THE IMPACT OF THE FIRM'S FINANCIAL CHARACTERISTICS ON THE FIRM'S OUTSOURCING ANNOUNCEMENT MARKET RETURN IN THE 20TH CENTURY: THE CASE OF CONTRACT GRANTING FIRMS'

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ABSTRACT

This study investigates the effect of outsourcing contract announcement on the value of the contract-granting firm. Results are based on a sample of 38 publicly traded firms that outsourced parts of their operations between 1990 and 2000. Results obtained are consistent with the previous research. Evidences have shown that previous research did not give attention to the firm's financial characteristics, and determine whether other financial characteristics influenced the market to react differently to outsourcing announcements. This research further extends the previous research by investigating the impact of outsourcing contract granting firms' financial characteristics on the magnitude of the market returns.

1-INTRODUCTION

The definition of outsourcing is the exporting or the delegation of one or more of operations within a firm to an external firm that specializes in that operation. The firm that is outsourcing its operations is called the outsourcing firm, granting, client, or buyer and the firm that specializes in the operational process is called the receiving firm, the target, the vendor, or the seller. Automakers (granting firms), for example, depend on many suppliers (receiving firms) to produce tires, mirrors, and stereos that make up the parts of the automobile. Other firms outsource servicers such as information technology, customer services, maintenance, etc. While some firms outsource domestically, other firms may outsource internationally (referred to as a global outsourcing or off-shore outsourcing). Global outsourcing is defined as the exporting or the delegation of one or more of the operations within a firm from a particular country to other areas of the world.

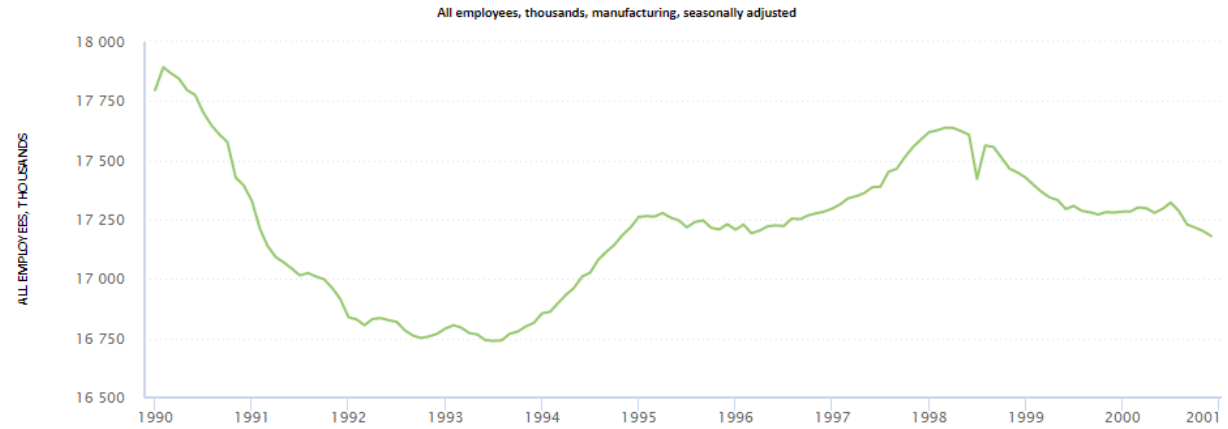
Advocates of outsourcing argue that the outsourcing activity helps the outsourcing firms by; (1)Providing them with the ability to focus more, (2)Providing them with the ability to lower costs, (3)Better anticipate future costs, (4)Take advantage of economies of scale. This implies that outsourcing firms become more profitable from outsourcing, thereby benefitting the shareholders. For example, in 2004 when president George W. Bush's chief advisor, Gregory Mankiw, released the Annual Economic Report of the President and praised the off-shoring of the U.S. service jobs, claiming that outsourcing are just a new way of conducting international trade. He added that the practice of off-shore outsourcing is the latest manifestation of the gains from trade that economists have talked about.[1] Also, Bahgawati claims that the savings from

[1] Otterman, S., February 2004. Trade: Outsourcing Jobs. Council on Foreign Relations, New York.

international outsourcing allow U.S. companies to stay afloat and expand in a highly competitive global market.[2]

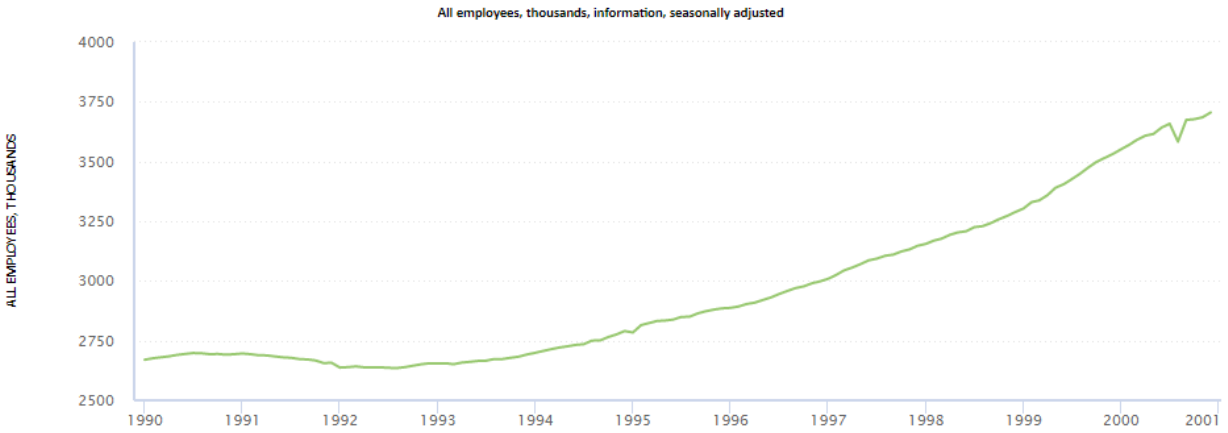
Opponents of global outsourcing argue that this activity leads to layoffs and dislocation of thousands of workers and reduce the quality of services provided. For example, The Nobel Prize laureate, Economist Paul Samuelson argues that the U.S. National income would be affected negatively if countries like China and India achieve higher productivity in exports. Also, in 2004 Senator John Kerry claimed that 3 million U.S. jobs been lost because of international outsourcing.

