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Curtis C Verschoor
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A Study of The Link Between a Corporation's Financial Performance and Its Commitment to Ethics

Curtis C. Verschoor

ABSTRACT. A number of studies have tested the relationship between a corporation's social and ethical performance and its financial performance. In contrast, this is the first study to demonstrate a link between overall financial performance and an emphasis on ethics as an aspect of corporate governance. It identifies the 26.8 percent of the 500 largest U.S. public corporations that, in their annual report to shareholders, commit to ethical behavior toward their stakeholders or emphasize compliance with their code of conduct. The financial performance of these corporations ranks higher than that of those who do not at a significance level of $p = < 0.005$, using the 1997 Business Week ranking which averages eight publicly-reported measures of historical financial performance. These findings should motivate more corporations to utilize the principles of Social and Ethical Accounting, Auditing and Reporting (SEAAR).

Introduction

The relationship between business corporations' financial and social performance has been a fruitful area of discussion and study for many years. Recently, Waddock and Graves (1997) and Preston and O'Bannon (1997) both provided comprehensive outlines of the many empirical research studies, critiques, and reviews that have examined the relationship between corporate social performance (CSP) and financial performance.

Curtis C. Verschoor is Ledger & Quill Research Professor in the School of Accountancy, DePaul University, Chicago, IL 60604.

Waddock's work integrates CSP, treatment of stakeholders, and quality of management. Waddock finds strong support for the hypothesis that perceived high quality of management, using a subset of the annual *Fortune* reputation survey, can be explained by the level of performance with respect to each of several specific primary stakeholders: owners, employees, customers and (marginally) communities. Thus, the study supports the premise that the concepts underlying Social and Ethical Accounting, Auditing, and Reporting (SEAAR) are important to CSP. Preston's 11-year longitudinal study of 67 companies considers various hypotheses as to whether there is a causal relationship between corporate social and financial performance and found no significant negative and strong positive correlations in both contemporaneous and lead-lag formations.

Previous studies did not attempt to demonstrate causation. Cochran and Wood (1984), Spencer and Taylor (1987), and Waddock and Graves (1994) found the relationship between corporate social and financial performance to be positive. However, Aupperle, Carroll, and Hatfield (1985), Aupperle and Van Pham (1989), McGuire, Sundgren, and Schneeweiss (1988), and Coffey and Fryxell (1991) found either no relationship or mixed results. In a number of these studies, the method used to measure CSP has been varied and contentious. Griffin and Mahon (1997) analyze 51 studies performed in the last 25 years on this subject and conclude that inconsistencies result from using 1) samples from multiple industries, 2) one or only a few measures of financial performance, and

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3) multiple sources of CSP measures, including those that are based on perceptions rather than actuality. Their study involves only six companies in the chemical industry.

One criticism of a number of these studies has been the use of results from the annual *Fortune* survey of corporate reputation as a direct surrogate for CSP. Specifically, Brown and Perry (1994 and 1995) demonstrate the presence of a "financial halo" in the *Fortune* data, thus making it an inappropriate measure of social performance. The current study avoids several pitfalls from previous studies by using publicly-reported information for both financial performance data and evidence of a broad concern for stakeholder interests.

The current study

This is the first large-scale study to measure the linkage between a large public corporation's overall financial performance and its stated commitment to recognize its stakeholders' interests. The study finds that approximately one-fourth of the 500 largest public U.S. companies make a commitment to treat their stakeholder constituents in accordance with a code of ethical conduct in a report by management contained in their annual shareholder report. The objective of the current analysis is to use this information to answer the question whether a mainstream emphasis on corporate social and ethical accountability is consistent with superior financial performance.

The study's significantly affirmative findings should encourage more corporations to increase their emphasis on stakeholder accountability, a key element of SEAAR. Effective implementation of SEAAR principles are believed to be important in making certain that the culture of the corporation does actually reflect its stated values and its code of conduct continues to properly accommodate the interests and needs of various stakeholders. Such execution activities, not just the adoption of a code of conduct which virtually all large public companies have done, are likely to be principal factors promoting the full financial benefit of a commitment to accountability. Anecdotal evidence exists that significant ethical shortfalls may exist even in companies who profess to operate on an ethical basis.

