
35
37
39

1
3 **PERFORMANCE MEASUREMENT**
5 **AND EXECUTIVE**
7 **COMPENSATION: PRACTICES OF**
9 **HIGH-PERFORMANCE COMPANIES**
11

13 Belverd E. Needles, Marian Powers and
15 Mark L. Frigo

17
19 **ABSTRACT**

21 *This study examines the links between financial performance and*
23 *executive compensation for high-performance companies (HPC). HPC*
25 *display sustained and superior cash flow returns, asset growth, and total*
27 *shareholder returns. In previous empirical analysis, HPC companies*
29 *displayed specific identifiable financial performance drivers and measures*
31 *when compared to companies in the S&P 500 (Needles et al., 2004).*
33 *Most recently, HPC sustained their high performance when compared to*
the S&P 500 over varied economic periods. Further, the research
identified operating asset management characteristics of these companies,
especially as they relate to the cash cycle (Needles et al., 2004).
Continuing this stream of research, this study first identifies the financial
and non-financial performance measures related to compensation of top
management of HPC as reported in the companies' public disclosures.
Then, these findings for HPC are matched to a set of comparable

35
37 **Performance Measurement and Management Control: Measuring and Rewarding Performance**
Studies in Managerial and Financial Accounting, Volume 18, 303–322
Copyright © 2008 by Emerald Group Publishing Limited
39 **All rights of reproduction in any form reserved**
ISSN: 1479-3512

1 *non-HPC. Finally, we evaluate the stated performance measures for*
2 *executive compensation in light of the performance drivers and measures*
3 *identified by previous research to be distinguishing characteristics of HPC.*
4 *We hypothesize that HPC will more closely align stated performance*
5 *measures for executive compensation with performance characteristics that*
6 *have been shown to be characteristics of HPC. We find that HPC are more*
7 *focused and unambiguous in their use of both financial and non-financial*
8 *performance measures in executive compensation.*

11 This study continues our exploration of the links between strategy,
12 execution, and financial performance by examining the links between
13 financial performance and executive compensation for high-performance
14 companies (HPC). HPC display sustained and superior cash flow returns,
15 asset growth, and total shareholder returns. In previous empirical analysis,
16 HPC companies displayed specific identifiable financial performance drivers
17 and measures when compared to companies in the S&P 500 (Needles, Frigo,
18 & Powers, 2004). Most recently, HPC sustained their high performance
19 when compared to the S&P 500 over varied economic periods. Further, the
20 research identified operating asset management characteristics of these
21 companies, especially as they relate to the cash cycle (Needles et al., 2004).
22 In the current study, the financial and non-financial performance measures
23 related to compensation of top management of HPC as reported in the
24 companies' public disclosures are identified. Then, these findings for HPC
25 are matched to a set of comparable non-HPC. Finally, we evaluate the
26 stated performance measures for executive compensation in light of the
27 performance drivers and measures identified by previous research to be
28 distinguishing characteristics of HPC. We hypothesize that HPC will more
29 closely align stated performance measures for executive compensation with
30 performance characteristics that have been shown to be characteristics of
31 HPC. Indeed, HPC are more focused and unambiguous in their use of both
32 financial and non-financial performance measures in executive compensa-
33 tion and HPC outperform comparable companies on the financial measures.

35 **PRIOR RESEARCH RELATED TO** 36 **EXECUTIVE COMPENSATION**

39 Typically, compensation programs are comprised of a mixture of base salary
and short-term and long-term incentives; the incentive elements rely on a

1 combination of performance measures (Epstein & Roy, 2005). However, the
2 real concern and the focus of the current study lies with determining the
3 performance measures that serve as a basis for the annual bonuses, or short-
4 term incentives, of top management. These bonuses are most commonly
5 based on past or ex post financial or other performance incentives. Long-
6 term incentives, such as stock options, are more difficult to evaluate due
7 their objective of promoting future performance or *ex ante* measures.
8 We focus in this chapter on the annual bonus contract because historical
9 accounting literature is based on investigations that scrutinize the selection
10 and behavioral consequences of annual bonus contracts (Ittner, Larcker, &
11 Rajan, 1997).

12 A topic of much heated debate contains the question of whether top
13 executives, especially CEOs, actually earn their pay. In an article from the
14 *Chicago Tribune* titled “CEO Pay Runs Way Ahead of Performance,” a
15 study found that chief executives from 11 companies from the Standard &
16 Poor’s 500 received \$865 million over five years while operating at a loss of
17 \$640 million in shareholder value. According to the article, among one
18 of the companies was AT&T, in which the CEO received \$17.2 million last
19 year, while AT&T shares declined five percent. Although the public eye
20 seems to surround issues such as the fairness of these immense CEO
21 compensation arrangements, the scholarly press focuses on conclusions
22 based on comprehensive analysis and research.

23 It is presumed that public companies’ boards of directors bargain at
24 arm’s length with CEOs to negotiate pay arrangements designed to serve
25 shareholders’ interests in an effort to legitimize compensation arrangements
26 through an underlying corporate law-based approach (Bebchuk & Fried,
27 2004). This fundamental conjecture of executive compensation leads to the
28 assumption that the board bargains at arm’s length with executives about
29 compensation, exclusively considering the best interest of the entity and its
30 stakeholders. The decision to provide the bonus portion of the compensa-
31 tion arrangement depends on the judgment of the board or its compensation
32 committee (Bebchuk & Fried, 2004). If management teams are not driven
33 through compensation measures, it may result in a failure to create value for
34 a firm.

