PREFACE

The Glucksman Institute for Research in Securities Markets awards fellowships each year to outstanding second year Stern MBA students to work on independent research projects under a faculty member's supervision. Two research projects completed by the Glucksman Fellows of 2007-2008 are included in this special issue of the Finance Department Working Paper Series. These papers focus on important topics in empirical financial economics.

Josh Zacharias, under the supervision of David Backus, explores the relationship between efficiency and size in microfinance institutions. In particular, the paper finds strong evidence of scale efficiencies in microfinance institutions. Mark Faktorovich, under the direction of Yakov Amihud, examines the level of success of a cross-border acquisition strategy. Specifically, this paper identifies differences in performance of U.S. companies that completed a cross-border acquisition compared with U.S. companies that acquired domestic targets. These papers, reflecting the research effort of two outstanding Stern MBA students, are summarized in more detail in the Table of Contents on the next page.

William L. Silber, Director
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Table of Contents

Josh Zacharias, An Investigation of Economies of Scale in Microfinance Institutions

This paper explores the relationship between efficiency and size in microfinance institutions. The business of microfinance attempts to strike a balance between the profit-seeking enterprise of credit loans and the social effort to improve living conditions of the poor. However, in order for these two goals to coexist, there must be some ability for firms to grow efficiently. Comparing like firms as well as looking at growth trends over time, we find that there is strong evidence of scale efficiencies in microfinance institutions. We conclude with a discussion of the nature of the economies of scale and the suggestion it has for the coexistence of profit-seeking and social improvement goals.

Mark Faktorovich, Globalization: How Successful are Cross-border Mergers and Acquisitions?

In light of the increasing popularity of cross-border mergers and acquisitions, this paper examines the level of success of a cross-border acquisition strategy. Specifically, this paper identifies differences in performance of U.S. companies that completed a cross-border acquisition compared with U.S. companies that acquired domestic targets. Additionally, this paper examines the difference in the market reaction to these deals by looking at abnormal stock returns around their announcements. The results indicate that acquirers of domestic targets are able to benefit more from some synergies, while those completing a cross-border acquisition take advantage of others. However, the results show no systematic difference between the performance of the two groups.

An Investigation of Economies of Scale in Microfinance Institutions

Josh Zacharias

I. Introduction

The business of microfinance strikes a delicate balance between the profit-seeking enterprise of credit loans and the social effort to improve the living conditions of the rural and urban poor. Envisioned by Muhammad Yunus in Bangladesh in 1976, microfinance was initially an attempt to design "a credit delivery system to provide banking services targeted at the rural poor," one predicated on "removing the need for collateral and [creating] a banking system based on mutual trust, accountability, participation and creativity."[1] Microfinance took root with the work of Yunus, who won the 2006 Nobel Peace Prize, and has continued with the worldwide creation and expansion of microfinance institutes (MFIs). Since Yunus established the Grameen Bank in 1983, microfinance has grown from a simple "credit delivery system" into a vast network of institutions, with diverse locations, structures and even diverse mission statements.

With this rapid growth and diversity has emerged a philosophical dilemma. Where once the foundation of microfinance fell clearly on the social side as a tool to combat poverty through the empowerment of impoverished entrepreneurs, there is now a significant number of people viewing the practice as a self-sustaining, commercial enterprise. This is best exemplified by Compartamos in Mexico which has built a $400 million loan portfolio, makes $80 million in profits and went public in 2007. This latter decision has been questioned by Yunus who believes Compartamos' decision will lead to the abandonment of microfinance's social mission.[2]

Furthermore, microfinance has significant attraction to the for-profit world, albeit an attraction rife with paradox. For one, despite the removal of collateral and credit history as a loan prerequisite, MFIs have been shown to have an extremely small loan default rate,

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[1] Grameen Bank online, http://www.grameen-info.org/bank/
[2] Malkin (2008)

comparable to or even lower than their commercial counterparts.[3] Second, despite most

traditional support coming from non-governmental organizations and socially-oriented

investors[4], Krauss and Walter (2006) show that MFIs generally show very low exposure to

market movements, making them a potentially intriguing risk-reducing portfolio diversification

option for investors.

Amidst this discussion, a key issue has only begun to be examined and thus far has been

left largely unresolved, namely the scalability of the microfinance process. At the base of any

commercialization effort is the implicit idea that an MFI could grow to disperse enough small

loans that it could make up for a loan-size disadvantage with sheer quantity and high repayment

rates. This would allow the MFI to eventually reach self-sufficiency and sustainability as profit-

making ventures while continuing to satisfy their socially-oriented mission.

This paper seeks to address two questions within this area: first, what cost efficiencies are

evident in microfinance with regard to firm size when comparing like firms? And second, what

observable patterns are seen when viewing individual firm growth longitudinally, and do these

patterns suggest the existence of economies of scale? We begin with a discussion of the small

but growing body of work in the area of microfinance efficiency, as we seek to understand the

most appropriate measures of efficiency in this unique area of banking. We will then examine a

broad sample of MFIs using an analysis of covariance regression model with proxies for various

firm attributes. This will allow us to understand the impact of size across similar firms. In order

to understand scale efficiencies in firms as MFIs grow, we also devise a multivariate approach to

consider matched pairs of portfolio growth and operational cost growth for a broad sample of

MFIs. In both analyses, we find strong evidence of scale efficiencies across firms and we break

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[3] Various research papers report a repayment rate over 95% for many MFIs, including Morduch (2000).
[4] Morduch (2000) reports that experts believe only 1% of all NGO-sponsored MFIs are self-sufficient and predict that no more than 5% would ever be.

this efficiency into various dimensions including firm region, firm type and firm self-sufficiency. We finish with a discussion of the findings as well as identifying other areas for future investigation.

II. Scale Efficiency in Financial Institutions

Investigation into efficiency in commercial financial institutions has a rich background, including a robust subcategory of papers specifically addressing scale efficiencies. Beginning as early as the 1960s, including a study of economies of scale in branch banking by Benston (1965) and continuing with a broad range of international data sets today, these studies have yielded both important specific findings as well as varied general approaches to understanding the relationship between inputs and outputs of financial firms. However, with a multitude of methodologies, several questions emerge with regard to microfinance: what are the challenges to identifying inefficiency versus noise? Moreover, even after identifying inefficiency, how can one best sort out the source? And of course, what is the best approach to overcome these issues?

For the last quarter century, Allen N. Berger and David B. Humphrey have played a particularly large role in this field, having outlined the idea of X-inefficiency in the early 1990s as well as making significant methodological advances in numerous other papers. In fact, their research has in many ways mirrored the field at large, as studies initially emphasized scale and scope efficiencies and more recently shifted to distinguishing X-inefficiency from the other two forms. Fittingly, the two paired up to conduct a broad survey, Berger and Humphrey (1997), where they parse out different measurement methodologies that have been used in frontier analysis, including both parametric and non-parametric approaches. Along with Berger and Mester (1997), the authors conclude that the assumptions and measurement techniques can make

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a difference in the conclusions of the source of inefficiency; however, "the choice made

concerning measurement technique, functional form, and other variables usually make very little

difference in terms of either industry average or the rankings of individual firms."[5]

That said, Humphrey (1987) and Yuengert (1993) present related approaches that have

particular appeal to the task of investigating sources of inefficiency in microfinance as an

industry. In both papers, the author shows that the sample of financial institutions can be divided

into quartiles by asset size to reveal not only an impact on the average cost of operations as size

changes but also on the magnitude of the variation of the costs. Though Humphrey used this

primarily to illuminate the differences between similar-sized firms, Yuengert goes on to compare

different approaches, specifically a Weighted Least Squares (WLS) approach and a Thick

Frontier Analysis (TFA), and ultimately devises a method of measurement that allows the

variance of the distributions themselves to vary with firm size.

This has immediate suggestions for an approach to MFIs, because our group of MFIs has

a similar general distribution to both of the aforementioned samples. In short, a quick look at

Figure 1 confirms that the average cost dispersion varies fairly significantly by firm size:

Fig. 1 - Average Operating Cost vs. Gross Loan Portfolio for Microfinance Institutions

Data Source: Microfinance Information eXchange

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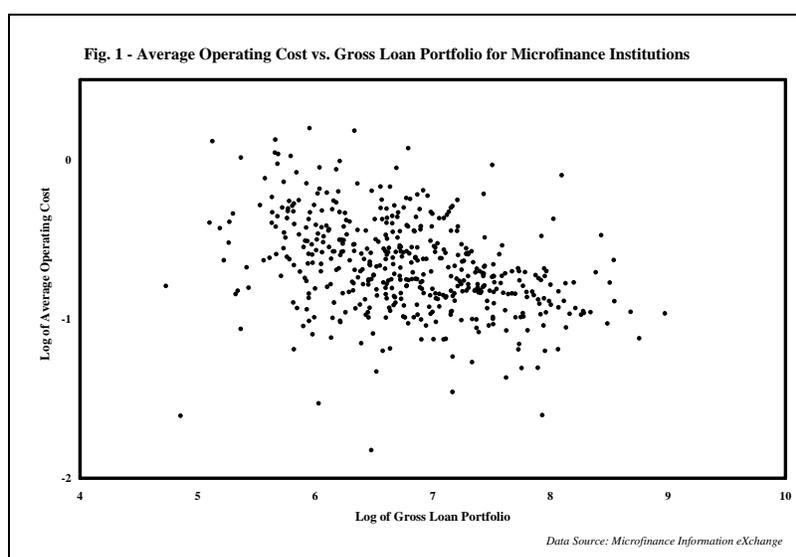
[5] Berger and Mester (1997), p. 42

Before conducting any in-depth analysis, we can perhaps already observe a general downward trend to the data suggesting the presence of scale efficiencies. However, the more striking pattern is the difference in variation, with the cluster of points on the low end of the size spectrum ranging much wider than the cluster on the high end. Thus our distribution is remarkably similar to the life insurance companies examined by Yuengert (1993) and the banks looked at by Humphrey (1987), and a version of their approach seems appropriate. We will take up this discussion later on as we walk through the methodology of this study.

III. Related Studies on Microfinance Institutions

Relative to other financial institutions, the microfinance industry and MFIs offer a much younger body of research, but with a recent explosion of studies and journal articles in the area. For an excellent summary of the earlier portion of this work, including a broad categorization of different avenues of study in microfinance, see Brau and Woller (2004).

Perhaps owing to the infancy of microfinance and thus the relative absence of reliable data, there is a clear bias in prior studies toward the economic theory and social implications. Morduch (2000) and Morduch (1999a) do an outstanding job presenting – and in some cases discrediting – some of the traditional propositions of microfinance. In particular, Morduch (2000) focuses on the delicate balance between efficiency and depth of outreach on one side and sustainability on the other, showing how the perceived "win-win" microfinance ideal rests on shaky presumptions. However, Murduch's argument is mostly a semantic one, based more on general consensus and overall economic theory than on supporting data and research. The reason for this is simple: few studies existed on microfinance operations and efficiency.

A number of researchers have leapt into that void since the publication of Morduch's paper, with an effort to understand efficiencies and operational trends of microfinance firms, including Gutierrez-Nieto, et al. (2007), Cull, et al. (2007), and Nghiem (2003) among others. Reviewing the recent literature, three approaches seem to have emerged in parallel. The first and probably most prolific is the case-based, anecdotal study. This has been and continues in some arena to be the preferred approach to microfinance analysis. Much within this body of work was surveyed by Brau and Woller (2004), and the problem with this approach remains the same: it is very difficult to extend to larger populations and thus merely serves to further the various policy and economic arguments surrounding the field.

The second approach is through straightforward financial ratio comparisons. Employed by Baumann (2004) as well as by *The Microbanking Bulletin*[6], this benchmarking places a firm or a sample of firms in relation to a population – such as South Africa relative to the world in the case of Baumann's study. The main advantage of this technique is its ease and quickness. With simple grouping and averaging, a firm or groups of firms can broadly evaluate its own performance and perhaps establish relativistic performance goals. However, often the benchmarking is too simplistic and falls well short of informing policy or identifying the true magnitude and source of efficiencies and inefficiencies.

Recently, there have been several sophisticated extensions to this approach – namely the integration of regression techniques as well as preliminary frontier analysis. Traditionally, a lack of reliable data has hampered efforts to get meaningful regression results in the microfinance field, but the Microfinance Information eXchange (MIX) has closed this gap significantly, making financial metrics readily accessible across a broad scope of microfinance firms. Cull, et

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[6] *The Microbanking Bulletin* is a biannual publication put out by the Microfinance Information eXchange (MIX). In each issue, it publishes "MIX Benchmarks" which allows individual firms to quickly place its performance in a number of categories in the broader context of its peer group.

al. (2007) appears to be the first in-depth study to use this data set, and the authors do an outstanding job answering three dimensions of questions, including the impact of interest rate level on MFI performance, the presence of "mission drift" away from the social effort and toward financial viability, and finally the trade-off between depth of outreach and the pursuit of profitability.

The final approach to MFI analysis is a mirror of much current financial institution analysis: a frontier approach primarily through DEA. This appears to have gained significant traction among researchers focusing their effort on categorizing firms in a sample in terms of specific operational characteristics and each firm's relative efficiency in those areas. Of course, the benefit of this approach as outlined by Berger and Humphrey (1997) is that it establishes far more robust benchmarks to identify "best practice" firms, mainly by understanding the relationships between a set of inputs and outputs. In particular, Gutierrez-Nieto, et al. (2007) used DEA to rank the relative efficiencies of a sample of Latin American MFIs in several different dimensions, and then continue on to use Principal Component Analysis (PCA) to understand the sources of variance in the global set. The result is four "principal components of efficiency": an overall assessment of efficiency based on the DEA model, NGO status, efficiency approach based on loan officers or operational costs, and gross loan portfolio. The authors also make some broad hypotheses about the impact of country and NGO status on several measures of efficiency. The drawback to any PCA analysis is that while the authors can make strong conjecture about the "meaning" of the components, the practical application of these vague.

Overall, after years of lagging far behind the study of commercial financial institutions, there is a rapidly growing body of literature investigating microfinance efficiencies on which to build. Specifically, two studies – Cull, et al. (2007) and Gutierrez-Nieto, et al. (2007) – offer

both comparison points as well as methodological forerunners of this paper. In particular, this paper will conduct a similar regression analysis to Cull, et al. (2007); however we will make three major additions: first, we will aim to refine the regression analysis to focus more on the operational metrics of MFIs (as opposed to the financial focus in Cull), specifically the relationship between operational cost and size. Second, we will adopt a slightly different model, using a general linear analysis of covariance (ANCOVA) model with weighted least squares to account for the differences in the variance of MFIs within different asset classes (as seen in Figure 1 earlier). And finally, we will look at the data set over time, using paired sets of operational cost and portfolio size growth measurements to understand patterns as MFIs grow. The next section will discuss this choice of methodology at greater length.

IV. Methodology

This study uses two different measurement techniques on the same core set of data. For the first portion of our study, we use an analysis of covariance (ANCOVA) general linear model with weighted least squares across a wide sample of MFIs. This will allow us to include vital categorical predictors as well as firm attributes measured on a continuous scale. While Yuengert (1993) proposes to use a more complicated regression methodology with two error variables – one to control for X-inefficiency and one for noise – the results from Berger and Humphrey (1997) seem to bear out that for an industry overview the difference is minimal. And while frontier analysis has been used by numerous financial institutional studies and several microfinance studies, as stated before, these approaches seem more appropriate in attempts to benchmark "best practice firms" through the identification of X-inefficiencies (such as DEA

analysis). However, by not including a noise variable, they seem to reduce the value of an industry overview.

The second portion of the study looks at MFI growth over time. The sample is a subsection of the firms above, namely the ones that have multiple years of operational and financial data. The goal is to look at each firm's growth on a one-year and five-year basis, while regressing normalized operational cost growth on one side against normalized gross loan portfolio growth on the other. In mathematical terms (where g = growth, OC = Operating Costs and GLP = Gross Loan Portfolio):

$$g_i^{OC} = \beta_0 + \beta_1 * (g_i^{GLP}) + \varepsilon_i$$

The results of this regression give us a sense of the relationship between cost growth and size growth, which is then broken down further by different dimensions. Specifically, if a firm sees no economies of scale, we expected the regression coefficient, β_1, to be equal to 1. That is, a one unit increase in Gross Loan Portfolio growth correlates to a one unit change in Operational Cost growth. Anything significantly different from one informs us about scale efficiency: for $\beta_1<1$, a one unit change in size correlates to a smaller change in costs which is the essence of economies of scale. Again, we normalize the growth data thus eliminating the complications of negative growth in either operating costs or gross loan portfolio.

Another appealing factor in this approach is that we implicitly control for many of the internal and external operational factors since we are basically comparing a firm to itself over time, thus much irregular variation can be attributed to noise and will be captured by our error term, ε. Granted, there may be some systematic bias, but we attempt to account for this by looking at the growth relationship across different slices (most notably by age, region and type of firm), effectively controlling growth for various firm factors. Overall, we then relate the results

from the ANCOVA regression with what we see by looking at scale efficiencies in a different dimension (i.e. time) in order to further understand the major factors that play into efficiencies.