Trends in stakeholder accountability

Expressing the primacy of shareholder interests to the exclusion of other stakeholders, Nobel Economics Laureate Milton Friedman made his classic contention more than 25 years ago that "a corporation's [only] social responsibility is to make a profit".[1] Corporation law has mirrored this emphasis. However, spurred by environmental concerns and relations with South Africa, social activists of the 1960s and 1970s called for increased accountability from corporations. Results of these efforts began to fade as pressure applied by institutional investors on increasing shareholder value resulted in neglect of the interests of other stakeholders, even those who directly impact or are impacted by corporate actions.

In more recent years, however, the general public has increasingly criticized this view and demanded greater accountability from large public corporations. President Clinton recently sponsored initiatives designed to achieve superior results in three areas of corporate performance. He convened a Summit on America's Future dealing with the importance of volunteerism, supported the development of the Apparel Industry Partnership Code of Conduct, and sponsored a Conference on Corporate Citizenship. In the U.K., victorious Prime Minister Tony Blair's platform emphasized corporate responsibility.

Increases in the importance of corporate ethics and SEAAR has also resulted from rapid expansion of the social and environmentally responsible investment movement. According to the latest study by the Social Investment Forum, the total value of all "responsibly invested" assets under management climbed from $639 billion in 1995 to $1.185 trillion in 1997.[2] Such investments now represent about 10 percent of new dollar inflows. Mutual funds limited to "socially responsible" investing have joined with other institutional investors to sponsor shareholder

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resolutions concerning broad public and social issues.

As a result of these factors, corporate boards of directors and senior management are realizing that effective corporate governance requires careful balancing of the interests of customers, suppliers, the community, employees and the general public. Consequently, a company's impact on its stakeholders is becoming an emerging hallmark of corporate performance.

Background of management reporting on internal control

Internal control is the most common term used to describe the processes an organization uses to achieve its objectives. It is recognized as the cornerstone of corporate governance. The management of U.S. corporations began reporting to the public on their internal controls in the early 1970s. The trend gathered momentum later in the 1970s after ethical lapses led to greater focus of public attention on corporate responsibility. The resulting enactment of the Foreign Corrupt Practices Act of 1977[3] requires all publicly held companies to maintain an adequate system of internal accounting control.

The 1987 Treadway Commission on fraudulent financial reporting made several recommendations concerning ethics. The first was:

> "Public companies should develop and enforce written codes of corporate conduct. Codes of conduct should foster a strong ethical climate and open channels of communication."
>
> "A strong corporate ethical climate at all levels is vital to the well-being of the corporation, all its constituencies [stakeholders], and the public at large."[4]

Treadway points out that a written code of corporate conduct strengthens the corporate ethical climate by signaling to all employees standards for conducting the company's affairs. The Treadway report suggests that well-defined ethical standards and guidelines for acceptable behavior promote ethical decision-making at all levels of the organization. It also emphasizes the importance of full support of the directors and senior officers who set an example for the entire company. This phenomenon has been labeled the "tone at the top."

Treadway's recommendations follow the outline contained in the Defense Industry Initiative and mention the need for open upward communication and suggest the use of an ombudsman to achieve it. Treadway also emphasizes the need for adequate monitoring and enforcement of the code throughout the organization.

The second recommendation made by the Treadway Commission was:

> "All public companies should be required by the Securities and Exchange Commission (SEC) to include a report in their annual shareholder report. . . . acknowledging management's responsibilities for the financial statements and for internal control [broadly defined], discuss how these responsibilities were fulfilled, and provide management's assessment of the effectiveness of the company's internal controls."[5]

Although the SEC never put the latter requirement into effect, three-quarters of large public companies each year voluntarily publish a report by management on internal control. However, fewer provide an assessment of its adequacy.