35 Katz, Gomez-Mejia, Tosi, and Werner (2000) evaluated relationships
36 between firm size, performance, and CEO pay. The foundation for the
37 theory was formulated based on the agency theory. Agency theory concerns
38 the relationship between a principal, the shareholder, and an agent of the
39 principal, the company’s managers (i.e. CEO). In essence, it entails the costs
of resolving disagreements between the principals and agents and aligning

1 interests of the two groups. The principal can align these interests through
2 monitoring of the agent to guarantee that the principal's interests are being
3 met. This is frequently impractical, and therefore the principal will align the
4 interests through executive compensation. Executive compensation consists
5 of base salary, bonus, and equity compensation such as stock options. The
6 goal of equity compensation is for the agent to have similar interests as
7 the shareholders and therefore be motivated to take on riskier projects that
8 will produce higher returns. The research assessed throughout the study
9 provided evidence that supports the theory in which organizational size is a
10 significant determinant of total CEO pay. Combined indicators of firm size
11 explain approximately nine times the amount of variance in total CEO pay
12 as compared to the most highly associated performance measure. Fascinat-
13 ing enough, further exploration concludes that firm size accounts for
14 more than 40 percent of the fluctuations in total CEO pay, while a firm's
15 operational performance accounts for less than 5 percent of the variance
(Katz et al., 2000).

17 As indicated above, many annual bonus awards rely on financial results
18 and in prior years these measures have been criticized for encouraging an
19 exaggerated misrepresentation on short-term accounting profits and
20 hindering the emphasis on long-term investments (Ittner et al., 1997).
21 Performance measures such as earnings and return on investment (ROI)
22 have limited value and can be easily manipulated, such as through the
23 timing of transaction recognition, when it comes to compensation of top
24 executives. In addition, changes in share price are not a good indicator of
25 a manager's own performance based on the fact that a company's stock
26 price can increase for reasons unrelated to a manager's own efforts and
27 decision making (Bebchuk & Fried, 2004). ROI is one of the most common
28 performance measures, and has been criticized for not taking into
29 consideration the cost of capital and for being unduly influenced by
30 external reporting rules (Ittner & Larcker, 1998). In the case of Fannie Mae,
31 for example, the chief executive Franklin Raines received nearly \$52 million
32 from 1999 through 2003 based on performance measures such as a 15
33 percent annual earnings growth. Then, in September of 2004, Fannie
34 collapsed due to the discovery of accounting improprieties, which caused
35 investors to question whether Raines had manipulated the numbers in order
36 to take home more money in his pocket (MacDonald & Ozanian, 2005). In
37 other words, accounting earnings are a key factor in measuring performance
38 for the rationale of executive compensation. Furthermore, another recent
39 study examined the outcome of earnings persistence on the style and nature
of executive compensation. The study determined that accounting earnings

1 obtain more weight in executive compensation contracts for firms with high
2 earnings persistence than those with low earnings persistence (Ashley &
3 Yang, 2004) Further, relying primarily on accounting earnings becomes
4 problematic when the accounting data are noisy. Yermack (1995) found
5 that the noisier the accounting data, the more likely it was that a board of
6 directors would provide incentives from stock options to monitor the
7 performance of the CEO.

8 Hayes and Schaefer (2000) investigated observable and unobservable
9 (to outsiders of the entity) measures of executive performance. In essence,
10 unobservable measures are those that are only visible to those inside the
11 firm. The research observed the premise that the unexplained variation in
12 executive compensation contracts should predict future variation in firm
13 performance if the unobservable measures are positively correlated with
14 future firm performance. In other words, the hypothesis of the study is that
15 executive compensation is a circuitous indicator of future firm performance.
16 After testing the hypothesis through the use of executive compensation data
17 from the *Forbes* Executive Compensation Surveys, the study concluded that
18 strong evidence supports the unexplained variation in current executive
19 compensation to be related to future performance. Implications further
20 confirmed that as the variance of observable (to outsiders) measures of
21 performance is higher, the relationship between unexplained variation in
22 current compensation and future performance is stronger. To rephrase the
23 concluding analysis of the study, the unknown fluctuations in compensation
24 amounts to top executives are connected to the future operations of a
25 company. Furthermore, when the performance measures that are observable **AU:3**
26 only to those inside the firm to reward top executives are lower, the
27 correlation between the unknown fluctuations in current executive
28 compensation amounts and the future operations of a company is improved.
29 Hayes and Schaefer (2000) determined that this inference is consistent with
30 the fact that firms substitute away from performance measures visible to the
31 public toward measures that are unobservable to outsiders as the public
32 measures become more strident.

33

34

EMPIRICAL OBJECTIVES

35
36
37 In order to measure the compensation as listed in the annual bonus contract,
38 boards of directors bestow a number of benchmarks such as strategic
39 initiatives, fundamental performance drivers, and a widespread set of both
40 financial and non-financial performance measures (Epstein & Roy, 2005).

