

# Information Content Change under SFAS No. 131's Interim Segment Reporting Requirements

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**Abstract:** This study empirically investigates the effect of implementation of SFAS No. 131 on companies' information environments by assessing the effect of interim period financial reports. Especially, using Beaver's information content measures, I investigate the market's reaction to interim period financial reporting under SFAS No. 131. The empirical results of the information content test show that the adoption of SFAS No. 131 does not affect the market's reaction. For the price test, I find no difference in the reaction to the interim financial statement filing for both voluntary and non-voluntary disclosers. This result gives evidence that the information content of the new requirements of interim financial reporting is not significantly different from that under the previous requirements.

# 1. Introduction

I n this study, I investigate the effect of implementation of SFAS No. 131 on companies' information environments.<sup>22</sup> Specifically, using Beaver's information content measures, I study the market's reaction to interim financial statements before and after adoption of SFAS No. 131.

<sup>&</sup>lt;sup>22</sup> SFAS No. 131 also changed the way companies defined segments, which could affect companies' information environments (Berger and Hann 2003; Botosan and Harris 2005; Ettredge et al. 2005). In this study, I examine the effect of the disclosure frequency (annual versus quarterly segment reporting) change, which is required by interim segment reporting requirements under SFAS No. 131. I examine the sensitivity of results to changes in reported segment as part of the analysis reported below. The results from these sensitivity tests result in similar references.

The Financial Accounting Standard Board (FASB) issued SFAS No. 131, Disclosures about Segments of an Enterprise and Related Information, effective for all fiscal years commencing after December 15th 1997. Under SFAS No. 131, firms are required to disclose segment information for interim periods (quarterly segment reporting) to shareholders. This provision was cited as one of the most important improvements needed by the AICPA Special Committee on Financial Reporting (SFAS No. 131, ¶ 50). Financial statement users contended that, to be timely, segment information is needed more often than annually and that the difficulties of preparing it on an interim basis could be overcome (SFAS No. 131, ¶ 98). In its 1993 position paper, the Association for Investment Management and Research (AIMR) emphasized that "segment data is vital, essential, fundamental, indispensable, and integral to the investment analysis process" and "without desegregation, there is no sensible way to predict the overall amounts, timing, or risks of a complete enterprise's future cash flows. There is little dispute over the analytical usefulness of disaggregated financial data."

A commitment to increased levels of disclosure reduces the possibility of information asymmetries arising either between the firm and its shareholders or among potential buyers and sellers of firm shares. Disclosure of segment information for interim periods requirement under SFAS No. 131 could reduce information asymmetry between management and investors. However, as reported by Botosan and Harris (2000), if many multi-segment firms consistently have disclosed their interim period information before adopting of SFAS No. 131, the new requirement's effect may be limited and the effect will possibly differ based on whether or not the firm previously provided segment information.

To test whether the release of SEC mandated interim financial reports has different information content from that under pre SFAS No. 131 requirements, the difference in price variability surrounding the release of quarterly reports (10-Qs) is examined using the price reaction (U-Statistic). This metric is developed by Beaver (1968) and revised by others. The assumption underlying these metrics is that if an information release (such as earnings) has information content, then new information will induce changes in price from which investors trade.

For these tests, I hand-collect segment disclosure information from firms' quarterly reports. Following Botosan and Harris (2000), if a firm reported sales and/or operating profits by business segment in its 10-Qs in the pre-SFAS No. 131 period, it is classified as a voluntary segment discloser (hereafter, a voluntary discloser). If the firm provided no business segment data in its 10-Qs during the

same time period, it is classified as a nonvoluntary segment discloser (hereafter, nonvoluntary discloser).

The empirical results of the information content test shows that the adoption of SFAS No. 131 doesn't affect the investor's price reaction. The price reaction test shows that the price reaction for voluntary disclosers increases and that for nonvoluntary decreases. However, for both before and after the adoption, there is no difference in the reaction to the interim financial statement filing for both disclosers. This result gives evidence that the information content of the new requirements of interim financial reporting is not significantly different from that under the previous requirements.

