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SUCCESS OF CROSS-BORDER MERGERS & ACQUISITIONS IN THE LONG-
TERM

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ABSTRACT

This thesis is an empirical analysis of recent notable cross-border mergers and acquisitions that took place between Chinese and US firms. I study the acquirers' stock price movements two years prior to and after the announcements, examine changes in selected financial ratios before and after announcements, and compare the performances of such cross-border M&As with domestic ones of similar characteristics. I hypothesize that cross-border M&A practices will outperform their domestic counterparts in terms of shareholder value creation for the acquirers in the long-term. The results provide a number of insights about the effectiveness of cross-border M&As and help businesses in US and China making better decisions when facing issues regarding taking over or merging with a foreign entity.

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Chapter 1

Introduction

Cross-border¹ mergers & acquisitions (M&A) is a phenomenon that arose since the surge of globalization. Traditionally, cross-border M&A deals take place between an acquirer in developed countries (home country) and a target in developing countries (host country), usually associated with foreign direct investment (FDI) and green field investment. However recently, we are seeing a trend of reverse deals where the acquirer from emerging markets (home country) takes over the target or part of its business in a developed economy (host country). What drives this unprecedented trend of the increase in the popularity of cross-border M&A remains to be a hot topic in finance. Possible contributing factors are trade liberalization, government deregulations, industry consolidation, integrated business models, and internalization. This study is mostly concerned with the outcomes of these deals whether they add values to the shareholders.

Ultimately, a company on the hunt to take over another company is looking to expand its business, eliminate inefficiencies and create synergies. This is true for both domestic² and cross-border M&A. If we consider the case for the latter, we would see a more complex situation. A cross-border M&A involves more uncertainties as to whether it will

¹ Cross-border and international are used interchangeably in this paper

² Domestic meaning both the acquiring company and target company are headquartered in the US

create value. This is because on the one hand, a cross-border deal gives the company the opportunity to exploit foreign markets in terms of expanding customer base and increase sales, identifying cheaper resources, absorbing new technologies, etc. Other than being used as a strategic tool to consolidate competitive advantage, a cross-border M&A is also a great way to diversify away business risk and improve business practices due to sharing of difference opinions and views. On the other hand, critics of cross-border M&A argue that it is more risky than domestic deals as to issues of cultural differences on both corporate and national levels, conflicting management styles, and difficulties in long-distance communications may rise. Much emphasis is put on the integration process to see value is created or destroyed.

The conventional view on cross-border M&A is that they never live up to expectations and usually underperform, or are less successful than domestic deals. According to a study by KPMG (Economist, 1999), over half of cross-border M&As destroyed shareholder value, while only 17% created shareholder value. In this paper, I hope to address the question of how successful cross-border M&As are in the period of two years post-deal, compared to the domestic deals that share similar characteristics. My hypothesis is that in the long-run, cross-border M&A deals outperform domestic ones.

The financial crisis in late 2007 posed a negative impact on and reduced the volume of global M&A activities in subsequent years. However, an upward trend is starting to pick up as the volume estimate of cross-border M&A deals in 2010 reaches \$960 billion, increased 75% from 2009, according to data compiled by Citigroup (Executive M&A

Summary, August 2010). Four of the top 10 global deals YTD are cross-border, the highest share since 2000. This shows the relevancy of this study to today's business trend. In order to minimize the effects of the financial crisis on examining the effectiveness of M&As, I only investigate in deals that took place two or more years pre-crisis.

Chapter 2

Literature Review

Studies on cross-border M&A have been conducted by professionals in many academic fields of business. In management, Professor Sydney Finkelstein of Tucker School of Business stressed on the importance of post-deal integration in achieving cross-border M&A goals (Safe ways to cross the merger minefield, p. 119-123, 1999). He points out cross-border M&As are more difficult to implement as they face not only the challenges of combining two separate entities, but also the threats coming from differences in corporate governance, regulatory environment, and country culture.