1 Over the past decade, more emphasis has been placed on incorporating
2 non-financial metrics into the performance measurement process. More
3 specifically, the use of non-financial objectives such as product innovation,
4 customer satisfaction, and employee satisfaction has taken a significant
5 jump in recent years (Ittner et al., 1997). In other words, both objective and
6 subjective criteria can be used for quantitatively determining an executive's
7 bonus qualifications. Objective measures are goals whose attainment can
8 readily be determined, as with financial performance measures. Subjective or
9 discretionary measures often lead to disagreements regarding whether the
10 executive has in fact achieved the goals, as with non-financial performance
11 measures (Bebchuk & Fried, 2004).

12 In accord with this background, we conduct tests of significant differences
13 among the top 10 financial performance measures and the leading 4 non-
14 financial performance measures. Further, we examine the performance
15 of HPC versus comparables on the identified value-added financial measures
16 over the period 2001–2005. The data for this study comes from the
17 DEF14A, or the definitive proxy statement, the primary source of information
18 about management's strategies for the firm as well as management
19 compensation. Included in the proxy statement is a summary of *how*
20 *members of management are paid, how much they are paid, and their*
21 *incentives for payment.*

22 We expect the HPC, in contrast to their comparable companies, will more
23 closely align stated performance measures for execution compensation with
24 measurement characteristics that have been shown to be the attributes of
25 HPC. We have divided the measurement results into the following three
26 criteria: strategic goals and initiatives, key financial measures, and various
27 non-financial measures. Any performance metrics enumerated in the proxy
28 statement that did not meet those categories were classified separately
29 according to the balanced scorecard.

31

Strategy

33

34 As previously mentioned, the first performance metric that we analyzed
35 was strategic goals and initiatives. To connect corporate operations with
36 corporate strategic goals, the performance judgments of management must
37 consist of key factors that provide insight into the organization's capabilities
38 to cultivate its future competitive position and allow for the forecast of
39 future performance (Epstein & Roy, 2005). Strategic goals and initiatives go
40 hand in hand with developing a comprehensive strategy to maximize the

1 potential of a variety of business opportunities and attaining selected
2 strategic goals along with a set of individually defined strategic initiatives.
3 A true business strategy expert must focus on emphasizing one firm goal that
4 should drive all his or her analysis and decision making: helping the business
5 maximize the creation of financial value (Frigo & Litman, 2004). In order
6 for management to achieve the goal of supporting strategic objectives, he or
7 she must have demonstrated the development and execution of strategic
8 plans. In addition, the term strategy indirectly imposes the standard of
9 strategically positioning the entity's assets and strategic alliances.

11

Financial Performance Measures

13

14 Traditional performance has been measured according to financial results.
15 Therefore, compensation has a history of being defined in terms of financial
16 metrics. Many companies today conventionally still use financial measures
17 as the sole basis of measuring executive compensation. The following
18 financial performance measures were evaluated in our study of executive
19 compensation:

AU :4

- 20 • Stock return
- 21 • Net income
- 22 • Earnings per share
- 23 • EBITDA, EBIT, or earnings before taxes
- 24 • Operating profit/operating profit margin
- 25 • Cash flows
- 26 • Return on assets
- 27 • Return on equity
- 28 • Return on investment
- 29 • Earnings goals and sales growth

31

33

Non-Financial Performance Measures

34 Traditional financial performance measures often represent lagging indica-
35 tors, quantifying past or present results but demonstrating failure to forecast
36 future performance or anticipate behavior that will result in executing
37 and obtaining future performance objectives (Epstein & Roy, 2005). As
38 previously mentioned, annual bonus awards calculated in conjunction with
39 financial performance measures have been linked to management decisions

1 that avoid focus on long-term investments and actually create strategies that
2 centralize on short-term results. However, firms that have traditionally
3 relied almost entirely on financial performance measures such as earnings,
4 accounting profits, and stock returns, are now beginning to realize that
5 heavy emphasis placed on financial measures is inconsistent with their
6 relative significance (Ittner & Larcker, 1998). In other words, it is suggested
7 that non-financial measures essentially lead to greater financial perfor-
8 mance. The primary reasons suggested for the use of non-financial
9 performance measures in incentive contracts for executive management are
10 that these measures are more superior indicators of projected financial
11 performance than conventional accounting, or financial measures and
12 they are functional in assessing and motivating managerial performance
13 (Banker, 2000). Instead of pertaining to short-term performance as financial
14 performance measures, non-financial measures are positively correlated to
15 the long-term benefits and economical well being of the entity.

16 Non-financial measures such as meeting customer needs, internal process
17 improvements, and an organization's innovation of product and brand
18 offerings reflect current managerial decisions that do not expose such efforts
19 until subsequent years pass (Banker, 2000). For example, current research
20 and development expenditures of a pharmaceutical or technology company
21 are not likely to generate economic benefits until future years due to the
22 extensive investigation and testing procedures of the product offerings.
23 By incorporating non-financial indicators into the measurement systems
24 pertaining to award contracts, many firms seek to create a wider set of
25 measures that capture not only firm value, but also the factors leading to the
26 creation of value in the business (Ittner & Larcker, 1998). Our study has
27 concluded that the primary non-financial performance measures fall into
28 four categories: human resource management, production and operations,
29 marketing and customer service, and management performance and
30 company-related objectives.

