CHINESE OVERSEAS M&A PERFORMANCE AND THE GO GLOBAL POLICY

by

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Abstract

This paper investigates whether stock markets view Chinese OMAs as increasing shareholder wealth. The subject is of interest given the influential role that the government plays in Chinese firms' overseas activities, and the fact that the government may have objectives other than maximization of shareholder wealth. We examine 145 OMAs by Chinese acquiring firms over the year 1994-2008. We find some evidence that markets positively responded to news of Chinese OMAs. However, we also find that markets responded less favorably after China implemented its Go Global policy encouraging overseas investment. We hypothesize two reasons for this: First, the expansion of OMAs under Go Global resulted in Chinese firms pursuing less attractive targets, on average. Second, Go Global re-directed investment towards industries having national strategic value but diminished profit value. Using a Blinder-Oaxaca decomposition procedure, we find no evidence to support this latter hypothesis. Thus, to whatever extent strategic interests may motivate China's Go Global policy, it does not appear that their pursuit has come at the expense of shareholder wealth.

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I. INTRODUCTION

This paper investigates whether stock markets view Chinese OMAs as increasing shareholder wealth. Over the period 1994 to 2007, Chinese foreign exchange reserves increased from US$52 billion to over US$15 trillion (National Bureau of Statistics of China, 1996, 2008). Concurrently, there has been a dramatic increase in Chinese OMA activity. By one measure, Chinese OMA activity rose from US$307 million in 1994 to over US$26.5 billion in 2008 (United Nations, 2006, 2008). Whether these investments are good for Chinese shareholders is a largely unanswered question. It is of particular interest given the influential role that the government plays in Chinese firms' overseas activities, and the fact that the government may have objectives other than maximization of shareholder wealth.

The study of Chinese OMAs also provides an opportunity to evaluate China's "Go Global" policy. "Go Global" is the banner name of a national policy encouraging outward investment by Chinese firms. It was initially introduced in 1999, but has evolved over time to represent a conglomerate of individual policies. Our study will compare stock market evaluations of Chinese OMAs before and after the adoption of the Go Global policy to assess whether the national strategic goals of this policy have come at the expense of shareholders of Chinese, acquiring firms.

There has been surprisingly little study in this area. To the best of our knowledge, the only academic study that measures stock market reactions to Chinese OMA announcements is Chen and Young (2009). They examine 39 deals and find a negative but statistically insignificant market response to OMA announcements on the (-1,0) window. They also report a negative relationship between government ownership and cumulative abnormal returns.

Among the non-academic literature, Hemerling et al. (2006) studies 16 deals and find that "relative total shareholder returns" around the announcement day were positive in 56% of deals.[1] Luedi (2008) analyzes 56 deals over the period 1995-2007 and reports that Chinese acquirers "overpaid" for foreign assets in 55 percent of deals, as measured by the change in share prices around the announcement day.[2] Other studies summarize various features of Chinese OMAs, such as location of target firms, characteristics of target industries, and motivations underlying foreign acquisitions (e.g. Liao, 2007; Deng, 2007, 2009; Rui and Yip, 2008). However, these rely largely on summaries of aggregate activity and case studies of a few firms without any formal analyses. Our study provides the most comprehensive analysis of Chinese OMAs to date, analyzing a total of 145 deals made over the years 1994-2008.

The study proceeds as follows: Section II briefly discusses related literature. Section III describes our data. Section IV presents the event-study methodology we employ in our analysis. Section V reports and discusses our results. Section VI concludes.

II. RELATED LITERATURE

Three strands of literature are especially relevant to our study: (i) results from previous studies measuring the performance record of OMAs by acquiring firms in other emerging markets; (ii) the relationship between government and business in China, particularly with respect to overseas investments by Chinese firms; and (iii) descriptions of China's "Go Global" policy.

Previous studies have come to conflicting conclusions about the response of share markets towards acquiring firms announcing OMA deals in other emerging markets. Gubbi et al.

[1] "Relative total shareholder return" is defined as "Total shareholder return" minus "Return of stock market index of the local market" as measured during the (-5,5) window.
[2] Luedi (2008) defines "overpaid" as a negative share price movement in the (-2,2) window.

(2010) evaluate 425 cross-border acquisitions by Indian firms during 2000-2007 and report positive and significant cumulative abnormal returns of 2.58% over the eleven-day window around the announcement date. Aybar and Ficici (2009) examine 433 cross-border M&As associated with 58 large multinational firms during the period 1991-2004. They report significant, negative cumulative abnormal returns of -0.09% on the (-1,1) window. Kim (2003) analyzes 270 events of overseas foreign investments (which include OMAs) by Korean firms from 1991-1997. He reports a lagged, positive market reaction on the day after announcement of 0.26%, which is significant at the 10 (but not 5) percent level. However, when he restricts analysis to the 30 largest *chaebol*-affiliates, he finds cross-border investments do not increase shareholder wealth.

Dunning's (1980) OLI paradigm is widely influential as a model for understanding the determinants of foreign direct investments. However, Dunning and Lundan (2008) note that the motivations of acquiring firms from emerging markets may differ from those in developed markets. In particular, government is likely to play a more prominent role in OMA decisions. OMAs are frequently seen as strategic instruments to further government's efforts to secure energy and other natural resources, and to appropriate new technologies.

With respect to China, a number of authors have noted that no discussion of Chinese OMAs is complete without special recognition to the role of the Chinese government (Ping, 2007; Huaichuan and George, 2008; and Morck, Yeung, and Zhao, 2008). The relationship between Chinese government and business enterprises is complicated. Government can be involved directly -- via direct ownership; or indirectly -- via government ownership of shares. Further, different levels of government may be involved; with national, provincial, and municipal governments engaged individually, or operating together as joint ventures. This

makes the distinction between government- and private-ownership blurry at best (Antkiewicz and Whalley, 2007). Liu (2005) estimates that 61.4 percent of Chinese listed companies are under local government control, 15.3 percent are under central government control, and 3.4 percent are cooperatively controlled by different levels of government. Only 12.8 percent are identified as privately controlled.[3] Similarly, Morck, Yeung, and Zhao (2008) find that 65.9 percent of shares of firms listing on the two mainland exchanges are owned by some level of Chinese government or related government agencies.

The implications of government control are manifold. Government can influence the appointment of senior company executives, can exert direct control over the kinds of business activities undertaken and the manner in which they are implemented, and subsidize specific business activities either directly or indirectly via low- or no-interest loans from the Chinese Central Bank. A relatively large literature explores whether government control has beneficial or detrimental effects on Chinese firm performance, with evidence mixed depending on the particular performance metric employed (Xu and Wang, 1999; Qi, Wu, and Zhang, 2000; Sun, Tong, and Tong, 2002; Hovey, Li, and Naughton, 2003; Wei, Xie, and Zhang, 2005; Gunasekarage, Hess, and Hu, 2007). For our purposes, the salient issue is whether government control causes Chinese firms to pursue OMAs for reasons other than increasing shareholder wealth.

The Chinese government's promotion of overseas investment came into force with the unveiling of its "Go Out Policy" or "Going Global Strategy" -- henceforth "Go Global" – in 1999.[4] As a national policy, it was elevated in importance when it was adopted as part of the 10th

[3] Ownership details for the remaining 7 percent were insufficient to identify the degree of government control.
[4] See "http://en.wikipedia.org/wiki/Go_Global."

Five Year Plan (2001-2005).[5] The nature of this promotion has taken numerous forms, and continues to evolve to the present day.[6]

One major thrust of the Go Global policy has been the loosening of controls on outward investment by Chinese firms. Outward investment requires approval by China's Ministry of Commerce, with concomitant foreign currency approval from the State Administration of Foreign Exchange (SAFE). In 2002, SAFE authorization was decentralized from the central agency to selected local authorities for projects of US$1 million or less, with an overall investment cap of US$200 million. Subsequent decentralization continued in 2005 such that foreign exchange authorization was extended to all provinces, municipalities, and autonomous regions; the local limit was increased to US$10 million; and the overall investment quota was expanded to US$5 billion. In June 2006, the overall investment quota was abolished. Meanwhile, authorization from the Ministry of Commerce was decentralized to local commercial administrations in October 2004, except for large state-owned enterprises.