In accounting, a previous research topic has focused on accounting differences between a US acquirer and a foreign target leading to inaccurate valuation on target in international M&A deals. Difficulties in the compliance of foreign GAAPs, in most cases the International Financial Reporting Standards (IFRS) may result in higher premiums paid for the target companies.

In finance, Mark Faktorovich of the Stern School of Business compared the level of success between cross-border and domestic M&A deals, by examining the differences in post-deal performance ratios of the merged companies, and by analyzing stock performance around the announcement date for matched pairs of domestic and international deals. He concluded that no significant difference exists in company performances between cross-border M&A deals and their domestic counterparts, but did find that cross-border deals generate more excitement +/- 5 days around announcement date. However, performance of the stocks shows no systematic difference in the period of +/- 20 days around announcement of the deals.

Chapter 3

Methodology

My approach to the analysis part of this paper is to compare company performances using performance ratio analysis two years post-transaction and to examine the difference in abnormal returns of company stocks between cross-border and domestic deals, in six months, one year, and two years period after the announcement date. In addition, I compare the company and stock performances of the acquirers pre- and post-deal on a two-year window. The following ratios are used for performance analysis:

- EBIT/Sales
- Sales/Assets
- Return On Assets
- Return On Equity

EBIT/Sales shows the operating profit margin of a company, it is used to determine whether the merged company is able to increase revenue and reduce cost. Sales/Assets tells whether the company can efficiently combine the resources and maximize sales. ROA and ROE measure the company's ability to generate the returns to its shareholders.

I also track the stock movements of the same companies within the same periods to see whether the patterns in abnormal returns show differences between cross-border and domestic deals.

The sample of M&A deals are taken from all the deals happened between January 1995 and December 2004. Each cross-border deal is paired with a matching domestic one, according to the size of the acquirer, size of the deal in terms of dollar amount, geographical characteristics of the companies and the industries they are in. The data I use in this paper are from:

- Thomson Reuters SDC Database
- Yahoo! Finance
- Acquiring company websites

In order to study the impact of cross-border M&As on acquirers and assess the performances of these deals, I carry out an empirical analysis of stock market data using the event study methodology. The event study approach assumes that the financial markets are efficient and the share price adjust itself instantaneously once related information is made available to the public (Yea-Mow Chen et al., 2009). The most commonly used event study methodology is a market model proposed by Fama (1976). The market model compares the actual stock price movements with the projected, thereby calculate the difference which represents the abnormal returns caused by the M&A event.

Following the market model, I denote the announcement date as 0, and the event window as $-T$ to $+T$, where $-T$ represents six months, one year and two years before the announcement and $+T$ represents six months, one year and two years after the announcement. This is the regression model I used:

$$R_{it} = \alpha_i + \beta_i R_{mt} + \epsilon_{it}$$

Where

R_{it} = actual return of firm i at time t

α_i , β_i = parameters representing the relationship between return on i and that of

the market

R_{mt} = actual return of market m at time t

ϵ_{it} = random error term

Abnormal return (AR_{it}) represents the difference between actual and expected return and is computed as:

$$AR_{it} = R_{it} - (\hat{\alpha}_i + \hat{\beta}_i R_{mt})$$

Where

$\hat{\alpha}_i$, $\hat{\beta}_i$ are estimates of parameters α_i , β_i based on historical correlation

I then calculate the average abnormal return (AAR_t) and cumulative abnormal return (CAR_t) as follows:

$$AAR_t = \frac{\sum_{i=1}^N AR_{it}}{N}$$

$$CAR_t = \sum_{i=0}^n AAR_t$$

Chapter 4

Empirical Results

4.1 Pilot Study - Cross-Border M&A between a Chinese acquirer and a US target

Since opening up its economy in 1978, China has seen its businesses involving in an increase number of outward foreign investments. These activities are fueled by the emergence of the Chinese economy combined with the globalization of business. The Chinese government, with its economic reform policies, encourages Chinese firms to invest overseas, in particular in the US. According to a series of surveys conducted by Mergermarket in the *US/Chinese Cross-Border M&A Spotlight* report, respondents felted weakening dollar and the excess cash the Chinese companies have are the drivers of these M&A deals.

