The Importance of Qualitative Factors in Corporate Performance Appraisal: Implications For Managers

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Abstract

The academic literature has tended to emphasize the formal assessment of organizational performance using largely quantitative criteria. In contrast, relatively little attention has been directed at understanding the role that qualitative information plays in the performance evaluations made by external constituents. The purpose of this paper is to fill this void by describing an empirical study of external decision makers that involved use of both quantitative and qualitative evidence. It is concluded that financial analysts and individual investors rely more heavily on such qualitative considerations as management interpretations and business environment information than on quantitative, financial statement based information for companies operating in dynamic and complex industries. A series of implications for corporate executives are explored.

Introduction

How do important constituents located outside of a company evaluate its performance, and why is this issue of critical importance to management?

The literature on contemporary American business abounds with discussions of whether short-term considerations dominate over long-term issues to the possible detriment of organizational survival. One alleged cause of this orientation is that a principal quantitative means of gauging company performance used by corporate resource providers -- financial statements -- tends to emphasize current performance. In turn, managers are motivated to emphasize those factors that have a favorable, short-term financial statement impact in their own decision making. In response to this problem, Robert Kaplan, for example, has argued that management should develop and use performance measures that better reflect the economic reality that underlies their organizations.(1) Implicit here is the assumption that management is decoupled from the expectations of external constituents as expressed by the performance measures they use, an assumption that may undermine effective communication.

Obviously, the actions of corporate managers are and perhaps should be largely governed by the reactions of company stakeholders in terms of the stock valuation process. But here a paradox arises. As noted by a recent Louis Harris poll of the top executives for 600 major U.S. corporations, more than two-thirds thought that capital markets had improperly evaluated their companies. In response to this problem, Alfred Rappaport urged managers to "read the market" in making their decisions.(2) But here, the stock market has in part, used information provided by the company to determine prices, thus implying some circularity if managers were to, in turn, use market data in their own decision making. Lacking in this reactive stance is a proactive orientation in which managers would seek to broaden the scope of information provided to external decision makers. But would external parties be receptive to such information?

To be sure, quantitative factors, largely fueled by accounting information, do play an important role in company evaluation, as evidenced by its use in stock valuation, bankruptcy prediction, bond rating prediction

and general interest in forecasting net income. Importantly, though, the dominance of such quantitative approaches has been increasingly questioned. Almost by default, it seems, qualitative factors such as a company's business environment, organizational strategies, political risks, and individual creativity, are also viewed as important in the financial literature, though these tend to be de-emphasized and have not been subjected to much systematic investigation.

Recent work by Chugh and Meador(3) has pointed to the importance of both quantitative and qualitative factors to external decision makers. Based on a survey of and interviews with financial analysts and corporate managers, they found that: (1) managers saw analysts as short-term oriented, while analysts reported that they stressed long-term indicators of future value; (2) managers believed that analysts stressed financial statement information, like earnings per share and sales growth, while analysts also reported a reliance on qualitative factors, like quality and depth of management, and that quantitative factors figured into stock valuation only after the company was understood using qualitative means; and (3) managers saw analysts attaching little importance to qualitative information relating to strategic planning while analysts thought this activity was critical to understanding the companies' long-term prospects. Ironically, while analysts thought such qualitative information to be very important in evaluating a company, they also thought it to be of questionable quality in terms of its reliability.

Clearly two themes emerge from available evidence. First, corporate management appears to harbor misperceptions on how external constituents evaluate company performance. And second, qualitative factors appear to play a potentially major role in evaluating company performance, although little is known of its characteristics. The purpose of this paper is to balance the views that management is insulated from the expectations of external constituents in terms of the performance measures they use on the one hand, and that managers should merely react to stock market data in a relatively passive and yet circular manner on the other. More specifically, we will examine how two types of important, external constituents, financial analysts and individual investors, go about evaluating companies in relation to qualitative and quantitative factors. Not only will this allow us to make more informed claims about the importance of qualitative factors to external resource providers, it should also provide guidance to corporate managers in better communicating with constituents located outside of the organization, thus unshackling their own decision making processes.

External Communication: An Active vs. Passive Stance

How do external resource providers evaluate company performance? To address this general question, we thought it necessary to determine if there is any systematic pattern to the reliance placed in qualitative information, a pattern that should be of interest to corporate managers. It is at this point that we began developing a series of specific research questions useful in dissecting corporate communications.