31 Firstly, human resource management is comprised of employee survey
32 results and employee retention. How well the human resource department
33 of a company is managed reflects on the employee turnover calculation.
34 An effective human resource department is reflected in the achievement
35 of departmental work plans. In addition, efficiency is organized into the
36 development of management and employees and the exercise of leadership
37 within the industry and in the communities.

38 Secondly, allocating production and operations to the non-financial
39 performance sector of executive compensation encompasses the commit-
40 ment to the quality of products and/or services and manufacturing

1 productivity. When companies utilize production and operations as a non-
2 financial measurement in determining executive compensation, it can also
3 include any acquisitions of products, patents, and product registrations.
4 Objectives pertaining to this category tend to include any product cost
5 reduction targets and innovation of certain products and/or services that
6 promote development, growth, and expansion. In addition, ensuring an
7 ample product supply and an effective launch of new offerings supports the
8 leadership in advancing growth through new product development and the
9 licensing of new products.

10 Thirdly, marketing and customer-related non-financial objectives could
11 be defined in terms of customer survey results and customer retention.
12 Valuing customer-oriented goals supports the promotion of customer
13 satisfaction and the improvement of community satisfaction. Furthermore,
14 a large portion of marketing performance measures target factors such as
15 market penetration and marketing expansion efforts.

16 Lastly, management performance and company related objectives are
17 a non-financial performance measure that directs successful leadership,
18 guidance, and ethics. Achievement of company-related objectives could
19 involve the implementation or completion of critical projects. Personal and
20 individual goals of executives as approved by a company's compensation
21 committee along with annual bonus awards are based on the attainment of
22 specific business and management objectives. In relation to the establish-
23 ment of policies, directives, and organizational goals to position the
24 company for growth, leadership qualities are measured by reviews from the
25 executive's subordinates, peers, and superiors. Individual performance goals
26 pertain to the level of responsibility and commitment, level of performance,
27 and past and present contribution to the achievement of organizational
28 goals and contributions to the business unit. Management performance is
29 demonstrated through progress toward or achievement of milestones in such
30 executive's area of responsibility with respect to the company's financial
31 performance. In addition, individual objectives of executives entail the
32 delivery of strong financial performance along with driving the company's
33 growth through organizational leadership and the development of enhan-
34 cing globalization in relation to the company's business.

35

37

EMPIRICAL SAMPLE

39 As previously mentioned, our investigation focused on two groups of
40 companies: "High-performance companies (HPC)" and three publicly

1 traded comparable companies (see Appendix). The comparable companies
2 were chosen from within the same industry code and similar size and
3 operations but without regard to financial performance. International
4 companies were not included in the empirical sample since they do not issue
5 statements comparable to the proxy statement. The data for the publicly
6 traded comparable companies were found using the Standard & Poor's
7 Net Advantage database. As noted in previous research, the first group
8 consisted of 38 HPC that have met the following strict criteria (Frigo, 2002a, **AU :5**
9 2002b):

- 11 • 10+ Years of Cash Flow Return on Investment (CFROI) about double
12 ($2 \times$) or more the cost of capital,
- 13 • 10+ Years Asset Growth rates exceeding GDP ($2 \times$), and
- 14 • 10+ Years Total Shareholder Return (TSR) consistent with ROIs and
15 Growth (about $2 \times$ market or more).

17 The Return Driven Strategy Initiative is an ongoing research study
18 spearheaded at the Center for Strategy, Execution, and Valuation in the
19 Kellstadt Graduate School of Business at DePaul University. The research
20 involves the screening of more than 15,000 public companies and the
21 identifying, documenting, and benchmarking of the strategic activities that
22 separate the best performers from the worst (Frigo & Litman, 2004).
23 The Return Driven Strategy Initiative influenced the development of a
24 framework for strategic analysis designed to focus on the prioritization of
25 business activities that lead to the highest levels of financial performance
26 (Litman, 2003). This research was conducted in correlation with the
27 CSFB HOLT's Value Search database of cash flow performance and
28 valuations of tens of thousands of companies (Frigo & Litman, 2004).
29 Intense investigation through the use of this database led to the discovery
30 of the 38 companies that have exhibited extraordinary financial perform-
31 ance, closely paralleling the Return Driven Strategy framework
32 consisting of a set of strict requirements, or tenets, that compel the success
33 of a firm.

34 In doing the analyses, the HPC were grouped alphabetically according
35 to their ticker symbols along with the ticker symbols of each of the three
36 comparable companies listed in accordance. The data for executive
37 compensation with regard to foreign comparable companies was excluded
38 from the study.

39

DISCUSSION OF RESULTS

Table 1 shows the study results organized for HPC and their comparable companies into the three categories:

- Strategic goals and initiatives (1 measure)
- Financial measures (10 measures)
- Non-financial measures (4 measures).