V. Data Source

All data for microfinance institutions was drawn from the 2006 financial data contained in the Microfinance Information eXchange (MIX), a "global information exchange for the microfinance industry [that] strives to facilitate exchange and investments flows, promote transparency and improve reporting standards in the microfinance industry."[7] A few words on the database: as of the writing of this paper, MIX makes basic financial reports available for 1,158 MFIs from around the world, with 625 of these receiving a rating of four or five diamonds indicating that they have a minimum of two consecutive years of audited financial statements. This study only used this smaller group of 625 MFIs for issues of data completeness and reliability (i.e. for firms with a 3-diamond rating or lower, there were many key elements missing from their operational data thus making regression analysis impossible).

For the longitudinal study, this data set was refined even further to include only firms with a 5-diamond rating. Again, the rationale is simple: we needed firms with multiple years of financials and only 5-diamond firms qualified beyond two years. This left the study with a set of 248 firms to examine on a one-year growth basis, though only 100 of these have complete five-year operational cost growth available.

Like Cull, et al. (2007), this study is only possible due to the excellent work that MIX has done distilling financial statements from many MFIs into a core set of data markers. That said, there are several bias factors that must be mentioned: first, there is obvious selection bias in our sample as only those firms that choose to report to MIX are used. Furthermore, in selecting the

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[7] Microfinance Information eXchange at http://www.mixmarket.org/

firms that have the best relationship with MIX – essentially the 4- and 5-diamond firms – we may be further biasing our results toward the healthier MFIs. In particular, we might also expect some survivorship bias since firms that have since been removed from the higher diamond rating status, or removed from the database overall, will not be included in this study. However, these sources of bias are more easily addressed than the traditional issue with microfinance studies: a lack of robust data to begin with. Thus we do our best to account for the implications of bias in our discussion of the results.

VI. Variable Selection

For the most part, the Methodology section addresses how the longitudinal study was conducted. However, a few words must be said about the selection of variables in the ANOVA model. The first issue was to select proxies for operational efficiency. One particular measure emerged as the best: Average Operating Cost (which equals operating expenses divided by gross loan portfolio). Average Operating Cost has been used successfully in prior studies of financial institutions – for examples, see Yuengert (1993) and Gutierrez-Nieto, et al. (2007) – and are available in our data set. Furthermore, Average Operating Cost will have to be converted to a logged scale, as the distribution is clearly logarithmic (see Appendix 1 for histogram).

The second decision was to establish specific categories and/or proxy variables to include in the regression in order to account for the vast differences in MFIs. In other words, what control dimensions are needed in order to distill the relationship between cost and size? MIX offers a number of indicators; the goal was to find proxies for four core areas: size, profitability, region and type. This was based on preliminary tests for significance as well as the PCA

analysis in Gutierrez-Nieto, et al. (2007) which found that size, type, and approach/mission were the key dimensions of their DEA analysis. Thus the selected indicators are as follows:

Size: To understand the relationship between the efficiency and scale of MFIs, this is obviously the most important category. There are two dimensions that we include: Gross Loan Portfolio, and Average Loan Size. In the context of MFIs, the latter proxy is particularly interesting as loan size can be a very good indicator of the mission of various firms (with the assumption that smaller loans often indicate a dedication to the original goal of microfinance, namely targeting the very poor). Furthermore, the measure addresses the intuition that the number of borrowers and the overall gross loan portfolio are key drivers of operational costs. Thus taken together, we understand the two dimensions in which a microfinance firm might see economies of scale. Both variables follow logarithmic distributions and are therefore logged throughout this study.

Profitability: As with size, two proxies are used to account for variance in MFI profitability: Operational Self-Sufficiency (equal to Revenues/Expenses) and Return on Assets (ROA). This will control for firms of different profit classes. In the commercial banking world, this would mean "financial health;" in the microfinance world, profitability may not always be the goal of the institution – particularly when one considers non-profits or NGOs – so we will talk in terms of mission as well as health.

Region: This is a proxy for the different global operational locations. The markers in the data are taken from MIX with the following six regions: "Latin America & The Caribbean," "Africa," "Middle East & North Africa," "Eastern Europe & Central Asia," "South Asia," and "East Asia & The Pacific."

Type: This is a proxy accounting for different types of microfinance institutions. Again, the markers are drawn from MIX with the following six categories of firms: "Non-Government Organization (NGO)," "Non-Bank Financial Institution (NBFI)," "Bank," "Rural Bank," "Cooperative/Credit Union (Coop)," and "Other."

Several other indicators were also tested for significance: "Age of Firm," "Number of Staff Members," and "% of Women Borrowers," all of which proved to have inconclusive results in the ANCOVA model and thus were dropped from the discussion of results. Of these, only Age will be re-introduced in the longitudinal portion of the study, as it shows some significance with regard to the cost-size growth relationship.

VII. Results: Analysis of Covariance

In this section, we will discuss the results of the ANCOVA model.[8] As we said above in the Methodology section, the overall approach is similar to that undertaken by Cull, et al. (2007), with a focus on the operational costs as opposed to the many financial metric. The results of the ANCOVA model are outlined in Table 1 below.

Right away, we can observe that MFIs in this sample see scale efficiencies. This can be interpreted in several ways. With regard to overall firm size – or Log GLP in the regression – it appears that each percent of growth in Gross Loan Portfolio is correlated with a 0.0626 percent reduction in Average Costs. In other words, bigger firms are associated with smaller average costs and therefore better efficiency, the very definition of economies of scale. This result can be extended even more strongly to Average Loan Size, which also has an inverse relationship with Average Costs but of a magnitude nearly three times Gross Loan Portfolio.

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[8] Descriptive statistics for all variables can be found in Appendices 2 and 3.

Table 1:
Regression of Operational Efficiency vs. Firm Attributes

	Log Average Costs
Size	
Log Gross Loan Portfolio ($)	-0.0626*
Log Average Loan Size ($)	-0.1838*
Profitability	
Operational Self-Sufficiency (%)	-0.3773*
Return on Assets (%)	0.9460*
Region	
Africa	0.1027*
East Asia & Pacific	0.0645**
Eastern Europe & Central Asia	0.0441**
Latin America & Caribbean	0.0687*
Middle East & North Africa	0.0053
South Asia	-0.2847*
Type	
Bank	0.1184*
Rural Bank	-0.0208*
Coop/Credit Union	-0.1631
Non-Bank Finanacial Institution	0.0103
Non-Government Organization	0.0091
Other	0.0461*
Constant	0.6128*
R^2	0.5877

Data Source: 2006 MFI data from Microfinance Information eXchange

* Significant at a .001 level. ** Significant at .1 level

Figures represent an ANCOVA general linear model. All variables under "Type" and "Region" are categorical predictors. "Profitability" and "Size" are continuous predictors with unit of measurement noted.

The obvious desire here is to imply causality, namely to state that increasing the size of the firm and the size of the average loan both cause the average costs to go down, thus allowing the firm to recognize the benefits of efficiency. There are several concerns: first, as we discussed in the prior studies section, there is a delicate balance between the loan size and microfinance

efforts to loan to the poor. On the one hand, the goal is to put the money in the hands of people who do not have access to traditional channels of credit, with the underlying theory that these people will repay at the same rates. However, the implication that larger loan size is associated with more efficient firms puts the financial and operational goals of the firm at direct odds with the social motivation of microfinance (basically, this is the "schism" that Morduch discusses at great length). Moreover, this relationship may be circular, as firms that have scaled up might have done so through different channels that are inherently more profitable and by extension more efficient. Thus causality is *possible* with regard to scale efficiency, but certainly not *clear*.

Indeed, our profitability proxies seem to some degree to bear this out. In terms of self-sufficiency, MFIs have a very strong relationship between higher self-sufficiency and better efficiency. Again, the causal relationship could point both directions. Thus taken together with the implication that greater size and greater loan size improve efficiency, we begin to see a problem with the incentives inherent in the industry. To put it bluntly, firms managers striving for profitability and operational efficiency have incentive to make larger loans and become more self-sufficient – and all indications are that this is mainly achievable through lending efforts that extend above the "very poor" that the social effort is geared toward. Return on Assets is bit more confusing until we remember that the relationship is a semi-log. Thus a one percent increase in return on assets leads to a less than .01 percent increase on average costs, a positive relationship but a very small one.

The final dimensions included in the ANCOVA model are Type and Region. These will be discussed at greater length in our longitudinal model, but we see some trends emerging with regard to efficiency. Looking at Region difference, the most striking results are the extremes, Africa on the inefficient end and South Asia on the efficient side. As the focus of this study is on

the existence of scale efficiencies, we will not comment on the explanations for this large spread; suffice it to say that this is a major area for future research.

VIII. Results: Scale Efficiency with Growth

In this section, we outline the results from our longitudinal regression analysis. We will focus on the final two dimensions – Type and Region – as well as how the results relate to the ANCOVA model. Firm Type was further subdivided into "NGO" and all others, as these Non-Government Organizations occupy a unique place in the microfinance industry, driven by social gains but often with an eye toward self-sufficiency and self-sustainability. The intuition from analyzing these firms as a separate entity is also confirmed by the results of Gutierrez-Nieto, et al. (2007) which posits that NGO status is one of the principal components driving efficiency. In short, the NGO stands out as different from the rest and thus is examined separately in Table 2.

Table 2:
Growth Relationship by Firm Type

	NGO	Non-NGO	Overall
'01-'02	0.769	0.987	0.881
'02-'03	0.727	0.800	0.763
'03-'04	0.775	0.731	0.733
'04-'05	0.844	0.706	0.761
'05-'06	0.800	0.773	0.787
'01-'06	0.664	0.784	0.719

Data Source: Microfinance Information eXchange

'01-'06 data is based on a regression of 5-year CAGR of MFIs.

Data in chart represent β_1 such that: OC Growth = $\beta_0 + \beta_1$ * (GLP Growth) + error

All calculations significant at a .001 level.

As outlined above, the overall regression of 5-year growth of average costs versus the 5-year growth of operational costs shows a gap in efficiency between NGOs and Non-NGOs, with NGOs seemingly *more* efficient as they have scaled by a significant margin.[9] However, this difference has not been uniform over the past five years. Whereas the efficiency growth relationship has grown slightly for NGOs, the Non-NGOs saw a big shift downward after 2002 and otherwise similar or even better returns to scale. Without longer-term data, it is difficult to fully explain this trend; we will discuss this at greater length in our concluding remarks. Overall, though, the story is the same is in our ANCOVA regression: MFIs do see operational efficiencies as they grow larger.

The final part of our study looks at the size-cost growth relationship by Region of operation. Again, Gutierrez-Nieto, et al. (2007) guide our intuition, as their results show "country clusters" in their PCA analysis with regard to the dimensions/components of size and efficiency. In other words, MFIs within the same region in their study appeared to have similar scale efficiencies. As such, we have outlined the observed 5-year growth relationship by region in Table 3 below in an effort to quantify the differences by region.

Table 3:
Growth Relationship by Region

	Africa	Eastern Europe	Latin America	Middle East	South & East Asia	Overall
'01-'06	0.870	0.838	0.857	.451*	0.661*	0.719

Data Source: Microfinance Information eXchange

'01-'06 data is based on a regression of 5-year CAGR of MFIs.

Data in chart represent β_1 such that: OC Growth = β_0 + β_1 * (GLP Growth) + error

All calculations significant at a .001 level, unless otherwise indicated.

* Significant at a .01 level.

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[9] Recall that in this regression, a value of "1" means that an MFI's costs have grown in step with its overall portfolio. Anything less than one indicates that the costs have grown slower than the portfolio; or in other words, the firm has been able to achieve scale efficiencies as it has grown.

The results show that firms in the Middle East, South Asia and East Asia see much stronger scale efficiencies than their counterparts in the other three regions. This result is consistent with the results from our ANCOVA model summarized in Table 1, namely that Africa sees the fewest scale efficiencies – though still positive – with Latin America and Eastern Europe in the same basic realm and South Asia in particular showing strong economies of scale. These results have significant implications for business models in those areas, namely that the Middle Eastern and Asian MFIs should be as large as possible while MFIs in the other regions should focus on efficiencies in other areas than scale.

It is important to note that sample size may play a role in the results, as Africa, Eastern Europe and Latin America each have a significant number of firms in this sample. This may get back to our original concerns with selection bias, namely that the regions with fewer firms reporting to MIX also have the most successful firms reporting to MIX. Overall, further study of major operational difference in these regions is an important area for future research, as the implications for scale decisions are clear.

IX. Discussion and Conclusion

We have examined economies of scale in microfinance institutions in two dimensions – by comparing similar firms across a broad sample as well as by looking at firms as they grow – and in both cases, we see strong evidence that operational efficiencies and size are positively correlated. In short, a larger MFI appears on average to be a more efficient one. However, converting this result into suggestions for policy is much more complicated.

Consider the results we saw with NGOs versus non-NGOs, namely that NGOs show stronger economies of scale than non-NGOs. The reality is that there may be several possible

underlying themes to this result: first, the difference could be that NGOs are receiving subsidies that do not get filed under operating costs. The role of subsidies in microfinance and specifically the Grameen Bank was discussed at length in Morduch (1999b), while the impact of subsidies in financial institutions was examined in Wolken and Navratil (1980). In short, both argue that subsidies are a vital part of operations across many financial institutions and that if grants were subtracted from profits – or accounted for in operational budgets at the market rate for the subsidy – much of the increased return would disappear. This is not to say that the subsidies are bad, merely that they are going toward the non-monetary "social returns" of poverty alleviation. The trade-off is that the apparent scale efficiency of those firms receiving the subsidies cannot be taken at face value as tradition measures improperly value the firm costs.

Alternatively, as argued in Krauss and Walter (2006), microfinance institutions show some resistance to broader market movements. But this effect may not be uniform across different firm types and thus the market downturn after 2001 impacted the operations of the non-NGOs more than the NGOs. This too would have an impact on scale efficiency and deserves further study in the context of product diversification. In short, we can see that it is hard to simply say that NGOs should implement a growth policy in order to become more efficient.

Converting the results into policy gets even more complicated when considering that efficiency may not be a firm's primary goal. Indeed, efficiency and self-sustainability in microfinance do not imply "success" since societal improvement is often paramount to the venture. In fact, striking this balance between social and financial gains has become the new challenge in the industry, one that has only begun to be evaluated. Jonathan Morduch envisioned many of these issues nearly a decade ago in Morduch (2000) and still his writings resound loudly with current struggles:

"Addressing the schism [between rhetoric and action, and between financially-minded donors and socially-minded programs] may also mitigate the emerging backlash against the microfinance movement. The insistence on the win-win proposition has alienated many potential supporters. Those willing to trade off costs for benefits have become frustrated as microfinance institutions stretch accounting data in order to claim profitability while simultaneously eschewing social evaluations. Perhaps more problematically, those interested in replicating the well-known success stories have only had partial and unreliable evaluations on which to base their plans."[10]

As mentioned earlier in the paper, this debate has recently brimmed over as two of the largest players in the microfinance world – the Yunus' Grameen Bank in Bangladesh, and Compartamos in Mexico – have begun openly criticizing each other, as Yunus believes that the pressures of seeking profit will cause Compartamos to abandon its social mission.[11] This debate more than any highlights the importance of a better understanding of the scale efficiency in order to inform decision-making for many players, including donors, investors and most importantly the managers of the firm.

On the one hand, this study offers an answer to this question: yes, there are scale efficiencies. But the areas in which we see them have very important suggestion for the future of the industry. In essence, bigger portfolios and bigger loans are associated with better efficiency; or differently, the firms see economies of scale. That said, Yunus' concern with Compartamos' business model may be founded as the act of increasing average loan size may run counter to the social design of microfinance. This leaves managers with a quandary: if organizational leaders are pushing for better efficiency and perhaps even profitability, how can this be balanced with the social mission? This question is even stronger for NGOs which currently see very strong scale efficiencies but have perhaps an even stronger social mission, if only because the receipt of subsidies may be at the root of much of this efficiency and the subsidies are in theory allotted almost exclusively for the social goals of the firm.

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[10] Morduch (2000), p. 627
[11] Malkin (2008)

Thus the roadmap to exploiting efficiency in microfinance remains cloudy. On the positive side, a great deal of research is being conducted to address both "best practice" and industry-wide issues, much of which speaks loudly about how managers can attempt to balance the profit and social aims of the firm. However, the negative side is that many of these studies – Cull, et al. (2007) in particular – show that this balance must stem out of an acceptance that there is a trade-off between profit and social mission, and thus the "win-win" proposition of microfinance discussed in Morduch (2000) is a mirage. The results from our study would seem to confirm the latter, with the implication that managers who hope to maximize social gains must be willing to sacrifice profit in order to do so. And conversely, any firm that places profit first will ultimately find itself moving out of the business of microfinance for social gains and into the broader realm of credit loans. In all, while not confirming a "win-win" solution, results such as these should at least allow firms and managers to be more realistic in their operational and strategic prioritization.