In 1991, extension of the applicability of the U.S. Federal Sentencing Guidelines[6] to corporations resulted in another strong motivation for corporations to upgrade their corporate governance systems to include a more formal ethics program following the principles set forth in the Defense Industry Initiative on Business Ethics and Conduct.[7] A 1992 study by the Center for Business Ethics at Bentley College showed that 93 percent of respondents had corporate conduct or ethics codes.[8]

Study design

The companies chosen for analysis were the largest 500 publicly held U.S. corporations in terms of sales or revenue as reported in the *1996 Business Week 1000*.[9] The measure used to assess financial performance was a new ranking of large company performance. Instead of reporting facts

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about the 1000 largest publicly held companies, *Business Week* (BW) decided in 1997 to prepare an analysis of the financial performance of each of the companies included in the S&P 500 Index.[10]

Using only historical publicly reported results, BW ranked each company in quintiles using eight financial measures: Total Return for 1 and 3 Years, Sales Growth for 1 and 3 years, Profit Growth for 1 and 3 Years, Net Margin, and Return on Equity. BW then combined the eight company quintile rankings with an addition of "a slight weighting for sales volume," to come up with an overall financial performance ranking. The 1997 BW analysis covered 367 or 73.4 percent of the 500-company sample.

Examination of the annual reports to shareholders issued in 1996 for each of the 500 companies disclosed that 374 or 74.8 percent contained a report by management on internal control. These reports are made voluntarily pursuant to the private sector initiatives described previously. Since no formal requirements exist, the wording and specific content varies considerably from company to company, yet there were patterns in scope and language. Some are quite brief while others go into considerable detail. My previous research shows that few company management reports change over time.

The reports typically describe management's responsibility for financial reporting and for establishing and maintaining a proper system of internal control. Some reports also describe management's responsibility to maintain an ethical corporate culture. A significant number of reports express some kind of conclusion as to the adequacy of the system to achieve a variety of control objectives, including safeguarding assets, assuring transactions are authorized, and promoting proper external financial reporting. Substantially all companies use the same major activities to achieve their internal control objectives. These include audit committee oversight, a program of internal auditing, and work of the external audit firm.

The one major control component referred to less frequently was a code of corporate conduct or ethics system. This was somewhat unexpected, in view of the emphasis on ethics in current accounting and auditing literature. Both the American Institute of CPAs (AICPA) *Statement on Auditing Standards No. 78*[11] and the Committee of Sponsoring Organizations of Treadway report entitled *Internal Control: Integrated Framework*[12] emphasize that the management philosophy and the integrity and ethical values of the people in an organization as part of the control environment are critically important to the effectiveness of all types of controls.

Further analysis of the management reports differentiated those who make a public commitment to the use of ethical practices in dealing with their stakeholders as a corporate-wide strategy. This commitment is the same premise that underlies the use of SAAER. The result was that 134 or 26.8 percent of the 500 included a commitment to use ethical practices in dealing with stakeholders or specifying that a code of conduct or ethics was a part of the internal control structure.

The language used to characterize a commitment to ethics or describe the importance of an ethics standard or code of conduct varied considerably. Some companies placed considerable weight on ethics as a strong factor in promoting effective controls. Some made a point of stating that management was responsible for establishing and maintaining an appropriate ethical culture within the organization. Others mentioned an ethics program almost in passing when listing control practices, such as proper selection and training of personnel. A few expressed the conclusion that the overall control system was effective in assuring ethical conduct.

Disclosure examples

The following excerpts from selected annual reports illustrate companies where ethics is a significant part of the corporate culture and control structure:

Johnson & Johnson

"It has always been the policy and practice of the Company to conduct its affairs ethically and in a socially responsible manner. This responsibility is characterized and reflected in the Company's Credo and Policy on Business Conduct which are distributed throughout the Company. Management

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maintains a systematic program to ensure compliance with these policies."[13]

Campbell Soup

"The company believes that its long-standing emphasis on the highest standards of conduct and business ethics, set forth in extensive written policy statements, serves to reinforce its system of internal accounting control."[14]

DuPont

"The company's business ethics policy is the cornerstone of our internal control system. This policy sets forth management's commitment to conduct business worldwide with the highest ethical standards and in conformity with applicable laws. The business ethics policy also requires that the documents supporting all transactions clearly describe their true nature and that all transactions be properly reported and classified in the financial records."[15]

IBM

"We believe that it is essential for the company to conduct its business affairs in accordance with the highest ethical standards, as set forth in the IBM Business Conduct Guidelines. These guidelines, translated into numerous languages, are distributed to employees throughout the world, and reemphasized through internal programs to assure that they are understood and followed."[16]

These examples are designed to illustrate companies that express a strong reliance on their code of conduct.

