HEADQUARTER RELOCATION
FINANCIAL PERFORMANCE AND STOCK MARKET REACTI

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Abstract

The paper investigatesreaction of the stock market (NASDAQ and NYSE) to 97 announcements of corporate headquarters relocations in the January 1990-August 2008 period. The results indicate thatthe stock market has no initial reaction to those relocating decisions as a whole, which contradicts with earlier findings. Furthermore, the reaction does not differ for the manufacturing, services, and wholesale/retail sectors of the economy. However, the empirical evidences show that the past financial performance of a corporationinfluenced its decision to relocate headquarter

Keyword: *headquarter relocation, financial performance*

1. Introduction

The relationshipamong strategic decisions of a firm, its value, and its performance has been extensively studied. Of those strategic decisions, both decisions that related to tangible and intangible value of firms are examined. On the tangible aspect, McConnell and Nantell (1985) examinethe relationship between joint-ventureformation and announcement- day stockprices. Blackwell, Marr and Spivey (1990) explorethe connection between plant closing decisions and the market value of firm. Jarrell, Lehn and Marr(1985) study the relationshipbetween research and development (R&D) projectsand stock prices. McConnell andMuscarella (1985) analyze the link between capital expenditure decisions and market value of the firm. On the intangible aspect, the effect of corporate name changes

is investigated by Bosch and Hirschey(1989). Also,Kadapakkam and Misra (2007) consider the impact of the change in ticker symbol to stock price and trading volume.

In addition to these analyses, there is a substantial bodyof literature on the valuation

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effect of a firm's decision to relocate its headquarter. What distinguishes the decision to relocate headquarter from other strategic decisions made by a company is the fact that headquarter relocation combines both tangible and intangible dimensions of that company. Because of the complexity of headquarter relocation decision and its implication to a company's future performance, managers have to weigh the costs and benefits of this strategic decision. The costs of headquarter relocation include the moving expenses, the costs of disruption operation, the costs of the losingcurrent employees who are not willing to move, and the costs of new employee training; while the potential benefits of headquarter relocation include lower labor costs, lower rental costs, tax reduction, and geographic location advantage.

In general, managers will make the decision in order to maximize the shareholders' wealth. Sometimes, managers are motivated by their personal interests. In these situations, the decision of headquarter relocation would have a negative impact to the company's shareholders. Alli, Ramirez, and Yung(1991); Chan, Gau, and Wang(1995); Ghosh, Rodriguez, and Sirmans(1995) suggest that relocation can have a direct impact on shareholder wealth overthe short term.The previous researches have examined stock market's reaction to the shareholders' wealth across different firms with different reasons for relocation. In those studies, most attentions are paid to the stated reason for relocation without providing more characteristics of the firm undergoing relocation. For example, the business sector of the relocating firm, which is an important factor to determine the stock market's reaction to that firm, is not taken into consideration. It can be argued that the investor's reaction to a firm's announcement of headquarter relocation will vary with respect to the sector of the economy that the firm belongs to. Knoben and Oerlemans (2005) indicate that the propensity to relocate and the relocation coefficient of different sectors in the economy are different.They realize that the moving behaviors of wholesale/retail and services sectors vary in number of firms and distance to move. Furthermore, Brouwer et al (2002) claim that sector is an important determinant of headquarter moving and is one of the most important internal factors that affect firms' decision to relocate. For example, services sector and wholesale/retail sector are primarily market oriented and need proximity to customers, in which case the geographic advantage reason would play a more important role to firms in the services and wholesale/retail sectors than to firms in manufacturing sector.

This paper studies the effect of headquarter relocation of a company to stockholders wealth and also explores the impact of headquarter relocation to stock price. It thus attempts to fill the gap in the exiting literature on shareholders' reaction to headquarter relocation with different business sectors. The paper is organized as follow: part II demonstrates the existing literature body, part III provides data description for the sample and subsamples, part IV shows the research methodology, hypotheses and results, and part V summaries and concludes the paper.