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XI. Appendices

Appendix 1: Histogram of Operating Expense
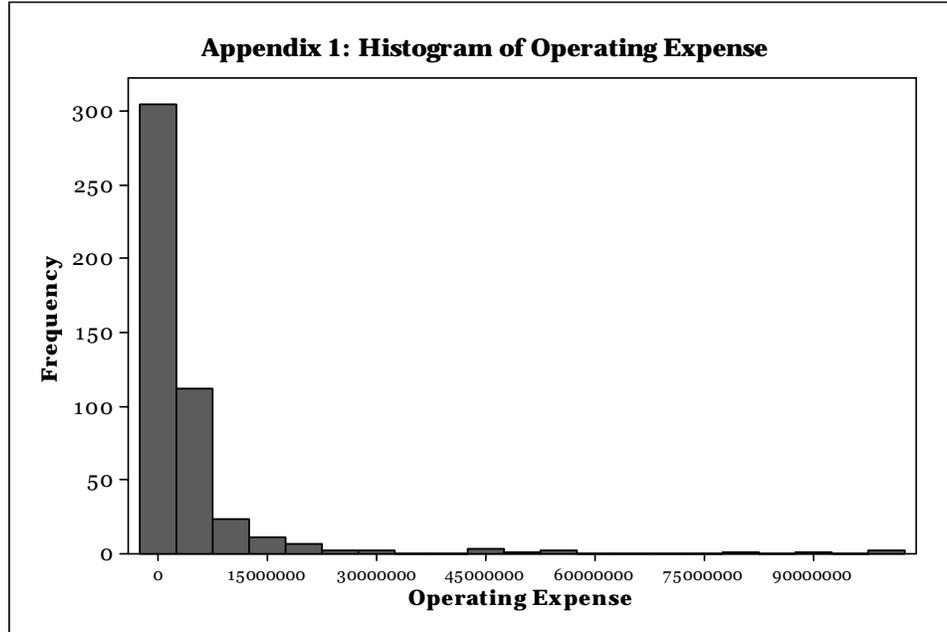
Appendix 2:

Descriptive Stats for Firm Attributes

	Mean	StDev	Min	Median	Max
Efficiency					
Log Average Costs	-0.6691	0.2896	-1.6073	-0.7014	0.1961
Size					
Log Gross Loan Portfolio ($)	6.7824	0.7438	4.7306	6.7540	8.9739
Log Average Loan Size ($)	2.7004	0.5026	1.5441	2.7235	4.4297
Profitability					
Operational Self-Sufficiency (%)	1.1843	0.2795	0.1881	1.1721	2.2702
Return on Assets (%)	0.0583	0.0695	0.0002	0.0419	0.7788

Data Source: Microfinance Information eXchange

Appendix 3:
Descriptive Stats for Average Costs (by Type and Region)

	N	Mean	StDev	Min	Median	Max
Region						
Africa	93	-0.530	0.304	-1.604	-0.520	0.196
East Asia & Pacific	26	-0.421	0.265	-1.014	-0.377	0.180
Eastern Europe & Central Asia	85	-0.761	0.218	-1.607	-0.718	-0.357
Latin America & Caribbean	195	-0.676	0.270	-1.309	-0.722	0.124
Middle East & North Africa	28	-0.691	0.246	-1.369	-0.682	-0.141
South Asia	44	-0.889	0.271	-1.530	-0.881	0.070
Type						
Bank	34	-0.614	0.321	-1.158	-0.692	0.196
Rural Bank	10	-0.850	0.243	-1.152	-0.940	-0.447
Coop/Credit Union	56	-0.862	0.258	-1.607	-0.830	-0.249
Non-Bank Finanacial Institution	160	-0.693	0.270	-1.604	-0.717	0.180
Non-Government Organization	197	-0.593	0.277	-1.272	-0.583	0.124
Other	14	-0.704	0.328	-1.369	-0.682	-0.171
OVERALL	471	-0.669	0.290	-1.607	-0.701	0.196

Data Source: Microfinance Information eXchange

Globalization: How Successful are Cross-border Mergers and Acquisitions?

Mark Faktorovich

I. INTRODUCTION

There has been a significant upturn in mergers and acquisitions (M&A) activity in the past few years as is typical during high market growth periods. This upturn follows a few years of M&A decline after the hot period in the 1990's. Non-U.S. companies entered the scene in the 1980s and their involvement picked up pace in the 1990s. Starting in the mid-1990s, over 15% of M&A deals with U.S. acquirers have involved a target company based in a foreign country.

US M&A Activity

Source: SDC Thomson
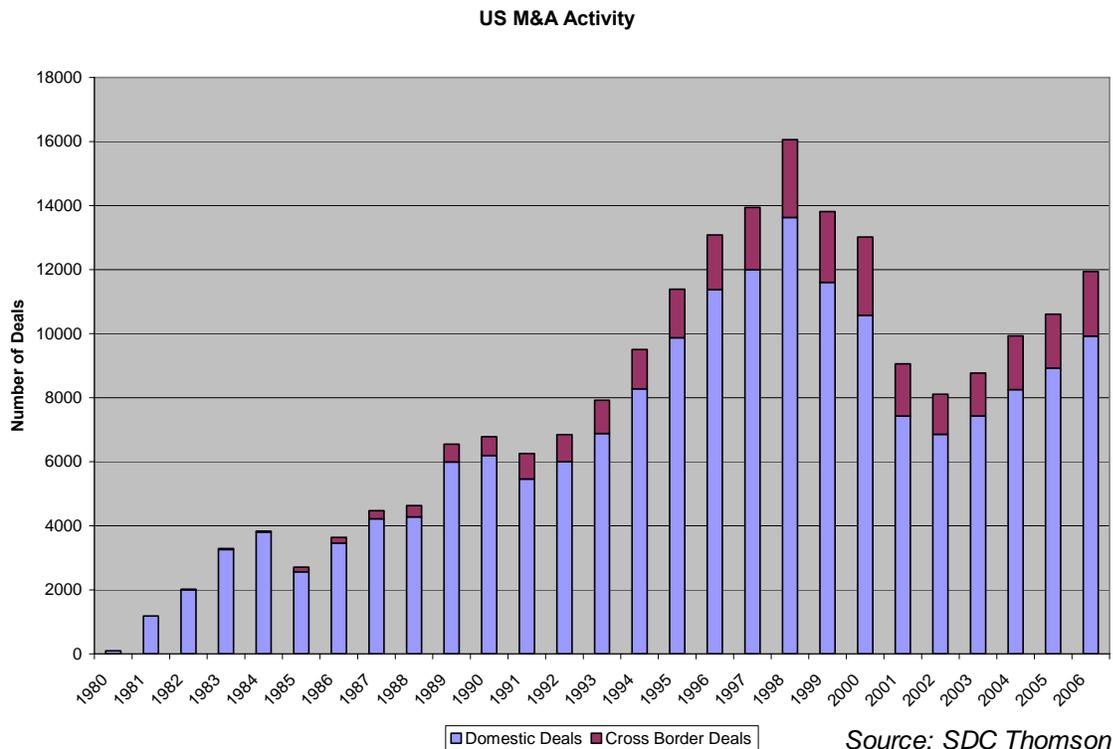
There are many reasons why companies choose the path of growing through M&A rather than adopting an organic growth model and much research has been devoted to the topic over the years. Still, the move toward globalization and the vast expansion of mergers and acquisitions involving non-U.S. companies raises a different question:

> *Are deals between two U.S. companies more successful, less successful or do they result in the same level of success as deals between a U.S. company and Non-U.S. Company?*

Taking on the strategy of a cross-border acquisition has many potential implications. A cross-border M&A may simply be an attempt at value creation as would any domestic M&A be. Still, a cross-border M&A could also offer a way to enter a foreign market whereas a domestic M&A may not provide that opportunity. When predicting performance of a cross-border M&A, we can consider the possibility of better synergies between two companies due to geographic expansion opportunities or sharing of different practices to improve business. Yet, there may be negatives such as conflict of management styles and a turbulent integration process due to significantly different cultures.

II. PREVIOUS WORK

M&As have been used as a strategy for expansion by companies for some time now and much research has been dedicated to analyzing the area. The technological breakthroughs of the 1990s and the increasing effects of globalization made M&As and especially cross-border M&As even more popular. The total value of deals completed between 1998 and 2000 approached $4 trillion – more than the combined value of deals completed in the prior 30 years (Henry, 2002). To date, much of the research has concluded that cross-border M&As   may not be as successful as acquirers might hope and pose significant challenges in the post-acquisition stages (Child et al., 2001). Furthermore, a study by KPMG found that over half of cross-border mergers and acquisitions destroyed shareholder values, while only 17% created shareholder value (Economist, 1999).

Still, while there has been a significant amount of research devoted to M&As, research on cross-border M&As has not kept up with the recent trend of increasing cross-border activity. Furthermore, this subtopic does not carry the recognition it deserves warranting research separate from (domestic) M&As, in general. The more recent research on cross-border M&As has

focused on post-acquisition issues such as integration processes, integration processes from an employee viewpoint, post-acquisition turnover of acquired firm executives, post-acquisition performance of acquired and acquiring firms, and the resulting knowledge transfer and organizational learning (Shimizu et al., 2004).

Cross-border M&A research originally focused on the concept that a cross-border acquisition is done by a firm in a developed country entering a less developed country (Wilson, 1980). With the current globalization trend blurring this concept, this paper examines empirical evidence from more recent cross-border deals (defined as between two companies headquartered in different countries) to analyze whether there is still a difference in performance following a cross-border deal compared to one that went through a domestic acquisition. The research focuses on deals where a U.S.-headquartered company is the acquirer.

III. DATA SELECTION

The most important aspect in comparing the performance of a cross-border acquisition with an acquisition involving two U.S. companies is finding a representative sample. The primary focus of the analysis is on comparing accounting performance post merger for a matched pair sample of deals. Three main sources of data are used to gather the required information: Thomson SDC database, CRSP, and Compustat. First, the Thomson SDC deal database is used to extract all recorded deals which were effective as of 1990. These deals are then examined to produce a data set containing a sample of matching pairs of deals. If T_c represents a control transaction and T_m represents a matching transaction, the sample is produced as follows:

- Acquirors of T_c and T_m are both headquartered in the United States
- Target of T_c is headquartered in the United States
- Target of T_m is not headquartered in the United States
- First 2 SIC digits of acquirer in deal T_c match first 2 SIC digits of acquirer deal T_m
- First 2 SIC digits of target in deal T_c match first 2 SIC digits of target deal T_m
- Acquirer owns 100% after transaction in both T_c and T_m

- Acquirer in deal T_m has total assets between 50% and 200% of acquirer's total assets in deal T_c
- Value of transaction in deal T_m is between 50% and 200% of value of transaction in deal T_c
- Deals T_c and T_m occurred within 1 year of each other

This narrows a total of about 372,000 deals down to approximately 2,000 valid pairs.

This data is then split into three distinct sets:

1. Neither acquirer from the matched pair was involved in a takeover (either as a target or an acquirer) in the fiscal year following the transaction in question. This set will subsequently be referred to as "t+1" or "1 year post acquisition" in the analysis.
2. Neither acquirer from the matched pair was involved in a transaction in the following two fiscal years following the transaction in question. This set will subsequently be referred to as "t+2" or "2 years post acquisition" in the analysis.
3. Neither acquirer from the matched pair was involved in a future transaction in the following three fiscal years following the transaction in question. This set will subsequently be referred to as "t+3" or "3 years post acquisition" in the analysis.

In order to analyze accounting performance, further data is then extracted from

Compustat Fundamentals for the remaining qualifying pairs. The following accounting ratios are

used for performance analysis using the data from the Compustat databases:

- EBIT / ASSETS
- EBIT / SALES
- SALES / ASSETS
- NI / EQUITY
- (NI + Interest Expense) / ASSETS

Due to some missing information, this reduced the sample sizes further. The final sample

sizes are depicted in the analysis.

In the second part of the analysis, I examine abnormal excess returns in the period around

the announcement of the acquisition for each pair. I use the same samples of matched pairs as

above to see whether cross-border acquirers see better stock performance around the

announcement as compared to their domestic deal counterparts.

IV. COMPANY PERFORMANCE

IV.1 Analyzing Company Performance

To analyze company performance, I performed two types of analysis on each of the three sets described above (t+1, t+2, and t+3). First, the difference in means was analyzed using the matching sample t-stat test. Also, cross-section regressions were done to attempt to predict the causes for any difference in performance.

For each accounting ratio R outlined in the previous section, the following differences were analyzed for each deal pair j:

$$\Delta R_j = (R_{jc} - R_{jm})_{t+n} - (R_{jc} - R_{jm})_{t-1}$$

where R_{jc} is the ratio of the control deal in pair j, R_{jm} is the ratio of the matching cross-border deal in pair j, t is the fiscal year of the deal's effective date and n is the number of years after the deal where the acquirer was not involved in another transaction. This was done as three distinct sets for $n = 1$, 2, and 3 and the results are as follows.

Performance Differences between Domestic Deals and Cross-Border Matches

	1-Year Post-Acquisition (Sample:202)				2-Year Post-Acquisition (Sample:93)				3-Year Post-Acquisition (Sample:42)			
	Mean	Median	t stat	p-value	Mean	Median	t stat	p-value	Mean	Median	t stat	p-value
$\Delta \dfrac{EBIT}{ASSETS}$	0.00	(0.00)	0.22	0.83	0.05	0.02	1.30	0.20	0.09	(0.01)	1.16	0.25
$\Delta \dfrac{EBIT}{SALES}$	1.93	0.00	1.07	0.28	14.47	0.05	1.09	0.28	1.43	0.03	1.33	0.19
$\Delta \dfrac{SALES}{ASSETS}$	(0.00)	(0.01)	(0.08)	0.94	(0.01)	(0.01)	(0.20)	0.84	(0.13)	(0.09)	(2.01)	0.05
$\Delta \dfrac{NI}{EQUITY}$	0.21	0.01	0.35	0.73	(0.03)	0.08	(0.07)	0.95	(0.44)	(0.03)	(1.28)	0.21
$\Delta \dfrac{(NI + IntExp)}{ASSETS}$	0.01	0.00	0.25	0.81	0.18	0.05	2.74	0.01	0.15	(0.01)	1.61	0.12

The above data suggests that, while not necessarily significant in a strict sense, there is generally a difference in performance of acquirers that went through a cross-border acquisition as compared to those involved in a domestic deal. We notice a few visible trends. We see a better performance of domestic acquirers in terms of pre-tax margin, which can support the notion that

domestic deals may have bigger cost synergies than similar cross-border deals. We also notice

that domestic acquirers have a better return on assets while the acquirers in cross-border deals

show a better asset turnover. The ROA trend suggests that it may be easier to integrate a

domestic company in terms of efficient use of its assets. At the same time, the trend for asset

turnover may support the common belief that cross-border acquisitions are a good strategy for

opening new markets for companies' existing products.

The next step was to compare the performance of acquirers from cross-border deals to the

industry performance. Manufacturing, Services, and Mining represented the bulk of the

industries in the sample set:
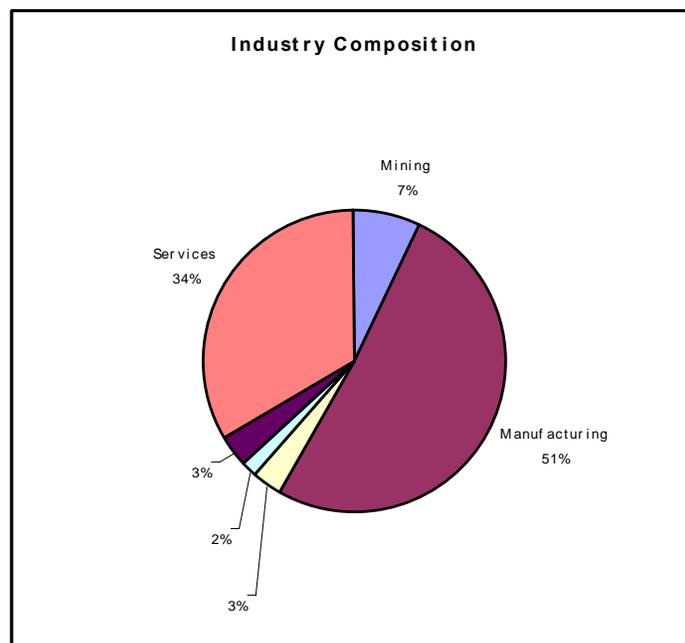
Here, I take a similar approach in using the same five ratios as above. However, instead

of using values of a control deal, I compare the median from the industry (using the first two SIC

digits) to the cross-border deal.

Performance Differences between Cross-Border Deals and Industry

	1-Year Post-Acquisition (Sample:181)				2-Year Post-Acquisition (Sample:81)				3-Year Post-Acquisition (Sample:41)			
	Mean	Median	t stat	p-value	Mean	Median	t stat	p-value	Mean	Median	t stat	p-value
$\Delta \dfrac{EBIT}{ASSETS}$	0.04	0.01	1.94	0.05	0.04	0.02	1.08	0.29	0.08	0.01	1.19	0.24
$\Delta \dfrac{EBIT}{SALES}$	1.77	0.01	0.86	0.39	1.69	0.04	1.11	0.27	1.19	(0.02)	1.31	0.20
$\Delta \dfrac{SALES}{ASSETS}$	(0.06)	(0.03)	(2.29)	0.02	(0.10)	(0.04)	(2.18)	0.03	(0.21)	(0.11)	(2.72)	0.01
$\Delta \dfrac{NI}{EQUITY}$	0.74	0.03	1.22	0.23	0.20	0.02	0.57	0.57	0.01	(0.03)	0.03	0.98
$\Delta \dfrac{(NI + IntExp)}{ASSETS}$	0.08	0.02	2.48	0.01	0.13	0.01	1.94	0.06	0.12	0.01	1.86	0.07

The above results show a similar picture as when comparing cross-border deals to matching domestic deals. In general, acquirers of cross-border targets do not perform as well as the industry. Here, however, we see a bit more statistical significance in our results. Specifically, acquirers following a cross-border acquisition appear to consistently have a higher asset turnover than the industry (at the 95% confidence level for first two years post deal and 99% confidence level for three years post deal), but at the same time a lower ROA (at the 99% confidence level for first year post acquisition and at the 90% confidence level for the following two years) as compared to the industry. Once again, similarly to the domestic deal comparison, cross-border acquirers lag on their return on assets when compared to the industry.