Figure: U.S. Employment in Manufacturing 1990-2000



Source: U.S. Bureau of Labor Statistics

Figure: U.S. Employment in Information 1990-2000



Source: U.S. Bureau of Labor Statistics

[2] Bahgawati, J., 2004. In Defense of Globalization. Oxford University, UK.

This study is empirically examining the impact of the firms' contract outsourcing announcements on the outsourcing (granting) firm's market value (stock price). The results are based on a sample of 38 publicly traded firms that outsourced part of their operations between 1990 and 2000. We use available data to test for the abnormal price return of the firm's stock as a reaction to the outsourcing announcement. We further examine if these abnormal returns are related to specific firm's financial characteristics, for both granting firms and receiving firms. This research makes contributions to the outsourcing practice literature by investigating the impact of outsourcing contract granting firms' particular financial characteristics on the magnitude of the market return.

2- LITERATURE REVIEW

Since the 1980's, outsourcing has become a useful management tool to firms and an expenditure device to many corporations. However according to the Oxford Dictionary, Outsourcing as a terminology first appeared in 1979, in an article in the Journal of Royal Society of Arts that pointed out the outsourcing of automotive design work to Germany consequent upon the shortage of British engineers. The first few outsourcing processes were services such as Designs, Information technology, payroll, customer services and management processes. Over the years, outsourcing processes thus included core processes such as manufacturing. Since late 1980's or early 1990's, outsourcing has been experiencing a huge growth. However, there is always a risk (Outsourcing Risk) involved with the outsourcing benefits (Outsourcing Advantages) (Beasley et al., 2004). There are many theories that are used to examine the decision of outsourcing. However, the three main theories that are adopted in the available outsourcing literature are; (1)the economies of scale theory, (2)the transaction cost theory (transaction cost economics), (3)the core competency theory.

Economies of scale are the cost advantages that the firm will obtain due to production size. The cost of the unit of output will decease with the increasing scale as the fixed costs are spread out over additional units of output. In spite of this, efficiency has been a source of cost reduction.

In their study, Ang and Straub (1998) argue that using the neoclassical theory; firms will outsource to achieve cost advantages from economies of scale. Furthermore, Levina and Ross (2003) averred that, large size firms outsource for other reasons apart from economies of scale. Considering that the outsourcing is done to achieve the economies of scale therefore outsourcing has nothing to offer the large firms, because these large firms can internally attain economies of scale adopting the receiving firms' (venders) methodology.

Transaction cost Theory or the economics of transaction cost is an important economic theory. Economics theory of the time suggests that "the market is efficient therefore those who are best at providing each good or service most cheaply are already doing so. However, Ronald Coase (1937) further explains that the cost of obtaining a good or service through the market instead of producing it in the house is more than just the price of the good because there transaction costs involved in using the market. These costs include operational costs (e.g. search and information costs) and contractual costs (e.g. bargaining costs, policing, and enforcement costs). Consequently, the decision to use the market will be based on the comparison between production costs in the house and the costs of using the market. Williamson (1975) argues further that since the free market transactions failed, the activities of the firm will need the existence of hierarchies and organizations to market-mediate and economize transaction costs. Therefore, the

theory of transaction costs suggests that the firm comprise a group of internal activities alongside with external market relations. Williamson (1985) further introduced the hold-up problem or fundamental transformation principle while referring to "the transformation of a large numbers bidding competition at the outset into a small numbers supply relations during contract implementation and at contract renewal intervals for transactions that are supported by significant investments in transaction specific assets". Therefore when the fundamental transformation problem is costly, the internal hierarchies become more attractive than the external market relationships. Thus, based on the theory of transaction costs, the firm's decision to outsource will be considered rational if the firm's decision is based on other factors such as asset designating, environmental risk, and other transaction costs (Ang and Straub, 1998). According to Gottschalk and Solli-Saether (2005), there are characteristics of business exchange that are positively related to transaction costs: (1) The investment in durable and specific assets is necessary, (2) The transactions are infrequent, (3) The tasks are complex and uncertain, (4)Measuring the performance of the task is difficult, (5)There are interdependencies with other transactions. Thus, according to the theory of transaction cost the firms' decision to outsource or not depends on the outsourcing transaction costs vs. internal production costs. The firm will engage in external market relationship (outsourcing) if and only if the internal production costs can be reduced through outsourcing.