To begin with, we challenge the premise that external parties are not intelligent and resourceful in the way in which they evaluate corporate performance. Here, we contend, for example, that if analysts need some way of gauging an important aspect of a company, such as the quality and depth of management or its strategic direction, they will develop their own information rather than rely solely on questionable data provided by management.

For example, one seasoned, highly successful analyst interviewed explained how he assesses whether a given company is "bullish" or "bearish" about its future, apart from management's usually optimistic claims expressed in "Management Discussions and Analyses" in its annual reports. This veteran simply examined the pattern of help wanted ads for the company and industry with regard to the ratio of ads for cost accountants to marketing personnel. Reasoning that if a company is facing shrinkage in its markets and is adopting a defensive posture as evidenced by needing more accountants to assess cost-cutting efforts, the analyst would sell short. Conversely, if the company is hiring marketing personnel, this may signal that the company is introducing new product lines or entering new geographical markets. Consequently, the veteran would buy. The point is, this analyst did not rely solely on management assertions nor on quantitative, financial information in his evaluations. He was aggressive and inventive in his evaluation efforts.

But, he went on to tell us, all companies and all industries are not created equal. He found his technique to be especially useful for companies operating in rapidly changing industries. Others of the financial community we have interviewed concurred that this idea that rapidity of change was critical. They argued that for high velocity industries, they must focus on the nature of this change and actively seek out interpretive information and information that reveals how a company fits in with its local business group. Then, this qualitative information is layered on quantitative, financial data

in making evaluations.

At a general level, then, it appears that the evaluation process is shaped by the business setting of the company. What is needed, is a systematic theory that would be useful in articulating this raw observation. Contingency theory(4) is useful in this regard. Simply put, contingency theory argues that organizational structure, the modus operandi of decision making, the methods of gauging performance, etc., are all driven by the nature of the business environment in which the company operates.

According to contingency theory, all organizations must actively communicate with their external constituents in order to gain both legitimacy and needed resources in order to survive. What varies is the nature of information conveyed and used by external constituents. In simple, stable environments, because of this very stability, communication is relatively straightforward and unproblematic. The company merely has to document how it has improved upon past performance, based almost exclusively on quantitative or financial statement information.

But in high velocity industries, such a historical orientation may lead to disastrous consequences. What is important here is to convey a picture of what changes are confronting the industry and how the company is reacting to these changes. Here also, a future orientation, as evidenced by heightened strategic planning activity, is called for. Thus, in contrast with more stable settings in which quantitative information plays a relatively dominant role, dynamic settings should emphasize qualitative, interpretive information pointed at explaining how the company fits in with its business setting. Such qualitative information may be expected to serve as an important complement to quantitative measures, for settings are never so unstable as to negate the past entirely.

This reasoning led to the following questions that we wished to address:

Question 1: Do analysts and investors who evaluate companies operating in relatively dynamic industries, employ quantitative data (e.g., financial statements) to an equal degree in comparison with analysts and investors who evaluate companies in stable industries?

Question 2: Do analysts and investors who evaluate companies in dynamic industries use management interpretations (e.g., management discussions and analyses contained in annual reports) to a greater extent

than analysts and investors who evaluate companies in stable industries?

Question 3: Do analysts and investors who evaluate companies in dynamic industries use information on the local business environment (e.g., trade journals, competitors' and suppliers' financial statements) to a greater extent than analysts who evaluate companies in stable industries?

The questions posed above were initially tested using a questionnaire distributed to 58 financial analysts and 58 individual investors, who agreed to participate in our study.(5)

The questionnaire had three sections. The first section described a case description of an electronics company that was experiencing critical raw material shortages and the strategy the company had implemented to combat this problem. Importantly, the attributes, problems and response of this fictitious company were carefully drawn from real-world corporations and were described using an SEC 10-K format so that all study participants would be familiar with it.

The second section of the questionnaire listed six sources of information that are available for use by analysts and investors in evaluating organizations. Participants were asked to indicate the extent to which they actually used each source of information in their actual analyses of corporations and the extent to which they would use it for the case description. The six items of information listed in the test instrument included: (1) the financial statements of the company being evaluated; (2) trade journals for the industry in which a particular company operates; (3) the financial statements of the company's competitors; (4) the financial statements of the company's suppliers; (5) discussions with management of the company; and (6) the management's presentation and analysis included in the company's annual report.

