Accounting Motivations for Outsourcing Disclosure Choice and Firm Performance

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This is a Big Deal!

- Outsourcing is a big deal!
- The U.S. Department of Commerce estimates that 34 percent of the total services purchased by businesses in 2004 were outsourcing-related.
- Research by the Gartner Group (October 2004) estimates the worldwide information technology outsourcing market alone at $180 billion in 2003, growing to $253 billion by 2008 (Lim 2006).

Background

- Current FASB and SEC regulations do not require disclosure of outsourcing activities in annual reports or other SEC-regulated filings.
- Prior research finds that the capital markets value information about firms’ outsourcing activities (Hayes, et. al. 2000; Florin, et. al. 2005).
- In general, informative voluntary disclosures assist investors and creditors to understand firms’ operations, thereby enhancing the efficiency of the capital allocation process (FASB 2001).
- However, lacking standard disclosure regulations, variations in firm disclosures can cause firm annual reports to be less informative (Mauldin and Richtermeyer 2004).

Outsourcing Disclosure Regulations: Schizophrenic?!

- Pre-existing MD&A rules under Regulation S-K (Item 303(a)(5)(i)) require firms to disclose contractual commitments if they are necessary for an understanding of a company's financial condition.
- In 2002, the SEC amended the disclosure requirements under the MD&A section of public company annual reports specifically to include descriptions of registrants' off-balance sheet arrangements and contractual commitments.
- Also in 2002, the SEC issued guidance designed to encourage more meaningful disclosures in the MD&A, with emphasis on commitments, events, and uncertainties, and with specific guidance on disclosures related to liquidity, critical accounting estimates and known trends that could impact the income statement.
- In 2004, the FASB and the IASB jointly concluded that disclosures regarding firm outsourcing and subcontracting activities should not be required on the face of the income statement and were silent regarding what type of outsourcing-related disclosures firms should make in their annual reports.

Outsourcing Disclosure Extent

- Alston and Bird (2004) demonstrate that firms take three broad approaches to outsourcing disclosures:
  - very limited disclosures of the financial terms.
  - moderate disclosures including names of service providers and durations of engagements.
  - more detailed disclosures including terms of the information technology and business processing outsourcing deals, pricing, and purchasing obligations.

Voluntary Disclosures

- Firms will provide voluntary disclosures as long as the expected benefits to the firm exceed the related costs of voluntary disclosures (Verrecchia 2001; Healy and Palepu 2001).
- One benefit of increased disclosure is a reduction in information asymmetry that would otherwise reduce liquidity and increase cost of capital (Verrecchia 2001).
- At the same time, firms' voluntary disclosures may not be completely credible (Healy and Palepu 2001).

Disclosure Choice

- Absent regulatory standards, economic theory suggests that management will trade-off between making disclosures related to the firms’ expected future performance and managing expectations for contracting, political, and corporate governance reasons (Watts and Zimmerman 1986).
- Graham, et. al (2005) find that managers make voluntary disclosures to reduce stock price risk, but at the same time, try to avoid setting a disclosure precedent that the firm will find difficult to maintain in the future.

Our Motivations

- We use a sample of firms with press releases announcing new outsourcing arrangements to examine which factors are associated with their subsequent decision to voluntarily provide or withhold information about the outsourcing in their annual reports.
- We examine:
  - firm profitability
  - capital market transactions
  - Leverage
  - Size
  - Industry
  - stock exchange and
  - the stock market's response to outsourcing announcements

Additionally…

- We also examine:
  - The type of firm activities that are outsourced:
    - Accounting
    - Logistics, and
    - Manufacturing
  - The stated objectives for the outsourcing
    - focus on core competence
    - cost savings, and
    - growth

Firm Profitability

- One of the major reasons for outsourcing is cost reduction
- The decision to outsource may stem from the firm's need to reduce falling profitability or to adjust to increased competition that threatens short-term growth in profitability.
- The *successful* implementation of outsourcing for cost reduction should lead to higher firm profitability than without the arrangement.