A second thrust has involved direct support from the Ministry of Commerce. Some of this has consisted of informational support and bureaucratic expertise in navigating foreign investment rules. In July 2004, the Ministry of Commerce along with the Ministry of Foreign Affairs provided a "guidance list" of industries that should be preferred for outward investment. Additional support has come in the form of preferential treatment of outward-investing Chinese firms in terms of direct grants, tax benefits, low- or no-interest loans, access to foreign exchange, etc. This culminated in November of 2004 with the creation of a formal loan support system under authority of the National Development and Reform Commission and the Export-Import Bank of China.

[5] See "http://www.gov.cn/node_11140/2006-03/15/content_227686.htm" (in Chinese).
[6] The subsequent discussion of the Go Global policy relies heavily on Hagiwara (2006).

This brief summary documents some of the changes and expansions that have occurred in China's Go Global policy since its inception in 1999. The policy is associated with at least three main motivations. First, it provides a means of reducing appreciation pressures on China's currency, the Renminbi. Second, it addresses concerns that there be sufficient resources to sustain China's growth over the middle- to long-term. And third, it presents an opportunity to modernize Chinese business via the appropriation of foreign technology and the assimilation of modern business practices. To the extent that government involvement in firms' OMA decisions is prompted by these motivations, it sets up a potential conflict between the maximization of shareholder wealth and the pursuit of national goals.

III. EXPECTED EFFECTS OF CHINA'S GO GLOBAL POLICY

The preceding description of China's Go Global policy allows us to hypothesize about stock market responses to OMA deals by Chinese firms before and after the policy. Let the supply and demand of OMA projects for Chinese, acquiring firms be given by FIGURE 1. The acquiring firm's willingness to buy is represented by the height of its demand curve, and is the maximum amount it could pay and still earn a profit from the deal. As not all potential target firms offer the same profit opportunities, the firms' demand curve will be downward-sloping, with more profitable targets sought-after first. Likewise, target firms will be characterized by different willingnesses with respect to being acquired by the respective firms. This can arise because of an overall willingness/reluctance to being acquired, or because competition from other potential acquirers drives up a target firm's acquiring price. The result is that Chinese, acquiring firms will face an upward-sloping supply curve of OMA projects. In the absence of constraints, firms would undertake Q* OMA projects.

The vertical distance between the demand and supply curve at a given quantity represents the wealth-creation potential (rents) associated with a given OMA deal. These can be appropriated by the target firm, by receiving a price higher than its willingness to sell; and/or by the acquiring firm, by paying a price lower than its willingness to buy.[7] Without loss of generality, let us assume that acquiring and target firms split these rents according to some fixed proportion.[8] If the acquiring firm pays a price lower (higher) than its willingness to buy for a given deal, stock markets should respond to its announcement by recording positive (negative) abnormal profits.

As discussed above, in the years preceding China's Go Global policy, firms were heavily restricted from investing overseas. Let us assume (for the moment) that government approval was given to those deals that had the greatest expected benefit to Chinese, acquiring firms. Let this quantity of deals be represented in FIGURE 1 by Q (Before Go Global) < Q*. As long as these rents were not entirely appropriated by the target firms, we would expect share markets to greet their announcements with positive, abnormal returns.

The loosening of restrictions after Go Global allowed firms to pursue more OMA deals. Ceteris paribus, these additional projects would be expected to generate smaller rents, reducing the profit gains from Chinese, acquiring firms and lowering share markets' price responses to OMA announcements. It is also possible that there could be pressure to pursue OMA deals that supported the national objectives of Go Global – such as acquiring foreign technology or locking

[7] Most studies of domestic M&A performance find that shareholders from target firms acquire most if not all of the benefits from M&As (Andre, Kooli, and L'Her, 2004; Healy, 1992; Jensen and Ruback, 1983; Loughran and Vijh, 1997; Masulis, Wang, and Xie, 2007). In contrast, studies of cross-border M&As find that these deals are frequently wealth-creating for shareholders of acquiring firms (Harris and Ravenscraft, 1991; Lowinski, Schiereck, and Thomas, 2004; Morck and Yeung, 1992). As noted above, there are still relatively few studies of OMAs from less developed countries.

[8] All the argument requires is that (i) OMA deal approvals were positively related to the expected benefit to the Chinese acquiring firm in the pre-Go Global period, and (ii) that the demand and supply of potentials deals was similar before and after Go Global.

in a long-term supply of natural resources – and that these could run counter to the private interests of shareholders. This would be represented in FIGURE 1 by firms pursuing deals beyond Q*. If this were the case, OMA deals would lower firm profits, and share markets would register negative, abnormal returns at their announcements.

A key assumption in the preceding analysis is that, during the pre-Go Global period, OMA approval was positively related to the expected benefit to the Chinese acquiring firm. No doubt other factors also played a role: Political connectedness of company executives, influence of government officials associated with public ownership of the firm, and the ability of the deal to contribute to important political and national interests were likely also important. However, as long as these were not negatively correlated with the expected sizes of benefits to acquiring firms, we should still expect markets to respond with smaller abnormal returns to OMA announcements during the Go Global period compared to the years before.

III. DATA DESCRIPTION

Our empirical analysis measures (i) the announcement effect of OMA deals on the shareholders of Chinese acquiring firms, and (ii) differences in share market responses to the announcement of OMA deals before and during the Go Global policy. To do that, we construct a sample of Chinese firms engaged in overseas acquisitions from January 1, 1994 to October 10, 2008. The data were drawn from Thomson's SDC Platinum M&A Database. The selection criteria include:

1. M&A transaction must be listed and completed between January 1, 1994 and October 10th, 2008.

2. The acquiring firm must be Chinese, and the target firm(s) non-Chinese.

3. The acquiring firm must have its shares traded on either (i) one of the following stock exchanges: Shanghai, Shenzhen, Hong Kong, New York, American, and Nasdaq; or (ii) be traded over-the-counter in the U.S.

4. The firm must not be a financial firm.[9]

In addition, we require that there be at least 157 days of continuous data around the OMA announcement date (126 days for the estimation window, and 31 for the testing window); and that there be fewer than 50% zero return days.[10] 145 OMA events – initiated by a total of 78 firms – satisfied these criteria.[11,12]

TABLES 1 through 3 summarize a number of features in the data before we undertake a formal event-study analysis. TABLE 1 reports year and value data for Chinese OMA deals. There is a positive spike in both the number and the size of deals beginning in 2002. Approximately three-fourths of the deals, accounting for over 90% of the total value of transactions, occur in the latter half of the sample period (2002-2008). As noted above, the Go Global policy was initiated in 1999 and expanded in subsequent years. The higher level of Chinese OMA activity occurring in 2002 and subsequent years is consistent with Go Global serving as a catalyst for Chinese OMA activity.

A potential complication in attributing the post-2001 spike in OMA deals to Go Global is the fact that China became a member of the World Trade Organization (WTO) in 2001.

[9] Financial firms are subject to special accounting and regulatory requirements, making them difficult to compare with other firms.

[10] A 70% criterion would produce 200 observations. A 30% criterion produces 183 observations. We chose the middle value of 50%, which gave us 194 observations.

[11] A search of the SDC M&A database using the criterion "public bidders" identified 112 Chinese outbound M&A events. Using the criteria "government" and "Hong Kong bidder" produced an additional 120 events. Subsequent investigation of company websites (e.g. ownership/location of headquarters, where the majority of the company's business and/or employees are located) established that these were Chinese mainland firms listed in Hong Kong. This initial set of 232 events was whittled down to 145 as follows: (i) 51 events were eliminated because of lack of data during the estimation period. In most of these cases, this arose because the listing occurred after the event. (ii) Another 26 events were eliminated because they were listed in stock exchanges other than the Chinese mainland, Hong Kong or US. (iii) Finally, 10 more events were eliminated because the data series contained 50% or more zero daily returns during the 157 data period (157 days = 126-day estimation period + 31-day testing period).

[12] Even accounting for the fact that our study includes (i) more years and (ii) listings in U.S. markets, we still identify many more OMA events than Chen and Young (2009). One possible explanation for this discrepancy is that Chen and Young (2009, page 8) hand-collected their data through news announcements published by the China Mergers and Acquisitions Association (CMAA). In contrast, we identified our OMAs through the Thomson Reuters SDC Platinum database.

