Financial Reporting and International M&A

Paquita Y. Davis-Friday
Baruch College

Hollis A. Skaife
University of Wisconsin - Madison

March 2009

Financial Reporting and International M&A

ABSTRACT: Theoretical research demonstrates that information asymmetries between prospective targets and acquiring firms constrain merger and acquisition (M&A) activity. Financial reporting is intended to reduce information asymmetries by producing financial information useful for resource allocation decisions. Research indicates that international financial reporting, specifically reporting under U.S. Generally Accepted Accounting Principles or International Financial Reporting Standards, results in more transparent financial information relative to other country-specific standards. After controlling for growth, performance, leverage, size and ownership structure, we find that firms are more likely to be targets in M&A when they engage in international financial reporting. The finding holds for within-country, across-country, and within-industry M&A transactions. In addition, our results indicate that firms domiciled in countries with less expropriation risk and less M&A regulation are more likely to be targets. Interestingly we also provide evidence that suggests that audit quality matters for cross-country target activity but is not a significant factor when examining within-country M&A. Our study provides insights into the market consequences associated with firms' financial reporting and the firm-specific and country-level characteristics that further international M&A activity.

Financial Reporting and International M&A

I. INTRODUCTION

Mergers and acquisitions (M&A) are a critical component of an efficient capital market because they facilitate change in the control of firm resources (Jensen and Ruback 1983, Jensen 2000, Andrade et al. 2001). There are barriers to M&A, however, that constrain M&A activity (Schipper and Thompson 1983). One such barrier is the information asymmetries that exist between prospective targets and acquiring firms, which diminish the likelihood that the M&A deal will be completed (Das and Sengupta 2001). One objective of financial reporting is to reduce information asymmetries by providing information about a firm's performance, resources and claims to the resources. Prior research documents that there is substantial variation in financial reporting standards across countries and that the variation in standards affects the quality of firms' financial information (e.g., Alford, Jones, Leftwich and Zmijewski 1993; Hung 2001; Bradshaw, Bushee and Miller 2004). Prior research also suggests that financial reporting using International Financial Reporting Standards (IFRS) and United States Generally Accepted Accounting Principles (U.S. GAAP), hereafter referred to as international financial reporting, results in higher quality financial information relative to other sets of financial reporting standards (Ashbaugh and Pincus 2001; Lang, Lins and Miller 2003; Barth, Landsman and Lang 2008).

In this study we investigate whether international financial reporting is associated with M&A target activity within and across countries. International financial reporting is more demanding in the scope of required financial disclosures and is more restrictive in the accounting measurement choices relative to many countries' financial accounting standards (Ashbaugh 2001). To the extent acquiring firms can better assess potential target firms' operations and performance due to the additional disclosures and more well-defined measurement requirements when firms engage in international financial reporting, we expect international financial reporting

to be positively related to being a target in a M&A. On the other hand, if acquirers prefer targets that have more private information flows because there is less competition for such firms, then we expect international financial reporting to lessen the likelihood of being a M&A target.

To conduct our empirical tests, we track sample firms for eight years identifying those firms that are targets in a completed stock acquisition, asset acquisition or merger. Specifically, we study the target activity of firms cross-listed on the London Exchange because the London Exchange allows foreign registrants to file financial statements prepared under alternative sets of accounting standards including international standards. Thus, sample firms report under different sets of financial reporting standards but are similar because they have a global market presence in that their shares trade in a foreign market.

Comparing target firms to non-target firms, we find the likelihood of being a target increases for firms that have more concentrated ownership, weak operating performance, and are more highly leveraged. The results also indicate that large firms and firms with fewer growth options are more likely to sell off assets, transfer ownership via stock, or be a party to a merger. We also find that acquiring firms prefer targets domiciled in countries with a common law legal system, less risk of asset expropriation, and less regulatory oversight over M&A transactions. Moreover, after controlling for firm-specific and country-level factors including audit supplier, we find that international financial reporting increases the likelihood of being a target in a completed M&A. This finding supports the conjecture that high quality financial reporting facilitates firms' global investment decisions (SEC 2000).

Our first analysis includes both within and across-country M&A transactions. To the extent information asymmetries are conditional on whether the acquiring firm and target firm are domiciled in different countries, our second analysis examines the role of financial reporting in cross-country M&A transactions. We find size and ownership concentration to be positively related to cross-country target activity.   We also find firms with fewer growth options are less likely to be targets in cross-country M&A deals. Furthermore, the cross-border results indicate

that expropriation risk and M&A regulation reduce the likelihood of firms being targets in cross-border M&. In contrast to the all transaction analysis, the results indicate no statistically significant relation between leverage, the reporting of losses, or legal system and being a target in a cross-border M&A. Interestingly, we find that the likelihood of being a target in a cross-border M&A increases when a firm contracts with one of the large international audit firms.

Turning to the role of international financial reporting in cross-border M&A, we find the quality of firms' financial information is a significant factor in predicting which firms will be targets in cross-border M&A. The significantly positive relation between international financial reporting and target activity is robust to controlling for firms' accounting standard choices and analyzing within-industry and within-country target transactions.

During our analysis period, international financial reporting required relatively more disclosures (e.g., segment reporting, statement of cash flows, accounting policies) and demanded more restrictive accounting measurement methods (e.g., specific guidance on accounting for leases, pensions, R&D, and reserves) relative to country-specific standards. In a series of sensitivity tests, we explore whether it is the additional disclosures or the restriction of accounting measurement choices under international standards that facilitate the completion of M&A. The results of the sensitivity tests suggest that it is the additional disclosures required under international reporting standards that matter more than the restriction of accounting measurement methods. This finding is important given most of the recent debate on accounting standard convergence is focused on whether accounting measurement standards will be consistently implemented across countries as opposed to valuing the mandated disclosures that come about from having a common set of financial reporting standards.

Our study makes several contributions to the literature. Prior research investigates the market consequences of differences in financial reporting across countries. The work of Bradshaw et al. (2004) and Covrig, Defond and Hung (2007) suggest that institutional investors prefer to invest in firms that engage in international financial reporting. Our research contributes

to this line of research by providing evidence on another market consequence of international financial reporting. Our study documents that firms' international financial reporting is positively associated with cross-border M&A activity thereby providing evidence supporting the claim that high quality financial reporting promotes global economic development via foreign investment (Rajan and Zingales 1998).

Second, our study provides evidence that is consistent with the U.S. Securities and Exchange Commission's (SEC) claim that the allocation of resources in the global market is a function of firms' financial reporting standards, auditing, and market regulation (SEC 2000). Our results indicate that firms' financial reporting standards and the quality of the audit function are important factors in cross-border M&A transactions; transactions which represent substantial resource allocation decisions. Related to regulation, we document there are substantial differences in the reporting and enforcement of M&A transactions across countries, and we document that firms domiciled in countries with more M&A regulation are less likely to be targets. Thus, our results demonstrate there are trade-offs in the market between the quality of firms' financial reporting and regulatory oversight related to M&A.

Our study also contributes to the literature by documenting firm-specific target characteristics associated with international M&A. There are few studies to date that investigate the factors that contribute to M&A activity. Palepu (1986) documents that low growth, less leveraged, and smaller U.S. firms are more likely to be targets in M&A. Rossi and Volpin (2004) document country-specific factors that affect the volume of international M&A activity concluding that acquiring firms prefer cross-border targets domiciled in common law countries. After controlling for firm-specific characteristics, however, our results indicate no statistically significant relation between the legal system and the likelihood of being a target. These findings draw into question the conclusions of Rossi and Volpin (2004) who conduct a country-level analysis. Prior research indicates that using aggregate country-wide data as opposed to firm-specific data can lead to different and potentially incorrect inferences (e.g. see Freeman 2004).

While the results of Rossi and Volpin (2004) speak to aggregate differences in target activity across countries, our study highlights the importance of controlling for firm-specific and country-level institutional factors when investigating the consequences of international financial reporting in the global market.

The paper proceeds as follows. The next section develops our financial reporting hypothesis. Section III describes our research design. Section IV presents our empirical results and conclusions are drawn in Section V.

II. INTERNATIONAL FINANCIAL REPORTING AND HYPOTHESIS DEVELOPMENT

International Financial Reporting

One of the primary objectives of financial reporting is to provide information to users of financial statements to aid them in making economic decisions relating to the reporting entity (Barth 2006). Accounting standards define the elements of the financial statements, which include both quantitative measurements (e.g., depreciation expense) and qualitative disclosures (e.g., method of depreciation). The cross-country variation in accounting standards results in a continuum of financial information transparency and usefulness internationally (Alford et al. 1993; Ali and Hwang 2000).