2. Literature Review

The relocation of corporation isinvestigated by many studies. As early as 1973, Semple established a notion with the idea that the destination of U.S. Corporationwas migrating

away from the Northeast and Midwest to the South and West. In other words, these corporations tried to avoid the high cost areas to move to the lower cost and growing areas. This notion is verified by Semple et al. (1985), Holloway and Wheeler (1991).The locations of corporate headquarter are also examined by Shilton and Stanley (1999). Using the data of 5,189 corporate headquarters, they find that 40 percent of all corporate headquarter are located in only 20 counties all over United States. More recently, Diacon and Klier (2003) observe the location trend of headquarter of large public companies from 1990 to 2000. They discover that the headquarters continue to be attracted by large metropolitan areas.

The relationship between joint-ventureformation and announcement-day stockpricesis examined by McConnell and Nantell (1985). An initial sample of joint ventures involving U.S. corporations over the period beginning January 1972 and ending December 1979is used to conduct the investigation. Several results are found, including the significant wealth gains from joint ventures;smaller partner earns a larger excess rate of return while the dollar gains are more equally divided; and the gains, scaled by resources committed, yield "premiums" similar to those in mergers. McConnell and Muscarella (1985) analyze the link between capital expenditure decisions and market value of the firm. Their study examines stock prices 658 corporations around the dates on which they publicly announced their future capital expenditure plans. The result is that unanticipated increases in planned capital expenditures have a positive impact andunanticipated decreases have a negative impacton the value of the firm. By a sample of 286 announcements of plant closings appearing in the Wall Street Journal from 1980 to 1984, Blackwell at al. (1990) explore connection between plant closing decisions and market value of the firm. They come up with a result that the stock market has a negative reaction to plant-closing announcements and the firms announcing closings have lower earnings than the market or the industry medians.

Chan et al. (1995)evaluatehow the stock's market respondto business relocation announcements. With 447 relocation announcements, including corporate headquarters, subsidiary headquarters or unit offices, or plants relocation, they claim that the stock market response is not related directly to the type of investment or facility. However, the response is related to the motivation of relocation and the future prospects of the corporations. The result suggests that the stock market refers these announcements to future prospects of the corporations because it responds positively to relocation announcements that are motivated by business expansion or cost savings, but negatively to announcements that are motivated by capacity reduction or facilities consolidation. Manning et al. (1999) look at the factors that influence corporate location decisions and examine how they impact shareholder wealth. With the sample of 182 corporate facility relocations, the authors conclude that if the relocation decisions were made without the intention to increase shareholder value then the affect will be negative (at negative 0.23 percent during the 2 day period around the announcement date). Gregory et al. (2005) investigatethe impact of headquarters relocation on selected performance indicators. By investigating the sample that contains 167 corporation

headquarters relocation from 1993 to 1998, they claim a little evidence of improved operating performance after the relocation of corporation headquarters. They also test the impact of distance relocated to performance of the corporation and find that it has no significant impact.

Alli et al. (1991) study the reaction of stock market to the announcements of corporate headquarters relocations. Their sample consists of 69 NYSE/AMEX firms and 43 NASDAQ firms. They find that during the two day period around the headquarter relocation announcement the stock price of the firm increases by 1.29 percent. Furthermore, they discover that the abnormal returns of these corporations are positively related to the availability of labor and negatively correlated to the cost of living in the new location and the change in employment level. Ghosh et al. (1995) examine the influence to stock price of corporate headquarter relocation decisions, which vary by the motivation of moving. They assume that corporations relocate because of cost-motivated, agency-motivated, increase (or decrease) space needs reasons and note that some companies announce its relocation without any reason.Using a sample of 160 headquarter relocations from 1966 to 1992, the authors investigate the response of stock price to different announced rationales for headquarter relocation. In the two day period around the relocation announcements, there is a positive response if the reason was attributed to cost-motivation (at 1.26 percent). A negative respond is found if the reason was agency-motivation (at negative 1.29 percent) or no reason (at negative 1 percent). But the result is statistically insignificant for the whole sample. This empirical evidence is similar to the findings of Woolridge and Snow (1990), who argue that the announcements of strategic investment decisions suchas corporate headquarters relocations should not have anyeffect on stock prices. More recently, Cox and Schultz (2007) examine the initial stockholder wealth impact of firms announcing corporate headquarters relocation. They observe the effect of headquarter relocation to stock market based on the differences reason for corporations to relocate. A sampleof 37 firms that relocated from December 1994 to April 2005 is investigated. The authors find that the stock-market reaction is favorable for companies moving their head office, in general.Additionally, stockholders react most positively to the managerial interest reason for such a shift.Also, if the reason is cost/consolidation and to some extent even when no reason is given thenshareholders have a positively reaction to relocation announcements, with an increase in stock returns. However, whenspace reasons are given for headquarters relocation, the stock return is negative.