However, these need not be viewed as competing determinants. The expansion of trade made possible by China's entrance into the WTO likely spurred Go Global efforts to promote China's investments abroad.

TABLE 2 reports the geographical distribution of target firms. Most target firms are located in developed countries. Over a third of deals involve target firms located in Hong Kong. Second and third place go to the U.S. and Australia. The remainder of the deals are spread widely across the six continents, with Asia a common target region. An interesting fact not apparent from TABLE 2 is that a significant drop-off in Hong Kong targets occurs with the onset of Go Global: Hong Kong firms are roughly half as likely to be chosen as targets in 2002-2008 as compared to 1994-2001.[13]

TABLE 3 reports the distribution across industries of target firms in the 1994-2001 and 2002-2008 time periods. The telecommunications, electronics, and software industries are at or near the top in terms of targets for Chinese acquiring firms. Other industries lag substantially behind, with the exception of energy and nature resources, which have enjoyed a substantial boost during the Go Global years. M&A activity involving target firms in the energy and natural resources industries comprised 30% of all deals during the Go Global years, compared to only 13% during 1994-2001. This is consistent with the Go Global motivation of assuring sufficient resource availability to sustain China's economic growth into the future. A further discussion of changes in target firm characteristics under Go Global is reserved until after a formal analysis of the stock market returns associated with Chinese OMAs.

[13] Hagiwara (2006) suggests that a substantial portion of Hong Kong OMA activity is in fact "roundtrip" investment that detours outside the mainland to take advantage of various tax, trade, and regulatory incentives.

IV. METHODOLOGY

We employ event-study methodology to evaluate the effect of Chinese OMAs on shareholder wealth. In addition to identifying M&A deals by Chinese firms, the Thomson SDC Platinum M&A database also provides announcement dates. A 31-day testing period was centered around the announcement day, with *Day 0* being the announcement day and 15 days on either side, so that the testing window consisted of Days *(*-15,15). The corresponding 126-day estimation window consisted of Days (-141,-16).

Daily (adjusted) stock prices (P_{it}) for each firm *i* at time *t* for the 157-day data period (-141,15) were obtained from the Thomson-Reuters Datastream database. Daily returns (R_{it}) were computed by taking the log of stock prices (Strong 1992):

$$(1) \qquad R_{it} = ln\left(\frac{P_{it}}{P_{i,t-1}}\right).$$

Data during the estimation window was used to estimate the following "market model" specification (Brown and Warner, 1985; Strong, 1992):

$$(2) \qquad R_{it} = \alpha_i + \beta_i R_{mt} + error_{it}, \; i=1,2,\ldots,N; \; t=-140,-139,\ldots,-16;$$

where *N* is the total number of firms included in the sample and R_{mt} is the return of the local market index at time *t*.[14] Expected returns during the testing period ($\hat{R}_{it}$) were calculated by

$$(3) \qquad \hat{R}_{it} = \hat{\alpha}_i + \hat{\beta}_i R_{mt}, \; i=1,2,\ldots,N; \; t=-15,-14,\ldots,14,15;$$

where $\hat{\alpha}_i$ and $\hat{\beta}_i$ are the estimated values of α_i and β_i from Equation (2). Abnormal returns for the testing period are calculated as the difference between actual returns during the testing period and their forecasted values (based on the coefficients estimated during the estimation period),

[14] The local market indices selected for the Shanghai, Shenzhen, Hong Kong, and U.S. markets were, respectively, Shanghai A Shares, Shenzhen A Shares, the Hang-Seng index and the S&P 500 Composite index.

(4) $AR_{it} = R_{it} - \hat{R}_{it}$, *i=1,2,...,N; t=-15,-14,...,14,15.*

We use average abnormal return (*AAR*) and average cumulative abnormal return (*ACAR*) as our two measures of stock market evaluations of announcements of Chinese OMAs,

(5.A) $AAR_t = \dfrac{\sum_{i=1}^{N} AR_{it}}{N}$, *t=-15,-14,...,14,15*; and

(5.B) $ACAR_{T_1,T_2} = \dfrac{\sum_{i=1}^{N}\sum_{t=T_1}^{T_2} AR_{it}}{N}$,

where T_1 and T_2 are any two days within the testing window.

For the purpose of hypothesis testing, we standardize abnormal returns using their respective standard deviations, σ_{it}.

(6.A) $ASAR_t = \dfrac{\sum_{i=1}^{N} AR_{it} / \sigma_{it}}{N}$, *t=-15,-14,...,14,15*; and

(6.B) $ASCAR_{T_1,T_2} = \dfrac{\sum_{i=1}^{N}\sum_{t=T_1}^{T_2} AR_{it} / \sigma_{it}}{N}$,

where *ASAR* and *ASCAR* are the average standardized abnormal return and average standardized cumulative abnormal return. As σ_{it} is unknown, we follow standard practice (Patell, 1976; Mikkelson and Partsch, 1986; Doukas and Travlos, 1988) and estimate σ_{it} by

(7) $\hat{\sigma}_{it} = \left[\hat{\sigma}_i^2 \left[1 + \dfrac{1}{L} + \dfrac{\left(R_{mt} - \overline{R}_m\right)}{\sum_{s=1}^{L}\left(R_{ms} - \overline{R}_m\right)^2} \right] \right]^{1/2}$,

where $\hat{\sigma}_i^2$ is the estimated variance of the error term in the market model regression (Equation 2), L is the number of observations in the estimation period (in our case, $L=125$), R_{mt} (R_{ms}) is the return on the respective market portfolio at time t (s), and $\overline{R}_m$ is the average return on the respective market portfolio over the estimation period.

If individual returns, R_{it}, can be assumed to be distributed independently normal, then $ASAR_t$ and $ASCAR_{T_1,T_2}$ can be easily transformed to produce Z statistics that are distributed asymptotically standard normal,

(8.A) $Z_{ASAR_t} = \sqrt{N}\, ASAR_t$; and

(8.B) $Z_{ASCAR_{T_2,T_1}} = \dfrac{\sqrt{N}}{\sqrt{T_2 - T_1 + 1}}\, ASCAR_{T_2,T_1}$.

V. RESULTS

Announcement returns over all years of the sample. The 78 Chinese firms involved in these 145 OMA events list their shares in a variety of exchanges. Thirty-four of these list on one of the two Mainland exchanges. Thirty-six list in Hong Kong, and twenty-five list in the U.S. Many of these firms list on more than one exchange. Accordingly, we conduct separate event studies for (i) the Mainland markets (55 observations), (ii) the Hong Kong market (85 observations), (iii) the U.S. markets (53 observations), and (iv) an aggregated sample that selects one observation per event based on highest volume of trades (145 observations).

TABLE 4 reports abnormal return measures for each of the three individual markets (Mainland, Hong Kong, and U.S.). Panel A reports daily average abnormal returns (AAR_t) for each day of the 31-day testing window. Panel B reports average cumulative abnormal returns

($ACAR_t$) for various windows chosen to detect evidence of "leakage" (market responses before the official announcement) and "lagged responses."

Under the null hypothesis of no announcement day effect and given a significance level of 5%, we would expect to see between one and two significant returns for each market in Panel A of the table. This is due to the large number of days (31) in the test period. Accordingly, we also report significant returns at the 1 percent level. Using this more stringent significance threshold, we would expect to see no significant entries in the panel if the announcements of OMAs have no effect on daily returns for the respective Chinese firms.

The mainland markets have no significant abnormal returns at the 1 percent level, but three at the 5 percent level (cf. Columns 1 through 3). For the Hong Kong and U.S. markets, the respective number of significant returns are two at the 1 percent level and another two at the 5 percent level (cf. Columns 4 through 6), and one at the 1 percent level and another two at the 5 percent level (cf. Columns 7 through 9). This is more than the expected number of significant returns that would arise under the null hypothesis.[15]

Looking at the *Day 0* results, we see that all three markets register positive abnormal returns, but these are significant only in the Hong Kong market (at the 1 percent level). If we expand the look to include one day on either side of *Day 0*, all of the abnormal returns are positive, except for the *Day 1* returns in the Mainland market. However, the only additional significant entry is for *Day 1* in the U.S. markets (again at the 1 percent level).