This study contributes to the literature on disclosure. I empirically investigate the market reaction to SFAS No. 131 interim period financial reports. My study shows that the adoption of SFAS No. 131 does not significantly affect investors' price reaction. The results reported here indicate that SFAS No. 131 interim period financial reports are not accompanied by significant market reaction, from which the inference may be drawn that the content of the newly required interim financial statements does not significantly differ from that the under previous requirements.

The remainder of this chapter is organized as follows. Section 2 describes data and sample selection. Section 3 provides the empirical analysis and results. Section 4 offers some concluding comments.

## 2. Data and Sample Selection

Segment data are obtained from the 2003 Compustat Industry Segment database. Following previous research, the sample is restricted to those firms with data on Compustat's Industry Segment (CIS) file (active and research) that have consolidated sales of at least \$20 million and industry segment data available, and have no reported segments in the financial services industry (Standard Industrial Classification (SIC) 6000 to 6999) or in the regulated utilities industry (SIC 4900 to 4999) (also excluding ADRs). From the CIS file, I obtain data on segment information, the number of reported segments for each firm, and SIC codes assigned to each segment.

Regarding voluntarily disclosing segment data in firms' quarterly reports, I examine 10-Qs on Lexis/Nexis. Following Botosan and Harris (2000), if a firm reported sales and/or operating profits by business segment in the pre-SFAS

No.131 period, it is classified as a voluntary discloser. If a firm provided no business segment data in its 10-Qs, it is classified as a nondiscloser.

# of Segment	Frequency	Percent	Non-voluntary	% of non-voluntary discloser	
	( <b>A</b> )	( <b>A</b> / <b>B</b> )	discloser		
			( <b>C</b> )	(C/A)	
2	391	60.25%	53	13.55%	
3	172	26.50%	14	8.14%	
4	57	8.78%	2	3.51%	
5	20	3.08%	2	10.00%	
6	7	1.08%	0	0.00%	
7	1	0.15%	0	0.00%	
8	1	0.15%	1	100.00%	
Total	649 (B)		72	11.09%	

Table 1.Segment Disclosure Composition (Fiscal year 1997)

Voluntary: voluntary interim segment disclosers.

Non-voluntary: interim segment non-disclosers.

Firm-level accounting data are collected from the 2003 Compustat Annual Industrial, Research, and Full Coverage files. Stock returns are collected from the 2003 Center for Research in Security Prices (CRSP) database. To avoid the effects of extreme observations, all data are winsorized at the 1 and 99 percent levels. Table 1 describes the composition of segment disclosure based on year 1997 Compustat and 10-Qs.

Descriptive statistics for voluntary and non-voluntary disclosers are provided in Table 2. Voluntary disclosers have a larger market value of firm equity (p-value = 0.0178), firm asset size (p-value <0.0001), sales (p-value = 0.0013), and a higher stock price (p-value = 0.0686). In addition, it shows that voluntary disclosers have more segments (p-value = 0.0136).<sup>23</sup>

<sup>&</sup>lt;sup>23</sup> All results are based on Wilcoxon Rank Sum test for medians. The t-test results are identical.

		Voluntary		Ν	Vonvoluntai	у		
		Sample			Sample			Wilcoxon
								Rank Sum
Variable	Ν	Mean	Median	Ν	Mean	Median	t-statistics	Test
VOLUME	577	256071	54900	72	163510	33056	-0.83	-0.52
MVAL	577	3672	639	72	2770	353	-0.74	-2.40**
ASSET	577	3010	788	72	1469	338	-2.21**	-4.04***
SALES	577	3121	874	72	1745	452	-2.17**	-3.22***
PRICE	577	30.88	26.75	72	25.99	21.31	-1.78*	-1.85*
BM	539	0.4310	0.3787	70	0.4826	0.4127	1.18	0.54
BETA	471	0.8832	0.8593	60	0.8752	0.7827	-0.12	-0.51
EPS	552	-2.9169	1.3250	70	1.1929	1.3100	0.92	-0.65
SEG. #	577	2.6153	2.0000	72	2.4167	2.0000	-1.69*	-2.47**