In this section, I examine the case of Lenovo's acquisition of IBM PC Division and conduct empirical analysis on the performance of this deal in terms of shareholder wealth creation. The characteristics of this deal are summarized in the following table:

Table 4 - 1

Date of Announcement	Deal Size	Type of Transaction	Industry
12-08-2004	\$1.25b	Cash/Stock	IT

Like many other Chinese firms that engage in cross-border M&As, Lenovo is primarily motivated by the international expansion opportunity in its PC unit by faster entry into new market outside of China, a chance to exploit IBM's advanced technology and existing networks, and the managerial know-how that Lenovo does not have. IBM PCD possesses a lot of the intangible assets that Lenovo could obtain to increase its competitive advantage. In fact, Lenovo named IBM's senior VP to be the new CEO and became the world's third largest PC manufacturer after the acquisition.

The relevant data was collected from the Thomson Reuters SDC database. Since Lenovo is listed on the Hong Kong Stock Exchange, the Hang Seng Price Index was used as the market portfolio. All prices are monthly closing prices on the 8th of each month.

Here is the summary of results using the market model:

Table 4 - 2

Event Window	AAR	CAR
-2 year, + 2 year	0.001634	0.078432
0, +6 months	0.007482	0.044894
0, +1 year	0.038382	0.460586

The cumulative abnormal return of nearly 8% over the period of 2 years prior to and after the announcement of the deal shows that this particular deal did bring a positive for investors of the Lenovo. However, this finding only applies to this particular deal between Lenovo and IBM. A bigger sample of cross-border M&As with comparison to similar domestic deals will be studied, and more in-depth and rigorous analysis of data including performance ratio analysis and t-test.

While conducting data analyses, I encountered a number of hurdles such as the availability and accuracy of accounting data used for ratio analysis. The numbers I collected from Hexun (www.hexun.com) seem to be very unreliable as they are at odds with the normal course of business development for Lenovo. Nevertheless, these issues can be overcome by careful selection of sample to be studied.

4.2 Cross-Border M&As between US acquirers and Chinese targets

The sample of cross-border M&A deals is extracted from the Thomson Reuters SDC database. In order to satisfy the selection criteria, each transaction has to be able to match up with a domestic one with similar characteristics. Therefore I decide to pair up the deals that involve the same acquirer, for better comparison between the two cross-border and domestic deals. For example, an acquirer in the sample would be a US company that acquired both a target company in China and one in the US.

The sample included six paired cross-border and domestic transactions, or 12 individual deals, by six US acquirers. They are:

- eBay Inc
- Emerson Electric Co
- Corning Inc
- Alcoa Inc
- ITT Industries Inc
- Procter & Gamble Co

Table 1 shows the names of the acquirers, targets, dates the transactions were announced, deal sizes in dollar amount, and industries of the acquiring and target companies. There is a heavy weighting on the manufacturing industry in the sample (See Figure 1), suggesting manufacturing companies are the most actively involved in cross-

border M&A practices between US and China. The timings of the two paired deals are chosen as far from each other as possible to avoid data overlaps in the performance analysis section. However slightly overlaps in data selection were inevitable but can be disregarded when generalizing results. The deals are also highly concentrated in the periods of 1997 to 2001 (See Table 4 - 3); this could potentially result in odd performance ratios due to the Sarbanes-Oxley Act in 2002. We can see all six transactions took place within the industries. No cross-industrial M&As were included in the sample.