U.S. GAAP is a combination of bulletins, opinions, and standards related to accounting measurement methods and disclosure requirements that has evolved through a due process system beginning in 1953. In general, the restriction of accounting measurement methods and the large number of disclosures required under U.S. GAAP are considered by many to result in the most transparent financial information in the world.

IFRS is a relatively new set of financial reporting standards whose development commenced in 1973 with the establishment of the International Financial Reporting Standards Committee (IASC). The set of IFRS has become (1) more demanding in its scope of disclosures and (2)

5

more restrictive in its accounting measurement choices through a series of improvement projects undertaken by the IASC and its predecessor the International Accounting Standards Board (IASB). Specifically, the Comparability Project resulted in substantive revisions to ten IFRS in November 1993 (Davis-Friday and Rueschhoff 1998) and in 1995, the IASC began its Core Project that had as its goal the development of a comprehensive set of financial reporting standards that would generate sufficiently transparent financial information for investors to make informed cross-border investment decisions (FASB 1996).

The global interest and commitment to the development of IFRS increased substantially in June 2000 when the European Commission issued a policy document that proposed that European listed companies be required to report under IFRS. This policy proposal was supported by the Economic and Finance Ministers of the European Union (ECOFIN), and in February 2001, the European Commission presented draft legislation to the Parliament and the Council of Ministers proposing that all EU companies listed on a regulated market be required to prepare consolidated accounts in accordance with IAS effective by 2005. The European Commission acknowledged in this proposed legislation that financial reporting is a key element of an efficient capital market, and the accounting standards followed in financial reporting contribute to meeting investors' information needs and promoting global economic development. In October 2002, the FASB and IASB entered into the "Norwalk Agreement" that formalized the two accounting standard setting boards' commitment to the convergence of U.S. GAAP and IFRS.

The additional disclosure requirements and the restriction of accounting method choices under IFRS and U.S.GAAP relative to other countries' GAAP during our period of analysis (described below) result in financial information that is more easily forecasted (Ashbaugh and Pincus 2001; Lang et al. 2003), more informative (Ali and Hwang 2000; Leuz and Verrecchia 2000) and of higher quality (Barth et al. 2008) than financial information prepared under domestic standards. As Ashbaugh (2001) and Bradshaw et al. (2004) note a non-U.S. firm's use of an internationally acceptable set of accounting standards potentially reduces investors

processing costs because financial information is reported in a familiar form. Given prior research, we consider international financial reporting, specifically reporting under U.S. GAAP or IFRS, to result in more transparent and decision useful financial information than country-specific financial reporting.

Hypothesis development

There are many reasons for firms to engage in a merger or acquisition. Three common motives are market expansion, resource acquisition, and efficiency improvements (World Investment Report 1998). Firms seeking to expand their market share identify potential target firms that give them access to regional and global markets or meet country-specific consumer preferences. When a firm has restricted access to critical raw materials or a low-cost labor pool, it may consider a merger or acquisition to insure access to these resources (Levine and Aaronovitch 1981). Likewise, a firm may acquire a target to gain control over a valuable brand name or physical infrastructure such as ports, roads or power.

Regardless of the reason for the M&A, the fundamental effect is to change the control of firm resources. Prior literature provides evidence that suggests that an active M&A market is an important component of efficient capital markets (Jensen and Ruback 1983; Andrade et al. 2001). However, prior literature also indicates that there are barriers to M&A.

Structural barriers reflect existing conditions in the economic environment that constrain M&A. These barriers include the role of government in regulating economic policy, and the role of equity in corporate financing. Technical barriers are erected by statutes and by firms' articles of incorporation. Techniques such as holding groups, cross-shareholdings and the issuance of non-voting shares not only contribute to the separation of ownership and control, but also protect management and the controlling shareholders from the risk of unfriendly takeovers. Considering that structural barriers result from macro-economic conditions or development, only technical barriers are subject to rules limiting their anti-takeover impact and these rules vary across countries. For example, poison pills are not used much outside the U.S. as they tend violate

7

corporate law or stock exchange regulations. The poison pill's success in the U.S. is connected

with the fact that the board of directors has full discretion in the issuance of new shares; while in

other countries the decision to increase a firm's capital ultimately rests with shareholders.[1]

Prior research investigates whether structural and technical barriers affect M&A activity.

Schipper and Thompson (1983) report evidence that is consistent with merger-related regulation

restricting firms' acquisition activities. Das and Sengupta (2001) demonstrate that a potential

target firm can lose its informational rent and reduce the likelihood of the completion of a merger

by withholding private information about its market size and technology from the bidding firm.

Thus, the work of Das and Sengupta (2001) suggests that the likelihood of completing a proposed

M&A is conditional on information asymmetries between the acquiring and target firms.

A direct implication of the Das and Sengupta (2001) model is that the quality of a target

firm's financial information affects the likelihood of completing the M&A deal. As the

transparency of financial information increases via more informative disclosures and more

reliable, relevant accounting measures, information asymmetries between managers and potential

stakeholders of the firm decrease. To the extent acquiring firms can better assess potential

targets' operations and performance when such firms report under IFRS or U.S. GAAP, we

expect a positive relation between international financial reporting and the likelihood of being a

target in a completed M&A.

On the other hand, acquiring firms may prefer targets that have more private information

flows because competitive advantages are not publicly revealed resulting in less competition for

such firms. Given it is not clear if international financial reporting increases or decreases the

likelihood of a firm being a target in a M&A our formal hypothesis, stated in the null form, is as

follows:

---

[1] Many countries (e.g., Austria, Italy, Spain, Switzerland) have codes that restrict the board of directors
from taking actions that would effectively change the firm's capital structure after a bona fide offer has
been announced (Ferrarini 2001) .

H$_0$: There is no relation between a firm's international financial reporting and the likelihood of it being a target in a completed M&A.

III. RESEARCH DESIGN

Methodology

We test the relation between international financial reporting and the likelihood of being a target using the following model:

$$TARGET = \beta_0 + \beta_1 INTLGAAP + \beta_2 INTLAUDITOR + \beta_3 CONCENTRATED\_OWN$$
$$+ \beta_4 LEGAL\_SYS + \beta_5 EXPROP\_RISK + \beta_6 M\&A\_REG + \beta_7 ROA \qquad (1)$$
$$+ \beta_8 GROWTH + \beta_9 MB + \beta_{10} LOSS + \beta_{11} LEVERAGE + \beta_{12} SIZE + \varepsilon$$

where INTLGAAP is coded one if a firm reports financial information prepared under IFRS or U.S. GAAP, and zero otherwise.[2]

Prior research suggests that auditors with the greatest market share have reputations for providing high quality audits (DeAngelo 1981). In addition, large audit firms are more likely to ensure that their clients disseminate reliable financial information because of litigation concerns (Khurana and Raman 2004; Lennox 1999; Dye 1993). Furthermore, the large international audit firms arguably have more expertise in auditing INTLGAAP because of their diversified client base worldwide. We use INTLAUDITOR to proxy for audit quality, where INTLAUDITOR is coded one for audits performed by a large international audit firm and zero otherwise.[3] If high quality audits reduce information asymmetries, we expect INTLAUDITOR to be positively associated with the likelihood of a completed transaction. It could be however, that the quality of a target's

---

[2] IFRS reports are identified by reading sample firms' annual reports and by lists maintained by the IASC. U.S. GAAP reporting is identified via the listing dates on the New York and American Stock Exchanges or NASDAQ. Under this coding scheme, sample firms that voluntarily use U.S. GAAP are misclassified as domestic-GAAP users. This coding scheme biases against finding results for INTLGAAP.

[3] In the earlier years of our analysis period, Arthur Andersen, Coopers & Lybrand, Deloitte & Touche, Ernst and Young, KPMG, and Price Waterhouse are the international audit market leaders, and as such, INTLAUDITOR equals one if the firm contracted with one of these audit firms. In 1997, Coopers & Lybrand and Price Waterhouse merged to become PricewaterhouseCoopers.

auditor is of no consequence given that the acquiring firm engages in due diligence before the M&A transaction is complete. As such, we make no prediction on the relation between INTLAUDITOR and the likelihood of being a target.

LaPorta, Lopez-de-Silanes, Shleifer (1999) report substantial differences in ownership concentration across countries. The degree of concentrated ownership within a firm potentially affects the likelihood of being a target in that it may be less costly for an acquirer to make a successful tender offer when dealing with a few large shareholders as opposed to widely disbursed shareholders. We use OWNERSHIP_CON, defined as the number of blockholders owning five percent or more of the firm's voting shares, to capture the degree of ownership concentration within a firm and predict a positive association between ownership concentration and the likelihood of being a target.

