ABSTRACT

The purpose of this study is to examine the impact of Sarbanes-Oxley Act on for-profit and not-for-profit healthcare organizations. Sarbanes-Oxley Act accelerates the amendments of sentencing guidelines that strengthen the responsibility of healthcare management. Although not-for-profit organizations are not directly subject to Sarbanes-Oxley Act, however, some provisions could be modified for corporate governance of not-for-profit organizations. In this study, we first test the financial reporting conservatism of for-profit healthcare organizations. The empirical results show that financial distress for-profit healthcare firms have over-aggressive financial reporting in 2000. However, the evidences also show that financial distress firms are not so aggressive in 2003. The results document the more conservative financial reporting environment after Sarbanes-Oxley. On the other hand, we provide a summary of the related studies about not-for-profit healthcare organizations. Those studies show that financial ratios, market competition are important indicators of not-for-profit hospital closure. The increased governmental scrutiny within the healthcare sector provide insights that not-for-profit healthcare organizations are expected to face a tougher financial reporting environment in the post-Sarbanes-Oxley period.

Key Words: Sarbanes-Oxley Act, for-profit and not-for-profit healthcare organizations, financial reporting environment

I. Introduction

Sarbanes-Oxley accelerates the amendments of sentencing guidelines that strengthen the responsibility of healthcare management. Although not-for-profit healthcare organizations are not directly subject to Sarbanes-Oxley Act, however, some provisions could be modified for corporate governance of not-for-profit healthcare organizations. A well-established internal control system emphasized by Sarbanes-Oxley could reduce the risks of material frauds, and heighten the quality of healthcare financial reporting. Otherwise, the increasing independent audit committees adopted by healthcare providers are expected to improve the fairness and reliabilities of the financial statements. Therefore, financial reporting of for-profit and not-for-profit healthcare organizations in the post- Sarbanes-Oxley period is expected to be tougher than in the pre- Sarbanes-Oxley period. The purpose of this study is to examine the impact of Sarbanes-Oxley Act on for-profit and not-for-profit healthcare organizations.

The remaining sections are organized as follows. Section II outlines the background of Sarbanes-Oxley Act and financial reporting of for-profit and not-for-profit healthcare organizations. Section III provides empirical tests for for-profit healthcare organizations. Section IV summarizes the related studies about

not-for-profit healthcare financial reporting. Section V briefly describes the conclusions of this study and draw future extensions.

II. The Sarbanes-Oxley Act Impacts on Healthcare Financial Reporting

1. Sarbanes-Oxley Act and Financial Reporting of For-Profit Healthcare Organizations

Sarbanes-Oxley accelerates the amendments of sentencing guidelines that strengthen the responsibility of healthcare management. For example, HealthSouth is charged to violate Sarbanes-Oxley Act for accounting frauds. Also, Sarbanes-Oxley restricts the auditors providing financial statement audits and non-audit services at the same time. This auditor independence requirement may enhance public confidence for financial reporting. Otherwise, the increasing independent audit committees adopted by healthcare providers are expected to improve the fairness and reliabilities of the financial statements.

The Securities Exchange Commission (SEC), public investors and other related parties continue to pay attention on fraudulent financial reporting and unfaith

management team. According to the attribution theory[1], individuals assess or attribute responsibility and culpability to individuals associated with failed performance. Investors will expect of a monitoring mechanism always beyond what the company provides. Especially in the post- Sarbanes-Oxley period, auditors have to maintain higher audit quality to reduce the litigation risks. Therefore, financial reporting of for-profit healthcare organizations in the post- Sarbanes-Oxley period should be more conservative than in the pre- Sarbanes-Oxley period. This study provides an empirical test and documents the results.

2. Sarbanes-Oxley Act and Financial Reporting of Not-For-Profit Healthcare Organizations

Like the HealthSouth scandal, two not-for-profit healthcare organizations, Allina Health System and Health MidWest are suspected to executive abuses in 2004. These cases remind us that corporate governance should be also emphasized in the not-for-profit sectors. Undoubtedly, the enactment of Sarbanes-Oxley also evokes the importance of corporate governance. Yetman and Yetman (2004) indicate that higher reporting quality is associated with increased governance in the not-for-profit sector.