# Table 2Sample Descriptive Statistics (Fiscal year 1997)

\*\*\*/\*\*/\* Significant at 1%/5%/10% level or better using a t-statistics (Wilcox Rank Sum test) for means (medians), two-tailed.

VOLUME: the daily turnover median.

MVAL: the market value of firm's equity at the fiscal year-end (millions).

ASSET: the firm asset size at the fiscal-year end (millions).

SALES: the firm sales at the fiscal-year end (millions).

PRICE: the stock price at the fiscal-year end.

BM: book to market ratio at the fiscal-year end.

BETA: the beta estimate via the market model based on a minimum 30 daily return

observations over twelve-month period.

EPS: EPS (Basic) - exclude extra items (dollar and cent).

SEG. #: the number of segments.

Voluntary: voluntary interim segment disclosers.

Non-voluntary: interim segment non-disclosers.

# 3. Empirical Analysis and Results

SFAS No. 131, Disclosures about Segments of an Enterprise and Related Information, is effective for all fiscal years commencing after December  $15^{th}$ , 1997. Under SFAS No. 131, firms are required to disclose segment information for interim periods to shareholders, which was listed as among the most important improvements needed by the AICPA Special Committee on Financial Reporting. Financial statement users also contended that segment information is needed more often than annually (SFAS 131, ¶ 98).

To test whether the release of SEC mandated interim financial reports has different information content from that of the pre-SFAS No. 131, the difference in price variability surrounding the release of quarterly reports (10-Qs) is examined using the price reaction (U-Statistic). This metric is developed by Beaver (1968)

and revised by others. The assumption underlying these metrics is that if information release has information content, then new information will induce new price equilibrium and/or trading.

Many studies have used these statistics to study value relevance (the usefulness and timeliness) of accounting information. Pattel (1976) studies information content of management forecasts based on a variant of Beaver's U-Statistic and shows that these disclosures are accompanied by price adjustments. Atiase and Bamber (1994) find that the magnitude of trading volume reaction is an increasing function of both the magnitude of the associated price reaction and the level of pre-disclosure information asymmetry.

I use a three-day window centered on the date of interim financial statement filing to capture the price reaction in response to the filing.<sup>24</sup> To estimate firm-specific parameters of return measure, I use one year of data ending on the month prior to the filing.

The U-Statistic compares a firm's unexpected returns during an event period to the estimated variance of firm's unexpected returns over a comparable non-event window. Following Kohlbeck and Magilke (2003), the unexpected return is measured using the market model (Sharpe 1964):

$$u_{i,t^*} = R_{i,t} - \widetilde{\alpha}_i - \widetilde{\beta}_i R_{mt^*}$$
(1)

where:

 $t^* =$  the three-day event window;

 $R_i$  = the natural log of the firm's daily return;

 $R_m$  = the natural log of the market daily return;

 $\tilde{\alpha}_i$  and  $\tilde{\beta}_i$  = firm specific estimates from the market model.

<sup>&</sup>lt;sup>24</sup> I use a three-day window (centered on the filing day) sum as U-Statistics (Usum3). I also use 1) the maximum value of those measures in the three-day window (Umax3), the sum and the maximum value of those measures in the five-day window (Umax5 and Usum5), and 3) the sum and the maximum value of those measures in the three-day window (two day prior to the filing day and the filing day, Umax2, Usum2). These results are presented in an appendix and are very similar.