Ball et al. (2000) conjecture that firms domiciled in common law countries are more likely to resolve information asymmetries through public disclosures due to the nature of contracting between equity stakeholders and managers. In contrast, firms domiciled in code law countries resolve information asymmetries via private disclosures (Leuz and Wüstemann 2004). One explanation consistent with the results of Ball et al. (2000) is that common law countries, in general, have federal securities laws, market regulation and enforcement policies that require firms to provide more public information flows relative to the public information flows required in code law countries (Rajan and Zingales 2003).

We use LEGAL_SYS to represent a firm's legal environment, where LEGAL_SYS is coded one for firms domiciled in common law countries and zero otherwise.[4] Rossi and Volpin (2004) indicate that the volume of M&A activity is significantly larger in countries with better investor protection, and, in general, common law countries have better investor protection than code law

---

[4] The common law countries representing in our sample include Australia, Canada, Hong Kong, Malaysia, New Zealand, and South Africa (Ball et al. 2000).

countries (La Porta et al. 2002). Therefore, we predict a positive relation between LEGAL_SYS and the likelihood of being a target.

Prior research indicates that the security of property rights is associated with firms' investment decisions (Culla and Xu 2005), suggesting that the risk of asset expropriation is the more severe impediment to economic development than the reliability of contract enforcement within a country. Given this prior work, we posit that firms facing high asset expropriation risk are less likely to insure that contractual claims are satisfied. EXPROP_RISK is the risk of asset expropriation, where larger values represent higher risk of asset confiscation or forced nationalization.[5] We predict a negative relation between EXPROP_RISK and the likelihood of being a target because acquiring firms face greater expected transaction costs if threatened with government intervention in the form of the expropriation of assets.

Asymmetric information and thus, agency costs are reduced and investor protection increased when firms are required by authoritative bodies to report information about their planned M&A activities and face oversight of the transfer of ownership claims. However, the benefits of M&A regulation in terms of a reduction in agency costs may not outweigh the explicit and implicit costs incurred by the required reporting and oversight over the proposed transactions. Schipper and Thompson (1983) investigate the consequences of the 1968 and 1970 Williams Amendments to the U.S. securities laws that mandated the public disclosure of transaction details related to tender offers. They document a negative price reaction to the announcement of the reporting requirements instilled by the Williams Amendments for firms with active acquisition programs. Schipper and Thompson (1983) conclude that U.S. market participants viewed the

---

[5] EXPROP_RISK is based on the expropriation risk values reported in La Porta et al. (1998). To simplify the interpretation of this variable, we transform the La Porta et al. (1998) values by subtracting the value from 10 so that higher values represent greater risk. Specifically, EXPROP_RISK is set equal to the following values by country: Australia=0.73, Austria=0.31, Belgium=0.37, Canada=0.33, Denmark=0.33, Finland=0.33, France=0.35, Germany=0.10, Hong Kong=1.71, Italy=0.65, Japan=0.33, Malaysia=2.05, Netherlands=0.02, New Zealand=0.31, Norway=0.12, South Africa=3.12, Spain=0.48, Sweden=0.60, and Switzerland=0.02.

requirements of the Williams Amendments to have negative cash flow consequences, ultimately imposing constraints on M&A activity in the U.S.

We control for the cross-country variation in M&A regulation by constructing an M&A index that measures the differences in M&A regulation across the 19 countries in which our sample firms are domiciled (see the Appendix for details). Our index is constructed as follows. We first consider whether a country's authoritative body overseeing M&A transactions requires firms to file reports for domestic M&A transactions, i.e., M&A transactions where both the target and acquiring firm are domiciled in the same country. Second, we determine whether there is mandatory reporting of foreign M&A transactions, i.e., transactions where the target firm is domiciled in the country of interest and the acquiring firm is domiciled elsewhere.[6]

The third and fourth criteria that we include in our M&A regulation index pertain to whether the M&A authoritative body can levy penalties on firms that do not comply with domestic M&A and foreign M&A reporting requirements. We also consider whether the authoritative body can order injunctions, divestitures or damages as part of the enforcement actions that can be taken against firms involved in M&A. Finally, our M&A index reflects whether there are special rules for foreign investment. For example, in Finland large acquisitions by investors from outside the European Union are subject to clearance by the Ministry of Trade and Industry.

In summary, our M&A index, which we label M&A_REG, reflects the regulatory requirements that firms are expected to comply with before a M&A transaction is completed. If the additional reporting and monitoring of transactions induced by the M&A regulation reduces acquiring firms' agency costs, we expect a positive relation between M&A_REG and the likelihood of firms being targets. However, if the M&A_REG generates more agency conflicts

---

[6] For example, in Australia, there is no requirement to notify the Australian Competition and Consumer Commission (the Australian oversight body) prior to entering into a merger agreement. However mergers involving acquisitions by foreign interests must be submitted to the Foreign Investment Review Board if the acquisition of shares is 15% or more or the value of assets being acquired exceeds five million Australian dollars.

thereby constraining target activity, we expect a negative relation between M&A_REG and the likelihood of being a target. No prediction is hypothesized for M&A_REG since *a priori* it is not known which outcome of M&A_REG is predominant.

The other control variables are derived from prior work predicting the likelihood of firms being targets in M&A (Palepu 1986), and are defined as follows. ROA is the return on assets defined as net income divided by average total assets. GROWTH is the firm's five year sales growth as reported in *Worldscope*. MB is the ratio of year-end market value to common stockholders' equity. LOSS is equal to one if the firm reported a loss, and zero otherwise. ROA and LOSS control for firm performance. GROWTH and MB control for firms' prior and future growth, respectively. In the international setting, acquiring a high-growth, strong performance firm may be a cost-effective approach to geographical diversification or market entry. In contrast, prior research examining the determinants of U.S. firms' M&A activities indicates that a U.S. firm is more likely to be a target when it under-performs (Palepu 1986). Because it is unclear whether strong performance enhances or diminishes the likelihood of non-U.S. firms being targets in M&A, we make no prediction on the signs of the coefficients on the performance and growth variables.

LEVERAGE is the ratio of long-term debt to total assets. LEVERAGE is used to proxy for financial resource availability, where higher values of LEVERAGE reflect more constrained financial resources (Palepu 1986). Under this interpretation it is predicted that LEVERAGE and the probability of being a target in M&A are positively related because firms that are financially constrained will be more willing to engage in asset divestitures or stock sales. LEVERAGE has also been used to proxy for firms' credit risk. Firms with greater credit risk may be less desirable targets if acquiring firms lack the cash flow to satisfy creditors' claims. No prediction is hypothesized for LEVERAGE since *a priori* it is not known which interpretation is predominant in the international M&A market.

The target model also includes SIZE, which is equal to the natural log of a firm's domestic market capitalization. Palepu (1986) argues that as a firm increases in size, it becomes more costly for a potential acquirer to integrate the target firm into its organizational structure, and therefore there is a negative relation between size and the likelihood of being a target. In contrast, the relation between SIZE and the likelihood of being a target may be positive if larger firms are more attractive targets because they have a foothold in a product market or country that cannot be replicated by the acquiring firm. Given aquiring firms' preferences are not known, we make no prediction on the relation between SIZE and TARGET. The empirical model also includes categorical variables to control for time clustering.

Sample

We begin by identifying all firms quoted on SEAQ International as of December 31, 1995 (n=682). We use firms cross-listed on SEAQ as opposed to all European stock exchanges because there is substantial variation in firms' financial reporting across this population and we are able to hand collect financial reporting standards and audit reports for these firms over time. Moreover, since all firms on SEAQ are cross-listed, arguably they all have a market presence outside their countries of domicile, which makes them susceptible to being an international target.

We delete 144 U.S. firms from the sample because U.S. firms operate in a more litigious environment relative to other cross-listed firms (Baginski, Hasssell, and Kimbrough 2002), and the target activity of U.S. firms is unlike that of other firms in the global M&A market (Rossi and Volpin 2004).[7] We also delete 84 firms that did not have the necessary 1994 data to estimate the target

---

[7] The descriptive statistics (not tabled) indicate that U.S. firms quoted on SEAQ are fundamentally different from non-U.S. firms quoted on SEAQ. Specifically, the descriptive statistics comparing U.S. firms to non-U.S. firms indicate that U.S. firms report significantly larger return-on-assets (at the 0.001 level), have significantly larger market-to-book ratios (at the 0.001 level), report significantly fewer losses (at the 0.10 level), are more leveraged (at the 0.001 level), have significantly fewer block holders (at the 0.001 level), are significantly larger (at the 0.001 level), and are more likely to hire high quality auditors (at the 0.001 level) than non-U.S. firms.

model, described below, for 1995, leaving 454 firms representing 19 countries in the initial sample. Table 1 summarizes the sample selection process.