The core competency theory argument is that the management has two choices either to produce in the house or to outsource. The management should choose to outsource non-core competency operations while concentrating on other core competency activities. Doing all these will improve and enhance core competencies. Prahalad and Hamel (1990) suggest the characteristics of core competencies that distinguish one corporation from another. Quinn (1999) takes the argument for outsourcing further by advocating extensive outsourcing strategies by suggesting that the firm can optimize the gain of outsourcing when the reason of outsourcing is to enhance core competency, and if it is combined with extensive outsourcing strategy that will lead to flexibility, Lower costs, and improved efficiency. In their study, Chundra and Kumar (2000) explain the importance of outsourcing non-core competencies considering that the responsibilities come with concrete arrangements. Hancox and Hackney (2000) further argue that outsourcing firms can obtain competitive advantage from designating and managing supply contracts. However, what is the definition of core competencies? In another way, which of the firms' operations are considered core competencies? Prahalad and Hamel (1990) suggest that core competency is a unique specific factor that; it is hard for competitors to imitate or copy, it is widely used for many products, and it must add or contribute to the customer's benefits. They also suggest that the firm must protect the core competencies for competitive success and these core competencies are the engine of the contemporary business developments.

There are some factors identified in the previous literature as the reasons behind outsourcing decisions. These are; the importance of core competency, flexibility, economies of scale and cost reduction. Studies such as Loh and Venkatraman (1992) summarize the argument of treating information technology outsourcing as an administrative innovation in which; (1) Outsourcing is a "significant shift in the model of governance" from control and coordination within the hierarchy to new hybrids model, (2) Outsourcing is "changes in routines dealing with internal arrangements", (3) Outsourcing is "changes in routines dealing with external alignments". Also, they find that the reducing cost and low economic return on the information technology are the main causes of information technology functions outsourcing decision.

In their study, Quinn and Hilmer (1994) argue that outsourcing will allow the firms' management to minimize the use of the firm' resources by; (1) Concentrating the effort on what

the firm knows how to do best, (2) Protecting the competitive advantages of the firm by allowing the firm to concentrate and develop the core competencies which will make entering the firms' core competencies area hard for the competitions, (3) Making the risk of research, development, and fast changing technology costs external instead of internal, by shifting the costs to the outsourcing contract receiving firm.

Also, Quinn (1999) argues that, outsourcing enhances core competencies and if core competency combined with an extensive outsourcing business strategy that will provide more efficiency and flexibility. Poppo and Zenger (1998) have equally identified that outsourcing allows more flexibility for the outsourcing firm. In addition, Deavers (1997) identified the outsourcing motivation factors based on a survey of more than 12000 firms that outsourced as; (1) Outsourcing will give an access to the global capacities, (2) Outsourcing will increase the firms' core competencies, (3) Outsourcing will split the risk between the outsourcing granting firm and the outsourcing receiving firm, (4) Outsourcing will free some of the firms' resources so that the firm can focus on the core competencies.

However, evidence has shown that market responses positive to the outsourcing announcements. For example; Hayes, Hunton and Reck (2000) study the effect of outsourcing all or part of the information system functions, using a sample of 76 firms, they publicly announced an information system (IS) outsourcing contract from 1990 through 1997. They find that there is no significant stock price change using an event study of two days window. However, when they use the day after announcement day as a one day event window, they argue that the announcement of a firms' information system function outsourcing is positively impact the market value of the outsourcing firm, and that positive response is higher for small firms and firms in the service industry due to higher information asymmetry. Dos Santos et al. (1993) Ahmad (2004) also admits that on average; outsourcing announcements driven by innovation have favorable market reaction than frequent or follow up announcements. Oh, Gallivan and Kim (2006) further argue that the market react positively to firm's outsourcing announcement if the intent from outsourcing is to reduce cost. Beasley et al. (2009) use a sample of 103 Information System announcements in the period between 1996 and 2003 to investigate the effect of the management's strategic intent for outsourcing and the firms' characteristics. They find that, the increase in the firms' value from the outsourcing announcement has a positive relationship with the firms' efficiency of the operating assets. Also, Isaksson and Lantz (2015) used Principal Component Analysis to identify four outsourcing strategies: Back office activities, Primary activities, Accounting activities, and Support activities. However, they did not find any significant relationship between these strategies and financial performance.

Still, there are some evidences showing the association of the outsourcing firm characteristics' and the market response to the outsourcing announcements. For example; Smith, Mitra, and Narsimhan (1998) stated that firms who outsource have higher debt and low cash reserve before the outsourcing announcement. Also, Farag and Krishnan (2003) study a sample of information technology (IT) outsourcing announcement between 1994 and 2001, they find that there is a positive announcement response to firms' outsourcing decision in the information system and service industry and the market response is more favorable if the outsourcing decision is related to cost reduction. However, Im et al. (2001) conclude that there is a negative relationship between the firm size and the market reaction; nonetheless this negative relationship turned to positive in the long run.

3-RESEARCH HYPOTHESIS

A key consideration of this research is to investigate the impact of the Granting firm's financial characteristics on the outsourcing announcement market return. Previous literatures found evidence that there is positive response from the market to the decision of outsourcing, and that responses differ across firms based on the size of the firms and the industry. This study contributes to the research by investigating previous literatures hypothesis regarding the firm size and industry and their impact on the market reaction to outsourcing decisions announcement. Also we add to previous research by examining granting firms' financial Characteristics that we believe may impact the magnitude of the market reaction to the outsourcing announcement.

Firm size: The argument is that, different sizes of firms imply different amount of information asymmetry because large firms have more news and analysis than small firms. This will lead to higher positive reaction to the decision of outsourcing for the smaller firms than the larger firms, as highlighted in Hayes, Hunton and Reck (2000).

Hg_1: The market reaction to outsourcing announcement will be positive and higher for the small granting firms than the larger granting firms.

Industry: The argument is that there is a positive market response for the firms' outsourcing decision in the information system and service industry due to information asymmetry also as expressesd in Farag and Krishnan (2003).