Panel B of TABLE 4 presents results for the average cumulative abnormal returns ($ACAR_{T_1,T_2}$). We break up the test period into seven periods. The first three periods – *(-15,-10), (-10,-5)*, and *(-5,-1)* – are designed to pick up evidence of leakage, where traders appear to act on

[15] It is important to remember that many of the associated firms list on more than one share market, so that results across markets are not independent.

the information prior to the public announcement. The next period, *(-1,1)*, is designed to pick up the effect at the time of the announcement, recognizing that the effect could show up in the *Day -1* and *Day +1* closing prices depending on when the announcement was made relative to the respective markets' closing times. The next three periods – *(1,5)*, *(5,10)*, and *(10,15)* – are designed to identify evidence that markets are slow to respond to the release of information. This could occur, for example, if OMA information was released in Chinese media, and non-Chinese-speaking traders were slow to obtain access to this information. The final two rows in the table look at longer windows – *(-5,5)* and *(-15,15)* – for evidence of sustained short-run market responses to OMA announcements.

Three of the *ACAR* entries in Panel B are significant at the 5 percent level: (*5,10*) for the Mainland markets, and *(-1,1)* for both the Hong Kong and U.S. markets, with the Hong Kong result significant at the 1 percent level. For the (*-1,1*) window, abnormal cumulative returns are positive for all three markets. For the wider windows (*-5,5*) and (*-15,15*), all entries are positive except for the Mainland markets over (*-15,15*), but none are significant.

TABLE 5 aggregates the observations from the previous markets. However, to avoid double-counting of the same event, it selects only one observation per event. When firms list on more than one market, we select the observation from the market with the highest volume. The aggregated sample has 145 observations. As before, Panel A reports the AAR_t results, while Panel B reports the $ACAR_{T_1,T_2}$ results for the respective windows.

When the results are aggregated, only one of the thirty-one AAR_t results is significant at the 1 percent level, and that is the *Day 0* announcement day results. The associated *p*-value is 0.0010. In Panel B, the $ACAR_{T_1,T_2}$ results show significant results for the *(-1,1*) window at the 1 percent level. None of the other results are significant below the 10 percent level. The short-

term announcement effect on (*-1,1*) does not appear to be sustained over the longer windows of (*-5,5*) and *(-15,15)* for the aggregated observations.

We conclude the following from the preceding analysis of stock exchange responses to OMA announcements. We find evidence of a positive stock market response over the (*-1,1*) window. This result is statistically significant at at least the 5 percent level for the aggregated sample of 145 deals, and for the individual Hong Kong and U.S. market samples (but not for the Mainland markets). For the aggregated sample, the average cumulative abnormal return is approximately 1.6 percent for this window. However, we find no evidence of significant cumulative abnormal returns over the *(-5,5)* and *(-15,15)* windows.

Announcement returns before and after the implementation of Go Global. The preceding results combined all OMA deals from 1994 to 2008. As discussed above, while the Go Global policy was unveiled in 1999, it has expanded from relatively modest beginnings over time. This makes it difficult to draw a hard and fast line to demarcate "before" and "after" the implementation of Go Global. For the purposes of the subsequent analysis, and guided by TABLE 1, we delineate the two periods by 1994-2001 and 2002-2008, respectively.[16]

TABLE 6 explores differences in abnormal returns across the two time periods, and for each of our four samples. All of the entries represent *ACAR* values over the (-1,1) window. For three of the four samples, the respective cumulative abnormal returns are positive and statistically significant at the 1 percent level. For the Mainland, they are negative, but insignificant. The next row reports cumulative abnormal returns for each of the four samples over the 2002-2008 period. While all of associated returns are positive, none are significantly different from zero.

[16] Luo, Xue, and Han (2010) demarcate the "Go Global" (or "Going Abroad") period as 2001 to the present.

The lower panel of TABLE 6 tests for differences in *ACAR* values across the two time periods. For the Hong Kong, US, and Aggregated markets, the differences are negative and statistically significant at the 5 percent level. These are consistent with the hypothesis above that the relaxation of OMA restrictions under Go Global would result in additional projects with smaller rents. This would reduce profit gains for Chinese, acquiring firms and cause share markets' price responses to OMA announcements to be lower during the Go Global period.

Averages can sometimes mask important features of the data. As a result, FIGURE 2 graphs individual cumulative abnormal returns (*CAR*) for the (-1,1) window for the Aggregated data set (i.e., the observations that underlie the results from Column (4) in TABLE 6). These corroborate the findings from TABLE 6 with one additional insight: The lower returns during the Go Global period are mostly due to smaller returns on the positive end of the abnormal return distribution. Even so, substantial differences exist in the distributions of abnormal returns across the individual market samples (cf. Appendix).

Investigation of reasons for lowered announcement returns during the Go Global period. The preceding results are consistent with the hypothesis that the expansion of OMAs under Go Global was associated with lower profit expectations for Chinese, acquiring firms. Two possible reasons are given above for why this might be so. First, as Go Global relaxed restrictions on OMAs, Chinese, acquiring firms increased the number of deals they undertook. Indeed, deals increased almost three-fold over the eight-year period preceding Go Global. These additional deals represented smaller profit opportunities. Second, Go Global directed investment towards industries having critical strategic value, such as natural resource and/or high technology industries. This led firms to undertake deals that progressed national interests at the expense of shareholder wealth.

To investigate which of these reasons is responsible for the observed differences in pre- and post-Go Global announcement returns, we examine five characteristics of deals. These are described in TABLE 7. *GOVTOWNED* is a dummy variable that identifies whether the acquiring firm is a government-owned enterprise. *ENERGY* and *TECHNOLOGY* are variables that indicate whether the target firm is located in the natural resources/energy or high technology industries. *TARGET_HK* is a dummy variable that indicates whether the target firm is located in Hong Kong. The variable *RELATED* indicates whether the target firm is located in the same industry as the acquiring firm (as measured by 2-digit SIC code).

The first three variables are designed to capture the influence of Go Global on firms' OMA decisions. Firms that are government owned should be more willing to trade off the interests of other shareholders in favour of national strategic interests. Further, since two of the three motivations underlying Go Global are to secure natural resources and appropriate new technologies, we would expect to see the lower abnormal returns in the Go Global period related to deals with target firms in these industries. The last two variables are control variables.

The top panel of TABLE 8 contrasts sample means of the respective deal characteristics before and after Go Global. There are several consistent patterns in the types of OMA deals undertaken after Go Global (though the Mainland sometimes provides an exception). Approximately half as many deals in the Go Global period involved Hong Kong targets compared to before. Further, as indicated already in TABLE 3, there was a significant increase in the number of deals that involved target firms in the natural resource and energy fields. There was also a significant increase in the frequency with which target firms were located in the same industry as the acquiring firm.

Differences in the respective contributions of those characteristics can also help explain differences in announcement returns. To explore this further, we estimated the following relationship between individual cumulative abnormal returns and the different deal characteristics,

$$(9) \quad CAR(-1,1)_i = \beta_0 + \beta_1 GOVTOWNED_i + \beta_2 ENERGY_i + \beta_3 TECHNOLOGY_i + \beta_4 TARGET\_HK_i + \beta_5 RELATED_i + error_i ,$$

for each of the two time periods and each of the four samples. The respective coefficients are reported in Panel B of TABLE 8.

Only one of the five deal characteristics is significantly related to cumulative abnormal returns in the eight different regressions: the coefficient for *RELATED* is negative and significant in the regression based on the pre-Go Global/Hong Kong sample. There are nineteen "pairs" of coefficients, comparing before and after Go Global.[17] Seven of them take different signs. Notably, the constant term is substantially smaller in the Go Global period.

TABLE 8 identifies that substantial differences exist between both (i) deal characteristics, and (ii) their relative contributions to abnormal returns (as measured by the estimated coefficients in Equation 9). In order to better understand their relative impacts, we employ the Blinder-Oaxaca decomposition method (Blinder, 1973; Oaxaco, 1973). This procedure is commonly employed in the labor economics literature to analyze wage differences between two different groups (e.g., male and female workers). It decomposes the mean difference in wages into the portion that can be explained by (i) differences in the characteristics of the two groups, and (ii) differences in the estimated coefficients in an Equation (9)-type regression.