Next we collect from *Securities Data Corporation* all completed corporate transactions from 1995 to 2002 for the 454 sample firms. Our analysis period begins in 1995 because, as noted above, that is the year that the IASC's Core Project greatly restricted accounting measurement choices under IAS. The analysis period ends in 2002 because that is the year that the European Union announced the mandatory use of IFRS by 2005 for all consolidated entities trading shares on an EU exchange. After 2002, many sample countries began incorporating international standards into or adopting international standards as their domestic standards.

We then identify the firm-year observations where sample firms are targets in completed transactions, and classify these 1,238 observations as the "target sample". The remaining 1,905 firm-year observations, i.e., firm-year observations where sample firms are not targets in M&A, serve as the control sample.[8] By identifying sample firms that are targets in completed M&A and comparing them to firms that are not targets, we do not artificially weight the frequency of target transactions. Artificially weighting the frequency of target transactions is a problem that is inherent in prior empirical studies that rely on matched-pair designs to provide evidence on the factors associated with firms being targets in M&A (Palepu 1986).

Panel A of Table 2 displays the firm-year observations by country. The most firm-year observations relate to Japanese firms (28.41%) followed by French firms (10.24%). In contrast there are only 20 observations from Austria (0.64%). Deleting these countries from our analysis does not change any inferences drawn from the results.[9]

---

[8] The vast majority of sample firms not identified as being a target in the SDC database were listed as being acquirers in M&A transactions over the analysis period. To the extent some sample firms were targets in completed M&A but the transaction was not covered by the SDC database, we have miscoded the dependent variable. This potential miscoding reduces the power of our empirical tests.

[9] There are several other countries that have well-developed sets of financial reporting standards in terms of the scope of required disclosures and restrictions on measurement choices, specifically Australia and Canada. When we delete sample observations related to firms domiciled in these two countries, our results

The firm-year observations are reported by year and by industry in Panel B and Panel C of Table 2, respectively. As expected, the number of observations declines over the eight year analysis period as sample firms merge, are bought or are taken over in a M&A (n = 454 and n = 299 for 1995 and 2002, respectively). We also note the frequency of target transactions varies by year. For example there are only 36 targets out of 435 firms in 1997 (8.27%) whereas more than half of the firms are targets in 2000 (181/357). We include year dummies in the empirical model to control for the variation in M&A activity over the analysis period.

The classifications in Panel C of Table 2 indicate that the majority of the observations represent firms operating in the rubber, metal, and machine products (SIC 3 = 26.22%), financial and insurance services (SIC 6 = 21.22%) and food, textile, and chemicals (SIC 2= 18.49%) industries. When we include industry dummies in equation (1) to control for industry effects, we draw similar inferences from the results.

Descriptive Statistics

Table 3 presents the descriptive statistics on the independent variables of equation (1). Panel A of Table 3 displays the summary statistics by the target and control sample, where variables are measured as of the sample firm's prior fiscal year end (Palepu 1986), and in the firm's domestic currency with the exception of SIZE which is measured in U.S. dollars. All continuous variables are winsorized at the 1st and 99th percentile.

The descriptive statistics indicate that target firms more often report under INTLGAAP (35%) than control firms (22%), providing preliminary evidence that international financial reporting is related to the likelihood of firms being targets in M&A. Target firms are also more likely to hire large international audit firms (65%) than control firms (59%). In addition, the descriptive statistics indicate that 25% of the control sample observations relate to firms domiciled in common law countries, which is significantly more than the 22% of target sample

are similar and our inferences remain the same.

observations. The descriptive statistics also indicate that there is less expropriation risk in target firms' countries of domicile. There is no significant difference in the mean M&A_REG between the control and target sample.

Turning to the other firm-specific variables, target firms have significantly more concentrated ownership (average number of blockholders=2) relative to control firms (average number of blockholders=1). In addition, target firms, on average, are significantly more leveraged (mean leverage = 0.69) and are significantly larger (mean size = 15.46) than control firms (mean leverage = 0.63; mean size = 14.91). The descriptive statistics indicate that the market-to-book ratio is marginally significantly larger for target firms (mean MB = 2.22) relative to control firms (mean MB = 2.12).

Panel B of Table 3 presents a correlation matrix, where the Pearson Product-Moment and the Spearman Rank-Order are reported above and below the diagonal, respectively. The majority of the correlations between the firm-specific and country-level attributes are significant. The largest correlations are between the country-level institutional variables of LEGAL and EXPROP_RISK (Spearman = 0.605, Pearson = 0.724).

IV. RESULTS

Target Activity

Table 4 displays the results of estimating the target model. To adjust for clustering potential serial correlation, we estimate the coefficients of equation (1) using generalized estimating equations clustering by firm and year (Diggle, Liang and Zeger 1994) and calculate standard errors and p-values based on the method of White (1980). We begin the empirical tests using all firm-year observations and report the results in the "All Transactions" columns of Table 4. The estimated coefficients on MB and LOSS indicate that non-U.S. firms with relatively low future growth prospects and poor operating performance are more likely to be targets in the international

17

M&A market. We also find that large, more highly leveraged non-U.S. firms are more likely to be targets.

When using all M&A transactions, the results indicate more target activity in countries with a common law system as the coefficient on LEGAL_SYS is significantly positive. In addition, the significantly negative coefficients on EXPROP_RISK and M&A_REG indicate that firms domiciled in countries with greater expropriation risk and more demanding M&A regulation, respectively, are less likely to be targets. The significantly positive coefficient on OWNERSHIP_CON is consistent with our prediction that non-U.S. firms with more concentrated ownership are more likely to be targets in completed M&A. We find no statistically significant relation between INTLAUDITOR and TARGET when considering all target transactions.

Turning to our primary variable of interest, we find a significantly positive coefficient on INTLGAAP. This result is consistent with the notion that M&A transactions are more likely to be completed when target firms provide higher quality financial information about their operations and performance.

Given the variation in financial reporting across-countries, our second and third analyses explore whether international financial reporting matters more for cross-border or within-border M&A. The second set of columns in Table 3 labeled "Cross-border Transactions" display the results of estimating equation (1) using cross-border target (n=507) and control firm observations (n=1905). The columns labeled "Within-Border Transactions" report the results using only within-border target (n=731) and control firm observations (n=1905).

We find, regardless of whether the M&A took place within or across borders, that larger firms and firms with fewer future growth prospects are more likely to be targets. In contrast, leverage and operating performance seem not to matter to acquiring firms involved in cross-border M&A as the coefficients on LOSS and LEVERAGE are no longer statistically significant at conventional levels. These findings suggest that cross-border M&A are used to enter new

product markets or expand market share whereas it seems within-border M&A are used to take control of assets or firms that are not being managed properly.

We also find acquiring firms prefer cross-border targets that have more concentrated ownership, which potentially makes the transfer of ownership less complicated compared to dispersed share ownership. In contrast, we find no significant relation between ownership concentration and firms being targets in within-border M&A. The results indicate that firms are less likely to be targets in both cross-border and within-border M&A when they are domiciled in countries where property is more likely to be confiscated and there is more M&A regulation.

Unlike the "All Transaction" analysis, we find no statistically significant relation between LEGAL_SYS and TARGET in the cross-border analysis after controlling for firm-specific characteristics and the other country-level institutional features of M&A_REG and EXPROPR_RISK. This finding draws into question the conclusions of Rossi and Volpin (2004) who conduct a country-level analysis and suggest that firms domiciled in common law countries may be preferred as cross-border targets over firms that are domiciled in code law countries. Freeman (2004), Freedman, Pisani and Purves (1998) and Greenland and Robbins (1994) indicate that researchers using aggregate country-wide data as opposed to firm-specific data can lead to different and potentially incorrect inferences.

Interestingly, we find a positive and significant coefficient on INTLAUDITOR in the cross-border analysis that indicates acquiring firms prefer targets that contract with large international audit firms when investing across borders. This finding is consistent with the notion that target firms contracting with large international audit firms receive more information benefits from their audits via their attestation of financial statements (Ashbaugh and Warfield 2003). In contrast, we find no statistically significant relation between audit quality and being a target in within-border M&A.

The positive and significant coefficient on INTLGAAP in both the cross-border and within-border transactions analyses indicate that acquiring firms prefer to invest in targets when the

targets provide relatively more disclosures and follow more restrictive accounting measurement methods relative to firms reporting under less demanding sets of financial reporting standards. These results support the conjecture that firms that provide more transparent and useful financial information by reporting under international financial reporting are more likely to be targets in international M&A.