IV.2 **Predicting Company Performance**

The next piece of the matched-pair analysis involves a cross-section regression. Here, I took two different approaches to attempt to explain the differences. First, each ratio described above was used as the dependent variable and the following as independent variables:

- Deal consideration (Dummy variable with 1 for cash only deals and 0 otherwise)
- LOG of acquirer size
- LOG of target size
- Target private/public (Dummy variable with 1 for public 0 for private)
- Acquirer and target in the same-industry (Dummy variable with 1 for same industry)
- Acquirer's market value/book value of equity
- Acquirer in manufacturing industry (dummy variable)

- Acquirer in services industry (dummy variable)

The regression was set up for each accounting ratio *R* as follows:

```
ΔRⱼ = Aᵢ * Xᵢⱼ + Bᵢ * Yᵢⱼ + ...
```

where X_{ij} is a vector of characteristics of control deal *j* and Y_{ij} is a vector of characteristics of

matching deal *j*. This regression was performed for the three distinct sets of t+1, t+2, and t+3

(detailed results can be found in Figure1, Figure 2, and Figure 3 for the three sets respectively

and are in columns labeled "(1)"), The second approach uses a slight variation in that the

difference for each ratio at t+n is set as the dependent variable while the difference for each ratio

at t-1 was added as another independent variable in addition to the characteristics above.

Specifically, the regression equation for each ratio *R* was set up as follows:

```
ΔR₍ⱼ, ₜ₊ₙ₎ = Aᵢ * Xᵢⱼ + Bᵢ * Yᵢⱼ + C * ΔR₍ⱼ, ₜ₋₁₎
```

where X_{ij} is a vector of characteristics of control deal *j* and Y_{ij} is a vector of characteristics of

matching deal *j*. This regression was also performed for the three distinct sets of t+1, t+2, and

t+3 (detailed results can be found in Figure1, Figure 2, and Figure 3 for the three sets

respectively and are in columns labeled "(2)").

A few of the factors appear to be of interest in the results. Looking at (1) regressions, we

can observe the effect of the public status of the target in the cross-border deal. The negative

coefficients for cross-border deals and positive coefficients for domestic deals suggest that deals

which involve target companies that are public will tend to perform better. This is not

unreasonable as it is likely that much more information is available on public targets. Also, if we

look at the Market-to-Book ratio for cross-border deals, we can see that acquirers with higher

Market-to-Book ratios will generally show a slightly worse ROE in the first year following the

deal, but then trend towards having generally better performance. However, there are no

coefficients that consistently have a large effect on the difference in performance. Furthermore,

when we examine the second set of regressions, labeled with (2), we can see that the performance in the year prior to the acquisition has a dominant influence on the performance in the subsequent years. In general, these results indicate that that the factors chosen do not have a significant impact on the difference in post-acquisition performance between domestic deals and their cross-border matches. In fact, the main drivers for the difference is the difference in performance of the acquirers' pre-acquisition performance, which is expected.

A further analysis of the location of the targets in cross-border deals reveals a similar picture. Looking at Figure 4, we can see that while acquirers who purchase a target in developing countries do not initially (1 year after deal completion) achieve positive results, they do tend to perform better in subsequent years. Still, the dominant factor in predicting post-deal performance is once again the acquirers' performance prior to the acquisition and the location of the target is not a statistically significant indicator.

I also performed similar cross-sectional regressions to attempt to explain the difference in cross-border deal performance as compared to the industry medians rather than a matched domestic deal. The regression was set up in a similar manner as the matched pair analysis with two the approaches. For each ratio difference ΔR (calculated by subtracting the company ratio from the industry median), the regressions ware run as follows:

```
Model 1:   ΔR = Aᵢ * Xᵢⱼ + ...
Model 2:   ΔR₍ⱼ, ₜ₊ₙ₎ = Aᵢ * Xᵢⱼ + C * ΔR₍ⱼ, ₜ₋₁₎
```

where X_{ij} is a vector of characteristics of cross-border deal *j*. Detailed results for Model 1 can be found in Figure 5 (for t+1), Figure 7 (for t+2) and Figure 9 (for t+3). For Model 2, the detailed results are in Figure 6 (for t+1), Figure 8 (for t+2) and Figure 10 (for t+3).

Here, we see a few trends that are rather similar to what we observed in the pervious analysis. Specifically, we can once again notice that the public status of the target and the

Market-to-Book ratio of the acquirer have a noticeable effect on post-acquisition performance. Once again, negative coefficients for public targets suggest that cross-border deals with a target company that is public will tend to perform better. Similarly, acquirers with higher Mark-to-Book ratios will show a worse ROE in the first year following the completion of the deal, but tend to generally trend better in the two years following. Lastly, Model 2 results once again show that pre-acquisition performance is the best indicator for post-deal success of the acquirers.

V. STOCK PERFORMANCE

V.1 Analyzing Stock Performance

As seen in the previous section, there does not appear to be significant evidence that suggests a difference in either direction between the performance of domestic M&A deals and their cross-border counterparts. In the second part of the analysis, I examine the market reaction around the announcement date for the matched pairs. Specifically, I look at the abnormal excess return for acquirers who have announced a domestic acquisition and their matching cross-border acquirers. I used the CRSP BXRET variable as the abnormal return measure. In cases when BXRET is not available, I calculate the abnormal return with a simple market adjustment by subtracting the CRSP value-weighted market index from the stock's return.

For this comparison, I use the same three sets of matching pairs of US-only acquirers as before. For each pair, I collected the cumulative excess return (CER) for two periods: +/-20 days around the announcement and +/-5 days around the announcement.

We first notice in the graph below[1] that over the longer period of twenty days prior to the announcement to twenty days following the announcement, the stock market reacts more positively to the domestic deal.

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[1] See Figure 11 for detailed results of the (-20,+20) abnormal returns

Cumulative Average Excess Returns (-20, +20)

Days Around Announcement

Domestic — Cross-border
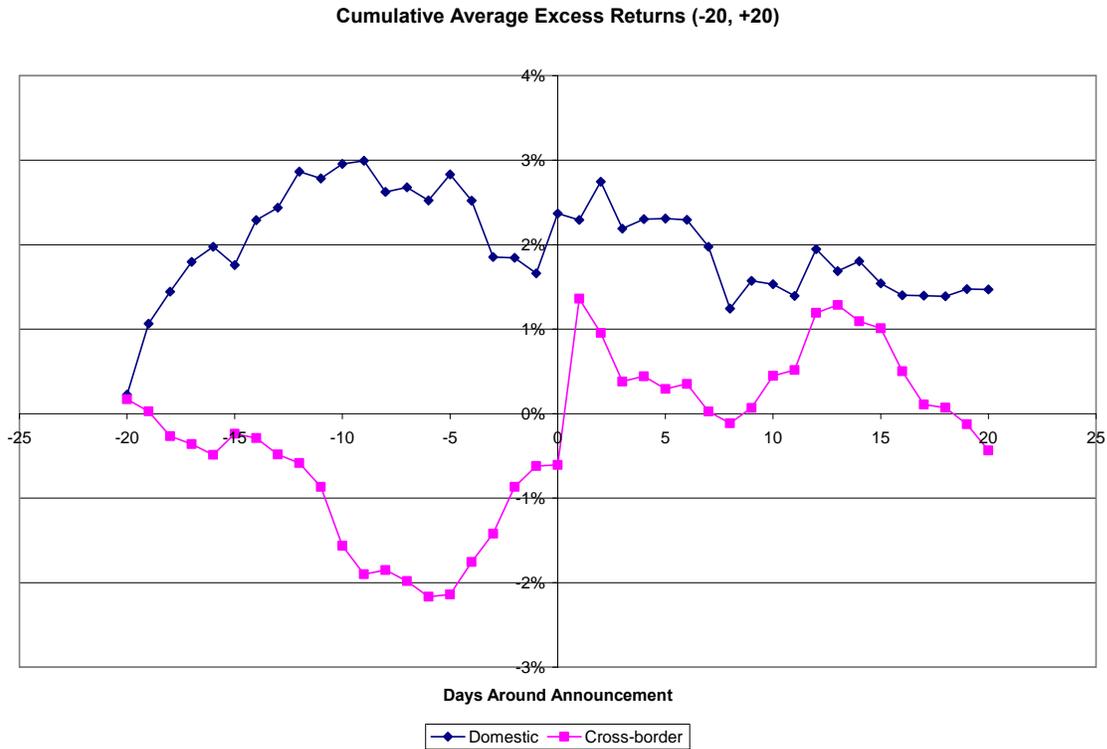
However, as we examine a shorter period around the announcement, we also notice in the chart below[2] the cross-border deal shows a significantly larger abnormal return in the period of five days before to five days after the announcement as compared to a domestic deal.

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[2] See Figure 12 for detailed results of the (-5, +5) abnormal returns

Cumulative Abnormal Excess Returns (-5,+5)
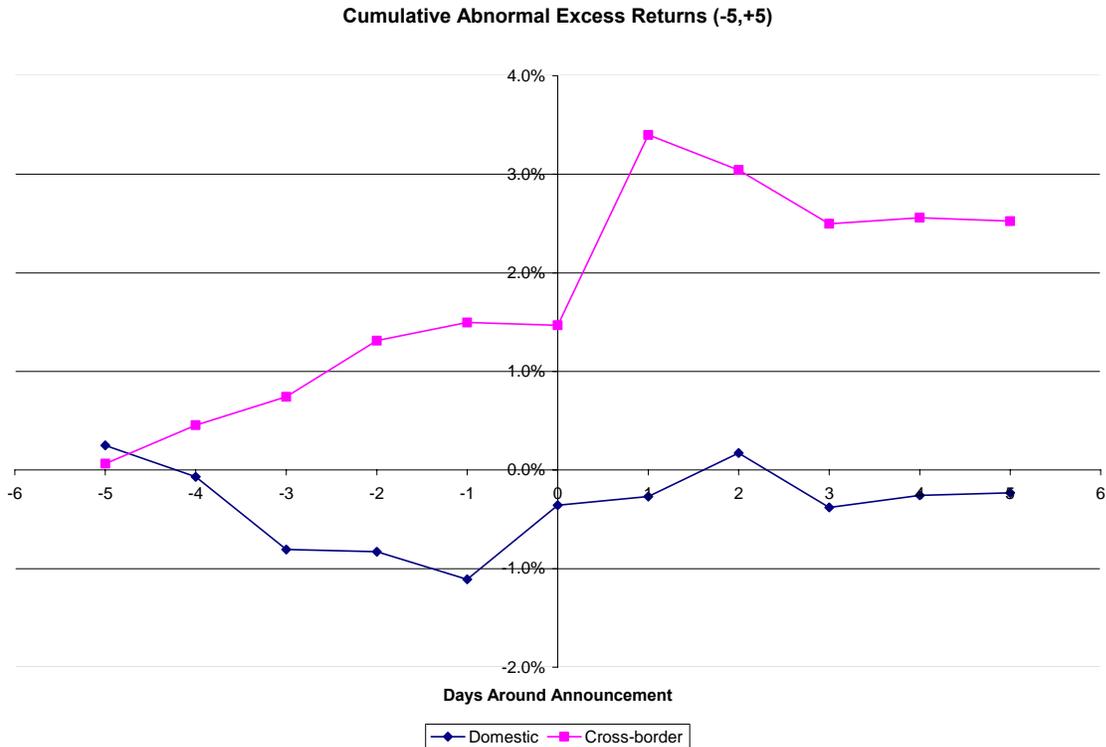
We can speculate that there is more excitement in the market about a cross-border deal than a domestic deal and that the abnormal excess returns are greater for a cross-border deal immediately around the announcement. However, the longer period still shows no systematic difference in performance of the stocks.

V.2 **Explaining the Difference in Stock Performance**

Given the clear difference in abnormal excess return around the deal announcement between acquirers announcing a deal with a domestic target and those looking at a cross-border target, I look at another set of cross-section regressions to attempt to explain this difference. The regressions are set up using the difference between cumulative abnormal excess return for five days around the announcement (from five days before to five days after) as the dependent variable. This will help answer the question of whether the market is able to predict the subsequence changes in the performance of the acquirers. I once again performed three sets of

regressions for the t+1, t+2, and t+3 sets and used two models for each. Both models use the

same set of firm characteristics as the previous regressions, but add the difference in

performance as independent variables. Specifically, the first model adds one independent

variable that is ΔR_j and is defined as:

$$\Delta R_j = (R_{jc}-R_{jm})_{t+n} - (R_{jc}-R_{jm})_{t-1}$$

where R_{jc} is the ratio of the control deal in pair j, R_{jm} is the ratio of the matching deal in pair j, t is

the fiscal year of the deal's effective date and n is the number of years after the deal where the

acquirer was not involved in another transaction. The second model adds the differences before

the deal and after the deal as two separate variables which are defined as:

$$\Delta R_{(j,t-1)} = (R_{jc}-R_{jm})_{t-1} \qquad \text{and} \qquad \Delta R_{(j,t+n)} = (R_{jc}-R_{jm})_{t+n}$$

Therefore the regression equations are set up as follows:

```
Model 1: dCER(-5,+5)  =  Ai * Xij + Bi * Yij + C * ΔRj
Model 2: dCER(-5,+5)  =  Ai * Xij + Bi * Yij + C * ΔR(j,t-1) + D * ΔR(j,t+n)
```

where X_{ij} is a vector of characteristics of control deal j and Y_{ij} is a vector of characteristics of

matching deal j. Both regressions were performed for the three distinct sets of t+1, t+2, and t+3

(detailed results can be found in Figure 13, Figure 14, and Figure 15 for the three sets

respectively with Model 1 results in columns labeled "(1)" and Model 2 results in columns

labeled "(2)").

     The results suggest that it is the sizes of the acquirers and targets in the deals examined

that are the main drivers in explaining the difference in cumulative abnormal excess returns

around the announcements. We can notice a clear indication that larger acquirers enjoy a higher

abnormal return. At the same time, we also see that smaller targets have the same effect. When

looking at the pre-announcement performance as well as future performance of the acquirers, we

notice that there is no significant effect on the abnormal returns. Therefore, we can speculate that

the market does not take acquirers' pre-deal performance into account and, similarly, does not predict subsequent changes in acquirer's performance.

VI. SUMMARY

The trend toward globalization is here. As companies expand, they look for ways to expand globally. Answering the question of whether a marriage of a U.S. company and a foreign company is better or worse than one of only U.S. companies can give good insight into its value. Cross-border M&As are complicated and a great majority is thought to have unsuccessful results. There are many variables that must be considered including corporate governance, political factors, countries involved, and regulations. To date, it appears that there are differences in both post-deal performance of the acquirers and market reaction when comparing cross-border acquisitions to similar domestic deals. A cross-border acquisition strategy has many advantages to staying close to home and working on a local deal. Yet, there are just as many challenges. Today, even domestic deals between large companies (take HP acquiring Compaq) have great cross-border implications, and with care, this strategy can lead to ultimate success. As more and more cross-border deals are completed, future studies can examine more data and longer time periods to further understand the differences between domestic and cross-border deals.