Hg_2: The market reaction to outsourcing announcement will be positive for the information system and the service industry granting firms.

Cost Efficiency: All previous researches suggest that the reason for outsourcing is the cost reduction which will lead to cost efficiency. This cost reduction process is a result of the access of the outsourcing granting firm to the more specialized, more experienced outsourcing receiving firm. This unique specialization and experience of the receiving firm will be expressed in unit cost reduction. For example a company that specializes in manufacturing auto mirrors for an automaker; would manufacture this product for other automakers, thus this company lowers the fixed cost per unit and reaches economics of scale. However on the other hand the outsourcing granting firm (Automaker) by outsourcing this operation concentrates its experience, economy and knowledge on the other core operations. Therefore, the outsourcing granting firm lowers or decreases its expenses. Consequently, it is expected that less efficient outsourcing granting firms will have higher positive response from the market to the outsourcing announcement more than the most efficient outsourcing granting firms. Investors will thus see the granting of the outsourcing contract as a method of increasing cost efficiency.

Hg_3: The market reaction to outsourcing announcement will be positive and higher for the less cost efficient granting firm than the more cost efficient granting firm.

Productivity: There is a positive relationship between rate of outsourcing and productivity growth as discussed in Ten, Raa and Wolf (2001). According to the Economics comparative advantage, firms will use their resources to produce the goods or the services that they have comparative advantages in. Thus, the outsourcing granting firms will utilize and allocate their resources to produce the good or service that they have advantages in and

outsource the production operations if they can obtain the same quality at lower or cheaper cost. The granting firm's productivity will consequently improve as a result of resources allocations. It is expected that more productive outsourcing granting firms will have higher positive responses from the market to the outsourcing announcement compared to the less productive outsourcing granting firms. However, investors will see the granting of the outsourcing contract as a method of increasing productivity.

Hg_4: The market reaction to outsourcing announcement will be positive and higher for the more productive granting firm than the less productive granting firm.

Profitability: In the older days when a business is successful and with the aim of reducing costs, management tends to hire more employees, expand their operations, and acquire more infrastructures. However, nowadays firms increase their profits by granting outsourcing contracts to other firms and by doing so the granting firms decrease employment and payroll, have more capabilities, and have access to additional facilities. The most important criterion for evaluating the performance of a firm is profitability as stated by Smith, Mitra, and Narsimhan (1998). Therefore, we expect that outsourcing granting firms, with less profitability, will have higher positive response from the market to the outsourcing announcement compared to the outsourcing granting firms with more profitability. Investors will thus see the granting of the outsourcing contract as a method of increasing access to profit.

Hg_5: The market reaction to outsourcing announcement will be positive and higher for the granting firm with less profitability than the granting firm with more profitability.

Liquidity: Liquidity measures the firms' ability to meet its debt obligations and the extent to which the firm uses debt financing. In their study, McFarlan and Nolan (1995) argue that one of the keys that drive outsourcing, especially for information systems outsourcing, is the need for cash. Also, Smith, Mitra, and Narsimhan (1998) state that "An important part of many information system agreements is an introductory cash payment by the vender for tangible and intangible IT assets of the client". As a result of this agreement the granting outsourcing firm will receive a cash payment from the receiving outsourcing firm. In the same vein, the granting firm can liquidate the tangible assets that did not get included in the agreement. Based on this, it is expected that the outsourcing granting firm with less liquidity will have higher positive response from the market to the outsourcing announcement compared to the outsourcing granting firms with greater liquidity. Investors will see the granting of the outsourcing contract as a method for increasing liquidity.

Hg6: The market reaction to outsourcing announcement will be positive and higher for the granting firm with less liquidity than the granting firm with more liquidity.

4- RESEARCH METHODOLOGY AND DATA:

Stock market prices processes follow a random walk if the capital markets are efficient. It is expected, therefore, that investors earn normal returns as a compensation for holding the stocks. Consequently, we consider the returns to be normal if there is no significant event.

However if there is a significant event, this may lead the stock to experience abnormal returns. The abnormal returns are observed when capital markets are efficient and can be calculated as:

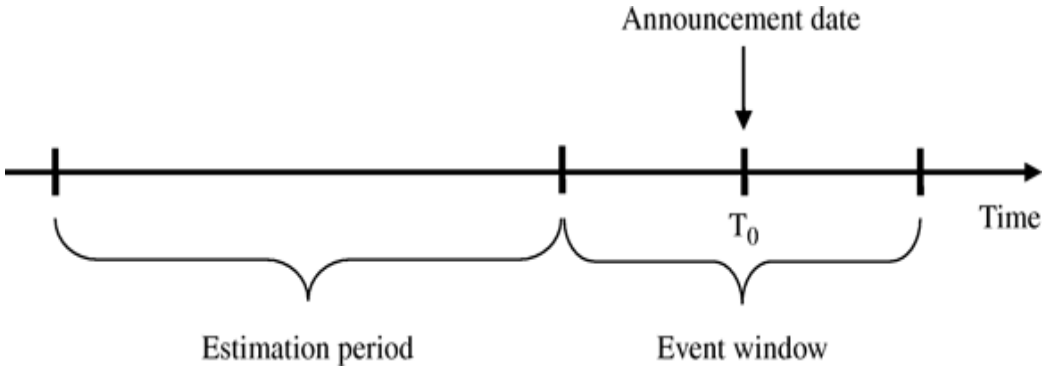
$$A_{iT} = R_{iT} - E(R_{iT}) \quad (1)$$

Where:
A_{iT} is the abnormal return for stock i at day T,
R_{it} is the return on stock i at day T,
$E(R_{iT})$ is the expected return on stock i at day T.