3. Data description

The data covers the period ranging from January 1990 to August 2008. Using Lexis-Nexis Academic database, announcements of headquarter relocation are collected for the considering period. For firms with multiple announcements, the earliest has been used. Lexis-Nexisdatabase has also been searched for any confounding corporate event (such as financial statements, change in management, stock repurchase etc.) Any firm that announced any coincide corporate event in the (-1, +1) window has been eliminated.The firms with more than 3 days of missing data for the period investigating and not listed on AMEX/

Table 1: Data description

The sample of ninety-seven headquarter relocation announcements is gather from the Lexis-Nexis database for the sample period from January 1990 to August 2008. Panel A shows the business description of firms in the sample. In the service sector, out of forty-one firms, there are thirty-nine firms in commercial service subsector and two firms in personal service subsector. In the manufacturing sector, out of forty-six firms, there are three firms in mining subsector. In the Wholesale/Retail sector, out of ten firms, there are four firms in retail subsector and six firms in wholesale subsector. Panel B shows the number of firms according to the different reasons to move. Panel C shows the integration of business description and reasons to move

Panel A: Business Description of Relocation Firms		
Sector	**Number of company**	**Percentage (%)**
Service	41	42.3
Manufacturing	46	47.4
Wholesale/Retail	10	10.3
Other	0	0
Total	97	100
Panel B: Reasons for Headquarter Relocation		
Reason to relocate	**Number of company**	**Percentage (%)**
Cost/Consolidation	36	37.1
Space expansion	21	21.6
Geographic	20	20.6
Managerial Interests	9	9.3
No Reason	11	11.3
Total	97	100

Panel C: ata integration						
	Cost/ Consolidation	Space	Geographic	Managerial Interest	No Reason	Total
Service	15	8	10	4	4	41
Manufacturing	15	12	8	4	7	46
Wholesale/Retail	6	1	2	1	0	10
Total	36	21	20	9	11	97

NYSE and NASDAQ have also been removed from the sample. After the screening process, the final sample consists of 94 U.S. publicly traded firms. Within the sample, there are three firms which relocated their headquarters twice in the period. Therefore, the number of sample announcements is 97.

For each firm, the announcement has been read carefully to find out the reason for relocation. The reasons have been classified into four categories: cost/consolidation, space expansion, geographic advantage, and managerial interests. Because some firms have not stated their reason for relocation,

they are considered as a group that do not explicit their reason.

Further, the firms have beenclassified into the following sectors: manufacturing sector (with SIC code ranges from 2000 to 3999), wholesale/retailsector (with SIC code ranges from 5000 to 5999), and servicessector (with SIC code ranges from 7000 to 8999).[1]

Table 1 provides some descriptive statistics of each category. In 97 headquarter relocation announcements, the firm management does not explicitly state the reason for relocation in 11 cases which is 11.3 percent of the sample. 58.7 percent of the sample fall into cost/ consolidation and space expansion categories. The remaining 30.2 percent are classified in geographic advantage and managerial interest categories.Finally, the sample consists of 47.2 percent of the firmsin manufacturing sector, 42.3 percent of the firms in services sector, and the remaining 10.3 percent in the wholesale and retail sector.

Methodology, Hypotheses, and Empirical Results

Themarket reaction to relocate decision with different reason(s) and different sector(s)

The methodology used to examine security returns is described in Brown and Warner (1980 and 1985). For each security j, the market model is used to calculate an abnormal return for day t, as follows

$$AR_{jt} = R_{jt} - \alpha_j - \beta_j R_{mt}$$

Where: R_{jt} is the rate of return on security *j* for day *t*

R_{mt} is the rate of return on the CRSP value-weighted index on day *t*

Coefficients α_j and β_j are OLS estimates of the intercept and slope, respectively, of the market model regression for the security *j*.