Figure 1: Factors Associated with Performance of Cross-border Deals as Compared to their Domestic Matches (1 Year after Completion of Deal)

	Δ EBIT / Total Assets		Δ EBIT / Sales		Δ Sales / Total Assets		Δ NI / Equity		Δ (NI + Int) / Total	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
Constant	0.1887	0.2447*	13.02	16.59	-0.079	0.0746	6.431	6.414	0.2853	0.3536*
	(1.36)	(1.86)	(1.01)	(1.28)	(-0.38)	(0.36)	(1.61)	(1.62)	(1.29)	(1.74)
Control Deal										
D1 Cash / Other	-0.02377	-0.00246	-0.81	-1.288	-0.07305	-0.0108	2.436	2.443	0.02985	0.04488
	(-0.45)	(-0.05)	(-0.17)	(-0.27)	(-0.92)	(-0.14)	(1.61)	(1.62)	(0.36)	(0.58)
D1 log(Acquirer Size)	-0.1426	-0.0869	-6.47	-6.99	-0.381	-0.3521	3.909	3.795	-0.0964	-0.0136
	(-0.90)	(-0.58)	(-0.44)	(-0.48)	(-1.59)	(-1.52)	(0.86)	(0.84)	(-0.38)	(-0.06)
D1 log(Target Size)	0.0313	-0.0649	24.7*	22	0.1871	0.205	1.527	0.76	0.1143	-0.1055
	(0.22)	(-0.47)	(1.85)	(1.65)	(0.86)	(0.98)	(0.37)	(0.18)	(0.50)	(-0.49)
D1 Target Public	0.11928**	0.09372*	-0.757	0.103	0.11003	0.10863	-1.32	-1.425	0.10292	0.06966
	(2.30)	(1.90)	(-0.16)	(0.02)	(1.40)	(1.44)	(-0.89)	(-0.96)	(1.24)	(0.91)
D1 Market-to-Book	-0.007755	-0.007503	-0.5072	-0.4638	0.015911*	0.018397*	-0.2876*	-0.3106*	-0.022343**	-0.020157**
	(-1.32)	(-1.35)	(-0.93)	(-0.86)	(1.79)	(2.15)	(-1.71)	(-1.84)	(-2.39)	(-2.34)
Matching Deal										
D2 Cash / Other	0.07347	0.07841	-3.117	-1.454	0.10901	0.1226	-1.625	-1.429	0.03183	0.06616
	(1.34)	(1.51)	(-0.61)	(-0.28)	(1.31)	(1.53)	(-1.03)	(-0.91)	(0.36)	(0.82)
D2 log(Acquirer Size)	0.0738	-0.0065	1.22	0.49	0.3483	0.2508	-4.095	-3.93	0.0364	-0.0682
	(0.50)	(-0.05)	(0.09)	(0.04)	(1.57)	(1.16)	(-0.97)	(-0.94)	(0.16)	(-0.32)
D2 log(Target Size)	0.0382	0.1349	-22.48*	-19.76	-0.1494	-0.1343	-2.557	-1.983	-0.0503	0.1445
	(0.27)	(0.99)	(-1.71)	(-1.50)	(-0.69)	(-0.65)	(-0.63)	(-0.49)	(-0.22)	(0.68)
D2 Target Public	-0.13136**	-0.09714*	-1.811	-2.965	-0.02222	-0.04326	-1.215	-1.025	-0.14727*	-0.10333
	(-2.47)	(-1.91)	(-0.37)	(-0.60)	(-0.28)	(-0.56)	(-0.79)	(-0.67)	(-1.73)	(-1.32)
D2 Market-to-Book	-0.004181*	-0.003316	-0.0702	-0.0635	0.003373	0.001537	0.17026**	0.19779***	-0.004266	-0.001311
	(-1.69)	(-1.41)	(-0.31)	(-0.28)	(0.90)	(0.42)	(2.40)	(2.71)	(-1.08)	(-0.36)
t-1 Δ	---	0.5823***	---	0.5897**	---	0.82072***	---	-0.2371	---	0.45528***
	---	(6.36)	---	(2.77)	---	(17.58)	---	(-0.30)	---	(4.79)
Acuirer Mfg Industry	-0.06779	-0.05009	-1.319	-1.871	-0.1135	-0.1455	-4.744**	-4.561**	-0.067	-0.0425
	(-0.93)	(-0.73)	(-0.20)	(-0.28)	(-1.03)	(-1.36)	(-2.27)	(-2.18)	(-0.58)	(-0.40)
Acuirer Svcs Industry	-0.03224	-0.02615	3.236	1.782	0.0294	-0.0133	-6.549***	-6.698***	0.0249	-0.0191
	(-0.38)	(-0.32)	(0.41)	(0.22)	(0.23)	(-0.11)	(-2.66)	(-2.73)	(0.18)	(-0.15)
Acq/Target Same Industry	-0.03979	-0.05002	1.605	1.462	0.0358	0.0256	1.144	1.09	-0.1286	-0.1396
	(-0.56)	(-0.75)	(0.25)	(0.22)	(0.33)	(0.25)	(0.56)	(0.54)	(-1.14)	(-1.35)
R-Sq =	9.3%	26.2%	5%	9.2%	9.5%	69.1%	12.0%	13.0%	8.5%	19.6%
R-Sq(adj) =	2.4%	20.1%	0%	1.6%	2.6%	66.6%	5.2%	5.8%	1.5%	12.9%
Degrees of Freedom	13,170	14,169	13,170	14,169	13,170	14,169	13,170	14,169	13,170	14,169
F-Value	1.35	4.28***	0.69	1.21	1.38	27.01***	1.78**	1.80**	1.21	2.94***

This table shows the influence of factors on the difference in 1-year post-deal performance of domestic deals as compared to cross-border matches. The dependent variables are the difference in accounting ratios depicted at the top of the tables, and the independent variables include various characteristics of the companies involved in the deal. t-values for the coefficients are in brackets.
***Statistically significant at the 1% level.
**Statistically significant at the 5% level.
*Statistically significant at the 10% level.

Figure 2: Factors Associated with Performance of Cross-border Deals as Compared to their Domestic Matches (2 Years after Completion of Deal)

	Δ EBIT / Total Assets		Δ EBIT / Sales		Δ Sales / Total Assets		Δ NI / Equity		Δ (NI + Int) / Total	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
Constant	0.27	0.2711	12.77	13.7	0.2998	0.4003	0.092	1.437	0.3604	0.2869
	(0.94)	(1.10)	(0.96)	(1.04)	(0.85)	(1.02)	(0.05)	(1.00)	(0.95)	(1.07)
D1 Cash / Other	0.0063	0.05615	0.349	0.967	-0.0417	-0.0261	0.9488	1.021*	0.0044	0.1072
	(0.05)	(0.56)	(0.06)	(0.18)	(-0.29)	(-0.18)	(1.33)	(1.76)	(0.03)	(0.99)
D1 log(Acquirer Size)	-0.2723	-0.0881	-6.16	-8.8	-0.4458	-0.5064	2.108	1.001	-0.0373	0.1092
	(-0.86)	(-0.32)	(-0.42)	(-0.61)	(-1.14)	(-1.24)	(1.10)	(0.64)	(-0.09)	(0.37)
D1 log(Target Size)	0.5981**	0.2258	25.83*	21.89	0.3497	0.3796	-0.805	-0.585	0.7079*	0.1815
	(2.04)	(0.88)	(1.90)	(1.63)	(0.97)	(1.03)	(-0.45)	(-0.40)	(1.82)	(0.66)
D1 Target Public	0.0627	-0.08328	0.739	-0.947	0.1837	0.1777	0.8013	0.3372	0.092	-0.08097
	(0.63)	(-0.94)	(0.16)	(-0.21)	(1.51)	(1.44)	(1.34)	(0.67)	(0.70)	(-0.87)
D1 Market-to-Book	-0.00204	-0.002424	-0.8697*	-0.8954*	-0.01161	-0.0107	-0.00969	0.03673	-0.00593	0.002491
	(-0.20)	(-0.28)	(-1.81)	(-1.90)	(-0.91)	(-0.82)	(-0.15)	(0.72)	(-0.43)	(0.26)
D2 Cash / Other	0.0904	0.03088	-0.779	0.221	0.1068	0.1169	-0.0553	-0.1962	0.005	-0.0349
	(0.80)	(0.32)	(-0.15)	(0.04)	(0.77)	(0.83)	(-0.08)	(-0.35)	(0.03)	(-0.34)
D2 log(Acquirer Size)	0.1178	-0.0451	2.41	4.96	0.1682	0.1864	-1.285	-0.917	-0.1099	-0.1851
	(0.40)	(-0.18)	(0.18)	(0.37)	(0.46)	(0.51)	(-0.72)	(-0.63)	(-0.28)	(-0.68)
D2 log(Target Size)	-0.4687	-0.1532	-26.04*	-21.77	0.002	-0.0054	-0.398	-0.21	-0.5845	-0.1886
	(-1.61)	(-0.60)	(-1.93)	(-1.63)	(0.01)	(-0.01)	(-0.23)	(-0.15)	(-1.51)	(-0.70)
D2 Target Public	-0.1229	-0.04568	-0.798	-1.292	-0.3415**	-0.3396**	0.7045	0.2697	-0.1431	-0.0291
	(-1.14)	(-0.49)	(-0.16)	(-0.26)	(-2.58)	(-2.50)	(1.08)	(0.50)	(-1.00)	(-0.29)
D2 Market-to-Book	-0.006026	-0.003102	-0.1062	-0.1009	-0.00373	-0.004053	-0.00996	0.00521	-0.008771*	-0.002456
	(-1.65)	(-0.99)	(-0.63)	(-0.61)	(-0.83)	(-0.89)	(-0.45)	(0.28)	(-1.81)	(-0.71)
t-1 Δ	---	0.1322	---	0.3215	---	0.9271***	---	0.1782	---	0.1387
	---	(0.79)	---	(1.06)	---	(7.84)	---	(0.49)	---	(1.35)
Acuirer Mfg Industry	-0.0004	0.0678	-0.755	-2.01	-0.0451	-0.058	-0.612	-0.6061	-0.0084	0.0263
	(0.00)	(0.61)	(-0.12)	(-0.33)	(-0.28)	(-0.35)	(-0.77)	(-0.93)	(-0.05)	(0.22)
Acuirer Svcs Industry	0.0053	-0.047	5.646	5.139	-0.1517	-0.1804	0.329	-0.8349	0.2028	-0.0226
	(0.03)	(-0.31)	(0.70)	(0.64)	(-0.71)	(-0.81)	(0.31)	(-0.95)	(0.88)	(-0.14)
Acq/Target Same Industry	-0.051	-0.0231	-0.278	-0.762	0.0518	0.0202	-0.8331	-0.544	-0.0696	-0.0403
	(-0.35)	(-0.19)	(-0.04)	(-0.12)	(0.29)	(0.11)	(-0.95)	(-0.76)	(-0.36)	(-0.30)
R-Sq =	11.7%	12.2%	17.6%	17.9%	19.6%	62.0%	16.5%	14.5%	15.3%	12.0%
R-Sq(adj) =	0.0%	0.0%	1.4%	0.0%	3.7%	53.7%	0.1%	0.0%	0.0%	0.0%
Degrees of Freedom	13,66	14,64	13,66	14,64	13,66	14,64	13,66	14,64	13,66	14,64
F-Value	0.67	0.63	1.08	1.00	1.23	7.46***	1.01	0.77	0.92	0.62

(Rows "Constant" through "D1 Market-to-Book" are grouped under **Control Deal**; rows "D2 Cash / Other" onward are grouped under **Matching Deal**.)

This table shows the influence of factors on the difference in 2-year post-deal performance of domestic deals as compared to cross-border matches. The dependent variables are the difference in accounting ratios depicted at the top of the tables, and the independent variables include various characteristics of the companies involved in the deal. t-values for the coefficients are in brackets.
***Statistically significant at the 1% level.
**Statistically significant at the 5% level.
*Statistically significant at the 10% level.

Figure 3: Factors Associated with Performance of Cross-border Deals as Compared to their Domestic Matches (3 Years after Completion of Deal)

		Δ EBIT / Total Assets		Δ EBIT / Sales		Δ Sales / Total Assets		Δ NI / Equity		Δ (NI + Int) / Total	
		(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
	Constant	0.6984	0.7934	14.37	14.14	-0.8958	-0.5166	-3.552	-3.442	0.9942	0.9407
		(0.89)	(1.01)	(1.23)	(1.18)	(-1.66)	(-0.89)	(-0.96)	(-0.93)	(1.06)	(1.27)
Control Deal	D1 Cash / Other	-0.2484	-0.229	-1.923	-1.77	-0.4619*	-0.2958	0.193	0.198	-0.0999	-0.1281
		(-0.69)	(-0.64)	(-0.36)	(-0.32)	(-1.87)	(-1.12)	(0.11)	(0.12)	(-0.23)	(-0.38)
	D1 log(Acquirer Size)	-0.2966	-0.2638	-16.05	-16.51	-0.7252	-0.8724	1.903	1.138	-1.017	-0.4003
		(-0.33)	(-0.29)	(-1.18)	(-1.18)	(-1.15)	(-1.41)	(0.44)	(0.26)	(-0.93)	(-0.45)
	D1 log(Target Size)	0.8109	0.6528	13.19	13.75	0.584	0.386	2.721	3.589	1.407	0.7277
		(1.15)	(0.91)	(1.25)	(1.26)	(1.20)	(0.79)	(0.81)	(1.05)	(1.66)	(1.05)
	D1 Target Public	0.0142	-0.0378	2.601	2.925	-0.1741	-0.0835	-0.09	0.264	0.2252	-0.0429
		(0.05)	(-0.12)	(0.56)	(0.61)	(-0.82)	(-0.39)	(-0.06)	(0.18)	(0.61)	(-0.14)
	D1 Market-to-Book	0.00672	0.00791	-0.1523	-0.1567	-0.00985	-0.00596	0.0176	0.0075	-0.00446	0.00253
		(0.31)	(0.36)	(-0.46)	(-0.47)	(-0.65)	(-0.40)	(0.17)	(0.07)	(-0.17)	(0.12)
Matching Deal	D2 Cash / Other	-0.194	-0.1516	-0.614	-0.61	-0.38**	-0.3571**	1.024	0.878	-0.1366	-0.0669
		(-0.85)	(-0.66)	(-0.18)	(-0.17)	(-2.41)	(-2.33)	(0.95)	(0.81)	(-0.50)	(-0.31)
	D2 log(Acquirer Size)	0.2524	0.1612	11.81	12.38	1.1955*	1.1572*	-0.812	-0.048	0.767	0.1618
		(0.29)	(0.19)	(0.92)	(0.94)	(2.01)	(2.01)	(-0.20)	(-0.01)	(0.74)	(0.19)
	D2 log(Target Size)	-0.9398	-0.7294	-13.02	-13.65	-0.829	-0.5565	-3.581	-4.517	-1.3795	-0.6534
		(-1.29)	(-0.97)	(-1.20)	(-1.22)	(-1.65)	(-1.07)	(-1.04)	(-1.28)	(-1.58)	(-0.91)
	D2 Target Public	-0.0826	0.0131	-3.07	-3.407	-0.4569*	-0.3157	-0.413	-0.863	-0.3734	-0.0764
		(-0.26)	(0.04)	(-0.65)	(-0.69)	(-2.08)	(-1.36)	(-0.27)	(-0.56)	(-0.98)	(-0.24)
	D2 Market-to-Book	-0.0161	-0.01285	-0.0452	-0.0624	-0.00079	-0.00201	-0.08995	-0.109	-0.03146	-0.02114
		(-0.97)	(-0.76)	(-0.18)	(-0.24)	(-0.07)	(-0.18)	(-1.15)	(-1.37)	(-1.58)	(-1.33)
	t-1 Δ	---	0.6341*	---	1.3438	---	0.8208***	---	1.8547**	---	0.3724**
		---	(1.76)	---	(1.57)	---	(6.97)	---	(2.44)	---	(2.11)
	Acuirer Mfg Industry	-0.0402	-0.0017	-4.48	-4.764	-0.144	-0.1405	1.32	1.045	-0.0758	0.0874
		(-0.12)	(-0.01)	(-0.91)	(-0.93)	(-0.63)	(-0.64)	(0.84)	(0.66)	(-0.19)	(0.28)
	Acuirer Svcs Industry	-0.3552	-0.3424	-3.913	-3.825	-0.416	-0.3202	0.468	0.493	-0.151	-0.1442
		(-0.81)	(-0.78)	(-0.60)	(-0.57)	(-1.37)	(-1.07)	(0.22)	(0.24)	(-0.29)	(-0.35)
	Acq/Target Same Industry	-0.0324	-0.149	1.734	2.132	0.8465**	0.6275*	1.6	2.035	0.1264	-0.1858
		(-0.07)	(-0.30)	(0.24)	(0.28)	(2.51)	(1.76)	(0.69)	(0.87)	(0.22)	(-0.39)
	R-Sq =	24.7%	38.7%	31.0%	34.5%	66.2%	82.4%	31.1%	46.2%	39.4%	46.1%
	R-Sq(adj) =	0.0%	0.0%	0.0%	0.0%	43.1%	68.7%	0.0%	4.4%	0.0%	4.2%
	Degrees of Freedom	13,19	14,18	13,19	14,18	13,19	14,18	13,19	14,18	13,19	14,18
	F-Value	0.48	0.81	0.66	0.68	2.86	6.02***	0.66	1.11	0.95	1.10

This table shows the influence of factors on the difference in 3-year post-deal performance of domestic deals as compared to cross-border matches. The dependent variables are the difference in accounting ratios depicted at the top of the tables, and the independent variables include various characteristics of the companies involved in the deal. t-values for the coefficients are in brackets.
***Statistically significant at the 1% level.
**Statistically significant at the 5% level.
*Statistically significant at the 10% level.

Figure 4: Affect of Target Location on Acquirer Performance

	Δ EBIT / Total Assets (t+k)		
	1 Year Post Deal	2 Year Post Deal	3 Year Post Deal
Constant	0.01575	0.05533	0.07306
	0.75	1.46	1.00
Target in Developing Country	0.7475	-0.0572	-0.085
	1.14	(0.51)	(0.31)
t-1 Δ	0.51768	0.4171	0.4733
	7.20***	4.03***	2.69***
R-Sq =	20.9%	15.1%	15.7%
R-Sq(adj) =	20.1%	13.3%	11.4%
Degrees of Freedom	2,199	2,94	2,39
F-Value	26.31***	8.38***	3.65**

This table shows the influence of target location and acquirer's pre-deal performance on post-deal performance for 1, 2, and 3 years after deal completion for cross-border deals. The dependent variables are change in EBIT / Total Assets 1, 2, and 3 years post completion of acquisition. Target location is a dummy variable with 1 for targets located in developing countries and 0 otherwise.
***Statistically significant at the 1% level.
**Statistically significant at the 5% level.
*Statistically significant at the 10% level.