Then,

$$U_{i,t^*} = \frac{u_{i,t^*}^2}{C_{it}S_i^2} * \frac{T_i - 4}{T_i - 2}$$
(2)

where:

 $S_i^2$  = the variance of the residuals during the estimation period for firm i;

 $C_{it}$  = the increase in variance due to prediction outside the estimation

period;

 $T_i$  = the number of days used in the estimation period for firm i.

A U-statistic ( $U_{it}^*$ ) close to one indicates no significant change in price variability during the three-day event window, and a U-statistic greater (less) than one implies an increase (decrease) in price variability during three-day event window around the interim financial statement filing (See Kohlbeck and Magilke (2003) for details).

Table 3 (and Figure I and II) presents the price reaction test of interim financial reports. For the first through third quarter combined period, the Wilcoxon Rank Sum Test in Panel A shows that the U-statistic for voluntary disclosers increases from pre- to post-SFAS No. 131.<sup>25</sup> This result is reversed for nonvoluntary disclosers. However, neither the increase nor decrease is statistically significant. In Panel B, I test whether the information content difference between voluntary and nonvoluntary disclosers changes with the adoption of SFAS No. 131. Before the adoption, the price reaction to the financial statement filing of nonvoluntary disclosers is bigger than that to voluntary disclosers' and after the adoption, the reaction to voluntary disclosers' is bigger. However, the difference between voluntary and nonvoluntary disclosers is not significantly different both before and after the adoption of SFAS N0.131 (for pre-SFAS No. 131, p-value = 0.3199 and for post-SFAS No. 131, p-value =0.8975). In Panel C, I investigate the effect of the adoption of SFAS No. 131 on each quarter. For nonvoluntary disclosers, the reactions to the first and second quarterly statement filing decrease and the reaction to the third increases. But, the impact of the adoption is immaterial and insignificant for each quarter.

<sup>&</sup>lt;sup>25</sup> Due to the relatively small sample size of nonvoluntary disclosers, all remaining test results are based on non-parametric Wilcoxon Rank Sum test. However, parametric t-test results are very similar.

However, for voluntary disclosers, I find that the U-statistic increases significantly in the second quarter (p-value <0.001) and decreases significantly in the third quarter (p-value=0.0132). In Panel D, I test whether the information content difference between voluntary and nonvoluntary disclosers changes with the adoption of SFAS No. 131 for each quarter. Before the adoption, the reaction to nonvoluntary disclosers' interim financial reports is always bigger and there is no statistical difference between voluntary and nonvoluntary disclosers. After the adoption of SFAS 131, however, the U-statistic for voluntary disclosers in the second quarter is significantly bigger than that of nonvoluntary disclosers (p-value = 0.0290). But, in the third quarter the U-statistic for nonvoluntary is significantly bigger than that of voluntary disclosers (p-value = 0.0271).

Taken together, the price reaction test shows that the price reaction for voluntary disclosers increases and that for nonvoluntary decreases. However, for both before and after the adoption, there is no difference in the reaction to the interim financial statement filing for both disclosers.

	PRE S	FAS 131	POST SFAS 131			
<u>Voluntary</u>						
(N=1255)	Mean	Median	Mean	Medain	t-statistics	Wilcoxon Rank Sum Test
Umax5	2.7868	1.5903	2.9970	1.6675	1.35	1.0252
Usum5	5.2474	3.2661	5.5759	3.3278	1.30	0.7975
Umax3	1.8346	0.9399	1.9699	1.0121	1.28	1.1406
Usum3	3.0271	1.5995	3.2335	1.7433	1.27	1.0066
Umax2	1.7479	0.9704	1.8030	0.9556	0.17	0.6274
Usum2	3.1449	1.8758	3.2690	1.8208	0.78	-0.6779
<u>Nonvoluntary</u>						
(N=132)	Mean	Median	Mean	Medain	t-statistics	Wilcoxon Rank Sum Tes
Umax5	3.3988	1.9942	3.2989	1.7643	-0.17	-0.4780
Usum5	5.9464	3.8272	6.0569	3.2370	0.12	-0.6086
Umax3	1.9423	1.1388	2.0356	1.0215	0.27	-0.3087
Usum3	3.1645	2.0394	3.3422	1.6363	0.33	-0.5570
Umax2	1.9797	1.1506	2.0359	0.9481	0.17	-0.3974
Usum2	3.5125	2.3277	3.6219	1.7229	0.20	-0.5933