Additional Tests

Within-industry analysis

Mitchell and Mulherin (1996) report that M&A cluster in industries as a result of industry shocks driven by deregulation, shifts in cost structures, or innovations in technology. To the extent managers of firms operating in the same industry are more knowledgeable about industry trends, the level of information asymmetries between an acquiring firm and target firm operating within the same industry is potentially lower than in across-industry M&A. If this is the case, it could be that international financial reporting is less significant in explaining the likelihood of being a target firm. To the extent there are still substantial differences in information asymmetries across firms operating in the same industry, however, we expect the results on INTLGAAP to hold when examining within-industry transactions.

To conduct the within industry analysis, we estimate equation (1) using only within-industry target transactions (n=347), i.e., the target and aquiring firm must be operating in the same industry as defined by their one-digit SIC, and control firm-year observations (n=1,905). The results of this analysis are reported in the first two columns of Table 5. We continue to find a positive and significant coefficient on INTLGAAP, suggesting that firms are more likely to invest in competitors that provide more useful financial information via their published financial statements. Interestingly, in contrast to our main results, we find that none of the firm characteristics other than size, which is positively related to the likelihood of being a target, are significant in the within-industry analysis.

Disclosures versus Measurement Methods

As stated above, the set of standards that comprise IFRS and U.S. GAAP during our period of analysis required firms to provide more disclosures and restricted firms' accounting measurement choices relative to firms' domestic accounting standards. To this point our analysis does not distinguish between increased disclosure or more precise accounting measurements when investigating the relation between international financial reporting and the likelihood of being a target in a completed M&A. Our next analysis attempts to do so in order to provide further insights into how international financial reporting reduces information asymmetries between acquiring and target firms. Are information asymmetries reduced more by the additional disclosures or by the accounting measurement restrictions induced by international financial reporting?

On one hand, one can posit that the additional disclosures required as part of international financial reporting are more important to acquiring firms because the additional disclosures provide more information about the nature of firms' cash flows, performance per share, and off-balance sheet assets and liabilities that is useful in determining target value (Leuz and Verrecchia 2000). Alternatively, the restriction of measurement methods potentially is more useful to acquiring firms because such restrictions can culminate in more comparable and predictable earnings measures that would be useful in assessing targets' current and future performance (Ashbaugh and Pincus 2001, Lang et al. 2003).

We use the additional disclosures (ADD_DISCLOSURES) required under International Accounting Standards and U.S. GAAP to capture the differences in disclosure requirements between INTLGAAP and firms' domestic financial reporting standards (Ashbaugh 2001). The additional disclosures include a required statement of cash flows, reporting significant accounting policies, disclosing changes in accounting policies and changes in accounting estimates, reporting prior period adjustments and post balance sheet events, identifying related party transactions and providing segment information. The accounting measurement restrictions (LESS_CHOICE)

include less discretion over the accounting for leases and pensions, disallowing the set up of reserves, and required expensing of research costs. [10]

The last four columns of Table 5 report the results of estimating equation (1) substituting ADD_DISCLOSURES and then LESS_CHOICE for INTLGAAP. We find a significantly positive coefficient on ADD_DISCLOSURES, suggesting that the likelihood of the M&A transaction being completed is increasing in the additional disclosures a non-U.S. firm provides when engaging in international financial reporting. In contrast, we find no significant relation between LESS_CHOICE and the likelihood of being a target in a completed M&A. These results provide some insight into the usefulness of firms' international financial reporting from the perspective of acquiring firms.

Accounting Standard Choice

The use of international financial reporting standards is voluntary for our sample of firms, and accordingly the analysis thus far potentially suffers from a self-selection problem that can result in inconsistent estimates of the coefficient on INTLGAAP. To address this concern, we conduct a two-step Heckman selection model. The first step models a firm's accounting standard choice as a function of managerial ownership, size, the changes in disclosure and measurement methods by adopting INTLGAAP, and whether the firm is cross-listed in the U.S.. We estimate this model using probit regression. The second step tests whether the firm characteristics driving the accounting standard choice affect the likelihood of being a target in a completed M&A by adding the inverse Mills ratio estimated from the first step to the target prediction model (equation 1).

---

[10] ADD_DISCLOSURES and LESS_CHOICE are as reported by Ashbaugh (2001) for countries that are in her sample. For countries not in her sample (Austria, Canada, Italy, Malaysia, South Africa), we construct our own measures of ADD_DISCLOSES and LESS_CHOICE using the same data source used in Ashbaugh (2001).

The results of the self-selection analysis are as follows. We find that firms with geater managerial ownership are more likely to adopt international financial reporting. The results also indicate that large firms and firms that are domiciled in countries with less stringent accounting standards in terms of fewer disclosures and measurement standards are more likely to use international financial reporting. Turning to the second stage, the coefficient on the inverse Mills ratio is statistically insignificant (*p-value* = 0.52). We continue to find a significantly positive coefficient on INTLGAAP (*p-value* = 0.03) suggesting that the factors that determine firms' international financial reporting do not explain such firms being targets in completed M&A.

Due Diligence

The completion of M&A transactions are conditional on the results of the due diligence process where auditors review all financial records and documents deemed material to the offer. For example, due diligence by the acquiring firm's auditor assesses the target's contracts to determine whether all liabilities are recognized and appropriately measured. If international financial reporting produces more transparent and useful financial information, then it should take less time to complete the due diligence process because auditors spend less time investigating and attesting to the target's assets and liabilities.

We test this conjecture by examining whether there is a difference in the length of time the acquiring firm is involved in due diligence (TIME) between targets following international reporting standards versus targets that report under their domestic standards. TIME is defined as the number of days between the announcement date and effective date as reported in the *Securities Data Corporation* database requiring a minimum of 30 days. We model TIME as a function of INTLGAAP, INTLAUDITOR, M&A_REG, and whether the M&A transaction is a stock acquisition (STOCK_AQUISITION). We expect a negative coefficients on INTLGAAP and INTLAUDITOR if the usefulness of targets' financial information and quality of auditor reduces the due diligence process. We expect positive coefficients on M&A_REG and

STOCK_AQUISITION as more regulation and more legal ramifications related to changing the control of shares will require more time to complete the M&A transaction.

Panel A of Table 6 displays the mean and median values of TIME for firms engaged in international financial reporting (INTLGAAP=1) and firms reporting under their domestic standards (INTLGAAP=0). While both the mean and median values of TIME are lower for INTLGAAP firms, the differences are not statistically significant at conventional levels (*p-value* for test of differences in means is 0.123).

Panel B of Table 6 reports the results of the multivariate analysis. As expected, we find that M&A transactions that take place in countries where there is more regulation take longer to complete. Also as expected we find stock acquisitions take longer than asset acquisitions to complete. We do not find significant coefficients on INTLGAAP or INTLAUDITOR. Future research can explore the extent to which international financial reporting affects the due diligence process.

V. CONCLUSIONS

International M&A activity has grown substantially over the last two decades. Yet research on the factors that enhance or inhibit international M&A is relatively limited. The purpose of this study is to examine whether firms' financial reporting is related to target activity within and across-countries. Specifically, our study investigates whether a firm's use of IFRS or U.S. GAAP, i.e., international financial reporting, is associated with the likelihood that it is a target in a completed M&A. In addition, our study explores other firm-specific determinants and country-level institutional characteristics that are associated with M&A activity prior to the mandatory adoption of international financial reporting by many firms.

To investigate whether international financial reporting is associated with the likelihood of being a target in a completed M&A, we track sample firms over eight years identifying those firms that are targets in completed M&A. We find that firms reporting under international standards are more likely to be targets regardless if the M&A transaction is within or across

borders. The results hold after controlling for firm-specific characteristics and country-level factors documented to influence target activity. Unique to our study, we also document firms domiciled in countries with less risk of asset expropriation and less M&A regulation are more likely to be targets. Our results also indicate that firms that are clients of a large international audit firm are more likely to be targets in cross-country M&A.

Our paper provides insights into the role financial reporting plays in international investment via M&A. Future research can explore whether international financial reporting facilitates other forms of investment both within and across countries.