The above equation means that the abnormal return for any stock equals the difference between the actual realized return, and the expected normal return.

As in Gao (2009) Oh and Gallivan (2004), and Hayes, Hunton, and Reck (2000) we use Brown and Warner (1985) methodology to compute the abnormal returns around the day of interest to estimate the announcement of outsourcing impact on the short run return. The study, therefore, follow these event study methodology steps; (1)We have to identify the event, and define the event window which consists of the day of the event (day zero), some days before the event day (-T days), and some days after the event day (+T), (2)We select the sample of granting firms that we will analyze, (3)We exclude the firms that had another event simultaneously in the event window, (4)Normal return expectation if this event did not occur, (5)We estimate the abnormal return during the event window. We define the abnormal return as the difference between the actual return and the normal expected return, (6)Finally, we test the abnormal return and make sure it is significantly different from zero.

Figure 1: Event Study (Granting Outsourcing Contract)



Following the previous studies (e.g., Hayes, Hunton and Reck, 2000; Farag and Krishnan, 2003) we define the announcement date as day zero, the trading T days pre the announcement day as day –T, and the trading T days post the announcement date as day +T (i.e., -T,0,+T). Our event study analysis is based on a period of 161 days starting at day -150 and ending at day +10 (-150, +10). The estimation period is the first 140 days in this period (-150, -11), and the announcement period is the post 21 days after the estimation period (-10, +10). The abnormal return for a particular stock over each of the announcement period days (-10, +10) is defined as,

$$A_{iT} = R_{iT} - (\hat{\alpha}_i + \hat{\beta}_i R_{mT}) \quad (2)$$

Where:
eq.(2) is the market model,
A_{iT} is the abnormal return for stock i at day T,
R_{it} is the return on stock i at day T,
R_{mT} is the market return (CRSP) value weighted index at day T,
$\hat{\alpha}_i$ and $\hat{\beta}_i$ are OLS coefficients estimates from the regression of the return on stock i on CRSP value weighted index over the estimation period.

The cumulative abnormal return (CAR_i) between days -T and T around the outsourcing announcement of a stock i is defined as,

$$CAR_i = \sum_{t=-T}^{T} A_{iT} \quad (3)$$

T-statistic:

Our objective in using the event study methodology is to measure the stock price reaction to a significant event which is translated in the abnormal returns. We use test statistics to examine whether this realized abnormal returns event related or a coincidence. So, to test the statistical significance of calculated abnormal returns, we use t-statistic as follow.
For a one day event:

$$\text{t-statistic} = \frac{\bar{A}_T}{\hat{S}(\bar{A}_T)} \quad (4)$$

For cumulative abnormal return between days -T and T around the outsourcing announcement:

$$\text{t-statistic} = \frac{\bar{CAR}}{\sqrt{\sum_{t=-T}^{T} \hat{S}^2 (\bar{A}_T)}} \quad (5)$$

$$\bar{A}_T = \frac{1}{N} \sum_{i=1}^{N} A_{it} \quad (6)$$

$$\bar{CAR} = \frac{1}{N} \sum_{i=1}^{N} CAR_i \quad (7)$$

And

$$\hat{S}(\bar{A}_T) = \sqrt{\frac{\sum_{t=-150}^{-11} (\bar{A}_T - (\frac{1}{140} \sum_{t=-150}^{-11} \bar{A}_T)}{139}} \quad (8)$$

where:

N is the number of stocks sample,

$\hat{S}(\bar{A}_T)$ is the estimated standard deviation of the average abnormal return at day T.

Both one day event t-statistic and cumulative abnormal return between days -T and T around the outsourcing announcement t-statistic are distributed as a Student-t distribution.

To investigate our hypothesis to see whether the granting firms' financial characteristics are related to the stock price response to the announcement of outsourcing, we regress the cumulative abnormal returns on the firm's financial characteristics. The regression is as follow:

$$CAR_{gi} = \alpha + \beta_1 Size_{gi} + \beta_2 Industry_{gi} + \beta_3 Cost - efficiency_{gi} + \beta_4 \text{Pr}oductivity_{gi} + \beta_5 \text{Pr}ofitability_{gi} + \beta_6 Liquidity_{gi} + \varepsilon_{gi} \quad (9)$$

Where:

CAR_{gi}: The cumulative abnormal return for granting firm i,

$Size_{gi}$: The size of the granting firm i,

$Industry_{gi}$: The industry for granting firm i. Dummy Variable for industry,

$Cost - efficiency_{gi}$: The cost efficiency for granting firm i,

$\text{Pr}oductivity_{gi}$: The productivity for granting firm i,

$\text{Pr}ofitability_{gi}$: The profitability for granting firm i,

$Liquidity_{gi}$: The liquidity for granting firm i,

ε_{gi} : The error term.

For Size we use the log of the granting firm's total sale. We use Dummy Variable for industry; we use 1 for granting Service firms and 0 for non-service granting firms. We follow the previous research (Hayes et al. 2000) and (Beasley et al.2006) by identifying the firm's industry using the SIC code, service firms SIC code is $\geq$ 5000 and non-service firms SIC code < 5000. Following the previous research (Smith, Mitra, and Narsimhan 1998), we use (operating expenses/sales) to measure cost efficiency. We use the asset turnover (sales/assets) as a measure of productivity. We further, use the ROA and ROE to measure the profitability using assets and equity. Finally, we use the financial leverage (Total Liability/Total common Equity) as a measure of liquidity.