[17] Note that there is no coefficient for *ENERGY* in the pre-Go Global/U.S. sample because there were no energy deals for that sample.

Let $\overline{Y}_1$ and $\overline{Y}_2$ represent the sample means of the dependent variable for two groups. It follows that $\overline{Y}_1 = \overline{\boldsymbol{X}}_1\hat{\boldsymbol{\beta}}_1$ and $\overline{Y}_2 = \overline{\boldsymbol{X}}_2\hat{\boldsymbol{\beta}}_2$; where $\hat{\boldsymbol{\beta}}_1$ and $\hat{\boldsymbol{\beta}}_2$ are the estimated coefficients from regressing Y on $\boldsymbol{X}$ for the two groups, and $\overline{\boldsymbol{X}}_1$ and $\overline{\boldsymbol{X}}_2$ are the vector of sample means of the respective explanatory variables. Two common methods for decomposing $\overline{Y}_2 - \overline{Y}_1$ are

(10a) $\overline{Y}_2 - \overline{Y}_1 = \hat{\boldsymbol{\beta}}_1\left(\overline{\boldsymbol{X}}_2 - \overline{\boldsymbol{X}}_1\right) + \overline{\boldsymbol{X}}_2\left(\hat{\boldsymbol{\beta}}_2 - \hat{\boldsymbol{\beta}}_1\right)$, and

(10b) $\overline{Y}_2 - \overline{Y}_1 = \hat{\boldsymbol{\beta}}_2\left(\overline{\boldsymbol{X}}_2 - \overline{\boldsymbol{X}}_1\right) + \overline{\boldsymbol{X}}_1\left(\hat{\boldsymbol{\beta}}_2 - \hat{\boldsymbol{\beta}}_1\right)$.

Method A weights the difference in characteristic sample means $\left(\overline{\boldsymbol{X}}_2 - \overline{\boldsymbol{X}}_1\right)$ by $\hat{\boldsymbol{\beta}}_1$, and the difference in estimated coefficients, $\left(\hat{\boldsymbol{\beta}}_2 - \hat{\boldsymbol{\beta}}_1\right)$ by $\overline{\boldsymbol{X}}_2$. Method B uses the weights $\hat{\boldsymbol{\beta}}_2$ and $\overline{\boldsymbol{X}}_1$, respectively.

If Go Global directed investment towards targets that benefitted national strategic interests at the expense of firm value, this should be reflected in either the effect of the differences in sample means, $\left(\overline{\boldsymbol{X}}_2 - \overline{\boldsymbol{X}}_1\right)$, or the differences in estimated coefficients, $\left(\hat{\boldsymbol{\beta}}_2 - \hat{\boldsymbol{\beta}}_1\right)$, or both. For example, suppose energy firms generally made less attractive targets for Chinese acquirers than firms in other industries. Then an increase in the number of *ENERGY* deals would be associated, ceteris paribus, with lower abnormal announcement returns. In other words, the effect of Go Global would be reflected in the $\left(\overline{\boldsymbol{X}}_2 - \overline{\boldsymbol{X}}_1\right)$ component.

Alternatively, suppose that prior to Go Global, Chinese firms only acquired energy firms that were likely to increase shareholder wealth. But after Go Global, government policy-makers encouraged them to acquire energy firms even if it was likely to lower profits. In this case, the effect of Go Global would show up in a lower estimated coefficient on the *ENERGY* variable; and the effect of Go Global would be reflected in the $\left(\hat{\boldsymbol{\beta}}_2 - \hat{\boldsymbol{\beta}}_1\right)$ component.

TABLE 9 reports the results of applying the Blinder-Oaxaca decomposition to the difference in *ACAR* values in the pre- and post-Go Global periods for each of the four samples. Changes in (i) mean sample characteristics, $\left(\overline{\boldsymbol{X}}_2 - \overline{\boldsymbol{X}}_1\right)$, and (ii) estimated coefficients, $\left(\hat{\boldsymbol{\beta}}_2 - \hat{\boldsymbol{\beta}}_1\right)$, are identified by "Means" and "Coefficients" respectively. The numbers in the table represent the percentage difference "explained" by the respective change for each variable, including changes in the estimated value of the constant term.[18] A positive number suggests that the change contributed to the difference in *ACAR* values. A negative number suggests the opposite; namely, that the observed gap is smaller as a result of the respective change. We are looking for variables with large positive values for either "Means," "Coefficients," or both.

For example, average cumulative abnormal returns on the *(-1,1)* window were approximately 4.8 percent lower for the Hong Kong market during the Go Global years (cf. $\boldsymbol{ACAR_{2002\text{-}2008} - ACAR_{1994\text{-}2001}}$ = -0.0483 in TABLE 6). At the same time, a higher percent of deals involved targets in the *ENERGY* industries. Thirty-eight percent of OMA deals by Hong Kong-listed, Chinese acquiring firms targeted *ENERGY* firms after Go Global, compared to only fifteen percent before (cf. TABLE 8). Methods A and B of the Blinder-Oaxaco decomposition procedure calculate that the combination of the change in means and the change in coefficients contributed approximately 38.6 percent (= 92.9 – 54.3 using Method A; = 36.2 + 2.4 using Method B) of the *ACAR* difference in the two time periods.[19] This suggests that the greater targeting of energy firms under Go Global contributed to the lower abnormal returns associated with the announcement of OMA deals during this period.

[18] Note that the "Sum" of the "Mean" and "Coefficients" contributions over all variables (including the constant term) must equal 100 percent.

[19] While Methods A and B assign different contributions to the differences in means and the differences in coefficients, the sum of these contributions will always be the same (cf. Equations 10a and 10b).

Unfortunately, this finding is not robust across the different samples. For example, the Blinder-Oaxaca approach calculates that *ENERGY*-associated changes accounted for only 5.8 percent of the lower abnormal returns for U.S.-listed shares in the Go Global period. Further, based on the Aggregated sample, the same approach leads to the conclusion that the gap would have been 24.6 percent *larger* without the associated *ENERGY* changes (= -68.9 + 44.3 using Method A; = -29.2 + 4.7 using Method B).

TABLE 9 finds no support for the hypothesis that the lower abnormal returns during the Go Global period are due to changes associated with one or more of the *GOVTOWNED, ENERGY,* and *TECHNOLOGY* variables. Indeed, the sum of the associated contributions in the Aggregated sample suggests that the difference in *ACAR* values would have been even larger were it not for changes in these variables.

TABLE 9 is noteworthy for two additional things; one for what it doesn't show, and one for what it does. First, there is no firm characteristic that is consistently identified with the decline in announcement returns during the Go Global period. Instead, the decline is "explained" by the constant term. This is consistent with the fact that it is the overall increase in the number of deals -- and not government-influenced investment pursuing public interests at the expense of private shareholders -- that is responsible for lower announcement returns during the Go Global period.

VI. CONCLUSION

Our study is motivated by two questions:

1. What has been the effect on shareholders of Chinese acquiring firms?
2. Has the Chinese government's "Go Global" policy disadvantaged shareholders in Chinese acquiring firms in order to pursue larger, national interests?

We answer these questions using an event-study methodology to investigate announcement effects of overseas mergers and acquisitions (OMAs) by Chinese, acquiring firms over the 1994-2008 period.

The first question is of interest because of the heavy involvement of the public sector in the ownership of Chinese firms (Antkiewicz and Whalley, 2007; Liu, 2005; Morck, Yeung, and Zhao, 2008). This raises concerns that OMA decisions by Chinese firms may not be concentrated on maximizing shareholder wealth. Our analysis finds no support for these concerns. We find some evidence that markets positively evaluated announcements of OMAs by Chinese acquiring firms, and no evidence that these announcements were negatively evaluated.