Firm Profitability Disclosure Choice: Conflicting Priors

- Miller (2002) found that:
  - firms increase disclosures during periods of increased earnings, and continue to increase such disclosures until earnings decline.
  - With the decline in earnings, firms tend to shift disclosures to focus on short-term strategic actions that could affect short-term results.
- On the other hand, Kasznik and Lev (1995) found that:
  - managers are twice as likely to voluntarily disclose earnings forecasts during periods of large negative earnings news as during periods of large positive earnings news.
- We thus make no prediction about how firm profitability is associated with the disclosure choice.
- We use Return on assets (ROA) as an accounting measure of firm performance.

Capital Market Transactions & Leverage

- Another potential reason for outsourcing is the firm's decision to focus on its core competencies (Gilley and Rasheed 2000; Kotabe and Murray 1990).
- Such a focus may ease access to capital markets.
- In some instances, the firm may sell tangible (manufacturing or information technology fixed assets) and/or intangible property to the vendor in connection with the outsourcing arrangement to generate cash that can be invested to grow the firm's core activity.
- In other cases, the firm may be outsourcing to both lower costs and increase the firm's access to capital markets.

Capital Markets Transactions & Leverage Disclosure Choice

- Prior research finds those firms that need to access the equity or debt markets are more likely to voluntarily disclose managements' earnings forecasts (Frankel, McNichols, and Wilson 1995).
- Firms issuing securities in the current or future periods have higher disclosure ratings (Lang and Lundholm 1993) and show an increase in voluntary disclosures beginning six months before equity issues (Lang and Lundholm 1996).
- Additionally, a firm that is highly leveraged may decide to increase outsourcing disclosures to provide assurance to its lenders that the firm is taking steps to increase profitability and cash flow.
- We proxy for a firm's capital market transactions (CMT) as the percentage change in total debt and common stock during the fiscal year of the outsourcing announcement.
- Leverage (LEV) is defined as total debt divided by total assets and is used to proxy for a firm's incentive to ensure creditors of the firm's ability to service its debt.

Size & Disclosure Choice

- Size effects are frequently documented in the voluntary disclosure literature.
- Larger firms have more resources than smaller firms, and therefore may be more confident of their ability to successfully implement and obtain the potential benefits from an outsourcing arrangement.
- This may increase the likelihood of a voluntary disclosure.
- Furthermore, larger firms are followed by more analysts and, accordingly, may voluntarily disclose more information without a corresponding annual report disclosure (Bhushan 1989).
- We proxy firm size (SIZE) by using total assets.

Industry, Stock Exchange & Disclosure Choice

- Outsourcing activities are most prevalent in the manufacturing and high technology industries.
- Also within the manufacturing divisions and information technology departments of firms.
- On the other hand, studies have shown that voluntary disclosure of forward-looking information may be particularly beneficial for the service industry, where greater information asymmetry exists between investors and management.
- The benefits of future earnings-related disclosures may be higher for firms listed on the NYSE compared to firms listed on the NASDAQ (Frieder and Suk 2007), thereby motivating NYSE firms to more frequently and voluntarily release information to the market.

Stock Market's Response to Outsourcing Announcements & Disclosure Choice

- We include a variety of firms from various industries and includes outsourcing announcements pertaining to many different firm activities and objectives.
- We include cumulative abnormal returns (CAR) around the outsourcing announcement date as a proxy for the market's expectation of the economic value of the outsourcing arrangement and expect that a firm's subsequent decision to disclose or not disclose outsourcing in its annual report will be influenced by the market's assessment of the economic value of the outsourcing agreement.

Methodology

- We search Lexis-Nexis press releases from 2000 to 2002 and identify a sample of 189 announcements by U.S. publicly traded firms disclosing an outsourcing agreement.
- We subsequently searched annual report filings from 1999 to 2003 to find that 81 of the 189 outsourcing arrangements are disclosed (with a varying degree of specificity) in the corresponding fiscal-year annual report.

Logistic Regression

- We use a logistic regression model to identify the determinants of a firm’s disclosure choice
- The dependent variable is the annual report disclosure choice (coded one for firms with both an outsourcing press release and Form 10-K annual report disclosure, and zero for firms with a press release only).