The third section of the questionnaire asked the participants to provide us with profile information, such as degrees held, years of experience in evaluating companies, and industry expertise. In addition, questionnaire data were supplemented with evidence gathered from intensive interviews with analysts and investors conducted both in developing the questionnaire and in interpreting the results.

Analysis and Results

We examined the three research questions by compar-

ing each of the six information sources presented in our questionnaire across industry specialty information obtained in the profile section of the questionnaire, where the industries varied in terms of dynamism versus stability. Consistent with both the views expressed by analysts during interviews and contingency theory, each of our hypotheses was strongly supported by our questionnaire results. Using analysis of variance, we found that "dynamics" were not significantly different from "stables" in their use of financial statement information, but did vary significantly in their use of management interpretations and information pertaining to the company's business environment. It appears, regardless of how dynamic or stable is the industry of a company being evaluated, quantitative, financial information forms a base for further analysis (Question 1). However, for more dynamic and complex companies, further analyses tend to incorporate qualitative information directed at ascertaining management's interpretations of where the company is going (Question 2) and how the company fits in with the local business environment (Question 3).

In the next phase of our study, we contacted a subgroup of our study participants and shared our preliminary findings. All of the analysts generally supported our findings, but argued that not only does qualitative information of the variety we described in our questionnaire play an important role in dynamic industries (although they felt we expressed such variables over-simplistically in our questionnaire), it may even displace some of the attention paid to the quantitative, financial data.

Amplifying a theme from contingency theory, it would seem that what a dynamic company did in the past, as documented with quantitative data in historical cost financial statements, may not be a valuable indicator of its fitness for surviving over the long haul in a growingly uncertain and complex business environment. In such a context, how a company fits in with its local business group may well be the most important way of gauging its long-term prospects. This led to the following derivative question:

Question 4: Does information on the local business environment of a company (e.g., trade journals, competitors' and suppliers' financial statements) dominate the assessments of analysts and investors who evaluate companies in dynamic industries in comparison with those who evaluate companies in stable industries?

To address this question, we computed ratios of each of the three types of information ((1) company financial

statements, (2) management interpretations, and (3) local business environment) to the other two forms of information. The results strongly suggested that information on how the company fits in with its local business environment appears to be the dominant type of information used for analyzing companies in dynamic industries -- for environmental adaptation is the lifeblood of survival in such situations.

Again in discussing our results with analysts, we were told that more sophisticated evaluators of corporate performance would tend to rely more heavily on qualitative information, whose effective use requires more "seasoned judgment." Because analysts spend more time in making their assessments than the typical investor and hence should be more "seasoned," they felt analysts would be more attuned to the nuances of using qualitative information. Further, because analysts should be more sensitive to "networks of organizations" in a given business sector, because of the many resources they have to draw on, and because they are relatively more powerful in obtaining certain forms of interpretive and perhaps sensitive information directly from management, they speculated that analysts would tend to rely more heavily on management interpretations and business environment information in making their evaluations. These observations led to the following derivative research question.

Question 5: Do sophisticated individuals (analysts) rely more heavily on qualitative information (management interpretations and business environment information) than do less sophisticated individuals (individual investors)?

Our statistical results strongly suggested that analysts do, in fact, place more reliance on qualitative information, while the two groups, sophisticated and unsophisticated users, were similar with regard to the use of financial statement information.

Qualitative and Quantitative Considerations

Based on our interview and questionnaire results, we believe analysts are faced with a dilemma and this, in turn, signals a dilemma for corporate managers. On the one hand, analysts cannot merely rely on quantitative data, for such an approach largely ignores the critical importance of understanding how a business fits in its environment as well as its strategic direction. On this point, one senior analyst interviewed commented:

Financial analysis deals with human institutions which do not necessarily conform to repetitive patterns over

time. Yet many competent people are spending a lot of time and money to develop mathematical models in the hope of finding a rational thread in the day-to-day changes in business and the market.

But, on the other hand, a wholly qualitative approach is also incomplete, for both negative and positive reasons. On the negative side of quantitative analysis, this same analyst observed:

One problem is that individual analysts work in relatively narrow sectors and lack the broad perspective required to relate a company to the market and the economy. Furthermore, most of them don't have the experience to be able to "dig" into complex companies to understand what makes them tick -- a difficult task for anyone. Also, the amount of information required to make comparative [qualitative] analyses in-depth is substantial and beyond the resources of many analysts. Hence the quantitative approach attempts to circumvent these problems and find the broad, repetitive patterns in company developments and markets through economic analysis. This may work most of the time. Whether it will protect against surprises or catch incipient changes in direction is another question. It is here that judgment, experience and intuition come to the foreground.