APPENDIX
M&A REGULATION INDEX

Country	Regulation Item						Regulation Index
	1	**2**	**3**	**4**	**5**	**6**	
Australia		X		X	X	X	4
Austria	X					X	2
Belgium	X	X	X	X	X	X	6
Canada	X	X				X	3
Denmark						X	1
Finland						X	1
France					X	X	2
Germany	X		X		X		3
Hong Kong							0
Italy	X		X		X		3
Japan	X		X		X	X	4
Malaysia	X	X				X	3
Netherlands					X	X	2
New Zealand						X	1
Norway	X						1
South Africa	X					X	2
Spain					X	X	2
Sweden	X				X		2
Switzerland	X		X		X	X	4

Elements of M&A regulation are based on the Global Competition Review that appeared in *The International Journal of Competition Policy and Regulation 1997/98*. The specific elements of M&A regulation are as follows: 1 = Mandatory reporting for domestic M&A; 2 = Mandatory reporting for foreign M&A; 3 = Penalties for noncompliance with domestic M&A reporting requirements; 4 = Penalties for noncompliance with foreign M&A reporting requirements; 5 = Enforcement powers include injunction and/or divestiture, damages, and penalties; 6 = There are special rules for foreign investment. An 'X' indicates that the country has the M&A regulatory requirement.

REFEFRENCES

Alford, A., J. Jones, R. Leftwich and M. Zmijewski. 1993. The relative informativeness of accounting disclosures in different countries. *Journal of Accounting Research* (Supplement): 183-223.

Ali, A. and L. Hwang. 2000. Country-specific factors related to financial reporting and the value relevance of accounting data. *Journal of Accounting Research* 38: 1-21.

Andrade, G., M. Mitchell, and E. Stafford. 2001. New evidence and perspectives on mergers. *Journal of Economic Perspectives* 15: 103-120.

Ashbaugh, H. 2001. Non-U.S. firms' accounting standard choices. *Journal of Accounting and Public Policy* 20: 129-153.

Ashbaugh, H. and M. Pincus. 2001. Domestic accounting standards, International Accounting Standards, and the predictability of earnings. *Journal of Accounting Research* 39: 417-434.

Ashbaugh, H. and T. Warfield. 2003. Audits as a corporate governance mechanism: Evidence from the German market. *Journal of International Accounting Research* 2: 1-21.

Baginski, S., J. Hassell, and M. Kimbrough. 2002. The effect of legal environment on voluntary disclosure: Evidence from management earnings forecasts issued in U.S. and Canadian markets. *The Accounting Review* 77: 25-50.

Ball, R. S.P. Kothari, and A. Robin. 2000. The effect of international institutional factors on properties of accounting earnings. *Journal of Accounting and Economics* 29:1-51.

Barth, M. 2006. Research, Standard Setting, and Global Financial Reporting. Now Publishers Inc., Hanover, MA.

Bradshaw, M., B. Bushee, and G. Miller. 2004. Accounting choice, home bias, and US investment in non-US firms. *Journal of Accounting Research* 42: 795-841.

Covrig, V.M, M.L. Defond and M. Hung. 2007. Home bias, foreign mutual fund holdings, and the voluntary adoption of international accounting standards. *Journal of Accounting Research* 45: 41-70.

Culla, R. and L. Xu. 2005. Institutions, ownership, and finance: the determinants of profit reinvestment among Chinese firms. *Journal of Financial Economics* 77: 117-146.

Das, S. and S. Sengupta. 2001. Asymmetric information, bargaining, and international mergers. *Journal of Economics & Management Strategy* 10: 565-590.

Davis-Friday, P. and N. Rueschhoff. 2001. An analysis of the implications of the IASC comparability project for IAS adopters in the U.S. *Asia-Pacific Journal of Accounting & Economics* (June): 43-61.

DeAngelo, 1981. Auditor size and audit quality. *Journal of Accounting and Economics* 3: 183-199.

Diggle, P., K. Liang, and S. Zeger. 1994. *The Analysis of Longitudinal Data*. New York: Oxford University Press.

Dye, R. 1993. Auditing standards, legal liability, and auditing wealth. *Journal of Political Economy* 101: 887-914.

Ferrarini, G. 2001. Share ownership, takeover law and the contestability of corporate control. *Company Law Reform in OECD Countries: A Comparative Outlook of Current Trends*.

Fields, T., T. Lys and L. Vincent. 2001. Empirical research on accounting choice. *Journal of Accounting and Economics* 31: 255-307.

Financial Accounting Standards Board (FASB). 1978. Statement of financial Accounting Concepts No. 1: Objectives of financial reporting by business enterprises. Financial Accounting Standards Foundation, Norwalk, CT.

Financial Accounting Standards Board (FASB). 1996. The IASC-U.S. Comparison Project: A Report on the Similarities and Differences between IASC Standards and U.S. GAAP. Financial Accounting Standards Foundation. Norwalk, CT.

Freedman, D. 2004. Ecological Inferences and the Ecological Fallacy. International Encyclopedia of the Social and Behavioral Sciences 4017-4030.

Hausman, J., 1978. Specification tests in econometrics. *Econometrica* 46, 1251 - 1271.

Healy, P. and K. Palepu. 2001. Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. *Journal of Accounting & Economics* 31: 405-440.

Hung, M. 2001. Accounting standards and the value relevance of financial statements: An international analysis. *Journal of Accounting & Economics* 30: 401-420.

International Accounting Standards Board (IASB). 2003. International Accounting Standards Committee Foundation, United Kingdom.

International Accounting Standards Board. 2001. Exposure draft of a proposed preface to International Financial Reporting Standards. International Accounting Standards Committee Foundation, United Kingdom.

International Accounting Standards Committee (IASC). 1994. International Accounting Standards. United Kingdom.

Jensen, M. 2000. A theory of the firm: Governance, residual claims, and organizational forms. Harvard University Press, Cambridge, Massachusetts.

Jensen, M. and W. Meckling. 1976. Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics* 3: 305-360.

Jensen, M.C. and R.S. Ruback. 1983. The market for corporate control. *Journal of Financial Economics* (April): 5-50.

Khurana, I. and K. Raman. 2004. Litigation risk and the financial reporting credibility of Big 4 versus non-big 4 audits: Evidence from Anglo-American countries. *The Accounting Review* 79: 473-495.

La Porta, R., F. Lopez-de-Silanes, A. Shleifer and R. Vishny. 1998. Law and finance. *Journal of Political Economy* 106: 1113-1155.

_____, _____, _____ and _____. 2002. Investor protection and corporate valuation. *Journal of Finance* 57: 1147-1170.

La Porta, R., F. Lopez-de-Silanes, and A. Shleifer. 1999. Corporate ownership around the world. *Journal of Finance* 54: 471-517.

La Porta, R., F. Lopez-de-Silanes, and A. Shleifer. 2000. Investor protection and corporate governance. *Journal of Financial Economics* 58: 3-27.

Lang, M., K. Lins, and D. Miller. 2003. ADRs, analysts, and accuracy: Does cross listing in the United States improve a firm's information environment and increase market value? *Journal of Accounting Research* 41: 317-345.

Lennox, C. 1999. Audit quality and auditor size: An evaluation of reputation and deep pockets hypotheses. *Journal of Business Finance and Accounting* 26 (September/October): 779-805.

Leuz, C. and J. Wüstemann. 2004. The role of accounting in the German financial system, Chapter 14, in: "The German Financial System", Jan P. Krahnen and Reinhard H. Schmidt (eds), Oxford University Press, London.

Leuz, C. and R. Verrecchia. 2000. The economic consequences of increased disclosure. *Journal of Accounting Research* 38: 91-124.

Levine, P. and S. Aaronovitch. 1981. The financial characteristics of firms and theories of merger activities. *Journal of Industrial Economics* 30: 149-172.

London Stock Exchange, 1994. A Listing in London, 2nd ed. The International Stock Exchange of the United Kingdom and the Republic of Ireland, London.

Mitchell, M. and J. Mulherin. 1996. The impact of industry shocks on takeover and restructuring activity. *Journal of Financial Economics* 41: 193-229

Palepu, K. 1986. Predicting takeover targets: A methodological and empirical analysis. *Journal of Accounting and Economics* 8: 3-35.

Rajan, R. and L. Zingales. 1998. Financial dependence and growth. *The American Economic Review* 88: 559-586

Rajan, R. and L. Zingales. 2003. The great reversals: the politics of financial development in the twentieth century. *Journal of Financial Economics* 69: 5–50.

Rossi, S. and P. Volpin. 2004. Cross-country determinants of mergers and acquisitions. *Journal of Financial Economics* 74: 277-301.

Schipper, K. and R. Thompson. 1983. The impact of merger-related regulations on the shareholders of acquiring firms. *Journal of Accounting Research* 21: 184-221.

Securities and Exchange Commission (SEC). 2000. International Accounting Standards. February 16, 2000. Release nos. 33-7801, 34-42430; International Series Release No. 1215; File No. S7-04-00.

White, H. 1980. A heteroskedasticity-consistent covariance matrix estimator and a direct test for heteroskedasticity. *Econometrica* 48: 817-838.