# Table 3.

#### **Price Reaction Analysis**

Panel A: Voluntary vs. Nonvoluntary for the first through third quarter combined

\*\*\*/\*\*/\* Significant at 1%/5%/10% level or better using a t-statistics (Wilcox Rank Sum test) for means (medians), two tailed.

PRE SFAS131: year 1997.

POST SFAS131: year 1998.

Umax: Maximum value of U-Statistics in an event window

(a detailed explanation in the text).

Usum: Sum value of U-Statistics in an event window (a detailed explanation in the text).

Voluntary: voluntary interim segment disclosers.

Nonvoluntary: interim segment nondisclosers.

# Table 3 (Continued 1)

Panel B: Difference between voluntary and nonvoluntary disclosers before and after SFAS No. 131 for the first through third quarter combined

	t-statistics	Wilcoxon Rank Sum Test
Umax5		
PRE SFAS 131	1.43	1.8001*
POST SFAS 131	0.69	0.7683
<u>Usum5</u>		
PRE SFAS 131	1.14	1.6545*
POST SFAS 131	0.69	-0.3900
Umax3		
PRE SFAS 131	0.47	0.9581
POST SFAS 131	0.23	0.1121
<u>Usum3</u>		
PRE SFAS 131	0.39	0.9947
POST SFAS 131	0.24	-0.1288
<u>Umax2</u>		
PRE SFAS 131	1.08	1.7900*
POST SFAS 131	0.94	-0.7235
<u>Usum2</u>		
PRE SFAS 131	1.02	1.8318*
POST SFAS 131	0.84	-0.5274