Table: Granting Firm Regression Variables

Dependent Variables				Definition
The cumulative abnormal return				CAR(-T,T)
Independent Variables	Measure	Definition	Units	
Size	Sales	Log (S)		S: sales
Industry	Dummy	1 = Service 0 = Non Service		
Cost Efficiency	Operating Expense/ sales	(COGS + SG&A)/S	Ratio	COGS: Cost of Goods Sold SG&A: Selling, General and Administration Expenses S: Sales
Productivity	Asset Turnover	S/TA	Ratio	S: Sales TA: Total Assets
Profitability	Return on Assets (ROA) Return on Equity (ROE)	NI/TA NI/CE	Ratio Ratio	NI: Net Income TA: Total Assets CE: Common Equity
Liquidity	Financial Leverage	TL/CE	Ratio	TL: Total Liability CE: Common Equity

The Outsourcing granting sample is for the period between January 1, 1990 and December 31, 2000 was obtained from articles in the Factiva Database that reported outsourcing announcements by the granting or the receiving firm for that period. Factiva Database combines Reuters Business Briefing, The Wall Street Journal, and the Dow Jones Newswires. We use keywords search using the terms (outsourcing Contract, and Outsource). Detailed review of the announcements revealed that there are non-outsourcing announcements or duplicated announcements. These non-outsourcing or duplicated announcements were deleted from the overall sample. To remain in the granting sample; outsourcing granting firms must be trading on the NYSE, AMEX or NASDAQ, and have stock returns available on the Center for Research in Security Prices CRSP. However, because we are interested in investigating the granting firms' characteristics effect on the response of the market, we have to have financial data available in COMPUSTAT and have data available in Compact Disclosure CD-Rom of the SEC filings. Also, we searched one year back from the announcement date to confirm that there was no earlier announcement. Consequently, the study concluded with 38 granting firms' sample. In our granting firms' sample there are 23 firms of mining, construction, manufacturing, communications, Electric, gas and Sanitary services which are identified by the SIC codes <

5000. The rest of the granting firms' sample is 15 firms of wholesale and retail trade, finance, insurance, real estate, services and non-classified firms are identified by the SIC codes $\geq$ 5000

Table: Distribution of Granting Firm Sample 1990 - 2000

Distribution of sample of 38 Granting outsourcing announcing firms during the period 1990 – 2000. The outsourcing announcements are identified from Factiva database.

Granting Firm Sample 1990 - 2000

Sample Size used:		**38**
Year	**Number Of Firms**	**Percent**
1993	2	5.26%
1994	1	2.63%
1995	6	15.79%
1996	6	15.79%
1997	6	15.79%
1998	8	21.05%
1999	4	10.53%
2000	5	13.16%
Total	38	100.00%

Major Industry Groups	**SIC Codes**	**Number of Firms**	**Percent**
Mining	10-14	2	5.26%
Manufacturing	20-39	18	47.37%
Communications, Electric, Gas, and Sanitary Services	40-49	3	7.89%
Wholesale Trade	50-51	1	2.63%
Retail Trade	52-59	2	5.26%
Finance, Insurance, and Real Estate	60-67	2	5.26%
Services	70-89	10	26.32%
Total		38	100.00%

To test our hypothesis for the impact of the firm characteristics and the response of the market to the outsourcing announcement we obtained the accounting characteristics of the granting firms from COMPUSTAT. Table presents summary statistics of the granting firm's financial characteristics.

Table: Summary Statistics of the Granting Firms' Financial Characteristics

Summary statistics of sample of; 38 Granting outsourcing announcing firms during the period 1990 – 2000. Outsourcing announcements are identified from Factiva database. Accounting data is obtained from COMPUSTAT.

Time Period					1999-2000
	Total Assets (mil)	Sales (mil)	ROA	ROE	NI (mil)
No.	38	38	38	38	38
Mean	21275.08682	15927.186	0.036582	0.479352	722.608
Standard Deviation	41989.62231	23965.148	0.130311	1.722897	1419.228
Median	4253.805	6470.35	0.060565	0.174707	122.9
Maximum	230615	103160	0.201526	10.69435	4770
Minimum	2.68	5.759	-0.52463	-0.65122	-3219

5- EMPIRICAL RESULTS AND THE DISCUSSION OF THE RESULTS

Table presents the results (Univariate) of the market reaction for the granting firm's outsourcing announcement for the subsample from January 1, 1990 to December 31, 2000. The table provides the cumulative abnormal returns for the event windows (-1, 1), (-3, 3), (-5, 5), and (-10, 10). The average cumulative abnormal returns are 1.09%, .89%, 1.27%, and 1.31% for the event windows (-1, 1), (-3, 3), (-5, 5), and (-10, 10) respectively. No statistically significant Cumulative abnormal returns, however the cumulative abnormal returns are positive. It was also expected, if there are cross-sectional differences of the benefits that granting firms can achieve by outsourcing which is consistent with the findings of Hayes et al. (2000), Farag and Kirshnan (2003), and Gao (2009). In general, the results are consistent with the previous research that there are no statistically significant cumulative abnormal returns. This is expected if there are cross-sectional differences of the benefits that granting firms can achieve by outsourcing which is consistent with Hayes et al. (2000), Farag and Kirshnan (2003), and Gao (2009). Equally, Oh and Gallivan (2004) mentioned the absence of statistically significant returns for small event windows.