Figure 1

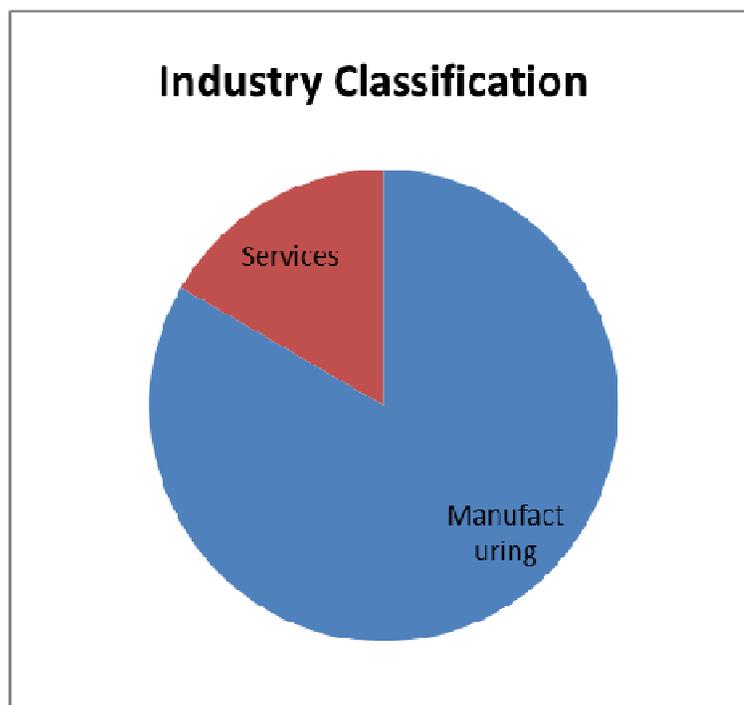


Table 4 - 3

Year of Transaction	No. of Transactions	Percentage
1997	2	16.67%
1999	2	16.67%
2000	3	25%
2001	3	25%
2003	1	8.33%
2004	1	8.33%

In the performance ratio analysis section, I generate the percentage increase in selected ratios (EBIT/Sales³, Sales/Assets, ROA, and ROE) two years after the transactions of six transactions in the sample. See Table 2.

EBIT/Sales: two of the three cross-border M&As outperformed their domestic counterparts while the eBay - Half.com deal had an over 20% increase. Since the data was from the end of year 2002, the abnormal increase could be partially attributed to the accounting change due to SOX. This result also shows acquiring companies are able to increase revenue and reduce cost at a larger scale when taking over a foreign target. The result is consistent with the motives of cross-border M&A practices: to exploit foreign markets, seek economies of scale, and obtain synergies.

³ Operating profits are used instead of EBIT where data is unavailable

Sales/Assets: five out of six deals saw declines in this ratio while cross-border transactions led to a larger decrease than domestic ones. This suggests acquiring companies tend to struggle at increasing sales proportionally to the increase in combining assets of the two companies when involved with cross-border transactions. It could potentially take longer for acquirers to efficiently consolidate the resources across borders.

ROA: Again, Emerson and Alcoa's cross-border deals outperformed their domestic ones with the exception of eBay. This can attribute to the relative sizes of the acquirers. Large companies like Emerson and Alcoa have much more resources to quickly absorb the synergies and efficiency gains from cross-border deals, while eBay being a younger, smaller company does better when facing fewer uncertainties in domestic M&As.

ROE: The ratio increases are consistent with the increase in ROA for eBay and Alcoa but are inconsistent for Emerson.

The Average Abnormal Return (AAR) and Cumulative Abnormal Return (CAR) analyses are done separately in four event windows:

- -2 years, +2 years
- 0, +6 months
- 0, +1 year
- 0, +2 years

For each individual transaction, weekly closing stock prices are taken from Yahoo! Finance 2 years prior and after the announcement date. These prices are then used to calculate the weekly discrete returns over the 4-year period⁴. In order to generate alpha and beta estimates for calculating abnormal returns, I regress the acquirers' stock returns of 2-year prior to the date of their earlier acquisition against the respective benchmark market portfolios within the same period. I used NASDAQ Composite for eBay and S&P 500 Index for the rest of the sample. The abnormal returns are then calculated using the event study market model. AAR results are shown in Table 3.