PERIOD	PRE S	FAS 131	POST SF	AS 131		
1st quarter)						
<u>Voluntary</u>						
(N=431)	Mean	<u>Median</u>	Mean	Median	t-statistics	Wilcoxon Rank Sum Test
Umax5	2.7782	1.6564	2.6011	1.3544	-0.72	-2.1532**
Usum5	5.1668	3.2656	4.7725	2.7982	-1.01	-1.9858*
Umax3	1.7953	0.9295	1.7576	0.9057	-0.23	-0.9176
Usum3	2.9698	1.5648	2.8690	1.5817	-0.39	0.7841
Umax2	1.7643	1.0054	1.5377	0.8199	-1.49	-2.2193**
Usum2	3.1799	1.8970	2.7606	1.5242	-1.65*	-2.2442**
Nonvoluntary						
(N=46)	Mean	Median	Mean	Median	t-statistics	Wilcoxon Rank Sum Test
Umax5	3.4213	2.1662	2.8387	1.6816	-0.61	-0.8551
Usum5	5.9766	4.2810	5.3773	2.7363	-0.43	-0.7223
Umax3	1.8247	0.9901	1.4114	1.1190	-0.94	0.4551
Usum3	3.0674	2.5269	2.4750	1.9667	-0.83	-0.5544
Umax2	2.1922	1.3328	1.9999	0.9642	-0.33	-0.4139
	2.1922 3.9476		3.5048	1.7784	-0.33	-0.4139
Usum2	5.9470	2.6281	5.5048	1.//84	-0.43	-0.0399
2nd quarter) Voluntary						
(N=451)	Mean	Median	Mean	Median	t-statistics	Wilcoxon Rank Sum Test
					<u>4.58***</u>	5.4374***
Umax5	2.4724	1.3580	3.7485	2.2142		
Usum5	4.7058	2.8417	6.9758	4.3208	5.00***	5.3385***
Umax3	1.6341	0.8259	2.4171	1.2089	4.28***	4.9180***
Usum3	2.7125	1.4473	3.9265	2.1945	4.30***	4.6781***
Umax2	1.5332	0.8799	2.2501	1.2759	4.40***	5.3244***
Usum2	2.7860	1.6445	4.0901	2.4762	4.63***	5.3042***
Nonvoluntary	м			N 11		
(N=46)	Mean	Median	Mean	Median	t-statistics	Wilcoxon Rank Sum Test
Umax5	3.7149	2.2205	3.4127	1.4813	-0.27	-0.1913
Usum5	6.3155	4.0569	6.0409	3.1401	-0.17	-0.4022
Umax3	2.0088	1.3404	2.2251	0.7590	0.32	-0.6755
Usum3	3.2599	2.0394	3.4342	1.2117	0.17	-0.9566
Umax2	2.0697	1.3087	2.1306	0.9308	0.10	-0.1093
Usum2	3.5928	2.5216	3.6544	1.5543	0.06	-0.3865
3rd quarter)						
Voluntary				N 6 11		
(N=373)	Mean	Median	Mean	Median	t-statistics	Wilcoxon Rank Sum Test
Umax5	3.1769	1.7358	2.5459	1.4209	-2.27**	-1.8769*
Usum5	5.9953	3.7248	4.8115	3.0271	-2.60***	2.4476**
Umax3	2.1224	1.0965	1.6744	0.8981	-2.28**	-2.4082**
Usum3	3.4737	1.9097	2.8166	1.4896	-2.19**	-2.4788**
Umax2	1.9884	1.0653	1.5690	0.8905	-2.45**	-2.3905**
Usum2	3.5382	2.0855	2.8636	1.6354	-2.36**	-2.2449**
Nonvoluntary	м			M P		
(N=40)	Mean	Median	Mean	Median	t-statistics	Wilcoxon Rank Sum Test
Umax5	3.0096	1.6658	3.6974	2.1151	0.68	0.7073
Usum5	5.4870	3.4751	6.8567	3.5886	0.85	0.3224
Umax3	2.0012	1.0029	2.5357	1.3465	0.67	1.0344
Usum3	3.1665	1.9392	4.2336	2.3705	0.97	0.9382
Umax2	1.6320	0.9056	1.9684	0.9837	0.74	0.0722
Usum2	2.9198	1.7600	3.7191	1.8941	0.99	0.0914

**Table 3 (Continued 2)**Panel C: Voluntary vs. Nonvoluntary for each quarter

# Table 3 (Continued 3)

Panel D: Difference between voluntary and nonvoluntary disclosers before and after SFAS No. 131 for each quarter