Given abnormal returns from the market model approach, the statistical significance of the event holding period returns is assessed for each firm. The 207-day estimation period is from 210 days before to 4 days before (or *t* = -210 to *t* = -4) the LexisNexis announcement at day *t* = 0. More formally, for a sample of N securities, the sample mean abnormal return on any given day *t* is:

$$\overline{AR_t} = \frac{1}{N}\sum_{j=1}^{N} AR_{jt}$$

To measure market model abnormal returns over a specific time interval, the sample mean abnormal returns are summed to derive the sample mean cumulative abnormal return:

$$\overline{CAR_t} = \sum_{t=T_1}^{T_2} \overline{AR_t}$$

Where: T_1 is the beginning date and $T_2$is the ending date of the period of 7 days from *t* = -3 to *t* = +3.

$$SAR_t = \frac{\overline{AR_t}}{S_{\overline{AR_t}}}$$

The test statistic for the significance of AR_t(standardized abnormal return) is calculated as:

Where $$S_{\overline{AR_t}} = \left[\sum_{t=-210}^{t=-4} \frac{(\overline{AR_t} - \overline{\overline{AR}})^2}{206}\right]^{0.5}$$

$$\overline{\overline{AR}} = \frac{1}{207}\sum_{t=-210}^{t=-4} \overline{AR_t}$$

[1] There are 92 firms fall into those three categories. However, there are two companies are mining firm. I add those companies to manufacturing sector.

Where: t = -210 to t = -4 is the 207-day estimation period.

The interval test statistic is assumed to be approximately normal distribution and can be written as:

$$\frac{\overline{CAR_t}}{SAR_t\sqrt{T_2 - T_1 + 1}}$$

Where: T_1 is the beginning date and $T_2$is the ending date of the period of 7 days from t = -3 to t = +3.

When a firm relocates its headquarters, it provides reason(s) for the relocation. The reasons are classified into the following categories:

Cost/consolidation. This category includes firms move to a new headquarter in order to reduce operating costs (which includes labor cost, rent cost, and taxes), to consolidate operation, or to increase production efficiency. This kind of announcements seems to have a neutral impact on stockholders' wealth.

*Space expansion.*This category includes firms that relocate to a new headquarter with the intention of expand production capacity or expand into a new market or product line. Such announcements seem to influence to stockholders' wealth in positive direction, in general.

*Geographic advantage.*This category consists of announcements that relocate to be closer to the market, main customers, material resources, or other production facilities. Depending on types of the relocate firms, the effect of these announcements will be different from neutral to positive.

*Managerial interest.*This category contains announcements of firms that change headquarter because of the management team's interest. In this category, the reason can be gathering senior management to one city, increase employees comfort and efficiency, etc. These announcements seem not to have a positive influence to stockholders' wealth.

No stated reason. This category includes firms that do not cite reasons for relocation. Nevertheless, the reason can be the purchase of a new property, the sale of existing headquarters, the end of current term, etc. These announcements appear not to have a positive impact to stockholders' wealth.

Hence, the market will review the relocation under several circumstances and tend to react differently to different reasons. The following hypotheses are developed:

Hypothesis 1: if the reason for a firm to relocate its headquarters is either cost/ consolidate, or space expansion, or geographic advantage; there is a positive effect on stockholder wealth.

Hypothesis 2: if the reason for a firm to relocate its headquarters is either managerial interest or no reason, there is a negative effect on stockholder wealth.

Table 2 shows the cumulative abnormal return for the periods (-1, +1), CAR(-1, 1), and (0, +1), CAR(0, 1), for the full sample and for different subsamples defined by the reason to move[2].

[2] Table 2 indicates that only 80 sampled announcements include in the event study. This is because of EVENTUS drops 17 announcements from initial sample.