Table: Cumulative abnormal returns for a sample of 38 granting firms 1990-2000

Cumulative abnormal returns for a sample of 38 granting firms during the period 1990 – 2000. The outsourcing announcements are identified from Factiva database. Abnormal returns are calculated using CRSP value weighted index parameters estimated over a 140 days period ending 10 days before the announcement date. CRSP value weighted index is used to compute the coefficients. The cumulative abnormal returns are calculated in the intervals.

Sample Period				1990 - 2000
	CAR -1, +1	**CAR -3,+3**	**CAR -5,+5**	**CAR -10,+10**
Mean	1.09%	0.89%	1.27%	1.31%
StD	4.61%	4.69%	6.14%	11.05%
Maximum	12.74%	15.65%	14.02%	29.16%
Minimum	-11.44%	-6.85%	-9.82%	-40.05%
Positive	20	22	22	22
Negative	18	16	16	16
Total	38	38	38	38
Positive	0.526	0.579	0.579	0.579
t Statistic	1.461	1.172	1.278	0.728
G-Sign Test Statistic	0.324	0.973	0.973	0.973

*** Significant at 1% , ** Significant at 5%, *** Significant at 10 %**

Since none of the cumulative abnormal returns for the event windows is statistically significant and the (-3, 3) event window for the cumulative abnormal returns has the most positive to negative ratio with positive mean for the granting firms' sample for the period from January 1, 1990 to December 31, 2000. Thus, we run a cross sectional regression using cumulative abnormal returns for the event window (-3, 3) as a dependent variable and the firms' financial characteristics as independent variables to explain the association of the cumulative abnormal returns and the granting firms' specific financial characteristics for that subsample. Table presents the results for the cross sectional regressions for the event windows (-1, 1), (-3, 3), (-5, 5), and (-10, 10). However, our analysis will be based on the (-3, 3) event window as was explained previously. The regression has R-Square of 0.1146 and Adjusted R-Square of -0.0920. The F-statistic is .5547 (p= .7860) suggesting that the model is not statistically significant. We find that the control variable of Industry (dummy; 1 for Services, 0 for non-services) is positively associated with the cumulative abnormal returns. Suggesting that, the abnormal returns are more positive for the service industry versus the non-service industry. The control variable of size (log of sales) surprisingly is positively associated with the cumulative abnormal returns. Suggesting that, the abnormal returns are more positive for the large firms versus smaller firms. This is also inconsistent with the hypothesis tested and the previous research. The variable of cost-Efficiency (Operating Expense / Sales) is negatively correlated with the cumulative abnormal returns. Suggesting that the market identified outsourcing as a cause for additional expenses. This is inconsistent with our hypothesis. The variable of productivity (Asset Turnover) is negatively correlated with the cumulative abnormal returns suggesting that the less productive the firm is the more positive the market reaction is. We use two variables for profitability ROA and ROE. ROA (Net income / Total Assets) is negatively correlated with the cumulative abnormal returns suggesting that the less positive the return on assets is, the more positive the market reaction will

be. ROE (Net income / Common Equity) is negatively correlated with the cumulative abnormal returns suggesting that the more un-profitable the firm is, the more positive the market reaction will be, which is consistent with our hypothesis. Finally, the variable of liquidity (Financial leverage) is negatively correlated with the cumulative abnormal returns suggesting that the market does not identify outsourcing as a way of lowering debt for the granting firm. However the liquidity coefficient is -.0013 meaning that the impact is almost none.

Table: OLS regression to explain the association of Cumulative Abnormal Returns and Granting Firms' Specific Financial Characteristics for the period 1990-2000

$$CAR_{gi} = \alpha + \beta_1 Size_{gi} + \beta_2 Industry_{gi} + \beta_3 Cost - efficiency_{gi} + \beta_4 \Pr oductivity_{gi} + \beta_5 \Pr ofitability_{gi} + \beta_6 Liquidity_{gi} + \varepsilon_{gi}$$

OLS regression to explain the valuation effect of 38 outsourcing announcements by granting firms during the period 1990 – 2000. The outsourcing announcements are identified from Factiva. The dependent variable is the cumulative abnormal return during; the 3 days event window CAR (-1,1), the 7 days event window CAR (-3,3), the 11 days event window CAR (-5,5), and the 21 days event window CAR (-10,10). The independent variables are: Industry (dummy, 1 = service and 0 = non service), Size is the log of sales, Cost-Efficiency is the operating expense over sales, Productivity is the Sales over Total Assets, ROA is the Net Income over Total Sales, ROE is the Net Income over Common Equity, Liquidity is the Total Liability over Common Equity.

Independent Variables	Expected Sign	Coefficient	t-Statistic	Coefficient	t-Statistic	Coefficient	t-Statistic	Coefficient	t-Statistic
Intercept		0.0042	0.0544	0.0320	0.4122	0.0505	0.5237	0.0009	0.0053
Industry	+	0.0133	0.6192	0.0114	0.5323	-0.0093	-0.3492	-0.0005	-0.0098
Size	-	0.0098	1.1249	0.0118	1.3592	0.0137	1.2745	-0.0011	-0.0569
Cost -Efficiency	+	-0.0401	-0.4922	-0.0548	-0.6726	-0.0907	-0.8961	-0.0479	-0.2626
Productivity	+	0.0059	0.4450	-0.0105	-0.7908	-0.0033	-0.1976	0.0221	0.7414
ROA	-	-0.0169	-0.1852	-0.0885	-0.9722	0.0349	0.3081	0.4421	2.1675**
ROE	-	-0.0072	-0.6740	-0.0081	-0.7639	-0.0015	-0.1129	0.0203	0.8517
Liquidity	+	-0.0006	-0.2660	-0.0013	-0.6045	-0.0007	-0.2621	0.0037	0.7753
Dependent Variable		CAR	(-1,1)	CAR	(-3,3)	CAR	(-5,5)	CAR	(-10,10)
N		38		38		38		38	
R-Square		0.0836		0.1146		0.2011		0.2003	
Adjusted R-Square		-0.1302		-0.0920		0.0148		0.0137	
F-Statistic		0.3912		0.5547		1.0791		1.0734	
Model Significance		0.9001		0.7860		0.4008		0.4042	