Findings

The data findings were determined through close and careful examination of proxy statements for the most recent year (usually 2005) for each individual company studied. The totals for each category were then calculated separately for the HPC and their comparable companies. Percentages were computed according to the amount of companies that illustrated positive results for the category in terms of the total number of companies and again, separately for the HPC and their comparable companies. Any non-US companies were excluded from all calculations with regard to totals due to lack of comparable reporting.

Neither HPC nor comparables tend to emphasize overall strategic goals and incentives. Only about one in five (22 percent) of HPC and comparable companies mention these areas as executive compensation criteria. However, HPC are clearly more focused in execution compensation policies. For example, HPC use significantly fewer measures – both financial (2.45 per HPC versus 3.17 on average for comparables) and non-financial (.97 per HPC versus 1.31 on average for comparables). These differences are statistically significant.

Further, HPC emphasize unadjusted value-creating measures, especially earnings per share (69 percent versus 32 percent) and earnings goals and sales growth (61 percent versus 43 percent). HPC are also more frequent users of net income (33 percent versus 15 percent), cash flows (17 percent versus 13 percent), return on assets (19 percent versus 5 percent), and return on equity (19 percent versus 7 percent). All these differences are statistically significant except cash flows. In contrast, comparable companies tend to use more adjusted financial measures such as EBITDA and EBIT (17 percent for comparables versus 14 percent for HPC) and ROI (12 percent versus

AU:1

Table 1. Financial and Non-Financial Measures Used in Executive Compensation.

	Financial Measures											Total
	Strategic goals and initiatives	Stock return	Net income	EPS	EBITDA, EBIT, or earnings targets	OP profit/ margin	Cash flow	ROA	ROE	ROI	Earnings and sales growth	
HPC totals	8	6	12	25	5	3	6	7	7	1	22	94
Comparables totals	23	7	16	33	18	17	14	5	7	12	45	174
Difference	-15	-1	-4	-8	-13	-14	-8	2	0	-11	-23	-80
Percentage difference	-187.50	-16.67	-33.33	-32.00	-260.00	-466.67	-133.33	28.57	0.00	-1,100.00	-104.55	-85.11
<i>t</i> -test	0.494780	0.069725	0.022475	0.000048	0.311787	0.090010	0.327636	0.021496	0.040680	0.019543	0.033638	0.001061
HPC percentages (of 36 HPC)	22.22	16.67	33.33	69.44	13.89	8.33	16.67	19.44	19.44	2.78	61.11	261.11
Comparables percentages (of 104 comparables)	22.12	6.73	15.38	31.73	17.31	16.35	13.46	4.81	6.73	11.54	43.27	167.31
Difference (%)	0.11	9.94	17.95	37.71	-3.42	-8.01	3.21	14.64	12.71	-8.76	17.84	93.80
Percentage difference	0.48	59.62	53.85	54.31	-24.62	-96.15	19.23	75.27	65.38	-315.38	29.20	35.92
<i>t</i> -test	0.494780	0.069725	0.022475	0.000048	0.311787	0.090010	0.327636	0.021496	0.040680	0.019543	0.033638	0.001061

1
3
5
7
9
11
13
15
17
19
21
23
25
27
29
31
33
35
37
39

Non-Financial Objectives					Total
	Human resources management	Production/operations	Marketing/customer related	Management performance and individual/company-related objectives	
HPC totals	11	7	6	13	37
Comparables totals	14	5	9	47	75
Difference	-3	2	-3	-34	-38
Percentage difference	-27.27	28.57	-50.00	-261.54	-102.70
t-test	0.024697	0.021496	0.124943	0.171023	0.057698
HPC percentages (of 36 HPC)	30.56	19.44	16.67	36.11	102.78
Comparables percentages (of 104 comparables)	13.46	4.81	8.65	45.19	72.12
Difference (%)	17.09	14.64	8.01	-9.08	30.66
Percentage difference	55.94	75.27	48.08	-25.15	29.83
t-test	0.024697	0.021496	0.124943	0.171023	0.057698

1 3 percent). These latter measures are areas in which judgment can play a role
by excluding negatives from the measurements.

3 When examining the results of the non-financial objectives in relation to
executive compensation, the HPC used statistically significantly higher
5 percentages for metrics in specific strategic areas such as human resource
management (31 percent versus 13 percent), production and operations
7 (19 percent versus 5 percent), and marketing/customer related (17 percent
versus 9 percent).

9 These results sustain the Return Driven Strategy structure in that
engaging employees is one of the eleven principles of applying the
11 framework (Frigo, 2002a, 2002b). Obtaining the right workforce and
engaging it in activities that challenge and develop its ability to innovate,
13 operate, and build on a company's brand is a primary competitive
advantage. Management and employees must have the proper incentives
15 to be motivated and aligned toward the company's objectives, especially
through the exercise of the quality of leadership, values, and culture. In
17 order to allow growth and prosperity of a firm, constant re-invention and
integrating strategies that focus on creating new products and services is
19 necessary. Innovative offerings is a second principle within the Return
Driven Strategy framework and further supports evidence that HPC
21 prioritize product innovation, understanding that differentiating the
offering leads to value execution.