Figure 5: Factors Associated with Performance of Cross-border Deals as Compared to Industry (1 Year after Completion of Deal: Model 1)

| Variable | 1 Year Post Deal Performance | | | | | | | | | | | | | | |
| | Δ EBIT / TOTAL ASSETS | | | Δ EBIT / SALES | | | Δ SALES / ASSETS | | | Δ NI / EQUITY | | | Δ (NI+Int) / ASSETS | | |
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Constant	0.1961	0.18894**	0.05391	14.38	15.934*	6.519	-0.2125	-0.2141**	-0.0975	7.951**	0.386	6.763***	0.2721	0.2658**	0.053
	(1.59)	(2.58)	(0.66)	(1.02)	(1.92)	(0.71)	(-1.34)	(-2.30)	(-0.94)	(2.01)	(0.16)	(2.62)	(1.57)	(2.58)	(0.46)
Acuirer Mfg Industry	-0.05039	---	-0.02143	-3.082	---	-1.589	-0.0333	---	-0.04608	-5.936***	---	-5.556***	-0.03284	---	-0.00437
	(-0.76)		(-0.33)	(-0.41)		(-0.22)	(-0.39)		(-0.56)	(-2.78)		(-2.70)	(-0.35)		(-0.05)
Acuirer Svcs Industry	0.02867	---	0.08535	2.251	---	4.622	-0.07273	---	-0.05218	-7.64***	---	-6.679***	0.1193	---	0.1642
	(0.37)		(1.17)	(0.26)		(0.56)	(-0.74)		(-0.56)	(-3.09)		(-2.90)	(1.11)		(1.62)
Acq/Target Same Industry	-0.01244	---	---	2.065	---	---	0.08917	---	---	1.242	---	---	-0.09646	---	---
	(-0.19)			(0.27)			(1.05)			(0.58)			(-1.04)		
Cash / Other	0.05676	---	---	-4.041	---	---	-0.03073	---	---	-0.412	---	---	0.05333	---	---
	(1.20)			(-0.75)			(-0.51)			(-0.27)			(0.81)		
log(Acquirer Size)	-0.05785	-0.03579	---	-4.213	-5.265	---	0.05152	0.06605*	---	-0.758	-0.0788	---	-0.06742	-0.05159	---
	(-1.43)	(-1.24)		(-0.91)	(-1.62)		(0.99)	(1.80)		(-0.58)	(-0.08)		(-1.19)	(-1.28)	
log(Target Size)	0.04328	---	-0.00585	-0.784	---	-3.642	0.0096	---	0.0426	-0.772	---	-1.326	0.05451	---	-0.00752
	(0.97)		(-0.17)	(-0.15)		(-0.95)	(0.17)		(0.98)	(-0.54)		(-1.23)	(0.87)		(-0.16)
Target Public	-0.11125**	-0.11731***	---	-2.001	-3.52	---	-0.07952	-0.06048	---	-1.486	-0.643	---	-0.11633*	-0.1435**	---
	(-2.33)	(-2.68)		(-0.37)	(-0.71)		(-1.30)	(-1.08)		(-0.97)	(-0.45)		(-1.74)	(-2.33)	
Market-to-Book	-0.004463**	-0.003872*	-0.003489*	-0.0952	-0.075	-0.0426	0.002577	0.002812	0.00279	0.15453**	0.1437**	0.1711***	-0.00555*	-0.004822*	-0.00459
	(-2.10)	(-1.88)	(-1.66)	(-0.39)	(-0.32)	(-0.18)	(0.95)	(1.07)	(1.05)	(2.27)	(2.13)	(2.59)	(-1.87)	(-1.67)	(-1.58)
R-Sq =	9.3%	6.5%	4.7%	3.1%	2.0%	2.1%	4.6%	3.5%	2.0%	9.5%	3.3%	8.6%	8.6%	5.3%	5.6%
R-Sq(adj) =	4.4%	4.7%	2.2%	0.0%	0.1%	0.0%	0.0%	1.6%	0.0%	4.7%	1.4%	6.2%	3.7%	3.5%	3.1%
Degrees of Freedom	8,149	3,154	4,153	8,149	3,154	4,153	8,149	3,154	4,153	8,149	3,154	4,153	8,149	3,154	4,153
F-Value	1.9*	3.58**	1.87	0.59	1.05	0.80	0.91	1.87	0.77	1.96*	1.74	3.60***	1.76*	2.88**	2.26*

This table shows the influence of factors on the difference in 1-year post-deal performance of cross-border deals as compared to their industry median values. The dependent variables are the difference in accounting ratios depicted at the top of the tables. In this model, the difference is defined as the difference between the industry median and the acquirer's ratios one year after the deal was completed minus the same difference one year before the deal was completed. The independent variables are various characteristics of the companies involved deals. t-values for the coefficients are in brackets.
***Statistically significant at the 1% level.
**Statistically significant at the 5% level.
*Statistically significant at the 10% level.

Figure 6: Factors Associated with Performance of Cross-border Deals as Compared to Industry (1 Year after Completion of Deal: Model 2)

Variable	Δ EBIT / TOTAL ASSETS			Δ EBIT / SALES			Δ SALES / ASSETS			Δ NI / EQUITY			Δ (NI+Int) / ASSETS		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Constant	0.3536***	0.27017***	0.09197	18	19.012**	7.598	-0.1768	-0.20962**	-0.15933	6.829*	-0.462	6.27**	0.4732***	0.38482***	0.1177
	(3.13)	(4.07)	(1.23)	(1.26)	(2.26)	(0.83)	(-1.21)	(-2.42)	(-1.63)	(1.69)	(-0.19)	(2.41)	(3.07)	(4.23)	(1.15)
Acuirer Mfg Industry	-0.06829	---	-0.02055	-3.257	---	-1.203	-0.0499	---	-0.04223	-5.678***	---	-5.43***	-0.04282	---	0.00973
	(-1.15)		(-0.35)	(-0.43)		(-0.16)	(-0.63)		(-0.55)	(-2.66)		(-2.65)	(-0.53)		(0.12)
Acuirer Svcs Industry	-0.02623	---	0.04362	0.818	---	4.128	-0.07243	---	-0.02358	-7.165***	---	-6.319***	0.0344	---	0.10035
	(-0.38)		(0.65)	(0.09)		(0.50)	(-0.79)		(-0.27)	(-2.88)		(-2.74)	(0.36)		(1.10)
Acq/Target Same Industry	-0.03409	---	---	2.292	---	---	0.06919	---	---	1.165	---	---	-0.10728	---	---
	(-0.58)			(0.30)			(0.88)			(0.55)			(-1.32)		
Cash / Other	0.04104	---	---	-3.01	---	---	0.01912	---	---	-0.261	---	---	0.04601	---	---
	(0.97)			(-0.56)			(0.34)			(-0.17)			(0.79)		
log(Acquirer Size)	-0.11822***	-0.08408***	---	-5.595	-6.357*	---	0.00601	0.06716*	---	-0.372	0.3441	---	-0.14258***	-0.11373***	---
	(-3.16)	(-3.15)		(-1.19)	(-1.93)		(0.12)	(1.97)		(-0.28)	(0.36)		(-2.80)	(-3.14)	
log(Target Size)	0.04868	---	-0.03661	-0.559	---	-4.293	0.08495	---	0.08041*	-0.746	---	-1.064	0.05443	---	-0.05203
	(1.23)		(-1.17)	(-0.11)		(-1.12)	(1.55)		(1.96)	(-0.52)		(-0.98)	(1.00)		(-1.22)
Target Public	-0.08344*	-0.07506*	---	-2.791	-3.881	---	-0.12441**	-0.08375	---	-1.622	-0.922	---	-0.08479	-0.08765	---
	(-1.94)	(-1.90)		(-0.51)	(-0.79)		(-2.17)	(-1.61)		(-1.06)	(-0.64)		(-1.44)	(-1.62)	
Market-to-Book	-0.003155*	-0.002677	-0.002015	-0.097	-0.0799	-0.0317	0.000911	0.001927	0.001694	0.11294	0.09154	0.12744*	-0.002804	-0.002313	-0.001656
	(-1.65)	(-1.45)	(-1.05)	(-0.40)	(-0.34)	(-0.14)	(0.36)	(0.79)	(0.68)	(1.52)	(1.25)	(1.76)	(-1.06)	(-0.91)	(-0.63)
Δ t - 1	0.40599***	0.4029***	0.45807***	0.6031**	0.5619**	0.6511***	0.72685***	0.75222***	0.74144***	3.405**	4.066**	3.378**	0.2704**	0.2567**	0.3206***
	(4.27)	(4.34)	(4.94)	(2.34)	(2.25)	(2.61)	(13.80)	(15.01)	(14.48)	(1.99)	(2.37)	(2.06)	(2.52)	(2.45)	(3.03)
R-Sq =	23.2%	21.2%	16.7%	7.7%	7.1%	6.5%	62.1%	60.9%	60.5%	12.7%	7.4%	11.9%	14.8%	12.8%	9.1%
R-Sq(adj) =	18.5%	19.2%	14.0%	2.1%	4.6%	3.4%	59.8%	59.9%	59.2%	7.4%	4.9%	9.0%	9.7%	10.5%	6.1%
Degrees of Freedom	9,148	4,153	5,152	9,148	4,153	5,152	9,148	4,153	5,152	9,148	4,153	5,152	9,148	4,153	5,152
F-Value	4.97***	10.32***	6.1***	1.38	2.91**	2.10*	26.91***	59.56***	46.64***	2.39**	3.04**	4.09***	2.86***	5.63***	3.04**

This table shows the influence of factors on the difference in 1-year post-deal performance of cross-border deals as compared to their industry median values. The dependent variables are the difference in accounting ratios depicted at the top of the tables. In this model, the difference is defined as the difference between the industry median and the acquirer's ratios one year after the deal was completed. In addition to the various characteristics of the companies involved in the deal, this model includes the difference in the ratios one year prior to the deal completion as an independent variable. t-values for the coefficients are in brackets.
***Statistically significant at the 1% level.
**Statistically significant at the 5% level.
*Statistically significant at the 10% level.

Figure 7: Factors Associated with Performance of Cross-border Deals as Compared to Industry (2 Years after Completion of Deal: Model 1)

Variable	Δ EBIT / TOTAL ASSETS			Δ EBIT / SALES			Δ SALES / ASSETS			Δ NI / EQUITY			Δ (NI+Int) / ASSETS		
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**	**(10)**	**(11)**	**(12)**	**(13)**	**(14)**	**(15)**
Constant	0.2357	0.2191	-0.0265	14.84	14.229**	5.122	-0.0106	-0.3872*	-0.1437	-0.105	-0.4548	0.3485	0.3281	0.3129*	0.0251
	(0.90)	(1.43)	(-0.18)	(1.43)	(2.37)	(0.89)	(-0.03)	(-1.87)	(-0.74)	(-0.07)	(-0.50)	(0.40)	(1.12)	(1.82)	(0.15)
Acuirer Mfg Industry	-0.0413	---	0.0186	-2.648	---	-0.437	-0.1703	---	-0.1346	0.2786	---	-0.0238	-0.0098	---	0.0438
	(-0.34)		(0.16)	(-0.54)		(-0.10)	(-1.06)		(-0.90)	(0.38)		(-0.03)	(-0.07)		(0.34)
Acuirer Svcs Industry	0.1069	---	0.1854	1.909	---	4.668	-0.4789**	---	-0.3118*	0.5008	---	-0.2279	0.1719	---	0.2244
	(0.70)		(1.39)	(0.32)		(0.89)	(-2.40)		(-1.77)	(0.55)		(-0.29)	(1.00)		(1.50)
Acq/Target Same Industry	-0.0388	---	---	-0.089	---	---	0.1173	---	---	-1.0789	---	---	-0.114	---	---
	(-0.29)			(-0.02)			(0.68)			(-1.36)			(-0.76)		
Cash / Other	0.07016	---	---	-0.849	---	---	-0.102	---	---	0.2733	---	---	0.0716	---	---
	(0.73)			(-0.23)			(-0.82)			(0.48)			(0.67)		
log(Acquirer Size)	-0.1162	-0.04412	---	-5.119	-5.062**	---	-0.0381	0.09373	---	0.5167	0.1675	---	-0.114	-0.06941	---
	(-1.14)	(-0.68)		(-1.27)	(-1.99)		(-0.29)	(1.07)		(0.85)	(0.43)		(-0.99)	(-0.95)	
log(Target Size)	0.1157	---	0.02456	0.274	---	-3.273	0.0995	---	0.05555	-0.5671	---	-0.2256	0.0804	---	-0.01141
	(1.16)		(0.35)	(0.07)		(-1.20)	(0.76)		(0.60)	(-0.95)		(-0.54)	(0.71)		(-0.15)
Target Public	-0.11533	-0.1277	---	-1.192	-2.487	---	-0.2373*	-0.1012	---	0.4526	0.1477	---	-0.1019	-0.14467	---
	(-1.19)	(-1.53)		(-0.31)	(-0.76)		(-1.88)	(-0.90)		(0.78)	(0.30)		(-0.94)	(-1.54)	
Market-to-Book	-0.004574	-0.003251	-0.003153	-0.0419	-0.0332	-0.0058	-0.004073	-0.003128	-0.00218	-0.01041	-0.01939	-0.01785	-0.006227	-0.005492	-0.005027
	(-1.34)	(-1.02)	(-0.97)	(-0.31)	(-0.27)	(-0.05)	(-0.91)	(-0.73)	(-0.51)	(-0.51)	(-1.01)	(-0.92)	(-1.62)	(-1.53)	(-1.38)
R-Sq =	8.5%	4.7%	0.048	8.2%	6.4%	0.058	12.4%	2.8%	0.066	6.8%	2.0%	0.021	9.9%	6.6%	0.067
R-Sq(adj) =	0.0%	0.7%	0.0%	0.0%	2.4%	0.005	2.1%	0.0%	0.014	0.0%	0.0%	0.0%	0.0%	2.8%	0.015
Degrees of Freedom	8,68	3,73	4,72	8,68	3,73	4,72	8,68	3,73	4,72	8,68	3,73	4,72	8,68	3,73	4,72
F-Value	0.79	1.19	0.91	0.76	1.63	1.1	1.21	0.70	1.28	0.62	0.50	0.38	0.93	1.73	1.3

This table shows the influence of factors on the difference in 2-year post-deal performance of cross-border deals as compared to their industry median values. The dependent variables are the difference in accounting ratios depicted at the top of the tables. In this model, the difference is defined as the difference between the industry median and the acquirer's ratios two years after the deal was completed minus the same difference one year before the deal was completed. The independent variables are various characteristics of the companies involved deals. t-values for the coefficients are in brackets.
***Statistically significant at the 1% level.
**Statistically significant at the 5% level.
*Statistically significant at the 10% level.

Figure 8: Factors Associated with Performance of Cross-border Deals as Compared to Industry (2 Years after Completion of Deal: Model 2)

	2 Year Post Deal Performance														
Variable	Δ EBIT / TOTAL ASSETS			Δ EBIT / SALES			Δ SALES / ASSETS			Δ NI / EQUITY			Δ (NI+Int) / ASSETS		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Constant	0.444**	0.3764***	0.0832	17.54	16.57***	5.114	0.0746	-0.3451*	-0.2354	0.346	-0.1271	0.8295	0.4406*	0.393***	0.1157
	(2.06)	(3.02)	(0.68)	(1.66)	(2.66)	(0.89)	(0.23)	(-1.77)	(-1.27)	(0.23)	(-0.14)	(0.96)	(1.84)	(2.85)	(0.96)
Acuirer Mfg Industry	-0.022	---	0.05094	-2.232	---	0.045	-0.1864	---	-0.1122	0.2354	---	-0.0462	0.0282	---	0.0842
	(-0.22)		(0.54)	(-0.46)		(0.01)	(-1.24)		(-0.79)	(0.33)		(-0.07)	(0.25)		(-0.07)
Acuirer Svcs Industry	0.0135	---	0.0941	1.301	---	4.724	-0.4049**	---	-0.2217	0.0453	---	-0.6416	0.0567	---	0.103
	(0.11)		(0.85)	(0.22)		(0.90)	(-2.15)		(-1.32)	(0.05)		(-0.82)	(0.40)		(-0.82)
Acq/Target Same Industry	-0.0487	---	---	0.134	---	---	0.0626	---	---	-0.8685	---	---	-0.1009	---	---
	(-0.45)			(0.03)			(0.38)			(-1.13)			(-0.83)		
Cash / Other	-0.00534	---	---	-1.831	---	---	-0.0403	---	---	0.0444	---	---	0.00543	---	---
	(-0.07)			(-0.48)			(-0.34)			(0.08)			(0.06)		
log(Acquirer Size)	-0.17696**	-0.14216***	---	-6.714	-6.017**	---	-0.1281	0.08049	---	0.4383	-0.0214	---	-0.1405	-0.13044**	---
	(-2.12)	(-2.63)		(-1.58)	(-2.28)		(-1.00)	(0.97)		(0.74)	(-0.06)		(-1.51)	(-2.21)	
log(Target Size)	0.04673	---	-0.07268	1.226	---	-3.306	0.2148*	---	0.10372	-0.8156	---	-0.5134	0.01416	---	-0.08697
	(0.57)		(-1.22)	(0.30)		(-1.21)	(1.68)		(1.18)	(-1.40)		(-1.24)	(0.15)		(-1.24)
Target Public	-0.03286	-0.03809	---	-0.865	-1.812	---	-0.2541**	-0.117	---	0.5961	0.3447	---	-0.03023	-0.05071	---
	(-0.41)	(-0.56)		(-0.23)	(-0.55)		(-2.14)	(-1.10)		(1.07)	(0.70)		(-0.34)	(-0.66)	
Market-to-Book	-0.001313	-0.000946	-0.000303	-0.0399	-0.0238	-0.0018	-0.005867	-0.003734	-0.003324	0.01504	0.00142	0.00824	-0.001466	-0.00165	-0.000655
	(-0.47)	(-0.37)	(-0.11)	(-0.30)	(-0.19)	(-0.01)	(-1.39)	(-0.92)	(-0.82)	(0.68)	(0.07)	(0.39)	(-0.46)	(-0.56)	(0.39)
Δ t - 1	0.0396	0.0295	0.0819	-1.215	-1.208	-0.041	0.5578***	0.5759***	0.5812***	-0.5762	-0.4328	-0.6394	0.0797	0.0792	0.086
	(0.25)	(0.20)	(0.53)	(-0.65)	(-0.71)	(-0.02)	(4.07)	(4.35)	(4.34)	(-0.90)	(-0.72)	(-1.04)	(0.53)	(0.56)	(-1.04)
R-Sq =	11.4%	10.6%	0.052	9.4%	7.7%	0.055	31.6%	23.3%	0.26	7.3%	1.4%	0.034	9.3%	8.3%	0.056
R-Sq(adj) =	0.0%	5.7%	0	0.0%	2.6%	0	22.5%	19.0%	0.207	0.0%	0.0%	0	0.0%	3.2%	0
Degrees of Freedom	9,67	4,72	5,71	9,67	4,72	5,71	9,67	4,72	5,71	9,67	4,72	5,71	9,67	4,72	5,71
F-Value	0.96	2.14*	0.78	0.77	1.50	0.83	3.45***	5.46***	4.98***	0.59	0.26	0.51	0.77	1.62	0.85

This table shows the influence of factors on the difference in 2-year post-deal performance of cross-border deals as compared to their industry median values. The dependent variables are the difference in accounting ratios depicted at the top of the tables. In this model, the difference is defined as the difference between the industry median and the acquirer's ratios two years after the deal was completed. In addition to the various characteristics of the companies involved in the deal, this model includes the difference in the ratios one year prior to the deal completion as an independent variable. t-values for the coefficients are in brackets.
***Statistically significant at the 1% level.
**Statistically significant at the 5% level.
*Statistically significant at the 10% level.