Study results

Statistical analysis of the *Business Week* rankings of companies in the two groups shows that the mean financial performance rank of companies with a stated commitment to ethical behavior is higher (163.28) by a statistically significant amount when compared with the mean rank of companies that either published no management report or did not make any reference to ethics (199.20). (See Table I.)

In other words, there is a less than a half of one percent probability that the link between a *Business Week* ranking of better financial performance and a company's commitment to a code of conduct or ethics is caused by chance.

Importance of proper execution

It should be emphasized that the mere presence of an ethics program or a code of conduct that does not cover all stakeholders or one which is not properly implemented throughout the organization is not sufficient. Even the most comprehensive code of conduct will not assure ethical behavior if there is inadequate commitment at the top or if compliance is not monitored effectively. An effective program of SAAER would be helpful in assuring that a company's code of conduct does properly reflect the interests and needs of stakeholders and that the corporate culture is appropriate.

Texaco, Inc. has all the outward appearances of having an effective ethics control system, yet stands as one of the more egregious examples in history of internal control failure involving stakeholders. It illustrates the fact that just presence of an ethics policy does not necessarily assure ethical behavior. Its management report states the following:

". . . it is Texaco's long-established corporate policy to maintain a control conscious environment and

TABLE I

	No. of companies	Mean rank
N =	376	
Companies stating commitment to ethics	112	163.28
Companies with no management report or no commitment to ethics	264	199.20
Probability that difference is by chance	0.0034	
Statistical Test	Mann-Whitney U	

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> an effective internal control system throughout its world-wide operations. Included in this system are Corporate Conduct Guidelines which require that all employees maintain the highest level of ethical standards."[17]

Texaco's 1997 Proxy Statement also notes that its board of directors performs oversight of internal controls through activities of several standing committees. Its Audit Committee

> "reviews and evaluates . . . internal controls [undoubtedly including those designed to assure adherence to policies, procedures, laws, and regulations] . . ."[18]

Its Public Responsibility Committee

> "reviews and makes recommendations regarding the policies and procedures affecting the company's role as a responsible corporate citizen, including those related to equal employment opportunity, health, environmental and safety matters, the company's relationship with its several constituencies and the company's philanthropic programs."[19]

Texaco's Compensation Committee makes certain that

> ". . . the company's compensation structure incorporates programs which . . . motivate performance . . . in full compliance with Texaco's Vision and Values."[20]

The report of the Compensation Committee attached to the 1997 Proxy Statement notes that performance [of Texaco managers] for bonus purposes is assessed in terms of

> ". . . fostering the company's Vision and Values and compliance with the Corporate Conduct Guidelines. Performance is also assessed against standards of business conduct reflecting social values and the expectations of the company's key constituencies including its employees and stockholders, the consumers of its products, suppliers and customers, the communities in which it operates and countries in which it does business. Among the corporate values and elements of the Corporate Conduct Guidelines considered [by the compensation system] are those which promote equal employment opportunity and diversity, safeguarding of the environment and protection of the health and safety of the company's employees. Adherence to these high standards is understood to have a direct effect on the company's profitability, and the performance of the company's managers is appraised in this regard."[21]

Court affirmation of Texaco's historically large $176.1 million discrimination suit settlement resulted from these control failures has drawn most of the news headlines. However, Texaco's agreement to appoint an independent Equality and Tolerance Task Force to bolster internal control and set aside $35 million to fund it for five years may have more important long-term ramifications.

Principles of good corporate governance dictate that members of the board of directors require sufficient, reliable and timely information to discharge their duties, such as those listed in the Texaco Proxy Statement. In large public corporations, they receive this information from others rather than from direct personal supervision or observation and rely on strong internal controls to assure its reliability. Thus, it appears very likely that highly significant internal control weaknesses were the cause of Texaco's widely reported failures to comply with anti-discrimination statutes in spite of the many oversight functions the directors reported performing. An effective commitment to SEAAR by Texaco's top management would have prevented this problem or at least detected its presence before it became an epidemic.