When we compare the matching cross-border and domestic AARs within each of the four event windows, very little trends/patterns can be detected, meaning the abnormal returns of cross-border and domestic deals are indifferent in a generalized analysis. Nevertheless, it is not difficult to see from the result that eBay's domestic acquisition outperformed its cross-border counterparts in all four event windows. This hints that size of the acquirer, industry of the acquirer and maturity of the acquiring company can be possible determinants of the long-term success of cross-border M&As.

The CAR results shown in Table 4 share similar characteristics with the AAR results, where the data shows no significant differences between the performances of cross-border and domestic M&As. On an individual acquiring company basis, Emerson was the

⁴ Maximum number of observations of stock prices and returns are taken when limited historical prices are available

only company that was able to generate positive returns throughout the four-year window.

The t-stat analysis in the appendix showed no statistically significant results except for the 0, +1 year AAR and CAR when using a one-tailed test with 95% CI.

Chapter 5

Conclusion

This study concluded that overall, performance of cross-border mergers and acquisitions are indifferent from domestic ones in terms of wealth creation for shareholders of the acquiring company. The differences in performance ratio analysis and abnormal returns analysis are insignificant with cross-border deals generating slightly more positive results to the acquirers. Cross-border mergers and acquisitions are difficult to implement and do not exhibit the same result to every firm. However there is more upside potential to cross-border deals as to domestic ones. Before an US company consider taking over a Chinese target, it has to strategically examine factors such as industries, company sizes, cultures, communications, and many more. All in all, cross-border mergers and acquisitions are a double-edged sword. They can be used to eliminate inefficiencies, create synergies, and make better use of the world's resources, but can also fail if not planned and implemented carefully. Future studies should use a larger sample and a long-horizon market model for more accurate results.

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Appendix

Performance Ratio Analysis

t-Test: Paired Two Sample for Means

	<i>EBIT/Sales (C)</i>	<i>EBIT/Sales (D)</i>
Mean	0.010188676	0.0315593
Variance	0.000201741	0.0244082
Observations	3	3
Pearson Correlation	0.930100545	
Hypothesized Mean Difference	0	
df	2	
t Stat	-0.258636469	
P(T<=t) one-tail	0.410050079	
t Critical one-tail	2.91998558	
P(T<=t) two-tail	0.820100157	
t Critical two-tail	4.30265273	

t-Test: Paired Two Sample for Means

	<i>Sales/Assets (C)</i>	<i>Sales/Assets (D)</i>
Mean	-0.061013273	-0.044389219
Variance	0.005105096	0.000671953
Observations	3	3
Pearson Correlation	-0.593466193	
Hypothesized Mean Difference	0	
df	2	
t Stat	-0.322419486	
P(T<=t) one-tail	0.388859299	
t Critical one-tail	2.91998558	
P(T<=t) two-tail	0.777718598	
t Critical two-tail	4.30265273	

t-Test: Paired Two Sample for Means

	<i>ROA (C)</i>	<i>ROA (D)</i>
Mean	0.006577975	-0.01362
Variance	8.39947E-05	0.000841
Observations	3	3
Pearson Correlation	0.915887892	
Hypothesized Mean Difference	0	
df	2	
t Stat	1.671687892	
P(T<=t) one-tail	0.118274028	
t Critical one-tail	2.91998558	
P(T<=t) two-tail	0.236548056	
t Critical two-tail	4.30265273	

t-Test: Paired Two Sample for Means

	<i>ROE (C)</i>	<i>ROE (D)</i>
Mean	-0.004468391	-0.02733
Variance	0.000417933	0.0031183
Observations	3	3
Pearson Correlation	0.485679315	
Hypothesized Mean Difference	0	
df	2	
t Stat	0.803722325	
P(T<=t) one-tail	0.252950708	
t Critical one-tail	2.91998558	
P(T<=t) two-tail	0.505901417	
t Critical two-tail	4.30265273	