Figure 9: Factors Associated with Performance of Cross-border Deals as Compared to Industry (3 Years after Completion of Deal: Model 1)

Variable	3 Year Post Deal Performance														
	Δ EBIT / TOTAL ASSETS			Δ EBIT / SALES			Δ SALES / ASSETS			Δ NI / EQUITY			Δ (NI+Int) / ASSETS		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Constant	0.7131	0.5302*	0.3173	11.253	8.566**	2.507	-1.5074*⁴	-0.7131**	-0.4696	-1.362	0.622	0.831	1.0466*	0.7972***	0.4147
	(1.25)	(1.99)	(1.02)	(1.35)	(2.21)	(0.53)	(-2.40)	(-2.21)	(-1.24)	(-0.58)	(0.56)	(0.65)	(2.05)	(3.37)	(1.46)
Acuirer Mfg Industry	0.0522	---	0.0855	-0.933	---	0.632	0.0473	---	-0.058	0.16	---	0.0275	0.0198	---	0.0887
	(0.19)		(0.35)	(-0.24)		(0.17)	(0.16)		(-0.20)	(0.14)		(0.03)	(0.08)		(0.40)
Acuirer Svcs Industry	-0.0983	---	-0.0088	-1.133	---	1.653	-0.2694	---	-0.0087	0.378	---	0.138	0.0003	---	0.0929
	(-0.32)		(-0.03)	(-0.25)		(0.42)	(-0.80)		(-0.03)	(0.30)		(0.13)	(0.00)		(0.39)
Acq/Target Same Industry	-0.0671	---	---	0.605	---	---	0.9711**	---	---	0.864	---	---	-0.1836	---	---
	(-0.19)			(0.12)			(2.49)			(0.59)			(-0.58)		
Cash / Other	-0.2013	---	---	-2.358	---	---	-0.1441	---	---	0.8486	---	---	-0.1504	---	---
	(-0.94)			(-0.76)			(-0.61)			(0.97)			(-0.79)		
log(Acquirer Size)	-0.1396	-0.1327	---	-4.286	-2.788*	---	0.3855	0.2398*	---	0.6977	-0.0337	---	-0.2453	-0.20184**	---
	(-0.64)	(-1.25)		(-1.35)	(-1.81)		(1.61)	(1.86)		(0.78)	(-0.08)		(-1.26)	(-2.14)	
log(Target Size)	-0.016	---	-0.1041	1.539	---	-1.59	-0.1025	---	0.2082	-0.6953	---	-0.2309	0.0264	---	-0.1535
	(-0.08)		(-0.91)	(0.50)		(-0.92)	(-0.44)		(1.48)	(-0.81)		(-0.48)	(0.14)		(-1.46)
Target Public	-0.0721	-0.0283	---	-3.085	-2.385	---	-0.3859	-0.0969	---	0.1935	0.0669	---	-0.1117	-0.1311	---
	(-0.32)	(-0.16)		(-0.94)	(-0.95)		(-1.56)	(-0.46)		(0.21)	(0.09)		(-0.56)	(-0.86)	
Market-to-Book	-0.01733	-0.01552	-0.012362	-0.0833	-0.0148	0.0654	-0.01127	-0.00274	-0.00498	-0.05799	-0.07608*	-0.07585*	-0.02305*³	-0.022367*ˑ	-0.016655
	(-1.43)	(-1.53)	(-1.24)	(-0.47)	(-0.10)	(0.43)	(-0.85)	(-0.22)	(-0.41)	(-1.16)	(-1.79)	(-1.83)	(-2.13)	(-2.48)	(-1.82)
R-Sq =	16.0%	11.5%	10.4%	17.9%	13.8%	5.8%	31.2%	11.7%	9.8%	19.7%	11.5%	12.6%	29.6%	26.2%	20.7%
R-Sq(adj) =	0.0%	2.0%	0.0%	0.0%	4.6%	0.0%	7.2%	2.2%	0.0%	0.0%	2.0%	0.0%	5.1%	18.2%	9.0%
Degrees of Freedom	8,23	3,28	4,27	8,23	3,28	4,27	8,23	3,28	4,27	8,23	3,28	4,27	8,23	3,28	4,27
F-Value	0.55	1.21	0.79	0.63	1.50	0.42	1.30	1.23	0.67	0.70	1.22	0.97	1.21	3.31**	1.76

This table shows the influence of factors on the difference in 3-year post-deal performance of cross-border deals as compared to their industry median values. The dependent variables are the difference in accounting ratios depicted at the top of the tables. In this model, the difference is defined as the difference between the industry median and the acquirer's ratios three years after the deal was completed minus the same difference one year before the deal was completed. The independent variables are various characteristics of the companies involved deals. t-values for the coefficients are in brackets.
***Statistically significant at the 1% level.
**Statistically significant at the 5% level.
*Statistically significant at the 10% level.

Figure 10: Factors Associated with Performance of Cross-border Deals as Compared to Industry (3 Years after Completion of Deal: Model 2)

	3 Year Post Deal Performance														
Variable	Δ EBIT / TOTAL ASSETS			Δ EBIT / SALES			Δ SALES / ASSETS			Δ NI / EQUITY			Δ (NI+Int) / ASSETS		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Constant	0.7905	0.4966*	0.3049	10.866	8.222**	2.776	-1.3359**	-0.6543*	-0.5424	-1.354	0.576	0.836	1.0324*	0.7776***	0.3948
	(1.40)	(1.89)	(1.00)	(1.27)	(2.08)	(0.58)	(-2.08)	(-2.04)	(-1.45)	(-0.56)	(0.50)	(0.63)	(1.98)	(3.13)	(1.36)
Acuirer Mfg Industry	0.065	---	0.1127	-1.189	---	-0.039	0.0103	---	-0.0484	0.136	---	0.024	0.0305	---	0.1069
	(0.25)		(0.47)	(-0.29)		(-0.01)	(0.03)		(-0.17)	(0.12)		(0.02)	(0.12)		(0.47)
Acuirer Svcs Industry	-0.0755	---	-0.0576	-1.052	---	1.633	-0.2282	---	0.0658	0.293	---	0.123	-0.0062	---	0.0677
	(-0.25)		(-0.22)	(-0.23)		(0.41)	(-0.68)		(0.21)	(0.21)		(0.10)	(-0.02)		(0.27)
Acq/Target Same Industry	-0.2264	---	---	0.641	---	---	0.8958**	---	---	0.867	---	---	-0.1968	---	---
	(-0.62)			(0.12)			(2.29)			(0.58)			(-0.61)		
Cash / Other	-0.1465	---	---	-2.146	---	---	-0.106	---	---	0.8591	---	---	-0.1419	---	---
	(-0.69)			(-0.67)			(-0.45)			(0.96)			(-0.72)		
log(Acquirer Size)	-0.1858	-0.1563	---	-4.001	-2.6	---	0.2689	0.2204*	---	0.6993	-0.0333	---	-0.2468	-0.19992**	---
	(-0.86)	(-1.48)		(-1.21)	(-1.63)		(1.04)	(1.72)		(0.77)	(-0.07)		(-1.25)	(-2.08)	
log(Target Size)	-0.0035	---	-0.1241	1.355	---	-1.593	0.0137	---	0.2333	-0.7091	---	-0.2325	0.0308	---	-0.1486
	(-0.02)		(-1.09)	(0.43)		(-0.91)	(0.05)		(1.69)	(-0.80)		(-0.48)	(0.16)		(-1.39)
Target Public	0.0782	0.0721	---	-3.186	-2.729	---	-0.4189	-0.1468	---	0.2365	0.1232	---	-0.0923	-0.1112	---
	(0.32)	(0.39)		(-0.95)	(-1.05)		(-1.69)	(-0.70)		(0.24)	(0.15)		(-0.43)	(-0.66)	
Market-to-Book	-0.01024	-0.01097	-0.0089	-0.0919	-0.0324	0.0411	-0.01211	-0.00257	-0.0037	-0.0513	-0.07018	-0.07496	-0.02159*	-0.021258**	-0.015115
	(-0.79)	(-1.04)	(-0.88)	(-0.51)	(-0.21)	(0.26)	(-0.91)	(-0.21)	(-0.31)	(-0.82)	(-1.30)	(-1.46)	(-1.81)	(-2.16)	(-1.55)
Δ t - 1	0.1649	0.2821	0.2802	1.555	1.722	2.008	0.7002**	0.6829***	0.6156**	0.752	0.788	0.963	0.8609*	0.885**	0.7894*
	(0.27)	(0.54)	(0.55)	(1.12)	(1.44)	(1.56)	(2.72)	(2.86)	(2.53)	(0.56)	(0.68)	(0.77)	(2.00)	(2.43)	(1.97)
R-Sq =	19.0%	13.4%	12.9%	23.6%	20.3%	13.7%	45.2%	29.9%	29.8%	16.6%	8.2%	9.2%	33.1%	29.8%	25.1%
R-Sq(adj) =	0.0%	0.5%	0.0%	0.0%	8.5%	0.0%	22.8%	19.5%	16.3%	0.0%	0.0%	0.0%	5.7%	19.4%	10.7%
Degrees of Freedom	9,22	4,27	5,26	9,22	4,27	5,26	9,22	4,27	5,26	9,22	4,27	5,26	9,22	4,27	5,26
F-Value	0.57	1.04	0.77	0.75	1.72	0.82	2.02*	2.88**	2.21*	0.49	0.60	0.53	1.21	2.86**	1.74

This table shows the influence of factors on the difference in 3-year post-deal performance of cross-border deals as compared to their industry median values. The dependent variables are the difference in accounting ratios depicted at the top of the tables. In this model, the difference is defined as the difference between the industry median and the acquirer's ratios three years after the deal was completed. In addition to the various characteristics of the companies involved in the deal, this model includes the difference in the ratios one year prior to the deal completion as an independent variable. t-values for the coefficients are in brackets.
***Statistically significant at the 1% level.
**Statistically significant at the 5% level.
*Statistically significant at the 10% level.

Figure 11: Difference in Means (CER -20,+20)

Δ	sdev	t-stat	p-value
0.06%	0.07	0.11	0.91
1.04%	0.10	1.44	0.15
1.71%	0.12	2.00	0.05
2.16%	0.13	2.28	0.02
2.46%	0.14	2.41	0.02
2.00%	0.15	1.78	0.08
2.58%	0.16	2.13	0.03
2.92%	0.17	2.27	0.02
3.45%	0.19	2.50	0.01
3.65%	0.20	2.51	0.01
4.52%	0.21	2.97	0.00
4.89%	0.23	2.91	0.00
4.47%	0.23	2.62	0.01
4.66%	0.24	2.59	0.01
4.69%	0.24	2.65	0.01
4.97%	0.24	2.86	0.00
4.28%	0.24	2.41	0.02
3.27%	0.26	1.71	0.09
2.71%	0.27	1.36	0.17
2.28%	0.28	1.12	0.26
2.97%	0.29	1.41	0.16
0.93%	0.31	0.41	0.69
1.79%	0.32	0.76	0.45
1.81%	0.32	0.76	0.45
1.86%	0.33	0.76	0.45
2.02%	0.33	0.81	0.42
1.94%	0.34	0.78	0.44
1.95%	0.35	0.75	0.45
1.36%	0.36	0.51	0.61
1.51%	0.35	0.58	0.56
1.09%	0.35	0.42	0.67
0.88%	0.34	0.35	0.73
0.75%	0.35	0.29	0.77
0.40%	0.35	0.15	0.88
0.71%	0.35	0.27	0.79
0.53%	0.36	0.20	0.84
0.90%	0.37	0.33	0.74
1.29%	0.37	0.47	0.64
1.32%	0.37	0.48	0.63
1.60%	0.38	0.57	0.57
1.90%	0.39	0.66	0.51

This table shows the difference between the means of cumulative abnormal excess returns of acquirers involved in domestic deals and acquirers involved in cross-border deals. The cumulative excess returns are calculated starting 20 days prior to the deal announcement until 20 days after the deal was announced.

Figure 12: Difference in Means (-5, +5)

Δ	sdev	t-stat	p-value
0.19%	0.07	0.38	0.70
-0.52%	0.10	(0.73)	0.46
-1.55%	0.12	(1.74)	0.08
-2.14%	0.12	(2.37)	0.02
-2.61%	0.13	(2.75)	0.01
-1.83%	0.15	(1.66)	0.10
-3.67%	0.19	(2.66)	0.01
-2.87%	0.20	(2.00)	0.05
-2.88%	0.19	(2.01)	0.05
-2.82%	0.20	(1.91)	0.06
-2.76%	0.21	(1.79)	0.08

This table shows the difference between the means of cumulative abnormal excess returns of acquirers involved in domestic deals and acquirers involved in cross-border deals. The cumulative excess returns are calculated starting 5 days prior to the deal announcement until 5 days after the deal was announced.