There are further pressures that also drive financial analysis toward quantitative analysis. As one participant, one strongly favoring the quantitative approach, commented on our findings:

I must point out that while the results are what I would expect, based on my experience, they partly reflect "perceived virtue." Of course, no analyst would say that he doesn't look at management, competitive factors, strategic plans, etc., because that is what an analyst is supposed to do. But the day-to-day reality is that he must make a lot of short-cuts to keep up with the constant flow of information and give opinions and recommendations. The "sell side" analyst especially is under these pressures. With more and more information instantly available through computer networks, the time horizons for investment decisions seem to be getting continually shorter. Institutional investors have become stock traders. In this environment, published numbers have a heavy weight in the decision process. Some say that "published earnings drive the market." In other words, long-term strategic plans are significant in the market only when they have an impact on current earnings.

I do agree with your basic point that analysts look beyond the accounting numbers to try to understand the business, its management, and its direction. The analyst

who does basic research will spend more time on these qualitative and intangible factors than the analyst who relies on secondary sources. But the significance of these factors does ultimately come back to the numbers that they produce. So the numbers provide the analytical and comparative framework.

In commenting on an earlier version of this article, another senior analyst, who had primary responsibility for developing a quantitative modeling, expert system at his financial institution, observed:

In our approach, the analyst does not select the stock but rather provides input to a system which does so. We do this because we wish to rank stocks across analysts. Therefore, we feel a need to somehow quantify the qualitative judgments that analysts make -- so as to put them into a system which compares the relative attractiveness of all the securities we follow. The primary method of doing this requires analysts to make projections which may be incorporated into a dividend discount model. We expect the analyst to use qualitative factors to do this, but the result is a quantitative projection of corporate prospects from which a present value is then derived. The historical financial information forms the backdrop against which the projections are evaluated and usually is the starting point for integrating the qualitative judgments. We then examine the projections -- including balance sheets, cash flow and income statements -- for reasonableness. This last step is very important because qualitative judgments, unchecked, often lead to forecasts, e.g., of corporate growth, which are unreasonable and/or unsustainable.

It appears that analysts must address the inherent dilemmas posed by contemporary financial analysis, dilemmas that are important for corporate managers to bear in mind in establishing communications with external constituents:

- * to recognize the importance of longer term, more qualitative characteristics of target companies, while holding in mind that there are short-term pressures to make decisions.
- * to recognize the importance of qualitative information and the use of judgment, while understanding that often the conditions necessary for their effective use do not exist.
- * to recognize the importance of publicly available accounting numbers to analytical and comparative models, while realizing that they may often be used simply because they are readily available and have the appearance of fostering rigorous, analytical decision

making.

* to recognize that the often commendable drive toward a "science" of financial analysis may also be at odds with the "profession" of financial analysis in which judgment and intuition play an important role.

In short, corporate executives must bear in mind that both quantitative and qualitative information play undeniably important, though problematic, roles in the stock evaluation process.

Implications for Corporate Executives

We believe that there are four major, interrelated implications for company executives arising from our analysis.

(1) The first implication is simple and direct, and yet, we feel, often overlooked and powerful. It has been often recommended that executives recognize that they live in a "fishbowl" and are subject to the scrutiny of many diverse constituents. This recommendation has obvious merit. Beyond this, executives should also think not just as managers, but also as key external constituents, like financial analysts, investors, lending officers of banks and other creditors, in a role-playing mode. From their perspective, the executive should focus on what information is needed to understand the company, where it has been and where it is going, and then steadfastly work to provide that information by the most appropriate means possible. The task of financial resource procurement through communication necessitates such an approach. Obviously important is financial statement information (Question 1). But, especially important, is qualitative information that interprets events in a broad-brush manner (Question 2) and demonstrates how the company fits in with a broader business context (Question 3).

Important here is a more robust use of existing channels of communication. Currently, the SEC allows and even encourages companies to experiment with reporting interpretive, forward-looking information under the protection of "safe harbor" rules, especially in the management discussion and analysis portion of the annual report. We strongly recommend that executives encourage their companies to take advantage of these opportunities.

As alluded to in our interview results, executives should also balance the recognized importance of qualitative information with a trend of financial analysis toward an even more quantitative focus, possibly in terms of "expert systems."