World Investment Report. 1998. Trends and Determinants. New York and Geneva: United Nations.

TABLE 1
Sample Selection

Firms quoted on SEAQ International at December 31, 1994   682

Less: U.S. firms   144

Less: Firms lacking 1994 data to estimate target model   84

Sample firms   454

The population of firms quoted on SEAQ International is the basis for our sample because there is substantial variation in firms' financial reporting across this population and they all have a market presence outside their countries of domicile. We track whether the 454 firms are targets in M&A over 1995 – 2002 so as to not artificially weight the frequency of target transactions in the population. Our analysis period is 1995-2002 because international financial reporting standards are distinct from many countries' domestic standards during this time period.

TABLE 2
Sample Details

Panel A: 1995 – 2002 Observations by Country

Country	Target sample	Control sample	Total n	%
Australia	95	87	182	*5.79*
Austria	4	16	20	*0.64*
Belgium	32	39	71	*2.26*
Canada	70	39	109	*3.47*
Denmark	40	40	80	*2.55*
Finland	38	59	97	*3.09*
France	145	177	322	*10.24*
Germany	135	95	230	*7.32*
Hong Kong	46	108	154	*4.90*
Italy	43	81	124	*3.95*
Japan	270	623	893	*28.41*
Malaysia	11	29	40	*1.27*
Netherlands	59	63	122	*3.88*
New Zealand	7	14	21	*0.67*
Norway	38	61	99	*3.15*
South Africa	44	201	245	*7.80*
Spain	43	74	117	*3.72*
Sweden	91	50	141	*4.49*
Switzerland	<u>27</u>	<u>49</u>	<u>76</u>	*2.42*
Total	<u>1238</u>	<u>1905</u>	<u>3143</u>	
	39.39%	*60.61%*	*100.00%*	

TABLE 2 (Continued)

Panel B: Observations by Transaction Year

	Transaction Year								
	1995	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**Total**
Control sample	307	303	299	250	211	176	188	171	1905
Target sample	147	148	36	167	179	181	152	128	1238
Total n	454	451	435	417	390	357	340	299	3143
%	14.44	14.35	13.84	13.27	12.41	11.36	10.82	9.51	100.00

Panel C: Observations by Industry

	One-digit SIC									
	0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**Total**
Control sample	10	260	299	471	201	145	447	50	22	1905
Target sample	1	107	282	353	92	138	220	37	8	1238
Total n	11	367	581	824	293	283	667	87	30	3143
%	0.35	11.68	18.49	26.22	9.32	9.00	21.22	2.77	0.95	100.00

The sample consists of 454 non-U.S. firms quoted on SEAQ International at December 31, 1994 having the necessary data to estimate the target prediction model. The"Target sample" is made up of the firm-year observations from 1995-2002 where a sample firm is identified in the *Securities Data Corporation* database as being a target in a completed M&A transaction. Target acquisitions are those transactions noted as a stock acquisition, an asset acquisition, or a merger. The "Control sample" represents all other firm-year observations from 1995 - 2002. One-digit SIC represents the following industries: SIC 0 = Agriculture; SIC 1=Metal and mining; SIC 2 = Food, textile, and chemicals; SIC 3=Rubber, metal, and machine products; SIC 4=Transportation and utilities; SIC 5=Wholesale and retail trade; SIC 6=Financial and insurance services; SIC 7=Hotel, health, engineering; and SIC 8=other services.

TABLE 3
Descriptive Statistics

Panel A: Summary Statistics

Variable	Control Sample n=1,905		Target Sample n=1,238				
	Mean	**Median**	**Mean**	**Median**	**Test of Means**	**Test of Median**	**χ2 Test**
INTLGAAP	0.22	--	0.35	--	--	--	58.67***
INTLAUDITOR	0.59	--	0.65	--	--	--	11.70***
OWNERSHIP_CON	1.00	--	2.00	--	--	--	1.55
LEGAL_SYS	0.25	--	0.22	--	--	--	3.81**
EXPROP_RISK	0.74	0.33	0.51	0.33	-7.75***	-0.54	--
M&A_REG	2.80	3.00	2.77	3.00	-0.61	-1.38	--
ROA	0.05	0.03	0.04	0.03	-1.53	-0.11	--
GROWTH	0.05	0.04	0.06	0.04	0.68	-2.22**	--
MB	2.12	1.73	2.22	1.83	1.73*	-2.68**	--
LOSS	0.12	--	0.13	--	--	--	0.02
LEVERAGE	0.63	0.66	0.69	0.68	6.46***	-4.71***	--
SIZE	14.91	15.04	15.46	15.55	10.95***	-10.31***	--

TABLE 3 (continued)

Panel B: Correlation Matrix - Pearson Product-Moment above and Spearman Rank-Order below (n=3,143)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
INTLGAAP (1)		0.078	-0.007	0.040	-0.035	-0.093	0.027	0.063	0.048	0.012	0.006	0.172
INTLAUDITOR (2)	0.079		0.189	0.366	0.262	-0.282	0.213	0.089	-0.013	-0.150	-0.190	-0.131
OWNERSHIP_CON (3)	-0.028	0.168		0.266	0.260	-0.139	0.151	0.031	-0.030	-0.081	-0.215	-0.271
LEGAL_SYS (4)	0.040	0.367	0.213		0.724	-0.236	0.269	0.045	-0.071	-0.099	-0.407	-0.219
EXPROP_RISK (5)	0.029	0.179	0.203	0.605		-0.317	0.308	0.049	-0.094	-0.084	-0.464	-0.320
M&A_REG (6)	-0.087	-0.312	-0.190	-0.197	-0.223		-0.327	-0.133	-0.003	0.158	0.247	0.282
ROA (7)	0.075	0.274	0.215	0.269	0.216	-0.385		0.212	0.274	-0.392	-0.524	-0.075
GROWTH (8)	0.091	0.153	0.062	0.094	0.073	-0.208	0.314		0.111	-0.140	0.019	0.021
MB (9)	0.058	-0.067	-0.036	-0.114	-0.174	0.121	0.193	0.153		-0.031	0.075	0.301
LOSS (10)	0.012	-0.150	-0.096	-0.100	-0.067	0.172	-0.483	-0.192	-0.076		0.171	-0.070
LEVERAGE (11)	-0.029	-0.182	-0.223	-0.374	-0.299	0.222	-0.616	-0.051	0.094	0.187		0.294
SIZE (12)	0.163	-0.122	-0.259	-0.198	-0.225	0.305	-0.137	0.030	0.389	-0.053	0.252	

TABLE 3 (continued)

_____

Variable definitions (source) are as follows: INTLGAAP equals one if the firm uses International Financial Reporting Standards or U.S. Generally Accepted Accounting Principles in preparing the year's annual report and zero otherwise (Annual report or Bank of New York); INTLAUDITOR equals one if the firm's audit report accompanying the annual report is signed by a large international auditor and zero otherwise (Annual report or Worldscope); OWNERSHIP_CON is the number of blockholders that own 5% or more of the firm's voting shares (Worldscope); LEGAL_SYS equals one if the firm is domiciled in a common law country and zero otherwise (La Porta et al. 1998); EXPROP_RISK is the risk of asset expropriation, where larger values represent greater risk of asset confiscation or forced nationalization (La Porta et al. 1998); M&A_REG is a discrete variable ranging from zero to six that represents the oversight over M&A transactions (see the Appendix for details); ROA is the return-on-assets defined as net income divided by total assets at fiscal year end (Worldscope); GROWTH is equal to the five year sales growth at fiscal year end (Worldscope); MB is market value of common equity divided by stockholders' equity (Worldscope); LOSS equals one if the firm reported a loss for the year and zero otherwise (Worldscope); LEVERAGE is long-term debt divided by total assets at fiscal year end (Worldscope); and SIZE is the natural log of a firm's market value at fiscal year end measured in U.S. dollars (Worldscope). All variables are measured in the year prior to the transaction year. */**/*** Significant at the .10, .05, and .01 level, respectively. Bolded correlations are significant at the .10 level or better.