Table 2: Cumulative abnormal return for different periods

Panel A: Summary of the Two-Day Announcement Period Abnormal Returns (CAR(0,1)) for the full sample and for the subsamples defined by management's stated motive for the relocation in the January 1990- August2008 period				
	CAR(0,1)	Z-Statistic	Percent Positive (%)	Number of Observation
Full Sample	0.68%	0.416	49	80
Cost/Consolidation	0.64%	0.876	59	32
Space Expansion	-1.62%	-2.795	30	13
Geographical Advantage	1.03%	(0.400)	35	15
Managerial Interest	3.31%	0.854	5	
No Stated	1.36%	0.754	63	11
Panel B: Summary of the Three-Day Announcement Period Abnormal Returns (CAR(-1,1)) for the full sample and for the subsamples defined by management's stated motive for the relocation in the January 1990– August2008 period				
	CAR(-1,1)	Z-Statistic	Percent Positive (%)	Number of Observation
Full Sample	0.32%	0.425	43	80
Cost/Consolidation	0.05%	0.204	47	32
Space Expansion	-2.07%	-2.239	24	13
Geographical Advantage	0.09%	1.165	27	15
Managerial Interest	2.87%	0.930	50	8
No Stated	2.46%	1.034	73	11

Based on the table, all the cumulative abnormal returnsare positive except for the space expansion subsample for both two-day and three-day periods. The managerial interest subsample seems to have the biggest CAR in two-day and three-day periods, with the return of 3.31 percent and 2.87 percent, respectively. With the space expansion subsample, the returns are negative for two-day and three-day periods, -1.62 percent and -2.07 percent, respectively. However, sincethe event study results are not statistically significant, there is not enough evidence to support the hypothesis. Hence, no link can be established between the event of headquarter relocation and shareholders' wealth.

With different sectors of the economy, the relocation decision aims to achieve different purposes. Therefore, dissimilar results are expected with the relocate decision of firms in different business sectors.

Hypothesis 3: if the reason to relocate a firm's headquarters is either cost/consolidate or space expansion, the effect to stockholder wealth will be greater for manufacturing firms in comparison with the effect on other firms.

Hypothesis 4: if the reason to relocate a firm's headquarters is geographic advantage, the effect on stockholder wealth will be greater for wholesale/retail and service firms in comparison with the effect on other firms.

The values of F statistic used to compare the variances are 1.35 and 2.86 for hypothesis 3 and hypothesis 4, respectively. Thus the p-values for the two tailed F test of hypothesis 3 and hypothesis 4 are 0.504 and 0.1445, respectively. With those high values of p-value, we conclude that $\sigma_1^2 = \sigma_2^2$ and use the equal variances procedure to compare means. With hypothesis 3, the observed value of the test statistic is 0.83. Because this is an upper tailed test, thus the p-value is 0.20. This p-value indicates that we cannot reject H_0. Similarly, the observed value of the T test statistic is 0.46 and the p-value is 0.33 for hypothesis 4. These results indicate that there is not enough evidence to support the research thesis.

2. The relationship among cumulative abnormal return, business description, and reason to move

To further analyze whether the reaction of the stock market to a firm's headquarter relocation announcement is related to the sector of the firm (manufacturing, services, and wholesale/retail) or the stated motivation for the relocation (cost/consolidation, space expansion, geographical advantage, management interest, and no stated reason), three regression analyses are performed. These regressions use the two-day CARs (the period of (0, 1)) as the dependent variable and the sector of the relocate firm and/or the stated motivation for the relocation as the independent variables. To compare the financial performance of the firms, the earnings before interest and taxes (EBIT) are factored in all cross-sectional regression models. The dummy variable for EBIT of a firm takes a value of 1 if that firm has a positive EBIT, and takes a value of 0 if that firm has a negative EBIT. The regression results are reported intable 3[3]. The first regression uses the dummy variable for EBIT and thetwo dummy variables for the two sectors of the economy. The dummy variables take a value of one if the sector of the economy is services or wholesale/retail (manufacturing serves as a base.) No statistical significance is found in this regression model. In the second regression, four dummy variables for the four stated reasons to move are used. The dummy variables take a value of one if the stated reason is cost/consolidation, space expansion, geographic advantage, or management interest (no stated reason serves as a base.) The managerial interest dummy variable is significant at 10 percentage level, indicating that the difference in the reasons to relocate has a slight effect on the reaction of the market to a relocation announcement. But it should be noted that the adjusted R^2 for the regression is only 2.86 percent. Last, in the third regression model, the dummy variables on the two sectors as well as the four motivations are regressed.Only the dummy variable with managerial interest is significant at 10 percentagelevel. This is consistent with the findings in the second regression model.