With respect to the second question, our theoretical analysis identifies two possible effects of the Go Global policy. First, as Go Global relaxed restrictions on OMAs, it allowed Chinese, acquiring firms to pursue additional profit-improving deals. Second, it may also have re-directed investment towards industries having critical strategic value, such as resource and technology industries. While the first effect should be wealth-increasing for shareholders, these additional deals could lower the average benefit of a deal to Chinese acquirers if only the most profitable deals were approved during the pre-Go Global period. The second effect should be wealth-decreasing if Chinese firms were led to sacrifice shareholder interests in behalf of progressing national strategic goals. Thus, while both effects would be reflected in lower abnormal returns during the Go Global period, only the second effect disadvantages shareholders of Chinese acquiring firms.

Our empirical analysis confirms that there were more deals during the Go Global period, and that the average benefit of these deals, as measured by market responses to announcements

of OMA deals, was lower during the Go Global period. However, we find no evidence of negative abnormal returns under Go Global.

To further investigate the second effect, we use a Blinder-Oaxaca decomposition procedure (Blinder, 1973; Oaxaca, 1973) to determine whether the lower abnormal returns associated with the Go Global period are due to variables associated with Go Global policy. We find no evidence that the lower returns were associated with firms being government-owned, or with deals being energy or technology-related.

In conclusion, under Go Global there have been more deals with generally lower expected benefits to shareholders. However, there is no evidence that Go Global has caused Chinese acquiring firms to sacrifice shareholder wealth in order to pursue national interests.

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TABLE 1
Distribution of Chinese OMA Deals by Year

A. Total Deals

Year	*Number of Deals*	*Deal Value Available*	*Total Value of Deals ($mil)*	*Average Value of Deals ($mil)*
1994	1	1	98.49	98.49
1995	1	1	1.34	1.34
1996	3	2	482.06	241.03
1997	6	5	706.80	141.36
1998	8	7	503.16	71.88
1999	5	3	45.86	15.29
2000	7	5	75.88	15.18
2001	8	5	68.68	13.74
2002	15	14	2221.67	158.69
2003	12	10	2342.86	234.29
2004	17	9	2267.86	251.98
2005	8	6	4243.59	707.26
2006	15	10	8812.72	881.27
2007	24	14	1907.58	136.26
2008	15	7	824.82	117.83
Total	145	99	24603.4	248.52

Table 1 shows time and deal value distribution of 145 Chinese Outbound M&A transactions (OMAs) initiated by 98 Chinese acquirers from 1/1/1994 to 30/10/2008. Events and deal value clustered in the period 2002-2008. Chinese OMAs decline sharply after the Global Financial Crisis. The number of transactions peaked in 2002 and 2007, while the highest average transaction value happened in year 2006.

TABLE 2
Distribution of Chinese OMA Deals by Region and Country

Country	*Number of Deals*	*Deal Value Available*	*Total Value of Deals ($mil)*	*Average Value of Deals ($mil)*
Developed nations				
Hong Kong[20]	55	41	4791	117
United States	16	13	2590	199
Australia	8	7	847	121
Canada	4	2	772	386
Germany	4	1	8	8
France	3	3	232	77
Japan	3	1	300	300
Netherlands	2	1	148	148
United Kingdom[21]	2	1	4141	4141
Norway	1	1	104	104
Sum	*98*	*71*	*13934*	*196*
Asia				
Singapore	6	2	981	490
Indonesia	5	4	1129	282
Kazakhstan	3	2	525	262
India	2	1	1	1
Thailand	2	1	18	18
Azerbaijan	2	2	70	35
Pakistan	2	1	284	284
South Korea	2	2	472	236
Russian Fed	2	2	3600	1800
Malaysia	1	1	11	11
Philippines	1	1	70	70
Sum	*28*	*19*	*7162*	*377*

[20] We include Hong Kong targets in the overseas M&A group because most researchers argue that Hong Kong has obviously different economic system away from Chinese mainland.

[21] Both of the target firms are PetroKazakhstan and with the nationality of United Kingdom in SDC database because they argue that the headquarter of PetroKazakhstan is in the United Kingdom. However, most Chinese consider it as a Canadian firm. In Zephyr M&A database, the nationality of PetroKazakhstan is Canada too.

Country	*Number of Deals*	*Deal Value Available*	*Total Value of Deals ($mil)*	*Average Value of Deals ($mil)*
Africa				
Nigeria	2	1	2692	2692
Chad	1	1	202	202
South Africa	1	1	21	21
Sum	*4*	*3*	*2916*	*972*
South America				
British Virgin	3	2	33	17
Peru	2	1	200	200
Venezuela	1	1	241	241
Brazil	1	1	18	18
Ecuador	1	1	100	100
Sum	*8*	*6*	*592*	*99*
Others	7	0	n.a.	n.a.
Total	145	99	24603	249

TABLE 3
Distribution of Chinese OMA Deals by Target Industries (1994-2001 versus 2002-2008)

1994-2001			***2002-2008***		
Target Industry Sector	***Percent of Deals***	***Average Value of Deals ($mil)***	***Target Industry Sector***	***Percent of Deals***	***Average Value of Deals ($mil)***
Telecommunication and Electronics, Prepackaged Software[a]	31%	16	Telecommunication and Electronics, Prepackaged Software	29%	223
Energy and Natural Resources[b]	13%	195	Energy and Natural Resources	30%	591
Wholesale, Retail, Trade[c]	13%	69	Wholesale, Retail, Trade	6%	53
Miscellaneous Manufacturing Products[d]	13%	10	Miscellaneous Manufacturing Products	10%	78
Electric, Gas, and Water Distribution, Construction	10%	13	Electric, Gas, and Water Distribution, Construction	5%	215
Transportation[e]	8%	279	Transportation	6%	228
Miscellaneous Business Services[f]	8%	6	Miscellaneous Business Services	11%	182
Chemicals and Drugs[g]	5%	1	Chemicals and Drugs	3%	58

[a] "Telecommunication and Electronics, Prepackaged Software Industry" consists of the following SDC categories: "Computer and Office Equipment;" "Telecommunications;" "Electronic and Electrical Equipment;" "Communications Equipment;" and "Prepackaged Software."

[b] “Energy and Natural Resources” consists of the following SDC categories: “Oil and Gas;” “Petroleum Refining;” “Mining;” “Metal and Metal Products;” and “Agriculture, Forestry, and Fishing.”

[c] “Wholesale, Retail, Trade” consists of the following SDC categories: “Wholesale Trade-Nondurable Goods;” “Wholesale Trade-Durable Goods;” and “Miscellaneous Retail Trade.”

[d] “Miscellaneous Manufacturing Products” consists of the following SDC categories: “Measuring, Medical, Photo Eqipment;” “Clocks;” “Food and Kindred Products;” “Stone, Clay, Glass, and Concrete Products;” “Textile and Apparel Products;” “Wood Products, Furniture, and Fixtures;” “Machinery;” “Miscellaneous Manufacturing;” and “Transportation Equipment.”

[e] “Transportation” consists of the following SDC categories: “Transportation and Shipping (except Air);” and “Air Transportation and Shipping.”

[f] “Miscellaneous Business Services” consists of the following SDC categories: “Business Services;” “Health Services;” “Investment and Commodity Firms, Dealers, Exchanges;” and “Radio and Television Broadcasting Stations.”

[g] “Chemicals and Drugs” consists of the following SDC categories: “Drugs;” and “Chemicals and Allied Products.”