[1] Attribution theory is about how people make causal explanations; the theory developed within social psychology as a means of dealing with questions of social perception. (http://www.webmail.fiu.edu/agent/mobmain?mobmain=1)

They find that marketed-based governance variables, such as lenders and donors, have consistent effects on financial reporting quality of not-for-profit organizations. Although not-for-profit organizations are not directly subject to Sarbanes-Oxley Act, however, Reilly (2005) reports that some provisions could be modified for corporate governance of not-for-profit organizations. For example, Section 404 strengthens the responsibility of management for maintaining an adequate internal control structure and assessing the effectiveness of the internal control procedures. A well-established internal control system could reduce the risks of material frauds, and heighten the quality of financial reporting. Another case is that New York State Not-For-Profit Corporation Law prohibits not-for-profit organizations to extend personal loans to officers or directors, such as Sarbanes-Oxley Act prohibits extending personal loans to officers or directors of publicly traded companies.

Underwriters, bond insurers or other related parties from bond market may also demand for increased disclosure or more accurate financial reporting of not-for-profit organizations similar to Sarbanes-Oxley Act requirements. O'Neil and Cutting (2005) report that Rush University Medical Center improve its bondholder disclosure by adapting some Sarbanes-Oxley provisions. For example, audit committee members have to review related disclosure documents before the bonds are released. A risk assessment and pilot project are also performed to meet the Section 404 compliance.

III. Empirical Tests for For-Profit Healthcare Organizations

As we mentioned earlier, financial reporting of for-profit healthcare organizations in the post - Sarbanes-Oxley period is predicted to be more conservative than in the pre- Sarbanes-Oxley period. Here, I provide an empirical test as follows:

1. Model specification

This study uses Kirsten Ely's model (1999) to test financial reporting conservatism. Holthausen and Watts (2001) use this model to compare the conservatism of US income numbers from 1927 to 1993 by reporting regime. If the slope coefficient (β_1) for $DR_t * R_t$ term is significantly positive, the financial reporting will be regarded as conservatism. The linear regression model is

$$X_t / P_{t-1} = \alpha_0 + \alpha_1 DR_t + \beta_0 R_t + \beta_1 DR_t * R_t$$

where:

X_t = the firm earnings or operating earnings per share for year t;

P_{t-1} = the price at the beginning of year t;

DR_t = 1 if R_t <0, else 0;

R_t = the rate of return on the firm's stock for year t;

when R_t (rate of return on the firm's stock)↓		
if auditor		defined as
report smaller X_t (EPS_t↓)	β_1 will be significantly positive	conservative
no effect	β_1 will be insignificant	neutral
report larger X_t (EPS_t↑)	β_1 will be significantly negative	aggressive

2. Sample selection

Table 1 shows the process of sample selection. We collect 367 for-profit healthcare firms, whose fiscal year ends around December 31, 2003 and 2000, respectively, from *Compustat* database. Then we exclude 272 and 255 firms for 2003 and 2000 due to variables data missing. After that, there are 95 and 112 sample firms in this study. Then, we delete those firms which are not financial distressed. We supposed that financial distressed for-profit healthcare firms are under the pressure of Sarbanes-Oxley requirements and face higher litigation risks. They are reasonable to have more conservative financial reporting after the enactment of Sarbanes-Oxley Act. Finally, we have 72 sample firms for 2003 and 2000, respectively.

[Insert Table 1 here]

3. Descriptive statistics

From the univariate analysis[2], the mean and median value of 2003 (1.51, 0.37) stock return rate are higher than those in 2000 (1.18, 0.02). Those firms report more optimistic earnings per shares in 2003 (-0.27, 0.06) than in 2000 (-0.45, 0.02) as we originally expected.