* Significant at 1%, ** Significant at 5%%, *** Significant at 10%

6- CONCLUSION

Outsourcing is the exporting or the delegation of one or more of operations within a firm to an external firm that specializes in that operation. The firm that is outsourcing its operations is called the outsourcing firm, granting, client, or buyer. The granting firms engage in outsourcing contracts to lower costs, better anticipate future costs, focus more in the core operations, and take advantage of economies of scale the outsourcing can offer. By doing so the granting firms expect to increase efficiency, improve productivity, increase profitability and therefore lower debt.

Previous studies had found positive market reaction to the outsourcing announcement. Therefore, in this research, we empirically investigate the effect of outsourcing contracts announcement on the value of the contract granting firm (Outsourcing firm). Our results are consistent with the previous research; however none of the cumulative abnormal returns for our sample are statistically significant. Previous research did not give attention to the firms' financial characteristics, and whether these other particular financial characteristics cause the market to react differently to outsourcing announcements. In this research, we elaborate previous research by investigating additional firm's financial characteristics that may impact the market reaction to outsourcing announcement. We use a sample that covers time period from 1990 to 2000, to investigate the impact of outsourcing contract granting firms' particular financial characteristics on the magnitude of the market return.

We find that surprisingly service industry is negatively associated with the cumulative returns; equally, we find that the size (as measured by log of sales) is positively associated with the cumulative returns. Both results are inconsistent with the previous research. We find a negative association between cost efficiency (as measured by operating expense divided by sales) and the cumulative returns, suggesting that outsourcing will lead to the acquiring of additional expenses. We find a positive association between productivity (as measured by asset turnover) and the cumulative returns. However, the impact is too small to consider. We find a negative association between profitability (as measured by return on assets and return on equity) and the cumulative returns suggesting that the market reacts more negatively for profitable firms. Finally, the study identifies positive association between liquidity (as measured by financial leverage) and cumulative returns suggesting that the market identifies outsourcing as a way of reducing debt. However, we cannot generalize the results obtained because insufficient statistical evidence.

We present an analysis of the results by making effort to present a theoretical answer to the question of: How come outsourcing becomes so important or significant? If there is no much significant value added to firms as a result of outsourcing, how come that outsourcing becomes so important? Are there other reasons beyond the simple financial perception by the market reaction in the short periods? Sharpe (1997) states that "outsourcing did not emerge as consequence of a sudden technical breakthrough, nor did it grow out of a bestselling book by a well-known management guru. Rather it was a result of market forces that emerged in response to demands for more efficient ways to address organizational competitiveness." Also, Levina and Ross (2003) explain that, large size firms outsource for other reasons beside economies of scale. Considering, that outsourcing is done to achieve the economies of scale. Therefore, outsourcing has nothing to offer the large firms, because these large firms can reach economies of scale internally and independently adapting the receiving firms' (venders) methodology.

There are additional reasons behind the outsourcing decisions beyond reducing cost and economies of scale. For example; core competency. As the core competency theory argument stated that the management has two choices either to produce in the house or to outsource. The management should choose to outsource non-core competency operations and concentrate on core competency activities, as a result this will thus improve and enhance core competency. Quinn (1999) advocates extensive outsourcing strategies. Further suggests that the firm can optimize the gain of outsourcing when the reason of outsourcing is to enhance core competency and if this combined with extensive outsourcing strategy, this will ultimately lead to flexibility. Outsourcing will allow the firm's management to minimize the use of the firm' resources by; Concentrating effort on what the firm knows how to do best, protecting the competitive advantages of the firms by allowing the firms to concentrate and develop core competencies, that

will make entering the firm's core competencies area difficult for the competitions, and making the risk of research, development, external instead of internal (Quinn and Hilmer, 1994).

Loh and Venkatraman (1992) equally treat outsourcing as an administrative innovation in which; outsourcing is a "significant shift in the model of governance" from control and coordination within the hierarchy to new hybrids model, outsourcing is "changes in routines dealing with internal arrangements", and outsourcing is "changes in routines dealing with external alignments". Furthermore, outsourcing will provide an access to global capacities, will increase the firm's core competencies, will split the risk between the outsourcing granting firms and the outsourcing receiving firms, and outsourcing will free some of the firm's resources so that the firms can focus on their core competencies (Deavers,1997).

Outsourcing is a way of off-shoring hazardous waste. Most of hazardous waste processing is carried out on-shore (locally) however the disparities in environmental regulations and disparities in waste processing costs result in an increase in off-shore outsourcing in hazardous waste processing. The amount of hazardous waste traded globally increased from 2 million tons to more than 8.5 million tons between 1993 and 2001 (Toepfer, 2007). When a multinational firm involves in a foreign country, that firm has a responsibility toward the firms' labor in that foreign country to ensure that the working conditions are fair and humane. However Outsourcing is different. When a granting firm globally outsources a contract to a receiving firm, most often the work condition regulations required in the receiving firm's country is less than the work condition regulations required in the granting firm's country.

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