(2) It has been widely stated in the business literature that the essence of strategic planning lies in enabling a company to adapt to a changing business environment. An organization's business context is thus of central importance in formulating plans. It is understandable, therefore, that a company's social context should shape the process of strategic planning. On this point, recall the Chugh and Meador's finding that analysts view a corporation's strategic plans and planning systems to be important to the stock valuation process. But, what is meant by a corporation's strategic planning system? Must it be an elaborate, well-articulated, highly structured system in order to be effective?

Recent strategic management literature suggests that a company's business context does tend to shape its planning process. Interestingly, just as the financial analysts interviewed argued, the issue of the dynamism-stability of the business environment emerges as important. In relatively stable environments, a formal, highly structured, quantitatively-oriented planning process can be employed as the company tries to understand better, through more comprehensive modeling procedures, a fairly well-known set of conditions. Attention is suitably placed on "knowing more, knowing it faster and knowing it better." But, in a dynamic environment, such a system may "overquantify" the situation and give a false sense that it is more structured than it really is. Here, planning tends to be more rough in texture, qualitative, and driven by intuition. Focus is placed on changing conditions, not better understanding existing conditions.(6)

One metaphor we find useful is that in stable situations, companies can afford to structure their planning system like a "palace" -- fortified, rigid and built around existing conditions. To the extent that their business environment does not change, palace-living provides a basis for improving operating efficiency, but at the cost of not being sensitive to change. In dynamic contexts, on the other hand, a "tent-living" life style, where members of the organization don wash and wear clothes, and focus on ever changing circumstances, and where openness, immediacy, flexibility, reliance on intuition, and a mental attitude that "existing conditions" are illusory, is encouraged.(7) Such a style fosters organizational survival.

Our findings are in substantial agreement with Chugh and Meador's study, that financial analysts should and do focus on how companies adapt to a changing environment, largely through use of qualitative information (see Questions 2, 3 and 4). It follows that we also agree that information pertaining to strategic planning is highly relevant to external constituents. Herein lies a

dilemma for corporate executives. How and what do they communicate to analysts and investors? One temptation would be to communicate well-structured, highly rational, well-integrated, technical image of strategic planning. Such a fortified, rigid picture may portray that the company is on top of things. In dynamic and complex environments, according to contemporary strategic management literature, such an image may be a false one. According to our findings pertaining to Questions 1, 2 and 3, external constituents are sensitive to a company's business environment as evidenced by their heightened use of qualitative information. It appears that executives should seek to build their understanding of the business environment and how the company fits in, and then seek to improve upon the information flowing to outsiders.

A corollary issue arises here. What of the corporate executive living in a palace surrounded by a stable environment? Our recommendation is to not be overly comfortable. In our comparisons of dynamic versus stable industries, the question kept confronting us: Are there truly stable industries in contemporary American business? One by one, previously stable industries, e.g., energy, automotive, banking, transportation, have been subjected to dramatic change. Consequently, we believe executives working in what are currently thought to be "stable" industries adopt a posture of reasoned skepticism toward this condition, to combat a feeling of comfort with their tried and true approaches to communicating with external constituents. What we urge is a sensitivity to change, and a recognized need to signal this change to external constituents.

(3) As our findings suggest pertaining to Question 5, sophisticated evaluators of company performance (financial analysts) see qualitative information as being more important than less sophisticated individuals (individual investors). We feel this may be in part due to a lack of accessibility of such information. Therefore, for companies seeking to establish fuller and more robust communications directly with investors, we feel one vitally important component of this effort concerns better communicating interpretative information (Question 2) and information on how the company fits in with its business context (Question 4) to individual investors. Probably this involves improving the use of the primary communication vehicle -- the annual report, and most particularly the management presentation and analysis.

(4) The investor relations function has been increasingly discussed as being important to company survival. But here, a key point merits amplification. Chugh and Meador state that investor relations should not be a de facto, reactive function that seeks to communicate the

meaning of trends, processes and events after they have happened. They urged that this function be integrated into company actions, such as the strategic planning function. We agree, but believe this represents the minimum. Beyond this, companies should not become complacent that investor relations exists in their company and assume the job of communicating with external constituents has been effectively delegated. All managers are or should be in the job of investor relations every day, in their thinking, in their actions, and in communicating the results of company activity. Complacency in investor relations, as in all areas of business, is highly dangerous.

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Footnotes

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