[Insert Table 2 here]

4. OLS regression results

Table 3 reports the OLS regression results for 2003 and 2000. As we mentioned earlier, the significantly positive slope coefficient (β_1) for $DR_t R_t$ term implies the conservatism financial reporting. Financial distress companies[3] are less conservative (β_1 is negatively significant at 0.1 significant level) in the pre -Sarbanes-Oxley period.

[2] We winsorize 1% and 99% extremely observations to reduce the outliers influences in this study.
[3] We also test the pooling sample for financial distress and not-financial distress companies. The results do not provide sufficient evidences to say whether financial reporting is conservative.

The empirical results show that for-profit healthcare firms have over-aggressive financial reporting in 2000. Even with the pessimistic stock return rates, they still tend to report optimistic earning per shares. However, financial distress companies are not so aggressive since β_1 is no longer negatively significant anymore in 2003. But there is no sufficient evidence to say that their financial reporting become more conservative (β_1 is not positively significant at 0.1 significant level) in the post -Sarbanes-Oxley period.

[Insert Table 3 here]

IV. Related Empirical Studies for Not-For-Profit Healthcare Organizations

We then summarize the related studies about not-for-profit healthcare financial reporting. Wertheim and Lynn (1993) indicate that financial ratios are important indicators of not-for-profit hospital closure. The fairness of financial reporting could provide useful information for publics in evaluation the financial condition for not-for-profit organizations. Bazzoli and Andes (1995) find that growing market competition appeared to be the major factor in the closure of a distress hospital. Auditors have reasons to reevaluate those distress hospitals when they face higher

litigation risks after Sarbanes-Oxley. Smith (2005) also point out that the increased governmental scrutiny within the healthcare sector warrants management's attentions. As we documented earlier that financial distress for-profit healthcare organizations have more conservative financial reporting in 2003, not-for-profit healthcare organizations are expected to face a tougher financial reporting environment in the post- Sarbanes-Oxley period.

V. Conclusions and Extensions

1. Conclusions

The fairness of external financial reporting and internal control effectiveness has long been the major concern of the public investors. Defond and Francis (2005) mention that Sarbanes-Oxley Act mandates auditing from a self-regulated industry overseen by Securities Exchange Commission (SEC) to an industry controlled by a quasi-governmental agency, the Public Company Accounting Oversight Board (PCAOB). The institutional changes improve audit quality, internal control and corporate governance. Since audit committee financial experts have the profession of understanding of internal controls and procedures for financial reporting, we can

expect that the financial reporting of for-profit and not-for-profit healthcare organizations will have different faces in the post- Sarbanes-Oxley period.

In this study, we first test the financial reporting conservatism of for-profit healthcare organizations. The empirical results show that for-profit healthcare firms have over-aggressive financial reporting in 2000. However, financial distress companies are not so aggressive since β_1 is no longer negatively significant anymore in 2003. The results document the more conservative financial reporting condition after Sarbanes-Oxley.

On the other hand, we provide a summary of the related studies about not-for-profit healthcare financial reporting. Those studies show that financial ratios, market competition are important indicators of not-for-profit hospital closure. The increased governmental scrutiny within the healthcare sector provide insights that not-for-profit healthcare organizations are expected to have more conservative financial reporting in the post- Sarbanes-Oxley period.

2. Future Research Avenue

Few studies provide the empirical tests to compare the performance between for-profit and not-for-profit healthcare organizations. Further research could design

suitable surrogates as performance measurements, and explores the performance improvement of financial distress healthcare organizations after the enactment of Sarbanes-Oxley Act.

References

Attribution theory (http://www.webmail.fiu.edu/agent/mobmain?mobmain=1)

Barniv, K. Danvers, Joanne H. Ran. An Empirical Examination of Tax Payments Reported by Nonprofit Hospitals. *Working Paper*.

Bazzoli, Gloria, Andes, Steven. Consequences of hospital financial distress. *Hospital & Health Services Administration*. Winter 1995. Vol. 40, Iss. 4; p. 472 (24 pages)

Ely, K, Waymire, G 1999. Intangible asset and equity valuation in the pre-SEC era. *Unpublish Working Paper. University of Iowa*.