Average Abnormal Returns

t-Test: Paired Two Sample for Means

	<i>-2 years, +2 years</i>	<i>-2 years, +2 years</i>
Mean	-0.004883333	-0.002716667
Variance	5.55217E-05	2.97377E-05
Observations	6	6
Pearson Correlation	0.568848583	
Hypothesized Mean Difference	0	
df	5	
t Stat	-0.849502659	
P(T<=t) one-tail	0.217190335	
t Critical one-tail	2.015048373	
P(T<=t) two-tail	0.434380671	
t Critical two-tail	2.570581836	

t-Test: Paired Two Sample for Means

	<i>0, +6 months</i>	<i>0, +6 months</i>
Mean	-0.012533333	-0.00485
Variance	0.000198759	0.000066219
Observations	6	6
Pearson Correlation	0.275722562	
Hypothesized Mean Difference	0	
df	5	
t Stat	-1.325127413	
P(T<=t) one-tail	0.121226152	
t Critical one-tail	2.015048373	
P(T<=t) two-tail	0.242452305	
t Critical two-tail	2.570581836	

t-Test: Paired Two Sample for Means

	<i>0, +1 year</i>	<i>0, +1 year</i>
Mean	-0.012066667	-0.00265
Variance	0.000336623	0.000120435
Observations	6	6
Pearson Correlation	0.901472578	
Hypothesized Mean Difference	0	
df	5	
t Stat	-2.378602661	
P(T<=t) one-tail	0.031637197	
t Critical one-tail	2.015048373	
P(T<=t) two-tail	0.063274394	
t Critical two-tail	2.570581836	

t-Test: Paired Two Sample for Means

	<i>0, +2 years</i>	<i>0, +2 years</i>
Mean	-0.0061	-0.005983333
Variance	0.000072604	0.000108918
Observations	6	6
Pearson Correlation	0.469625695	
Hypothesized Mean Difference	0	
df	5	
t Stat	-0.028867857	
P(T<=t) one-tail	0.489043394	
t Critical one-tail	2.015048373	
P(T<=t) two-tail	0.978086789	
t Critical two-tail	2.570581836	

Cumulative Abnormal Returns

t-Test: Paired Two Sample for Means

	<i>-2 years, +2 years</i>	<i>-2 years, +2 years</i>
Mean	-1.015116667	-0.56338333
Variance	2.384636674	1.279300422
Observations	6	6
Pearson Correlation	0.563141763	
Hypothesized Mean Difference	0	
df	5	
t Stat	-0.849470914	
P(T<=t) one-tail	0.217198377	
t Critical one-tail	2.015048373	
P(T<=t) two-tail	0.434396754	
t Critical two-tail	2.570581836	

t-Test: Paired Two Sample for Means

	<i>0, +6 months</i>	<i>0, +6 months</i>
Mean	-0.3325	-0.13065
Variance	0.1370141	0.048378639
Observations	6	6
Pearson Correlation	0.285333085	
Hypothesized Mean Difference	0	
df	5	
t Stat	-1.326490517	
P(T<=t) one-tail	0.121016566	
t Critical one-tail	2.015048373	
P(T<=t) two-tail	0.242033132	
t Critical two-tail	2.570581836	

t-Test: Paired Two Sample for Means

	<i>0, +1 year</i>	<i>0, +1 year</i>
Mean	-0.63122	-0.13988
Variance	0.910288	0.338961
Observations	6	6
Pearson Correlation	0.898862	
Hypothesized Mean Difference	0	
df	5	
t Stat	-2.40387	
P(T<=t) one-tail	0.030663	
t Critical one-tail	2.015048	
P(T<=t) two-tail	0.061327	
t Critical two-tail	2.570582	

t-Test: Paired Two Sample for Means

	<i>0, +2 years</i>	<i>0, +2 years</i>
Mean	-0.62975	0.61603333 1.1543482
Variance	0.771744835	83
Observations	6	6
Pearson Correlation	0.462996389	
Hypothesized Mean Difference	0	
df	5	
t Stat	-0.032756518	
P(T<=t) one-tail	0.487568074	
t Critical one-tail	2.015048373	
P(T<=t) two-tail	0.975136149	
t Critical two-tail	2.570581836	