In the table, we can realize that the signs of regression coefficients are consistent together. For example, the regression coefficients for services, wholesale/retail, cost/consolidation, and space expansion subsamples consistently have a negative value. While the coefficients for geographic advantage and management interest have a positive value. Moreover, in all

[3] Of 97 announcements in the initial sample, COMPUSTAT does not have information for 11 cases. Therefore, only 86 announcements are considered.

Table 3

Crosse-Sectional Regressions of the Two-Day Announcement Period Abnormal Return on the Sector of the Relocating Firms and on Stated Reason for the Relocation Using the Full Sample of Headquarter Relocation Announcements in the January 1990 – August2008 Period (T-Statistics are in Parentheses)

Regression Model	EBIT	Services	Wholesale/ Retail	Cost/ Consolidate	Space Expansion	Geographical Advantage	Management Interest	Intercept	Adjusted R^2	F-Statistic	Size
Regression 1	0.0190	-0.0114	-0.0294					0.0061	1.95%	0.57	86
	(0.94)	(-0.55)	(-0.93)					(0.32)			
Regression 2	0.0183			-0.0083	-0.0162	0.0231	0.0754	-0.0051	2.86%	1.39	86
	(0.92)			(-0.28)	(-0.47)	(0.69)	(1.69)*	(-0.18)			
Regression 3	0.0198	-0.0079	-0.0303	-0.0023	-0.0132	0.0264	0.0771	-0.0344	1.14%	1.11	86
	(1.00)	(-0.38)	(-0.95)	(-0.07)	(-0.37)	(0.77)	(1.74)*	(-0.79)			

The types of business sector are obtained from the LexisNexis and SEC website. The stated motivations are obtained from LexisNexis. All the independent variables in the regression are dummy variables that take a value of one if the sector is services or wholesale/retail sector, or if the stated reason falls into the "cost/consolidation," "space expansion," "geographical advantage," or "management interest" category. Regression 1 uses only the sector dummies as independent variables with the manufacturing sector as the base. Regression 2 uses only the stated reason dummies as independent variables with "no stated reason" as the base. Regression 3 uses both the sector dummies and the stated reason dummies as independent variables. All the regression include dummy variable of Earning Before Taxes and Interest (EBIT), which is denote 1 if EBIT is positive and 0 if EBIT is negative

***, **, and * denote statistical significant at the 1 percent, 5 percent, and 10 percent levels, respectively, in two tailed tests

regression models, the regression coefficients for EBIT are positive at 0.019, 0.18, and 0.198 for first model, second model, and third model, respectively. However, the results are statistically insignificant.

3. Financial performance of firms announcing relocation decisions

Brickley and Van Drunen (1990) find that firms undertaking internal corporate restructurings to improve efficiency or to cut costs have significantly lower returns on common equity (ROEs) than comparable firms during the five-year period surrounding (two years before to two years after) the event. Blackwell et al (1990) also report similar evidence for firms announcing plant closing decisions. Alli et al (1991), however, report that relocating firms have a statistically insignificant lower average ROE than non-relocating firms in the same industry during the three-year period surrounding the relocation announcement. In addition, Chan et al (1995) fail to detect any significant difference in the median industry-adjusted ROEs between the year of the announcement and selected years before or after the announcement. Financial performance of the sampled firms covering the period of two years prior to the headquarter relocation announcement is analyzed to find out whether poor financial performance leads to the relocation decision[4]. Using COMPUSTAT database, various financial indicators are collected, includingtotal assets, total common/ordinary equity, total liabilities, cash and cash equivalent, and net income (loss) of the sample. To compute the ROE, net income (loss) is divided by total common/ ordinal equity. To examine the level of risk, the debt-equity ratio of firms is also calculated by dividing total common/ordinal equity by

[4] Because the covering period is from January 1990 to August 2008, there is a lack of post relocation financial performance. Therefore only financial performance in the prior two year is investigated.

total liabilities. The liquidity of the firms is calculated by dividing total assets by cash and cash equivalent. To adjust for sector effect, sector-adjusted ROEs, sector-adjusted D/E ratios, and sector-adjusted liquidity of firms are computed by subtracting the sector median ROE, sector median D/E ratio, and sector median liquidity from the respective ratios for the sampled firms.The sector median financial ratios are the median financial ratios of all the firms in COMPUSTAT with the similar SIC code in the same year as the announcing firm[5]. Table 4reports the financial ratios (ROE, D/E, and Liquidity) of the full sample and subsamples defined by different sectors[6].