Gulley O David, Santerre Rexford E. The effect of tax exemption on the market share of nonprofit hospitals. *National Tax Journal* (1986-1998). Washington: Dec 1993. Vol. 46, Iss. 4; p. 477 (10 pages)

Holthausen R W., Watts R L. The relevance of the value-relevance literature for financial accounting standard setting. *Journal of Accounting and Economics 31* (2001) 3-75.

Reilly James J. Sarbanes-Oxley and Social Clubs and Other Tax-Exempt Organizations. *The CPA Journal*. New York: Mar 2005. Vol. 75, Iss. 3; p. 12 (2 pages)

O'Neil Patricia S, Cutting Thomas C. Bondholder disclosure and Sarbanes-Oxley: how one medical center aligned best practices. *Healthcare Financial Management*. Westchester: Aug 2005. Vol. 59, Iss. 8; p. 68 (5 pages)

Smith Pamela C. The Need for Strategic Tax Planning Among Nonprofit Hospitals. *Journal of Health Care Finance*. New York: Summer 2005. Vol. 31, Iss. 4; p. 31 (9 pages)

Wertheim, Paul, Lynn, Monty L. Development of a prediction model for hospital closure using financial accounting data. *Decision Sciences*. Atlanta: May/Jun 1993. Vol. 24, Iss. 3; p. 529 (18 pages)

Yetman Robert J. and Yetman Michelle. The Effects of Governance on the Financial Reporting Quality of Nonprofit Organizations. University of California, Davis - Graduate School of Management and University of California, Davis - Graduate School of Management. *Working Paper.*

Table 1 : Sample Selection

	2003	2000
Compustat initial	367	367
Less: Variable data missing	-272	-255
Sample	95	112
FD Sample	72	72
NFD Sample	23	40

Table 2 : Descriptive Statistics

2000		EPSDP	DR	R	DRR
N		112	112	112	112
Mean		-0.45	0.48	1.18	-0.26
Median		0.02	0.00	0.02	0.00
Std. Deviation		2.92	0.50	6.30	0.33
Percentiles	25	-0.20	0.00	-0.57	-0.57
	50	0.02	0.00	0.02	0.00
	75	0.10	1.00	1.06	0.00

2003		EPSDP	DR	R	DRR
N		95	95	95	95
Mean		-0.27	0.24	1.51	-0.07
Median		0.06	0.00	0.37	0.00
Std. Deviation		1.48	0.43	4.66	0.16
Percentiles	25	-0.11	0.00	0.00	0.00
	50	0.06	0.00	0.37	0.00
	75	0.09	0.00	1.21	0.00

where:

$EPSDP = X_t / P_{t-1}$;

X_t = the firm earnings or operating earnings per share for year t;

P_{t-1} = the price at the beginning of year t;

$DR_t = 1$ if $R_t < 0$, else 0;

R_t = the rate of return on the firm' s stock for year t;

Table 3 : OLS regression results : FD Sample

2000

Dependent Variable: EPSDP

	Coefficients	t	Sig.	VIF
(Constant)	-0.01	-0.02	0.98	
DR	-3.40	-2.47	0.02	2.92
R	0.17	2.25	0.03	1.11
DR*R	-3.25	-1.74	0.09	2.84
Adj R^2	0.14			
F	4.87		0.00	
N	72			

2003

Dependent Variable: EPSDP

	Coefficients	t	Sig.	VIF
(Constant)	-0.15	-0.65	0.52	
DR	0.06	0.09	0.93	2.60
R	-0.14	-3.79	0.00	1.05
DR*R	0.48	0.28	0.78	2.57
Adj R^2	0.14			
F	4.94		0.00	
N	72			

where:

$EPSDP = X_t / P_{t-1}$;

X_t = the firm earnings or operating earnings per share for year t;

P_{t-1} = the price at the beginning of year t;

$DR_t = 1$ if $R_t < 0$, else 0;

R_t = the rate of return on the firm s stock for year t;