Table 1 – Deal Characteristics

<u>Acquirer</u>	<u>Target</u>	<u>Date of Announcement</u>	<u>Deal Size (\$mil)</u>	<u>Acquirer Industry</u>	<u>Target Industry</u>
eBay Inc	EachNet.com (China)	06/11/2003	150.00	Business Services	Miscellaneous Retail
	Half.com Inc (United States)	06/14/2000	374.00		Miscellaneous Retail
Emerson Electric Co	Avansys Power Co Ltd (China)	10/22/2001	750.00	Manufacturing - Measure/Analyze/Control Instruments	Manufacturing - Electronics
	Jordan Telecommun Products Inc (United States)	12/14/1999	980.00		Manufacturing - Electronics
Corning Inc	Lucent Tech Beijing, Shanghai (China)	07/24/2001	225.00	Manufacturing - Primary Metal Industries	Manufacturing - Electronics
	NZ Applied Technologies Corp (United States)	04/24/2000	150.00		Manufacturing - Measure/Analyze/Control Instruments
Alcoa Inc	Pingguo Aluminium Co (China)	11/12/2001	249.97	Manufacturing - Primary Metal Industries	Manufacturing - Primary Metal Industries
	Howmet International Inc (United States)	03/14/2000	349.32		Manufacturing - Transportation Equipment
ITT Industries Inc	STX Pte Ltd(San Teh Ltd) (China)	08/30/1999	118.80	Manufacturing - Transportation Equipment	Manufacturing - Rubber and Miscellaneous Plastic Products
	Kaman Sciences Corp (United States)	11/14/1997	135.00		Manufacturing - Electronics
Procter & Gamble Co	Procter & Gamble-Hutchison Ltd (China)	05/11/2004	2,000.00	Manufacturing - Chemicals and Allied Products	Manufacturing - Chemicals and Allied Products
	Tambrands Inc (United States)	04/09/1997	2,003.89		Manufacturing - Paper and Allied Products

Table 2 – Performance Ratio Analysis

<u>Acquirer</u>	<u>Target</u>	<u>EBIT/Sales</u> <u>%Inc.</u>	<u>Sales/Assets</u> <u>%Inc.</u>	<u>ROA</u> <u>%Inc.</u>	<u>ROE</u> <u>%Inc.</u>
eBay Inc	EachNet.com (China)	2.61%	1.42%	1.59%	1.75%
	Half.com Inc (United States)	21.06%	-7.05%	1.97%	2.26%
Emerson Electric Co	Avansys Power Co Ltd (China)	-0.13%	-6.91%	0.63%	-2.30%
	Jordan Telecommun Products Inc (United States)	-3.90%	-1.87%	-2.79%	-1.70%
Corning Inc	Lucent Tech Beijing, Shanghai (China)	-	-	-	-
	NZ Applied Technologies Corp (United States)	-	-	-	-
Alcoa Inc	Pingguo Aluminium Co (China)	0.58%	-12.80%	-0.24%	-0.79%
	Howmet International Inc (United States)	-7.70%	-4.40%	-3.27%	-8.76%
ITT Industries Inc	STX Pte Ltd(San Teh Ltd) (China)	-	-	-	-
	Kaman Sciences Corp (United States)	-	-	-	-
Procter & Gamble Co	Procter & Gamble-Hutchison Ltd (China)	-	-	-	-
	Tambrands Inc (United States)	-	-	-	-