Model

- **Probit (Annual Report = 1) = F(β1it + β2ROAit + β3CMTit + β4LEVit + β5SIZEit**
- **+ β6MANINDit + β7AGIND it + β8COMMINDit + β9 TRADEINDit + β10CARit**
- **+ β11NYSEit) (1)**
- where F(•) is the logistic cumulative density function, and for firm *i* in year *t. E*ach independent variable is determined as follows:
- **ROA** = return on assets (net income before extraordinary items, Compustat annual data 18, divided by total assets, Compustat annual data 6);
- **CMT =** percentage change in total debt (long-term debt, Compustat annual data 9 + debt in current liabilities, Compustat annual data 34) and common stock (total shareholders' equity, Compustat annual data 216 – retained earnings, Compustat annual data 36). Each sample firm is then coded CMT = 1 if the percentage change in total debt or common stock exceeds the corresponding two-digit SIC code industry median percentage change in the year of the outsourcing announcement, 0 otherwise;
- **LEV =** total debt, both short (Compustat annual data 34, debt in current liabilities) and long-term (Compustat annual data 9), divided by total assets (Compustat annual data 6);
- **SIZE =** total assets (Compustat annual data 6);
- **MANIND = 1** for firms with two-digit SIC code between 20-39 (manufacturing); 0 otherwise;
- **AGIND = 1** for firms with two-digit SIC code between 01-19 (agriculture, mining, and construction); 0 otherwise;
- **COMMIND = 1** for firms with two-digit SIC code between 40-49 (transportation and communication); 0 otherwise;
- **TRADEIND = 1** for firms with two-digit SIC code between 50-59 (wholesale and retail trade); 0 otherwise;
- **CAR =** cumulative abnormal return using the market model over a three-day (-1, +1) window where t = 0 is the press release day; and,
- **NYSE =** 1 for firms listed on the New York Stock Exchange; 0 otherwise.

Results & Analysis: Table 2

- For the period from 2000-2002 and as shown in Panel A of Table 2, information technology, manufacturing, and logistics represent the largest number of disclosed outsourcing activities for both subsamples.
- Panel B shows that cost savings is the largest disclosed objective for outsourcing in both subsamples, followed by improving customer service and leveraging the outsourcing provider’s expertise.
- Almost one-third of the firms in our sample do not disclose the objective for outsourcing in the press release. Panels A and B of Table 2 illustrate that current outsourcing disclosures are neither comparable nor consistent across firms.

Results & Analysis: Table 4 (ROA)

- The coefficient on ROA is negative (-0.747) and significant (p=0.012), indicating that firms with weaker operating performance relative to their industry are more likely than firms with stronger performance to disclose outsourcing in their annual reports.
- Two possible explanations:
  - Firms performing poorly during the fiscal year of the outsourcing announcement may disclose outsourcing in their annual report to signal an expected improvement in performance after the implementation of the announced outsourcing activity.
  - Alternatively, the disclosure may be designed to 'explain away' weak performance. The coefficient on LEV is 0.632 with a p-value of 0.030, indicating that more highly leveraged firms are more likely to disclose outsourcing than are less leveraged.

Results & Analysis: Table 4 (Lev)

- The coefficient on LEV is 0.632 with a p-value of 0.030, indicating that more highly leveraged firms are more likely to disclose outsourcing in their annual reports.
- Highly leveraged firms may disclose outsourcing arrangements to provide assurance to existing creditors that outsourcing plans will potentially improve future cash flows and to assist with short-term plans to raise more debt or equity capital.

Results & Analysis: Table 4 (Capital Markets Transactions)

- We do not find an association between capital market transactions and the probability of outsourcing-related annual report disclosures ($p=0.349$).

Results & Analysis: Table 4 (Size)

- The coefficient on SIZE is 1.027 and is significant ($p=0.032$), indicating that larger firms are more likely to provide voluntarily disclosures in their annual reports.