PERIOD		t-statistics	Wilcoxon Rank Sum Test
1st quarter)			
	Umax5		
	PRE SFAS 131	1.16	1.1506
	POST SFAS 131	0.40	09835
	<u>Usum5</u>		
	PRE SFAS 131	0.91	1.1495
	POST SFAS 131	0.66	-0.8310
	<u>Umax3</u>		
	PRE SFAS 131	0.08	0.2380
	POST SFAS 131	-1.42	0.1260
	Usum3		
	PRE SFAS 131	0.17	0.4445
	POST SFAS 131	-0.89	0.1919
	Umax2		
	PRE SFAS 131	0.16	1.2603
	POST SFAS 131	1.14	1.4347
	Usum2		
	PRE SFAS 131	1.23	1.3959
	POST SFAS 131	1.11	1.537
2nd quarter)	10010110101	1.11	1.557
2nd quarter)	Umax5		
	PRE SFAS 131	1.50	1.5029
	POST SFAS 131	-0.45	-1.1613
	Usum5	0110	111010
	PRE SFAS 131	1.39	1.5902
	POST SFAS 131	-0.77	-1.4824
	Umax3	0177	111021
	PRE SFAS 131	1.03	1.2421
	POST SFAS 131	-0.32	-2.0574**
	Usum3		
	PRE SFAS 131	1.03	1.2938
	POST SFAS 131	-0.55	-2.1829**
	Umax2		
	PRE SFAS 131	1.32	1.6074
	POST SFAS 131	-0.28	-1.0400
	Usum2		
	PRE SFAS 131	1.42	1.7648*
	POST SFAS 131	-0.59	-1.3472
3rd quarter)			
1 /	Umax5		
	PRE SFAS 131	-0.28	-0.2195
	POST SFAS 131	1.33	1.7527*
	Usum5		
	PRE SFAS 131	-0.55	-0.0760
	POST SFAS 131	1.46	1.4482
	Umax3		
	PRE SFAS 131	-0.25	-0.0335
	POST SFAS 131	1.46	2.5807***
	Usum3		
	PRE SFAS 131	-0.42	0.1366
	POST SFAS 131	1.48	2.2099**
	Umax2		
	PRE SFAS 131	-1.31	-0.023
	POST SFAS 131	0.98	1.0216
	Usum2		
	PRE SFAS 131	-1.34	-0.0662
	POST SFAS 131	1.18	1.0029

#### **Figure I** Price Reaction (for quarters combined)



Usum: Sum value of U-Statistics in event window (a detailed explanation in the text). BEFORE: pre-SFAS No. 131 (Year 1997).

AFTER: post-SFAS No. 131 (Year 1998).

VOL5: voluntary interim segment disclosers in a five-day window.

NON-VOL5: nonvoluntary interim segment disclosers in a five-day window.

VOL3: voluntary interim segment disclosers in a three-day window.

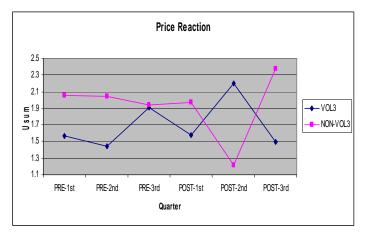
NON-VOL3: nonvoluntary interim segment disclosers in a three-day window.

VOL2: voluntary interim segment disclosers in a two-day prior to and the filing day window.

NON-VOL2: nonvoluntary interim segment disclosers in a two-day prior to and the filing day window.

## **Figure II.**

Price Reaction (for each quarter)



Usum: Sum value of U-Statistics in an event window (a detailed explanation in the text). PRE-1st: the first quarter of year 1997.

PRE-2nd: the second quarter of year 1997.

PRE-3rd: the third quarter of year 1997.

POST-1st: the first quarter of year 1998.

POST-2nd: the second quarter of year 1998.

POST-3rd: the third quarter of year 1998.

VOL3: voluntary interim segment disclosers in a three-day window.

NON-VOL3: nonvoluntary interim segment disclosers in a three-day window.

# 4. Conclusions

I investigate the effect of implementation of SFAS No. 131 on companies' information environments by assessing the effect of interim period financial reports. Especially, using Beaver's information content measures, I investigate the market's reaction to interim period financial reporting under SFAS No. 131. The empirical results of the information content test show that the adoption of SFAS No. 131 does not affect the market's reaction. For the price reaction test, I find no difference in the reaction to the interim financial statement filing for both voluntary and non-voluntary disclosers. Unlike financial statement users' contention, this result gives evidence that the information content of the new requirements of interim financial reporting is not significantly different from that under the previous requirements.

With the relatively smaller sample size of the non-discloser sample, the power of the test results is very relatively low so that I cannot conclusively argue from these findings that the adoption of the quarterly segment information disclosure does not communicate relevant information to investors. And maybe the market needs some time to digest the new information from the mandated requirements of interim segment reporting and reflect its understanding. To provide more unambiguous conclusions, more powerful tests are required.

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