Table 3 – AAR

<u>Acquirer</u>	<u>Target</u>	<u>-2 years, +2 years</u>	<u>0, +6 months</u>	<u>0, +1 year</u>	<u>0, +2 years</u>
eBay Inc	EachNet.com (China)	-1.64%	-2.22%	-1.52%	-1.96%
	Half.com Inc (United States)	-0.21%	-1.18%	0.33%	-0.41%
Emerson Electric Co	Avansys Power Co Ltd (China)	0.29%	0.56%	0.36%	0.32%
	Jordan Telecommun Products Inc (United States)	0.27%	0.47%	0.88%	0.24%
Corning Inc	Lucent Tech Beijing, Shanghai (China)	-1.10%	-3.43%	-4.67%	-1.18%
	NZ Applied Technologies Corp (United States)	-1.33%	-0.44%	-2.33%	-2.68%
Alcoa Inc	Pingguo Aluminium Co (China)	-0.42%	-0.64%	-1.12%	-0.64%
	Howmet International Inc (United States)	-0.13%	-1.61%	-0.20%	-0.27%
ITT Industries Inc	STX Pte Ltd(San Teh Ltd) (China)	0.12%	-1.31%	-0.04%	0.12%
	Kaman Sciences Corp (United States)	-0.10%	0.32%	0.03%	-0.20%
Procter & Gamble Co	Procter & Gamble-Hutchison Ltd (China)	-0.18%	-0.48%	-0.25%	-0.32%
	Tambrands Inc (United States)	-0.13%	-0.47%	-0.30%	-0.27%

Table 4 – CAR

<u>Acquirer</u>	<u>Target</u>	<u>-2 years, +2 years</u>	<u>0, +6 months</u>	<u>0, +1 year</u>	<u>0, +2 years</u>
eBay Inc	EachNet.com (China)	-340.00%	-59.88%	-80.74%	-202.37%
	Half.com Inc (United States)	-41.48%	-31.81%	17.61%	-41.48%
Emerson Electric Co	Avansys Power Co Ltd (China)	60.03%	15.13%	18.89%	32.80%
	Jordan Telecommun Products Inc (United States)	55.71%	12.77%	46.64%	24.12%
Corning Inc	Lucent Tech Beijing, Shanghai (China)	-228.53%	-89.21%	-242.62%	-121.13%
	NZ Applied Technologies Corp (United States)	-276.08%	-11.87%	-123.60%	-276.08%
Alcoa Inc	Pingguo Aluminium Co (China)	-87.33%	-17.31%	-59.23%	-66.49%
	Howmet International Inc (United States)	-27.85%	-43.49%	-10.37%	-27.85%
ITT Industries Inc	STX Pte Ltd(San Teh Ltd) (China)	24.33%	-35.26%	-2.08%	12.54%
	Kaman Sciences Corp (United States)	-20.91%	8.68%	1.59%	-20.91%
Procter & Gamble Co	Procter & Gamble-Hutchison Ltd (China)	-37.57%	-12.97%	-12.95%	-33.20%
	Tambrands Inc (United States)	-27.42%	-12.67%	-15.80%	-27.42%

Academic Vita

Jun Yan

EDUCATION

The Pennsylvania State University, Schreyer Honors College **University Park, PA**

Bachelor of Science in Finance

Graduation: May 2011

Bachelor of Arts in Economics

Honors Thesis: *Success of Cross-Border Mergers & Acquisitions in the Long-Term*

Kingswood High School

Bath, United Kingdom

RELEVANT EXPERIENCE

MY Hedgefund

Beijing, China

Research Analyst

Jul 2010

- Analyzed the case of Renaissance Technologies in an effort to replicate the return of the Medallion fund
- Researched the Chinese A Shares market using computer software to identify potential investment opportunities

CEDZ Management Committee

Huzhou, China

Financial Management and Audit Internship

Jun 2010

- Audited the 2009 annual financial reports required by the Bureau of Finance under minimal supervision
- Observed the manager's work on a ¥250 million debt financing project, funds used in construction of local
- Infrastructure

LEADERSHIP EXPERIENCE

Chinese Undergraduate Student Association

University Park, PA

President

Apr 2009 – Apr 2010

- Led a team of eight officers to organize various events and activities for the benefit of 100+ members
- Strengthened leadership and motivational skills by chairing meetings, delegating responsibilities, and overseeing results
- Planned and directed traditional and cultural festivals such as the Chinese New Year, Chinese karaoke contest, Moon Festival, and annual banquet, which drew more than 300 people on average

SKILLS AND INTERESTS

Fluent in Mandarin, working toward fluency in Cantonese