TABLE 4
Likelihood of Being a Target

$$TARGET = \beta_0 + \beta_1 INTLGAAP + \beta_2 INTLAUDITOR + \beta_3 OWNERSHIP\_CON + \beta_4 LEGAL\_SYS + \beta_5 EXPROP\_RISK + \beta_6 M\&A\_REG$$
$$+ \beta_7 ROA + \beta_8 GROWTH + \beta_9 MB + \beta_{10} LOSS + \beta_{11} LEVERAGE + \beta_{12} SIZE + \varepsilon$$

	Predicted sign	All Transactions n=3,143		Cross-Border Transactions n=2412		Within-Border Transactions n=2636	
		Parameter estimate	Standard error	Parameter estimate	Standard error	Parameter estimate	Standard error
Intercept	--	-3.884***	0.840	-6.748***	0.917	-4.477***	0.977
INTLGAAP	+/-	0.270**	0.138	0.339**	0.155	0.282*	0.154
INTLAUDITOR	+/-	-0.008	0.100	0.255**	0.129	-0.015	0.118
OWNERSHIP_CON	+	0.063**	0.036	0.190***	0.049	0.047	0.045
LEGAL_SYS	+	0.566*	0.220	0.225	0.252	0.757**	0.235
EXPROP_RISK	-	-0.525***	0.127	-0.606***	0.157	-0.534***	0.141
M&A_REG	+/-	-0.147**	0.060	-0.194***	0.074	-0.141**	0.061
ROA	+/-	0.008	0.012	0.006	0.017	0.009	0.012
GROWTH	+/-	-0.096	0.172	-0.174	0.244	-0.153	0.202
MB	+/-	-0.072**	0.036	-0.085*	0.048	-0.076*	0.040
LOSS	+/-	0.208*	0.111	0.098	0.135	0.204	0.134
LEVERAGE	+/-	0.668**	0.309	0.559	0.372	0.888**	0.330
SIZE	+/-	0.229***	0.054	0.352***	0.062	0.237***	0.062
Generalized R^2		0.46		0.37		0.42	
TARGET = 1		1,238		507		731	

TABLE 4 (continued)

_____

Variable definitions (source) are as follows: TARGET equals one when the firm is a target in a completed merger, asset acquisition or stock acquisition, and zero otherwise; INTLGAAP equals one if the firm uses International Financial Reporting Standards or U.S. Generally Accepted Accounting Principles in preparing the year's annual report and zero otherwise (Annual report or Bank of New York); INTLAUDITOR equals one if the firm's audit report accompanying the annual report is signed by a large international auditor and zero otherwise (Annual report or Worldscope); OWNERSHIP_CON is the number of blockholders that own 5% or more of the firm's voting shares (Worldscope); LEGAL_SYS equals one if the firm is domiciled in a common law country and zero otherwise (La Porta et al. 1998); EXPROP_RISK is the risk of asset expropriation, where larger values represent greater risk of asset confiscation or forced nationalization (La Porta et al. 1998); M&A_REG is a discrete variable ranging from zero to six that represents the oversight over M&A transactions (see the Appendix for details); ROA is the return-on-assets defined as net income divided by total assets at fiscal year end (Worldscope); GROWTH is equal to the five year sales growth at fiscal year end (Worldscope); MB is market value of common equity divided by stockholders' equity (Worldscope); LOSS equals one if the firm reported a loss for the year and zero otherwise (Worldscope); LEVERAGE is long-term debt divided by total assets at fiscal year end (Worldscope); and SIZE is the natural log of a firm's market value at fiscal year end measured in U.S. dollars (Worldscope). All variables are measured in the year prior to the transaction year. To adjust for clustering potential serial correlation, we estimate the coefficients of equation (1) using generalized estimating equations clustering by firm and year (Diggle, Liang and Zeger 1994) and calculate standard errors and p-values based on the method of White (1980). */**/*** Significant at the .10, .05, and .01 level, respectively. The generalized R^2 is calculated as $1-\exp((\chi LR2)/n)$, where $(\chi LR2)$ is the chi-square statistic for the likelihood ratio test for the overall model, and n is the total number of observations.

_____

TABLE 5
Additional Analysis

$$TARGET = \beta_0 + \beta_1 FINRPT + \beta_2 INTLAUDITOR + \beta_3 OWNERSHIP\_CON + \beta_4 LEGAL\_SYS$$
$$+ \beta_5 EXPROP\_RISK + \beta_6 M \& A\_REG + \beta_7 ROA + \beta_8 GROWTH + \beta_9 MB + \beta_{10} LOSS$$
$$+ \beta_{11} LEVERAGE + \beta_{12} SIZE + \varepsilon$$

	Within Industry n=2252		Additional Disclosures under INTLGAAP n=3,143		Measurement Restrictions under INTLGAAP n=3,143	
	Parameter estimate	Standard error	Parameter estimate	Standard error	Parameter estimate	Standard error
Intercept	-6.752***	1.008	-4.100***	0.843	-3.999***	0.841
INTLGAAP	0.374**	0.174				
ADD_DISCLOSURES			0.075**	0.037		
LESS_CHOICES					0.078	0.057
INTLAUDITOR	0.203	0.157	0.002	0.100	-0.001	0.100
OWNERSHIP_CON	0.197***	0.054	0.061**	0.036	0.061**	0.036
LEGAL_SYS	0.548**	0.278	0.642***	0.219	0.612***	0.219
EXPROP_RISK	-0.513***	0.182	-0.521***	0.128	-0.522***	0.128
M&A_REG	-0.208***	0.071	-0.132**	0.061	-0.150***	0.060
ROA	-0.023	0.023	0.008	0.012	0.008	0.012
GROWTH	-0.059	0.237	-0.100	0.173	-0.097	0.172
MB	-0.036	0.051	-0.073***	0.036	-0.074**	0.036
LOSS	0.044	0.183	0.214*	0.111	0.214*	0.111
LEVERAGE	0.388	0.413	0.712**	0.310	0.696**	0.310
SIZE	0.353***	0.067	0.239***	0.054	0.239**	0.054
Generalized R^2	0.32		0.46		0.46	
TARGET = 1	347		1238		1238	

Variable definitions (source) are as follows: FINRPT is set equal to one of three financial reporting measures. In the "Within Industry" analysis FINRPT is set equal to INTLGAAP, where INTLGAAP equals one if the firm uses International Financial Reporting Standards or U.S. Generally Accepted Accounting Principles in preparing the year's annual report and zero otherwise (Annual report or Bank of New York). In the "Additional Disclosures under INTLGAAP" analysis, FINRPT is set equal to ADD_DISLCOSURES which is the number of additional disclosures a firm provides by reporting under international accounting standards rather than its domestic accounting standards (Ashbaugh 2001). FINRPT in the "Measurement Restrictions under INTLGAAP" analysis is set equal to LESS_CHOICE which represents the number of accounting measurement constraints faced by a firm when the firm reports under international accounting standards rather than its domestic accounting standards (Ashbaugh 2001). See Table 4 for remaining variable definitions. To adjust for clustering potential serial correlation, we estimate the coefficients of equation (1) using generalized estimating equations clustering by firm and year (Diggle, Liang and Zeger 1994) and calculate standard errors and p-values based on the method of White (1980). */**/*** Significant at the .10, .05, and .01 level, respectively. The generalized R^2 is calculated as $1-exp((\chi LR2)/n)$, where $(\chi LR2)$ is the chi-square statistic for the likelihood ratio test for the overall model, and n is the total number of observations.

TABLE 6
Due Diligence

Panel A: Descriptive Statistics on Time Spent in Due Diligence

	INTLGAAP=0 n=285			INTLGAAP=1 n=159		
Variable	Mean	Median	Std. Dev.	Mean	Median	Std. Dev.
TIME	148.62	105.00	146.01	134.22	96.00	107.75

Panel B: Factors Associated with the Time Spent in Due Diligence – OLS Regression

$$\text{TIME} = \beta_0 + \beta_1 INTLGAAP + \beta_2 INTLAUDITOR + \beta_3 M\&A\_REG + \beta_4 STOCK\_AQUISITION + \varepsilon$$

	Predicted sign	Parameter estimate	Standard error
Intercept	--	4.301^{***}	0.115
INTLGAAP	-	0.017	0.073
INTLAUDITOR	-	0.012	0.072
M&A_REG	+	0.082^{***}	0.027
STOCK_AQUISITION	+	0.216^{***}	0.071
Adj. R^2		0.031	
n		443	

The sample is the firm-year observations that have announcement and effective dates in the the *Securities Data Corporation* data base. Variable definitions: TIME is defined as the days of due diligence, where the days of due diligence is the number of days between the announcement date and effective date requiring a minimum of 30 days; INTLGAAP equals one if the firm uses International Financial Reporting Standards or U.S. Generally Accepted Accounting Principles in preparing the year's annual report and zero otherwise (Annual report or Bank of New York); INTLAUDITOR equals one if the firm's audit report accompanying the annual report is signed by a large international auditor and zero otherwise (Annual report or Worldscope); M&A_REG is a discrete variable ranging from zero to six that represents the oversight over M&A transactions (see the Appendix for details); and STOCK_AQUISITION equals one if the M&A transaction was a stock acquisition and zero otherwise.