23 Comparable companies tend to use more general statements about
management performance and company-related objectives than HPC
25 (45 percent versus 36 percent) as opposed to the specific areas discussed in
the previous paragraph. As a result, in a similar manner to the financial
27 measures, there is less focus and opportunity for the use of "judgment" in
evaluating performance of executives in the comparable companies.

29

31

Performance Measurement

33

In the previous section, it was observed that HPC tended to emphasize
35 value-creating financial measures in its executive compensation practices.
The performance of HPC companies was compared to the comparables for
37 the period 12/31/2001–12/31/2005 to test whether HPC indeed performed
better in these areas. Earnings per share were excluded because of the
39 difficulty of comparing this measure among companies. Sales growth, return
on assets, return on equity, cash flows returns on assets, cash flows returns

1 on stockholders' equity, and cash flows returns on sales were included.
2 The following hypothesis was tested for each of these measures:

3 **H.** There is no significant difference between the HPC and the
4 comparable companies.
5

6
7 The hypothesis was rejected in every case, indicating that HPC performed
8 significantly better on those value-creating measures that were identified as
9 the basis of executive compensation.

11 **FUTURE RESEARCH**

12
13 As noted in the discussion above, the issue of equity-based compensation is
14 a complex one, especially as regards it being an ex ante or ex post incentive.
15 Companies' proxy statements enable the determination of stock options for
16 company CEO's and the company's top management (including the CEO).
17 Data is also available for the amount of exercisable and unexercisable
18 options outstanding along with the dollar value amount. An extension of
19 the current study to be done in the future will look at the role equity-based
20 compensation for HPC versus comparables.
21

23 **CONCLUSION**

24
25 In this study, financial and non-financial performances related to
26 executive compensation were examined for HPC and a set of comparable
27 companies. This is a continuation of our work involving the identification
28 of characteristics of HPC. The measurement results were divided into the
29 following three criteria: strategic goals and initiatives, key financial
30 measures, and various non-financial measures. Tests of significant differ-
31 ences were conducted among the top 10 financial performance measures and
32 the leading 4 non-financial performance measures. HPC are more likely to
33 use unadjusted value-creating measures, especially earnings per share and
34 earnings goals and sales growth. HPC are also more frequent users of net
35 income, cash flows, return on assets, and return on equity. In contrast,
36 comparable companies tend to use more adjusted financial measures such as
37 EBITDA and EBIT and ROI. These latter measures are areas in which
38 judgment can play a role by excluding and overcoming negatives from the
39 measurements. When examining the results of the non-financial objectives in

1 relation to executive compensation, the HPC used statistically significantly
 3 higher percentages for metrics in specific strategic areas such as human
 5 resource management production and operations, and marketing/customer
 7 related. Comparable companies tended to use more general non-financial
 9 measures than did HPC. Finally, we examined the performance of HPC
 versus comparables on the identified value-added financial measures
 over the period 2001–2005. HPC performed significantly better on those
 value-creating measures that were identified as the basis of executive
 compensation.

11 In summary, HPC are more focused and unambiguous in their use of both
 13 financial and non-financial performance measures in executive compensa-
 tion and HPC outperform comparable companies on the financial measures.

15 UNCITED REFERENCES

17 Banker, Potter, & Srinivasan (2000); Bloomberg News (2006); Cheney
 19 (2005); Core, Guay, & Verrecchia (2003); Eaton & Prucyk (2005);
 MacDonald & Ozanian (Pa); Needles, Frigo, & Powers (2006).

23 ACKNOWLEDGMENTS

25 We wish to thank Jennifer Maes, Karen Hansen, and Robert Bellinski, who
 served as Research Assistants on this study.

29 REFERENCES

- 31 Ashley, A. S., & Yang, S. S. (2004). Executive compensation and earnings persistence. *Journal* **AU 6**
of Business Ethics, 369–382.
- 33 Banker, R. D., Potter, G., & Srinivasan, D. (2000). An empirical investigation of an incentive
 plan that includes non-financial performance measures. *The Accounting Review*, 65–92.
- 35 Bebchuk, L., & Fried, J. (2004). *Pay without performance: The unfulfilled promise of executive*
compensation. Cambridge, MA: Harvard University Press.
- 37 Bloomberg News. (2006). CEO pay runs way ahead of performance, study finds. *Chicago*
Tribune, April 1.
- 39 Cheney, G. (2005). Expensing stock options: The rule is final, or is it? *Financial Executive*, 20–23.
- Core, J. E., Guay, W. R., & Verrecchia, R. E. (2003). Price versus non-price performance
 measures in optimal CEO compensation contracts. *The Accounting Review*, 957–981.
- Eaton, T. V., & Prucyk, B. R. (2005). No longer an ‘option’. *Journal of Accountancy*, 63–68.

1 Epstein, M. J., & Roy, M.-J. (2005). Evaluating and monitoring CEO performance: Evidence
 from US compensation committee reports. *Corporate Governance*, 75–87.

3 Frigo, M. L. (2002a). Strategic competencies of return driven strategy. *Strategic Finance*, 6–9.
 Frigo, M. L. (2002b). Supporting tenets of return driven strategy. *Strategic Finance*, 10–12.

