Does The Stock Market Fully Value Intangibles? Employee Satisfaction and Equity Prices

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Summary of Findings

This paper analyzes the relationship between employee satisfaction ("ES") and long-run stock returns. A portfolio of the "100 Best Companies to Work For in America" earned a four-factor alpha of 0.29% per month from 1984-2009, or 3.5% per year. The results are robust to controlling for industries, firm characteristics, weighting methodologies, and adjusting for outliers. The outperformance is at least as strong from 1998, even though the list was published in *Fortune* magazine and thus highly visible to investors. The Best Companies exhibit significantly more positive earnings announcements: over the four announcement dates in each year, they earn 1.2-1.7% more than peer firms.

These findings contribute to three strands of research:

- 1) The increasing importance of human capital in the modern corporation
- 2) The equity market's failure to fully incorporate the value of intangible assets
- 3) The effect of socially responsible investing ("SRI") screens on investment performance.

<u>Implication #1: Employee Satisfaction and Shareholder Value</u>

The first implication is that ES is positively correlated with shareholder value. This is not as obvious as it may sound. Historically, employees were viewed as a cost to be minimized, no different to other costs such as raw materials. Management strategies therefore sought to work their employees as hard as possible and pay them as little as possible (in terms of both salary and working conditions). High ES may signal that employees are being underworked or overpaid, to the detriment of shareholders. Indeed, existing evidence supports this classical view. For example, Abowd (1989) find that pay increases reduce a firm's market value dollar-for-dollar. This traditional view continues to pervade modern thinking on managing workers, for example the use of "sweatshop" labor in developing countries and "prescribing" detailed instructions for employees to follow in firms such as McDonald's. Motivation is achieved with purely financial means (e.g. payfor-output and the threat of firing) rather than satisfaction.

However, the world is now different. Nowadays, workers are increasingly called upon to exhibit creativity and initiative rather than follow prescribed processes. Since key outputs are hard to measure (e.g. teamwork, idea generation, building client relationships), the traditional motivation tool of pay-for-output is often inappropriate. High ES is thus increasingly important in generating *intrinsic motivation*. Satisfied employees identify with the firm and internalize its goals, and will therefore willingly exert effort even in the absence of extrinsic incentives. In addition, high ES can also achieve *retention* of key

workers. This is critical to many firms for which employees are the most important asset and the greatest source of sustainable competitive advantage.

<u>Implication #2: Market Valuation of Intangibles</u>

Even if managers are aware of the long-run benefits of investing in human capital, they may still not invest. The key problem is that such investment is intangible: while the costs are immediately observable (lower earnings), the benefits may not become observable for many years. Intangible investment may thus depress earnings and thus the stock price. Since a low stock price increases the risk of a hostile takeover, and reduces the value of the manager's shares, she may avoid investment even though it is beneficial in the long-run.

These "myopia" concerns rest on the assumption that the benefits of investment are very difficult to credibly communicate to the market. This explains why I analyze a widely-respected, publicly available survey, which represents independent certification of a firm's intangibles. In addition, I delay forming my portfolios until the month after list publication, to give the market time to react to the list. If the market fully incorporated the contents of the *Fortune* list, I should not be able to earn excess returns by trading on the list one month after the fact. By showing that intangibles are not incorporated into the market, even when certified by a study as respected as the Best Companies survey, my study suggests that intangibles in general are not incorporated into the stock market - the vast majority of which have no equivalent of the Best Companies survey for independent verification. This provides support for managerial myopia theories.

Implication #3: Socially Responsible Investing (SRI)

The traditional view of SRI is that it worsens investment performance, since SRI screens reduce an investor's choice set. Investors thus face an "either-or" choice: either to maximize returns, or to pursue non-financial goals (e.g. social responsibility) at the expense of returns. Indeed, many prior studies have found that SRI either worsens, or at best has no effect on returns. While they are a handful of studies that identify an SRI screen that improves returns, they are based on short time periods and do not control for risk.

This is the first paper to my knowledge that shows that SRI can improve returns over a long time period (26 years) and controlling for risk. A firm's concern for other stakeholders, such as employees, may ultimately benefit shareholders (the first implication of the paper), yet not be priced by the market as "stakeholder capital" is intangible (the second implication). Investors thus may be able to "do well and do good." The results of this paper have been widely cited by the popular press (e.g. Reuters, The Economist) and the SRI community (e.g. Social Investment Forum); the Parnassus Workplace Fund was recently launched to pursue an investment strategy focused on ES. The paper won the Moskowitz Prize for best paper in SRI research.