TABLE 4A
Daily Responses: By Individual Exchanges

Day	*Mainland*			*HK*			*US*		
	AAR (1)	*Z (2)*	*p-value (3)*	*AAR (4)*	*Z (5)*	*p-value (6)*	*AAR (7)*	*Z (8)*	*p-value (9)*
-15	-0.0033	-0.7676	0.4427	-0.0078*	-2.5027	0.0123	0.0006	0.1407	0.8881
-14	-0.0016	-1.0227	0.3064	-0.0053	-1.2785	0.2011	-0.0145*	-2.3834	0.0172
-13	0.0028	0.8482	0.3963	-0.0004	-0.5646	0.5724	0.0136	1.8288	0.0674
-12	0.0057*	2.0771	0.0378	0.0027	1.1370	0.2555	0.0149	1.4820	0.1383
-11	-0.0053	-1.8470	0.0647	-0.0039	-1.4377	0.1505	0.0022	0.0131	0.9896
-10	0.0009	-0.0279	0.9777	-0.0006	0.4789	0.6320	0.0057	0.7438	0.4570
-9	0.0005	-0.1135	0.9096	0.0046	1.2314	0.2182	-0.0014	-0.2871	0.7741
-8	-0.0004	-0.3891	0.6972	-0.0007	-0.3645	0.7155	-0.0012	-0.0013	0.9990
-7	-0.0009	-0.0272	0.9783	-0.0056*	-1.9829	0.0474	-0.0100	-1.6606	0.0968
-6	0.0002	0.2940	0.7688	0.0029	0.8913	0.3728	0.0062	1.0362	0.3001
-5	0.0006	0.0770	0.9386	0.0030	0.6264	0.5310	0.0100	1.7559	0.0791
-4	0.0036	1.6558	0.0978	-0.0007	-0.4280	0.6687	-0.0040	-0.3298	0.7416
-3	0.0048*	2.2021	0.0277	-0.0035	-0.4375	0.6618	-0.0016	-0.5492	0.5828
-2	-0.0002	-0.2589	0.7957	0.0021	0.8802	0.3787	-0.0098	-1.1695	0.2422
-1	0.0012	0.2031	0.8390	0.0029	1.0672	0.2859	0.0043	0.7780	0.4366
0	0.0041	1.7442	0.0811	0.0105**	2.5998	0.0093	0.0124	0.8727	0.3828
1	-0.0027	-1.5190	0.1288	0.0018	1.0377	0.2994	0.0114**	2.6739	0.0075

Day	*Mainland*			*HK*			*US*		
	AAR (1)	*Z (2)*	*p-value (3)*	*AAR (4)*	*Z (5)*	*p-value (6)*	*AAR (7)*	*Z (8)*	*p-value (9)*
2	-0.0063	-1.5413	0.1233	0.0019	1.1161	0.2644	-0.0138*	-2.0683	0.0386
3	-0.0029	-0.8133	0.4161	-0.0060	-1.5086	0.1314	-0.0032	-0.8033	0.4218
4	-0.0015	-0.0079	0.9937	-0.0007	0.0272	0.9783	0.0001	0.0158	0.9874
5	0.0009	0.2636	0.7921	0.0015	0.6843	0.4938	-0.0028	-0.2238	0.8229
6	-0.0015	0.4509	0.6520	-0.0014	-0.3037	0.7613	0.0012	0.3985	0.6902
7	0.0056	1.8594	0.0630	0.0023	0.6814	0.4956	0.0076	0.2748	0.7834
8	0.0009	0.7210	0.4709	-0.0014	-0.7913	0.4288	-0.0023	0.1287	0.8976
9	0.0001	0.5021	0.6156	-0.0006	0.2778	0.7812	-0.0026	-0.8353	0.4035
10	0.0034	1.4840	0.1378	-0.0030	-0.3411	0.7330	-0.0004	-0.2114	0.8326
11	-0.0022	-1.0813	0.2796	-0.0012	-0.1396	0.8890	-0.0027	0.1550	0.8768
12	-0.0037	-1.8380	0.0661	-0.0024	-0.3025	0.7623	-0.0029	-0.9062	0.3648
13	0.0005	0.3253	0.7450	-0.0002	0.1944	0.8458	0.0015	0.2961	0.7672
14	0.0001	1.0555	0.2912	-0.0028	-1.2140	0.2247	0.0076	1.1823	0.2371
15	-0.0060*	-2.5253	0.0116	0.0135**	3.3297	0.0009	-0.0082	-1.5199	0.1285
N	***55***			***85***			***53***		

* Indicates statistical significance at the 5 percent level (two-tailed test).
** Indicates statistical significance at the 1 percent level (two-tailed test).

TABLE 4B
Cumulative Responses: By Individual Exchanges

Day	*Mainland*			*HK*			*US*		
	ACAR (1)	*Z (2)*	*p-value (3)*	*ACAR (4)*	*Z (5)*	*p-value (6)*	*ACAR (7)*	*Z (8)*	*p-value (9)*
(-15,-10)	-0.0009	-0.3021	0.7626	-0.0152	-1.7014	0.0889	0.0225	0.7451	0.4562
(-10,-5)	0.0011	-0.0762	0.9392	0.0036	0.3595	0.7192	0.0093	0.6479	0.5170
(-5,-1)	0.0100	1.7348	0.0828	0.0037	0.7640	0.4449	-0.0010	0.2170	0.8282
(-1,1)	0.0026	0.2472	0.8047	0.0151**	2.7162	0.0066	0.0280*	2.4967	0.0125
(1,5)	-0.0125	-1.6180	0.1057	-0.0014	0.6067	0.5440	-0.0084	-0.1814	0.8560
(5,10)	0.0093*	2.1560	0.0311	-0.0027	0.0846	0.9325	0.0007	-0.1912	0.8484
(10,15)	-0.0079	-1.0532	0.2923	0.0038	0.6234	0.5330	-0.0050	-0.4099	0.6818
(-5,5)	0.0016	0.6047	0.5454	0.0128	1.7080	0.0876	0.0030	0.2871	0.7740
(-15,15)	-0.0026	0.3562	0.7217	0.0014	0.4784	0.6324	0.0179	0.1486	0.8819

* Indicates statistical significance at the 5 percent level (two-tailed test).
** Indicates statistical significance at the 1 percent level (two-tailed test).

TABLE 5A
Daily Responses: Aggregated Exchanges

Day	*AAR*	*Z*	*p-value*
-15	-0.0043	-1.5921	0.1114
-14	-0.0051	-1.0597	0.2893
-13	0.0048	0.8378	0.4021
-12	0.0082*	2.5346	0.0113
-11	-0.0032*	-2.0300	0.0424
-10	0.0029	1.0520	0.2928
-9	0.0024	0.6223	0.5338
-8	-0.0009	-0.3905	0.6962
-7	-0.0068*	-2.1173	0.0342
-6	0.0034	1.1888	0.2345
-5	0.0044	1.2565	0.2089
-4	0.0004	0.6813	0.4957
-3	-0.0006	0.6487	0.5165
-2	-0.0044	-1.1983	0.2308
-1	0.0025	0.9388	0.3479
0	0.0120**	3.2905	0.0010
1	0.0010	0.3552	0.7224
2	-0.0076*	-2.4207	0.0155
3	-0.0056*	-1.9768	0.0481
4	0.0003	0.4100	0.6818
5	-0.0005	0.1974	0.8435
6	-0.0042	-1.5033	0.1328
7	0.0046	1.2982	0.1942
8	-0.0010	0.0958	0.9237
9	-0.0014	-0.6192	0.5358
10	0.0005	0.6282	0.5299

Day	*AAR*	*Z*	*p-value*
11	-0.0031	-0.7623	0.4459
12	-0.0023	-0.9831	0.3256
13	0.0006	0.6750	0.4997
14	-0.0001	-0.3044	0.7609
15	-0.0014	-0.3718	0.7100
N = 145			

* Indicates statistical significance at the 5 percent level (two-tailed test).
** Indicates statistical significance at the 1 percent level (two-tailed test).

TABLE 5B
Cumulative Responses: Aggregated Exchanges

Days	*ACAR*	*Z*	*p-value*
(-15,-11)	0.0033	-0.1051	0.9163
(-10,-6)	0.0055	0.6580	0.5105
(-5,-1)	0.0024	1.0406	0.2980
(-1,1)	0.0156**	2.6469	0.0081
(1,5)	-0.0123	-1.5362	0.1245
(5,10)	-0.0020	0.0396	0.9684
(10,15)	-0.0058	-0.4566	0.6480
(-5,5)	0.0021	0.6580	0.5105
(-15,15)	-0.0043	-0.1111	0.9116

* Indicates statistical significance at the 5 percent level (two-tailed test).
** Indicates statistical significance at the 1 percent level (two-tailed test).