At the full sample level, the sector-adjusted ROE and sector-adjusted D/E show no statistical significance. However, the result for sector-adjusted liquidity has negative values at statistical significant level of one percent for both one and two year prior to the relocation. This indicates that in two years before the relocation, the sampled firmsexhibit statistically significant lower liquidity in comparison to the whole sector liquidity.

When full sample is partitioned by sector, an interesting pattern emerges. Manufacturing firms consistently have worse financial performancerelatively to a group of comparable firms in the year prior to relocation. The ROE for the manufacturing firms is 0.091 lower than the ROE of the whole sector at the one percentlevel of statistical significance. The liquidity for those firms is also 0.018 lower than the liquidity for the whole sector at the one percentlevel of statistical significance. The D/E ratio of the firms in this sector is 0.219 higher than D/E ratio for the whole sector at ten percentlevel of statistical significance. Given this findings, it can be concluded that a relocating firm in the manufacturing sector should experience a less favorable financial situation in comparison to the whole manufacturing sector.

Table 4

Sector-Adjusted Median Rate of Return on Common Equity (ROE), Sector-Adjusted Median Debt over Equity Ratio (D/E) and Sector-Adjusted Median Liquidity for Two Year before a Headquarter Relocation Announcement for the Full Sample and Different Sectors (Services, Manufacturing, and Wholesale/Retail) in the January 1990 – August 2008 Period

		Sector-Adjusted ROE		Sector-Adjusted D/E		Sector-Adjusted Liquidity	
	Year	Median[a]	Size	Median[b]	Size	Median[c]	Size
Full Sample	-1	-0.040 (-1.19)	86	0.32 (0.34)	86	-0.0034*** (-3.98)	86
	-2	-0.044 (1.20)	86	0.17 (-0.88)	86	-0.01*** (-4.13)	86
Category by Sector							

[5] Brickley and Van Drunen (1990) and Blackwell et al (1990) use a similar technique to examine earnings performance around internal corporate restructuring and plant closing announcements

[6] Of 97 announcements in the initial sample, COMPUSTAT doesn't have information for 11 cases. Therefore, only 86 announcements are considered.

Table 4 also reports that the liquidity of the relocated firms is statistically significantly lower than the liquidity of all the comparable firms for the whole sample as well as the manufacturing and services subsamples.In the sample, the liquidity of the services sector firms are slightly lower (0.0023) than the liquidity of all firms in the sector in one year prior to relocation and 0.0114 lower in two year prior to relocation. With the manufacturing sector, there is a 0.018 and 0.009 lower in one year prior to relocation and two year prior to relocation, respectively. Lower liquidity reported for relocation firm suggests that a shortage in current assets may lead to announcements of headquarters relocation.

4. Conclusions

This paper examines the stock market's reaction to 97 relocation headquarter announcements. Unlike previous studies, no statistically significant reaction by the stock market to announcements of headquarter relocation is found. Additionally, no statistically significant evidence has been provided on the hypothesized relationship between shareholders' wealth and the sector of the economy that the relocated firms belong to. Further analysis, however, reveals that the past financial performance plays an important role in the decision to relocate. The relocation firms tend to have a significantlyworse financial indicators in comparison with the firms in the same sector of the economy in two years prior to relocation. Therefore, the worse financial performance a firm has been, the higher the likelihood that the firm will move its headquarters in the future.

Specifically, a firm will change the location of its headquarter when its stock has a low liquidity level. This result suggests that firms might look for animprovement in their liquidity level by changing the headquarters to a new location. Moreover, in the manufacturing sector, relocation firms have a lower ROE and higher D/E ratio compared to that of other firms in the same sector. Low rate of return on the ownership interests and high level of leverage might be important factors affecting the decision to relocate of manufacturing firms, especially when these firms can reduce operating costs or to increase production efficiency by moving their headquarters.❑

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