5 Frigo, M. L., & Litman, J. (2004). When strategy and valuation meet. *Strategic Finance*, 31–39.

Hayes, R. M., & Schaefer, S. (2000). Implicit contracts and the explanatory power of top
 executive compensation for future performance. *RAND Journal of Economics*, 273–293.

7 Ittner, C. D., & Larcker, D. F. (1998). Innovations and performance measurement: Trends and
 research implications. *Journal of Management Accounting Research*, 205–238.

9 Ittner, C. D., Larcker, D. F., & Rajan, M. V. (1997). The choice of performance measures in
 annual bonus contracts. *The Accounting Review*, 231–256.

11 Katz, J. P., Gomez-Mejia, L. R., Tosi, H. L., & Werner, S. (2000). How much does performance
 matter? A meta-analysis of CEO pay studies. *Journal of Management*, 301–339.

13 Litman, J. (2003). Drive thy value, *Research and application of the most advanced strategy and
 valuation frameworks*, Credit Suisse and CSFB HOLT. AU :7

15 MacDonald, E., & Ozanian, M. Paychecks on Steroids. *Forbes*, 134–138. AU :8

Needles, B. E., Frigo, M., & Powers, M. (2004). Strategy and integrated financial ratio
 performance measures: Empirical evidence of the financial performance scorecard and high
 performance companies. *Studies in Managerial and Financial Accounting*, 14, 113–151.

17 Needles, B. E., Frigo, M., & Powers, M. (2006). Strategy and integrated financial ratio
 performance measures: Further evidence of the financial performance scorecard and
 high performance companies. *Studies in Managerial and Financial Accounting*, 16. AU :9

19 Yermack, D. (1995). Do corporations award CEO stock options effectively? *Journal of
 Financial Economics*, 237–269.

APPENDIX

High-Performing Companies		Comparables	
Symbol	Company name	Symbol	Company name
29	ABT	AGN	Allergan Inc.
31	Abbot Laboratories	MYL	Mylan Labs Inc.
33	ADP	PARS	Pharmos Corp.
35	Automatic Data Processing, Inc.	ASF	Administaff Inc.
37	AMGN	CEN	Ceridian Corporation
39	Amgen Inc.	FDC	First Data Corp.
		CRL	Charles River Laboratories International Inc.
		IVGN	Invitrogen Corp.
		AFFX	Affymetrix Inc.
	AXP	COF	Capital One Financial Corp.
	American Express Company	FMD	First Marblehead Corp.
		ACF	AmeriCredit Corp.

APPENDIX (Continued)

High-Performing Companies		Comparables	
Symbol	Company name	Symbol	Company name
AZN	AstraZeneca plc	GSK	Glaxosmithkline plc
		SEPR	Sepracor, Inc.
		BRL	Barr Pharmaceuticals Inc.
BBBY	Bed Bath & Beyond Inc.	PIR	Pier 1 Imports Inc.
		LIN	Litcomp PLC
		WSM	Williams-Sonoma Inc.
BVF	Biovail Corp.	ALKS	Alkermes, Inc.
		ADRX	Andrx Group Corp.
		IPXL.PK	Impax Laboratories Inc.
CTAS	Cintas Corp.	RMK	Ready Mix Inc.
		GKSR	G&K Services Inc.
		KAR	Kardex
DELL	Dell Inc.	HPQ	Hewlett-Packard Co.
		IBM	International Business Machines Corp.
		GTW	Gateway Inc.
DHR	Danaher Corp.	DOV	Dover Corp.
		TKR	Timken Co.
		CR	Crane Co.
ESRX	Express Scripts Inc.	CMX	Catalyst Media Group PLC
		OCR	Omnicare Inc.
		APR	April Group
FNM	Fannie Mae	FRE	Freddie Mac
		SOV	Sovereign Bancorp Inc.
		CFC	Countrywide Financial Corp.
FRX	Forest Laboratories Inc.	SNY	Sanofi-Aventis
		ENDP	Endo Pharmaceuticals Holdings Inc.
		WPI	Watson Pharmaceuticals Inc.
GE	General Electric Co.	MMM	3M Co.
		TYC	Tyco International Ltd.
		TXT	Textron Inc.
GPS	Gap Inc.	ANF	Abercrombie & Fitch Co.
		AEOS	American Eagle Outfitters Inc.
		ARO	Aeropostale Inc.
HD	The Home Depot, Inc.	LOW	Lowe's Companies Inc.
		SHW	Sherwin-Williams Co.
		KGFHY.PK	Kingfisher New ADR


APPENDIX (Continued)