Figure 13: Factors Associated with Cumulative Abnormal Excess Returns (1 Year Accounting Data)

		Δ EBIT / Total Assets		Δ EBIT / Sales		Δ Sales / Total Assets		Δ NI / Equity		Δ (NI + Int) / Total	
		(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
	Constant	-0.01502	-0.01977	-0.003	-0.00281	-0.01012	-0.03015	-0.00078	-0.00175	-0.0159	-0.01023
		(-0.16)	(-0.20)	(-0.03)	(-0.03)	(-0.11)	(-0.31)	(-0.01)	(-0.02)	(-0.16)	(-0.11)
Control Deal	D1 Cash / Other	-0.03678	-0.03886	-0.03781	-0.03772	-0.03723	-0.04664	-0.03444	-0.03347	-0.03768	-0.0357
		(-1.04)	(-1.09)	(-1.07)	(-1.07)	(-1.05)	(-1.30)	(-0.97)	(-0.94)	(-1.07)	(-1.01)
	D1 log(Acquirer Size)	0.2281**	0.2255**	0.2192**	0.2188**	0.2221**	0.2197**	0.2248**	0.2243**	0.2277**	0.2295**
		(2.08)	(2.05)	(2.02)	(2.00)	(2.03)	(2.01)	(2.07)	(2.06)	(2.08)	(2.09)
	D1 log(Target Size)	-0.12546	-0.1195	-0.1177	-0.1182	-0.1271	-0.1393	-0.125	-0.1363	-0.12708	-0.1377
		(-1.26)	(-1.18)	(-1.17)	(-1.17)	(-1.26)	(-1.38)	(-1.25)	(-1.36)	(-1.27)	(-1.36)
	D1 Target Public	0.00779	0.00997	0.01022	0.01005	0.01014	0.00986	0.00867	0.00633	0.00826	0.00609
		(0.22)	(0.27)	(0.29)	(0.28)	(0.28)	(0.28)	(0.24)	(0.18)	(0.23)	(0.17)
	D1 Market-to-Book	-0.001221	-0.001287	-0.001682	-0.001681	-0.001472	-0.002256	-0.001694	-0.001923	-0.001174	-0.001116
		(-0.30)	(-0.32)	(-0.42)	(-0.42)	(-0.37)	(-0.56)	(-0.42)	(-0.48)	(-0.29)	(-0.27)
Matching Deal	D2 Cash / Other	0.02944	0.02965	0.02983	0.0299	0.03074	0.02874	0.02864	0.03006	0.03024	0.03116
		(0.79)	(0.80)	(0.81)	(0.81)	(0.83)	(0.77)	(0.77)	(0.81)	(0.82)	(0.84)
	D2 log(Acquirer Size)	-0.2108**	-0.2053**	-0.2058**	-0.2055**	-0.2061**	-0.193*	-0.2097**	-0.2084**	-0.2101**	-0.2143**
		(-2.08)	(-2.01)	(-2.04)	(-2.03)	(-2.03)	(-1.90)	(-2.08)	(-2.07)	(-2.08)	(-2.11)
	D2 log(Target Size)	0.12853	0.1204	0.1224	0.123	0.1311	0.13569	0.12841	0.13737	0.12998	0.1415
		(1.30)	(1.19)	(1.23)	(1.22)	(1.32)	(1.37)	(1.30)	(1.38)	(1.31)	(1.41)
	D2 Target Public	-0.0044	-0.00623	-0.00729	-0.00738	-0.00621	-0.00308	-0.00735	-0.00485	-0.0045	-0.00306
		(-0.12)	(-0.17)	(-0.20)	(-0.20)	(-0.17)	(-0.08)	(-0.20)	(-0.13)	(-0.12)	(-0.08)
	D2 Market-to-Book	-0.001935	-0.001951	-0.002043	-0.00204	-0.002015	-0.00173	-0.001848	-0.001369	-0.00194	-0.001832
		(-1.18)	(-1.18)	(-1.25)	(-1.25)	(-1.23)	(-1.05)	(-1.12)	(-0.80)	(-1.18)	(-1.11)
	Acuirer Mfg Industry	0.0228	0.0218	0.01957	0.01947	0.0204	0.02785	0.01375	0.01629	0.02223	0.02304
		(0.44)	(0.42)	(0.38)	(0.38)	(0.40)	(0.54)	(0.26)	(0.31)	(0.43)	(0.45)
	Acuirer Svcs Industry	0.03673	0.03638	0.03761	0.03751	0.03693	0.04418	0.02866	0.02415	0.03567	0.03376
		(0.62)	(0.61)	(0.64)	(0.63)	(0.62)	(0.74)	(0.47)	(0.40)	(0.60)	(0.57)
	Acq/Target Same Industry	-0.06911	-0.06812	-0.06927	-0.06933	-0.07	-0.06843	-0.06871	-0.06894	-0.06809	-0.07017
		(-1.46)	(-1.43)	(-1.47)	(-1.46)	(-1.48)	(-1.45)	(-1.45)	(-1.46)	(-1.43)	(-1.47)
	Δ Ratio	0.02303	---	-0.0003912	---	-0.00069	---	-0.001115	---	0.01577	---
		(0.41)		(-0.72)		(-0.02)		(-0.61)		(0.44)	
	Δ t + 1	---	0.03182	---	-0.00039	---	0.0117	---	-0.001376	---	0.00423
			(0.53)		(-0.72)		(0.32)		(-0.75)		(0.11)
	Δ t - 1	---	0.00366	---	0.000254	---	0.01799	---	-0.01952	---	-0.03875
			(0.05)		(0.08)		(0.48)		(-1.03)		(-0.78)
	R-Sq =	7.2%	7.3%	7.4%	7.4%	7.1%	8.1%	7.3%	8.0%	7.2%	7.5%
	R-Sq(adj) =	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Degrees of Freedom	14,152	15,151	14,152	15,151	14,152	15,151	14,152	15,151	14,152	15,151
	F-Value	0.84	0.79	0.87	0.80	0.83	0.89	0.85	0.88	0.84	0.81

This table shows the influence of factors on the difference in cumulative abnormal excess returns of domestic deals as compared to their cross-border deals matches. The dependent variable is the difference in cumulative excess returns and the independent variables include a set of characteristics for both deals as well as the difference in accounting ratios. The variables labeled as Δ Ratio, Δ t + 1, and Δ t − 1 represent the difference in the ratios labeled in the top row with Δ Ratio being the difference at t+1 subtracted from t-1 and Δ t+1 being the difference a year after the deal while Δ t-1 being the difference a year before the deal.
***Statistically significant at the 1% level.
**Statistically significant at the 5% level.
*Statistically significant at the 10% level.

Figure 14: Factors Associated with Cumulative Abnormal Excess Returns (2 Year Accounting Data)

		Δ EBIT / Total Assets		Δ EBIT / Sales		Δ Sales / Total Assets		Δ NI / Equity		Δ (NI + Int) / Total	
		(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
	Constant	-0.0714	-0.0248	-0.0837	-0.0747	-0.1467	-0.0405	-0.0951	-0.0974	-0.0824	-0.033
		(-0.35)	(-0.13)	(-0.40)	(-0.35)	(-0.75)	(-0.19)	(-0.46)	(-0.48)	(-0.40)	(-0.17)
Control Deal	D1 Cash / Other	-0.11395	-0.07582	-0.11751	-0.11613	-0.10154	-0.09095	-0.12102	-0.09539	-0.11701	-0.06398
		(-1.40)	(-0.96)	(-1.44)	(-1.41)	(-1.31)	(-1.17)	(-1.47)	(-1.16)	(-1.43)	(-0.79)
	D1 log(Acquirer Size)	0.2396	0.2801	0.2532	0.2415	0.3585	0.2833	0.2502	0.2434	0.2565	0.3107
		(1.03)	(1.26)	(1.09)	(1.02)	(1.61)	(1.23)	(1.08)	(1.06)	(1.11)	(1.40)
	D1 log(Target Size)	-0.2074	-0.2881	-0.2331	-0.2417	-0.28	-0.2392	-0.2411	-0.3017	-0.232	-0.2791
		(-0.98)	(-1.41)	(-1.09)	(-1.11)	(-1.43)	(-1.21)	(-1.17)	(-1.46)	(-1.10)	(-1.38)
	D1 Target Public	-0.05439	-0.11603	-0.06624	-0.07134	-0.09935	-0.10391	-0.06932	-0.09909	-0.06372	-0.10184
		(-0.73)	(-1.54)	(-0.91)	(-0.96)	(-1.42)	(-1.49)	(-0.95)	(-1.34)	(-0.87)	(-1.42)
	D1 Market-to-Book	-0.007869	-0.008052	-0.00818	-0.008329	-0.005926	-0.005062	-0.007957	-0.006923	-0.007991	-0.005994
		(-1.13)	(-1.21)	(-1.14)	(-1.15)	(-0.89)	(-0.76)	(-1.14)	(-1.00)	(-1.14)	(-0.89)
Matching Deal	D2 Cash / Other	0.08218	0.07892	0.07186	0.07476	0.06142	0.06992	0.07387	0.06876	0.07281	0.07278
		(1.07)	(1.07)	(0.94)	(0.97)	(0.85)	(0.97)	(0.97)	(0.91)	(0.96)	(1.00)
	D2 log(Acquirer Size)	-0.1438	-0.2002	-0.1512	-0.142	-0.2045	-0.1746	-0.1486	-0.132	-0.1552	-0.2033
		(-0.67)	(-0.97)	(-0.70)	(-0.65)	(-1.00)	(-0.85)	(-0.69)	(-0.62)	(-0.72)	(-0.99)
	D2 log(Target Size)	0.1918	0.2696	0.213	0.2235	0.2005	0.1883	0.226	0.2624	0.2136	0.2234
		(0.87)	(1.27)	(0.94)	(0.97)	(0.98)	(0.92)	(1.05)	(1.23)	(0.97)	(1.06)
	D2 Target Public	0.06296	0.07372	0.06781	0.06515	0.13173*	0.12813	0.06739	0.06913	0.06702	0.07825
		(0.81)	(0.99)	(0.87)	(0.83)	(1.69)	(1.65)	(0.87)	(0.90)	(0.86)	(1.05)
	D2 Market-to-Book	-0.001234	-0.000925	-0.000882	-0.000877	-0.000257	-0.000696	-0.000817	0.000521	-0.000994	-0.000397
		(-0.51)	(-0.40)	(-0.37)	(-0.37)	(-0.11)	(-0.31)	(-0.34)	(0.21)	(-0.41)	(-0.17)
	Acuirer Mfg Industry	0.02932	0.05133	0.0343	0.02905	0.04376	0.03042	0.03687	0.04991	0.03311	0.02617
		(0.30)	(0.55)	(0.35)	(0.29)	(0.48)	(0.33)	(0.38)	(0.52)	(0.34)	(0.28)
	Acuirer Svcs Industry	0.1572	0.1175	0.156	0.1534	0.1912	0.1614	0.1557	0.1258	0.1577	0.1011
		(1.30)	(1.01)	(1.28)	(1.25)	(1.66)	(1.38)	(1.28)	(1.04)	(1.29)	(0.85)
	Acq/Target Same Industry	-0.1638	-0.15215	-0.1556	-0.1574	-0.17447*	-0.20945**	-0.1513	-0.1479	-0.1575	-0.16091
		(-1.61)	(-1.56)	(-1.53)	(-1.53)	(-1.81)	(-2.10)	(-1.47)	(-1.46)	(-1.55)	(-1.66)
	Δ Ratio	-0.06561	---	-0.00033	---	0.16067**	---	0.0056	---	-0.01658	---
		(-0.75)		(-0.19)		(2.45)		(0.33)		(-0.27)	
	Δ t + 2	---	-0.2304**	---	-0.000502	---	0.15295**	---	-0.00445	---	-0.19681**
			(-2.13)		(-0.28)		(2.34)		(-0.25)		(-2.09)
	Δ t - 1	---	-0.1739	---	-0.00123	---	-0.23386**	---	-0.0797	---	-0.08512
			(-1.34)		(-0.27)		(-2.67)		(-1.62)		(-1.18)
	R-Sq =	19.3%	27.7%	18.4%	18.6%	27.1%	29.4%	18.5%	22.6%	18.5%	27.5%
	R-Sq(adj) =	0.0%	5.6%	0.0%	0.0%	6.7%	7.7%	0.0%	0.0%	0.0%	5.3%
	Degrees of Freedom	14,50	15,49	14,50	15,49	14,50	15,49	14,50	15,49	14,50	15,49
	F-Value	0.85	1.25	0.81	0.75	1.33	1.36	0.81	0.95	0.81	1.24

This table shows the influence of factors on the difference in cumulative abnormal excess returns of domestic deals as compared to their cross-border deals matches. The dependent variable is the difference in cumulative excess returns and the independent variables include a set of characteristics for both deals as well as the difference in accounting ratios. The variables labeled as Δ Ratio, Δ t + 2, and Δ t − 1 represent the difference in the ratios labeled in the top row with Δ Ratio being the difference at t+2 subtracted from t-1 and Δ t+2 being the difference a two years after the deal while Δ t-1 being the difference a year before the deal.

***Statistically significant at the 1% level.
**Statistically significant at the 5% level.
*Statistically significant at the 10% level.

Figure 15: Factors Associated with Cumulative Abnormal Excess Returns (3 Year Accounting Data)

		Δ EBIT / Total Assets		Δ EBIT / Sales		Δ Sales / Total Assets		Δ NI / Equity		Δ (NI + Int) / Total	
		(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
	Constant	-0.1479	-0.2535	-0.2912	-0.2886	-0.2747	-0.2482	-0.3222	-0.3278	-0.1775	-0.1541
		(-0.53)	(-0.76)	(-1.11)	(-1.06)	(-0.78)	(-0.67)	(-1.33)	(-1.30)	(-0.64)	(-0.46)
Control Deal	D1 Cash / Other	0.0969	0.0972	0.0888	0.0828	0.0677	0.0767	0.0998	0.1028	0.1004	0.1022
		(0.81)	(0.80)	(0.79)	(0.70)	(0.47)	(0.51)	(0.95)	(0.95)	(0.82)	(0.80)
	D1 log(Acquirer Size)	0.0027	0.0868	0.4393	0.5433	0.0449	-0.0913	0.2331	0.1688	0.0524	0.018
		(0.01)	(0.17)	(1.00)	(0.91)	(0.09)	(-0.16)	(0.65)	(0.41)	(0.09)	(0.03)
	D1 log(Target Size)	-0.3374	-0.3186	-0.5685*	-0.6396	-0.3248	-0.2997	-0.3661	-0.321	-0.3542	-0.3465
		(-1.15)	(-1.06)	(-2.01)	(-1.63)	(-0.95)	(-0.84)	(-1.55)	(-1.15)	(-1.03)	(-0.96)
	D1 Target Public	-0.0755	-0.0795	-0.1522	-0.1738	-0.1053	-0.0912	-0.10469	-0.0895	-0.0889	-0.0851
		(-0.62)	(-0.64)	(-1.41)	(-1.27)	(-0.97)	(-0.78)	(-1.10)	(-0.83)	(-0.66)	(-0.60)
	D1 Market-to-Book	0.00113	-0.00059	-0.001168	-0.001574	-0.000724	0.000234	-0.000491	-0.000285	0.000164	0.000557
		(0.14)	(-0.07)	(-0.17)	(-0.21)	(-0.10)	(0.03)	(-0.08)	(-0.04)	(0.02)	(0.06)
Matching Deal	D2 Cash / Other	-0.04398	-0.05191	-0.03918	-0.03931	-0.05425	-0.05555	0.00023	-0.00188	-0.03966	-0.03759
		(-0.59)	(-0.67)	(-0.56)	(-0.54)	(-0.64)	(-0.64)	(0.00)	(-0.03)	(-0.53)	(-0.48)
	D2 log(Acquirer Size)	0.1372	0.0807	-0.2598	-0.3636	0.1342	0.2506	-0.0464	0.0188	0.0837	0.1111
		(0.29)	(0.17)	(-0.62)	(-0.63)	(0.25)	(0.41)	(-0.13)	(0.05)	(0.15)	(0.18)
	D2 log(Target Size)	0.2129	0.1902	0.4821	0.5645	0.1994	0.1867	0.2371	0.185	0.251	0.2439
		(0.63)	(0.55)	(1.57)	(1.28)	(0.49)	(0.44)	(0.91)	(0.60)	(0.67)	(0.62)
	D2 Target Public	-0.0341	-0.05	0.0071	0.0212	-0.0571	-0.0678	-0.0383	-0.05	-0.0311	-0.0318
		(-0.29)	(-0.40)	(0.06)	(0.17)	(-0.37)	(-0.42)	(-0.37)	(-0.45)	(-0.25)	(-0.24)
	D2 Market-to-Book	-0.008026	-0.007816	-0.00749	-0.00735	-0.006826	-0.00687	-0.0097*	-0.00999*	-0.007825	-0.008144
		(-1.43)	(-1.36)	(-1.44)	(-1.36)	(-1.18)	(-1.15)	(-1.96)	(-1.92)	(-1.34)	(-1.26)
	Acuirer Mfg Industry	0.0411	0.0483	0.0642	0.0634	0.0549	0.059	0.0815	0.0822	0.0452	0.0471
		(0.35)	(0.40)	(0.58)	(0.55)	(0.45)	(0.47)	(0.79)	(0.77)	(0.38)	(0.38)
	Acuirer Svcs Industry	0.0409	0.0689	0.0922	0.0947	0.0403	0.0309	0.0834	0.0837	0.0593	0.057
		(0.28)	(0.45)	(0.69)	(0.68)	(0.26)	(0.19)	(0.68)	(0.66)	(0.42)	(0.39)
	Acq/Target Same Industry	0.0223	0.0714	-0.0061	-0.0269	0.0786	0.0738	0.0644	0.0801	0.0292	0.0209
		(0.14)	(0.40)	(-0.04)	(-0.16)	(0.35)	(0.32)	(0.46)	(0.53)	(0.18)	(0.12)
	Δ Ratio	-0.0827	---	0.007055	---	-0.051	---	-0.03075*	---	-0.02064	---
		(-0.53)		(1.37)		(-0.36)		(-2.06)		(-0.21)	
	Δ t + 3	---	0.0207	---	0.008036	---	-0.0933	---	-0.03128*	---	-0.0472
			(0.09)		(1.25)		(-0.53)		(-2.01)		(-0.22)
	Δ t - 1	---	0.0989	---	-0.01576	---	0.0478	---	0.05003	---	0.0252
			(0.61)		(-0.49)		(0.32)		(0.84)		(0.24)
	R-Sq =	51.1%	52.6%	56.3%	56.6%	50.5%	51.3%	62.3%	62.7%	50.2%	50.3%
	R-Sq(adj) =	0.0%	0.0%	9.3%	2.4%	0.0%	0.0%	21.7%	16.0%	0.0%	0.0%
	Degrees of Freedom	14,13	15,12	14,13	15,12	14,13	15,12	14,13	15,12	14,13	15,12
	F-Value	0.97	0.89	1.20	1.04	0.95	0.84	1.54	1.34	0.94	0.81

This table shows the influence of factors on the difference in cumulative abnormal excess returns of domestic deals as compared to their cross-border deals matches. The dependent variable is the difference in cumulative excess returns and the independent variables include a set of characteristics for both deals as well as the difference in accounting ratios. The variables labeled as Δ Ratio, Δ t + 3, and Δ t − 1 represent the difference in the ratios labeled in the top row with Δ Ratio being the difference at t+3 subtracted from t-1 and Δ t+3 being the difference a three years after the deal while Δ t-1 being the difference a year before the deal.
***Statistically significant at the 1% level.
**Statistically significant at the 5% level.
*Statistically significant at the 10% level.

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