Results & Analysis: Table 4 (Capital Markets' Reaction)

- The coefficient on CAR is negative (-0.555) and significant (p=0.039).
- Firms experiencing a negative stock market reaction around the outsourcing announcement date are more likely to repeat the disclosure in their annual report.
- Firms experiencing a negative stock market reaction to their outsourcing announcements may be viewed skeptically by the market in the short-term. Voluntary annual report disclosures may be intended to assure the market that outsourcing will be beneficial.

Results & Analysis: Table 4 (Stock Exchange Effects)

- The coefficient on the NYSE variable is -0.714 and is significant ($p=0.023$), indicating that firms listed on the NASDAQ are more likely to disclose outsourcing information in their annual reports.

Results & Analysis: Table 4 (Industry Effects)

- The coefficients for each of the industry dummy variables in the model in Table 4 are all insignificant ($p>0.10$);
- Therefore, the model at this stage, did not find that any particular industry is more or less likely than the service industry (our base industry) to disclose outsourcing in its annual report.

Table 4 Analysis Excluding Financial Services

- Excluding the 19 financial services firms, the signs of the coefficients and the levels of significance are similar to the full sample for ROA, SIZE, CAR, and NYSE.
- By contrast, the coefficients for the industry variables MANIND, AGIND, and COMMIND are each negative and significant, indicating that firms in these industries are less likely than firms in the service industry to make annual report disclosures regarding outsourcing.

Results & Analysis: Table 5

- When recipient firms announce the outsourcing agreement in a press release, they are likely to repeat the disclosure in their subsequent annual report -- presumably to emphasize the importance of the outsourcing agreement to the firm’s future performance.

Results & Analysis: Table 5 (BHAR)

- We test whether the *fiscal year abnormal market return* (i.e., the abnormal return during the fiscal year corresponding to the outsourcing announcement) is associated with the subsequent decision by a firm to disclose outsourcing in their annual report. We include one-year buy-and-hold abnormal returns as a dichotomous variable in our model, replacing the dichotomous CAR variable. We set BHAR = 1 if the sample firm's buy-and-hold abnormal return exceeds the sample median, and 0 otherwise.
- We find that weak performance, whether in terms of accounting return (ROA) or market return (BHAR) or the market's initial assessment of the outsourcing agreement (CAR), increases the likelihood of annual report disclosure.

Results (Table 6)

- Weaker firms seem more likely to disclose their outsourcing arrangements in subsequent annual reports.
- Is this merely window-dressing or is this a credible signal of improved future viability?
- We examine ΔBHAR as shown in Table 6.
- ΔBHAR is defined as the buy-and-hold abnormal return in fiscal year t=+1 minus the buy-and-hold abnormal return in disclosure choice fiscal year t=0.

Analysis (Table 6)

- We use ΔBHAR as the dependent variable in an OLS regression with ΔROA and the annual report disclosure choice variable (DiscSource) as independent variables. If the market interprets the decision to disclose in the annual report as a reliable signal of improved performance, the coefficient on DiscSource should be positive and significant.
- Our results suggest firms disclosing outsourcing are signaling in a credible manner that they expect a turnaround in performance. From an economic perspective, this result seems reasonable because poorly performing firms choosing to outsource certain activities would be the firms most expected to take steps to quickly improve performance.

Conclusions: Outsourcing Disclosure Trends

- The most frequently disclosed types of outsourced activities are information technology, logistics, and manufacturing.
- The most frequently disclosed objectives for outsourcing are cost savings, improving customer service, and leveraging the provider’s expertise.
- However, almost one-third of the firms in our sample do not disclose any type of objective for outsourcing.
- These results suggest the need for the development of standards to enhance the consistency and comparability of annual report disclosures related to outsourcing.

Conclusions: Findings

- Firms more likely to make annual report disclosures of outsourcing:
  - Underperforming firms (with respect to return on assets) and larger firms (in terms of total assets).
  - Firms experiencing both short and long-term negative capital market reactions.
  - Firms listed on the NASDAQ.
  - Firms that announce (via press releases) the outsourcing agreement themselves as opposed to announcements by their supplying firms.
  - Firms disclosing outsourcing in their annual reports signaling credible improvement in their short-term market performance.