High-Performing Companies		Comparables	
Symbol	Company name	Symbol	Company name
HOG	Harley-Davidson Inc.	DMH VPWS.OB UMCC.PK	Ducati Motor Holding SpA Viper Powersports Inc. Ultra Motorcycle Co.
INTC	Intel Corp.	AMD TXN LLTC	Advanced Micro Devices Inc. Texas Instruments Inc. Linear Technology Corp.
ITW	Illinois Tool Works Inc.	PNR HSC DCI	Pentair Inc. Harsco Corp. Donaldson Company Inc.
JNJ	Johnson & Johnson	PG KV-B MRX	Procter & Gamble Co. K V Pharma CL B Medicis Pharmaceutical Corp.
JNY	Jones Apparel Group Inc.	RL FOSL LIZ	Polo Ralph Lauren Corp. Fossil Inc. Liz Clairborne Inc.
KO	Coca-Cola Co.	JSDA PEP FIZ	Jones Soda Co. Pepsico, Inc. National Beverage Corp.
LLY	Eli Lilly & Co.	AL PRX BNT	Alcan, Inc. Par Pharmaceutical Companies Inc. Bentley Pharmaceuticals Inc.
MDT	Medtronic Inc.	BSX STJ BDX	Boston Scientific Corp. St. Jude Medical Inc. Becton Dickinson & Co.
MRK	Merck & Co. Inc.	BMY PTIE SUPG	Bristol-Myers Squibb Co. Pain Therapeutics Inc. SuperGen Inc.
MSFT	Microsoft Corp.	SYMC CA RHT	Symantec Corp. CA, Inc. Red Hat Inc.
MXIM	Maxim Integrated Products Inc.	MU MCHP ALTR	Micron Technology Inc. Microchip Technology Inc. Altera Corp.
OMC	Omnicom Group Inc.	IPG LAMR RHD	Interpublic Group of Companies Inc. Lamar Advertising Co. RH Donnelley Corp.

APPENDIX (Continued)

High-Performing Companies		Comparables	
Symbol	Company name	Symbol	Company name
ORCL	Oracle Corp.	BMC	BMC Software Inc.
		MFE	McAfee Inc.
		NOVL	Novell Inc.
PAYX	Paychex Inc.	ACS	Affiliated Computer Services, Inc.
		TSS	Total System Services, Inc.
		MGI	Moneygram International Inc.
PFE	Pfizer Inc.	NVS	Novartis AG
		DDD	SCOLR Pharma Inc.
		VRX	Valeant Pharmaceuticals International
PII	Polaris Industries Inc.	ACAT	Arctic Cat Inc.
		HMC	Honda Motor Co. Ltd.
		MPX	Marine Products Corp.
RHI	Robert Half International Inc.	MAN	Manpower Inc.
		KELYA	Kelly Services Inc.
		KFY	Korn/Ferry International
SGP	Schering-Plough Corp.	KG	King Pharmaceuticals Inc.
		QGLY	Quigley Corp.
		QSC	Questcor Pharmaceuticals Inc.
SYK	Stryker Corp.	WAT	Waters Corp.
		ZMH	Zimmer Holdings Inc.
		HSP	Hospira Inc.
SYY	Sysco Corp.	PFGC	Performance Food Group Co.
		UNFI	United Natural Foods Inc.
		NAFC	Nash Finch Co.
WMT	Wal-Mart Stores Inc.	COST	Costco Wholesale Corp.
		PSMT	PriceSmart Inc.
		BJ	BJ's Wholesale Club Inc.
WYE	Wyeth	TEVA	Teva Pharmaceutical Industries Ltd.
		IVX	Ivax Corp.
		NXXI	Nutrition 21 Inc.

AUTHOR QUERY FORM

	Book: SMFA-V018 Chapter: 13	Please eail or fax your responses and any corrections to: Email: Fax:
---	--	--

Dear Author,

During the preparation of your manuscript for typesetting, some questions may have arisen. These are listed below. Please check your typeset proof carefully and mark any corrections in the margin of the proof or compile them as a separate list*.

Disk use

Sometimes we are unable to process the electronic file of your article and/or artwork. If this is the case, we have proceeded by:

- Scanning (parts of) your article Rekeying (parts of) your article
 Scanning the artwork

Bibliography

If discrepancies were noted between the literature list and the text references, the following may apply:

- The references listed below were noted in the text but appear to be missing from your literature list. Please complete the list or remove the references from the text.
 Uncited references: This section comprises references that occur in the reference list but not in the body of the text. Please position each reference in the text or delete it. Any reference not dealt with will be retained in this section

Queries and/or remarks

Location in Article	Query / remark	Response
AU:1	Please provide the expansions for EPS, OP, ROA and ROE.	
AU:2	MacDonald and Ozanian (2005) and Banker (2000) are not listed in the reference list. Please provide complete bibliographic details of the same.	
AU:3	Please check the sentence "To rephrase operations of a company"	
AU:4	Please provide the expansions for EBITDA and EBIT.	

1	AU:5	Frigo (2002) has been tagged as Frigo (2002a) and (2002b). Please check the citations in the text and specify whether it should be 2002a or 2002b.	
3			
5	AU:6	Please provide the volume numbers in Ashley and Yang (2004), Banker et al. (2000), Cheney (2005), Core et al. (2003), Eaton and Prucyk (2005), Epstein and Roy (2005), Frigo (2002a and 2002b), Frigo and Litman (2004), Hayes and Schaefer (2000), Ittner et al. (1997), Ittner et al. (1998), Katz et al. (2000), and Yermack (1995).	
7			
9			
11			
13			
15			
17	AU:7	Please provide the place of publication in Litman (2003).	
19	AU:8	Please provide the volume number and year in MacDonald and Ozanian.	
21	AU:9	Please provide the page range in Needles (2006).	
23			

25

27

29

31

33

35

37

39