Texaco's delegation of governance functions to an external group seems without precedent in its breadth and scope. Task Force recommendations for changes in practices affecting diversity in areas of procurement, franchising and distribution as well as employment must generally be adopted by management under penalty of court sanction. Also, the unlimited access granted the Task Force to any and all activities of the corporation could result in a costly and cumbersome duplication of the monitoring efforts which could have been more effectively and efficiently performed by a properly structured Texaco corporate audit function.

Another large corporation has had costly and embarrassing episodes of unethical behavior in spite of a stated commitment to ethics. Sears'

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management report states the importance of ethics as follows:

> "The Company's formally stated and communicated policies demand of employees high ethical standards is their conduct of its business. These policies address, among other things, potential conflicts of interest; compliance with all domestic and foreign laws, including those related to financial disclosure; and the confidentiality of information."[22]

Sears has also supported limited codes of conduct designed to ensure the rights of workers at supplier manufacturers.

In spite of these commitments to ethical conduct, however, Sears' record of ethical disasters at the retail level includes "systematic overcharges" at auto repair centers and unlawful collection of funds from bankrupt customers. These suits were settled legally by refunding money to customers, but additional damage has undoubtedly resulted from the resulting poor public relations. More recently, lawsuits were filed in Georgia and an investigation begun in Florida over allegations that Sears was selling used Die Hard batteries as new.[23] Sears stores have also been picketed by disgruntled retirees.

Perhaps Sears has failed to instill broad ethical values in its employees, so that its ethics code is viewed as compartmentalized and not mainstream. Writing about Sears, the director of the Arizona State University Lincoln Center for Applied Ethics states:

> "Political correctness and feel-good management fads are no substitute for honesty, fairness and respect for the law."[24]

To its credit, Sears has taken steps designed to raise the economic literacy of its associates, revise its compensation practices, and instill new ethical attitudes as "now Sears leaders see the inseparable nature of employee, customer, and investor."[25]

Conclusions

This study shows a statistically significant linkage between a management commitment to strong controls that emphasize ethical and socially responsible behavior on one hand and favorable corporate financial performance on the other. These results demonstrate the probability that a broad corporate concern for ethical conduct toward stakeholders is becoming a mainstream management issue in achieving higher profitability. Ethics is no longer concerned with just compliance with laws and regulations in relation to the Federal Sentencing Guidelines or the quality of financial reporting.

Yet events have shown how important it is for a company to focus on the effectiveness of controls to implement its commitment to ethical and socially responsible behavior. Recent reengineering and downsizings make trust, teamwork, and self-directed activities motivated through a loyal corporate culture even more important to a company's financial success. Mere profession of ethical principles in a code of conduct without the essential elements of full commitment at the senior level, continual practical ethics training throughout the organization, and monitoring the effectiveness of performance affecting each stakeholder can make the outcome a public relations exercise rather than real accountability. Adoption of the principles of SAAER should significantly guide companies to achieve mastery of the proper balance between the interests and needs of each stakeholder group.

Notes

[1] Friedman, Milton, 'The Social Responsibility Is To ncrease Profits', *New York Times Magazine*, September 13, 1970, pp. 32–33.

[2] Social Investment Forum, *1997 Report on Responsible Investing Trends* (Washington, DC: Social Investment Forum, 1997).

[3] 91 Stat. 1491 (1977)

National Commission on Fraudulent Financial Reporting (Treadway), *Report of the National Commission on Fraudulent Financial Reporting* (New York: American Institute of CPAs, 1987), p. 35.

[5] Treadway, p. 44.

[6] Guidelines issued by The U.S. Sentencing Commission (*USSC Guidelines Manual*, Chapter 8, 1994) (USSG), made the existence of "effective" internal compliance programs a mitigating factor leading to leniency upon conviction of unlawful

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behavior. The characteristics of an effective compliance program for USSG purposes closely follow the principles set forth in the Defense Industry Initiatives on Business Ethics and Conduct (DII).

[7] Blue Ribbon Commission on Defense Management (Packard), *Quest for Excellence* (Washington, DC: President's Blue Ribbon Commission on Defense Management, 1986). The principles of the DII ethics system require a participant corporation to have a code of ethics, ethics training, a method for confidential internal reporting of alleged misconduct, and self-governance procedures.

[8] Center for Business Ethics, 'Instituting Ethical Values in Large Corporations', *Journal of Business Ethics* **11**, 863.

[9] *Business Week*, March 25, 1996, pp. 88–164.

[10] *Business Week*, March 24, 1997, pp. 91–153.

[11] Auditing Standards Board, *Statement on Auditing Standards No. 78 – Consideration of Internal Control in a Financial Statement Audit: An Amendment to Statement on Auditing Standards No. 55* (New York: American Institute of CPAs, 1995), para. 66.

[12] Committee of the Sponsoring Organizations of the Treadway Commission, *Internal Control: Integrated Framework* (New York: American Institute of CPAs, 1993), Framework, pp. 19–28.

[13] Johnson & Johnson 1996 Annual Report, p. 40.

[14] Campbell Soup Company 1996 Annual Report, p. 33.

[15] E. I. duPont de Nemours and Company 1996 Annual Report, p. 28.

[16] International Business Machines Corporation 1996 Annual Report, p. 42.

[17] Texaco, Inc. 1996 Annual Report, p. 69.

[18] Texaco, Inc. 1997 Proxy Statement, p. 5.

[19] Texaco 1997 Proxy, p. 5.

[20] Texaco 1997 Proxy, p. 5.

[21] Texaco 1997 Proxy, pp. 28–29.

[22] Sears Roebuck and Company 1996 Annual Report, p. 19.

[23] Jennings, M. M., 'Trendy Causes are No Substitute for Ethics', *Wall Street Journal*, December 1, 1997, p. A22.

[24] Ibid.

[25] Special Sponsorship Supplement to the Business Ethics Awards, *Business Ethics*, November/December 1997, pp. 10–14.

References

Aupperle, K., A. Carroll and J. Hatfield: 1985, 'An Empirical Examination of the Relationship Between Corporate Social Responsibility and Profitability', *Academy of Management Journal* **28**, 446–463.

Aupperle, K. and D. Van Pham: 1989, 'An Extended Investigation in the Relationship Between Corporate Social Responsibility and Profitability', *Employee Responsibilities and Rights Journal* **2**, 263–274.

Brown, B. and S. Perry: 1994, 'Removing the Financial Performance Halo for Fortune's "Most Admired" Companies', *Academy of Management Journal* **37**, 1346–1359.

Brown, B. and S. Perry: 1995, 'Halo-Removed Residuals of Fortune's "Responsibility to the Community and Environment" – A Decade of Data', *Business and Society* **34**, 199–215.

Cochran, P. and R. Wood: 1984, 'Corporate Social Responsibility and Corporate Social Performance,' *Academy of Management Journal* **27**, 42–56.

Coffey, B. and G. Fryxell: 1991, 'Institutional Ownership of Stock and Dimensions of Corporate Social Performance: An Empirical Examination', *Journal of Business Ethics* **10**, 437–444.

Griffin, J. and J. Mahon: 1997, 'The Corporate Social Performance and Corporate Financial Performance Debate: Twenty-Five Years of Incomparable Research', *Business and Society* **36**, 5–31.

McGuire, J., A. Sundgren and Thomas Schneeweis: 1988, 'Corporate Social Responsibility and Firm Financial Performance', *Academy of Management Journal* **31**, 854–872.

Preston, L. and D. O'Bannon: 1997, 'The Corporate Social-Financial Performance Relationship: A Typology and Analysis', *Business and Society* **36**, 419–434.

Spencer, B. and G. Taylor: 1987, 'A Within and Between Analysis of the Relationship Between Corporate Social Responsibility and Financial Performance', *Akron Business and Economic Review* **18**(1), 7–18.

Waddock, S. and S. Graves: 1994: *The Corporate Social Performance-Financial Performance Link*. Paper presented at the annual meeting of the Academy of Management, Dallas, TX.

Waddock, S. and S. Graves: 1997, 'Quality of Management and Quality of Stakeholder Relations: Are They Synonymous?', *Business and Society* **36**, 250–279.

231 Wyngate Drive,
Barrington, IL 60010,
U.S.A.

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