TABLE 6
Cumulative Responses: 1994-2001 versus 2002-2008

Time Period	*Mainland* *(1)*	*Hong Kong* *(2)*	*US* *(3)*	*Aggregated* *(4)*
1994-2001	-0.0079 *(Z = -0.79, N = 9)*	0.0531 *(Z = 3.71, N = 20*)	0.0836 *(Z = 2.97, N = 12)*	0.0459 *(Z = 3.46, N = 39)*
2002-2008	0.0051 *(Z = 0.75, N = 46)*	0.0048 *(Z = 1.31, N = 65)*	0.0114 *(Z = 1.26, N = 42)*	0.0054 *(Z = 0.79, N = 106)*
$ACAR_{2002\text{-}2008} - ACAR_{1994\text{-}2001}$	0.0130	-0.0483	-0.0722	-0.0405
$H_0: ACAR_{2002\text{-}20081} = ACAR_{1994\text{-}2001}$	Z = 1.02	Z = -2.61	Z = -2.02	Z = -2.31

* Indicates statistical significance at the 5 percent level (two-tailed test).
** Indicates statistical significance at the 1 percent level (two-tailed test).

TABLE 7
Variable Descriptions and Summary Statistics

Variable	*Description*	*Mean*	*Std. Dev.*
GOVTOWNED	Dummy variable that takes the value 1 if firm is a government-owned enterprise (as determined by SDC Platinum database)	0.5034	0.5017
ENERGY	Dummy variable that takes the value 1 if the target firm is in the "Energy and Natural Resources" industry	0.2552	0.4375
TECHNOLOGY	Dummy variable that takes the value 1 if the target firm is in the "Telecommunication and Electronics, Prepackaged Software," "Transportation," or "Chemicals and Drugs" industries	0.4000	0.4916
TARGET_HK	Dummy variable that takes the value 1 if the target firm is headquartered in Hong Kong	0.3793	0.4869
RELATED	Dummy variable that takes the value 1 if the acquiring and target firms are both in the same 2-digit, SIC industry	0.5241	0.5011

TABLE 8
Comparison of Sample Means and Estimated Coefficients: 1994-2001 Versus 2002-2008

Variables	***Mainland***		***Hong Kong***		***US***		***Aggregated***	
	1994-2001	*2002-2008*	*1994-2001*	*2002-2008*	*1994-2001*	*2002-2008*	*1994-2001*	*2002-2008*
A) Sample Means								
GOVTOWNED	0.5555	0.3696	0.8500	0.6462	0.0833	0.5238	0.5641	0.4811
ENERGY	0.2222	0.2609	0.1500	0.3846	0.0000	0.3095	0.1282	0.3019
TECHNOLOGY	0.2222	0.3043	0.4500	0.3846	0.7500	0.4048	0.4615	0.3774
TARGET_HK	0.4444	0.2174	0.6000	0.3385	0.6667	0.2381	0.6154	0.2925
RELATED	0.5555	0.5000	0.3000	0.6769	0.0833	0.6905	0.2821	0.6132
B) Estimated Coefficients								
GOVTOWNED	-0.0262	-0.0004	-0.0889	-0.0082	-0.0295	-0.0112	-0.0323	0.0029
ENERGY	-0.0569	-0.0005	0.1117	-0.0049	n.a.	-0.0135	-0.1034	-0.0110
TECHNOLOGY	-0.0262	-0.0178	0.0487	0.0091	-0.2544	0.0119	-0.0460	0.0024
TARGET_HK	-0.0171	-0.0182	-0.0538	-0.0091	-0.1759	-0.0187	-0.0909	-0.0205
RELATED	-0.0042	-0.0007	-0.1549*	0.0199	-0.1223	0.0208	-0.0507	0.0018
Constant	0.0350	0.0152	0.1687	-0.0018	0.4043	0.0067	0.1689	0.0113
Observations	9	46	20	65	12	42	39	106

* Indicates significant difference at the 5% level.

TABLE 9
Decomposition of the 1994-2001 / 2002-2008 ACAR Gap

	GOVTOWNED	*ENERGY*	*TECHNOLOGY*	*TARGET_HK*	*RELATED*	*CONSTANT*	*Sum*
A) MAINLAND *(Difference = 0.0130)*							
Means (Method A)	37.5	-16.9	-16.6	29.9	1.8	0.0	35.7
Coefficients (Method A)	73.2	113.0	19.6	-1.9	13.2	-152.8	64.3
Means (Method B)	0.7	-0.2	-11.3	31.9	0.3	0.0	21.4
Coefficients (Method B)	110.0	96.3	14.3	-3.8	14.7	-152.8	78.6
B) HONG KONG *(Difference = -0.0483)*							
Means (Method A)	-37.5	-54.3	6.6	-29.2	121.0	0.0	6.6
Coefficients (Method A)	-107.9	92.9	31.5	-31.3	-245.1	353.3	93.4
Means (Method B)	-3.5	2.4	1.2	-5.0	-15.5	0.0	-20.4
Coefficients (Method B)	-141.9	36.2	36.9	-55.5	-108.6	353.3	120.4

TABLE 9 (continued)
Decomposition of the 1994-2001 / 2002-2008 ASCAR Gap

	GOVTOWNED	*ENERGY*	*TECHNOLOGY*	*TARGET_HK*	*RELATED*	*CONSTANT*	*Sum*
C) US *(Difference = -0.0721)*							
Means (Method A)	18.0	0.0	-121.7	-104.4	102.9	0.0	-105.2
Coefficients (Method A)	-13.3	5.8	-149.4	-51.8	-137.0	550.9	205.2
Means (Method B)	6.8	5.8	5.7	-11.1	-17.5	0.0	-10.3
Coefficients (Method B)	-2.1	0.0	-276.8	-145.2	-16.5	550.9	110.3
D) AGGREGATED *(Difference = -0.0483)*							
Means (Method A)	-6.6	44.3	-9.6	-72.5	41.5	0.0	-2.8
Coefficients (Method A)	-41.9	-68.9	-45.2	-50.8	-79.6	389.2	102.8
Means (Method B)	0.6	4.7	0.5	-16.4	-1.5	0.0	-12.0
Coefficients (Method B)	-49.2	-29.2	-55.3	-106.9	-36.6	389.2	112.0

FIGURE 1
Acquiring Firm's Demand and Supply of OMA Projects

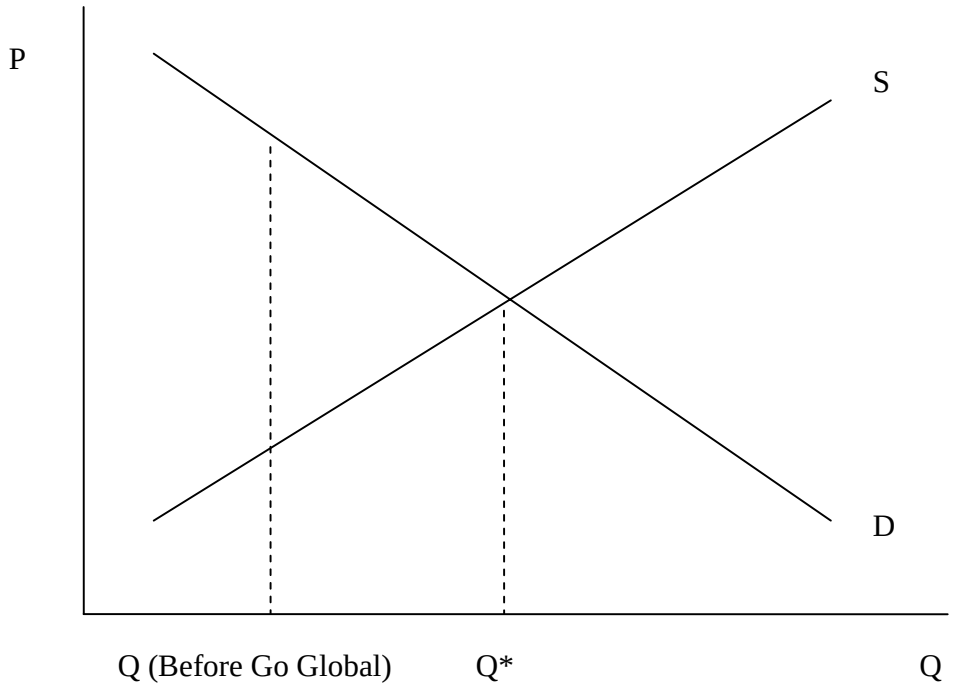
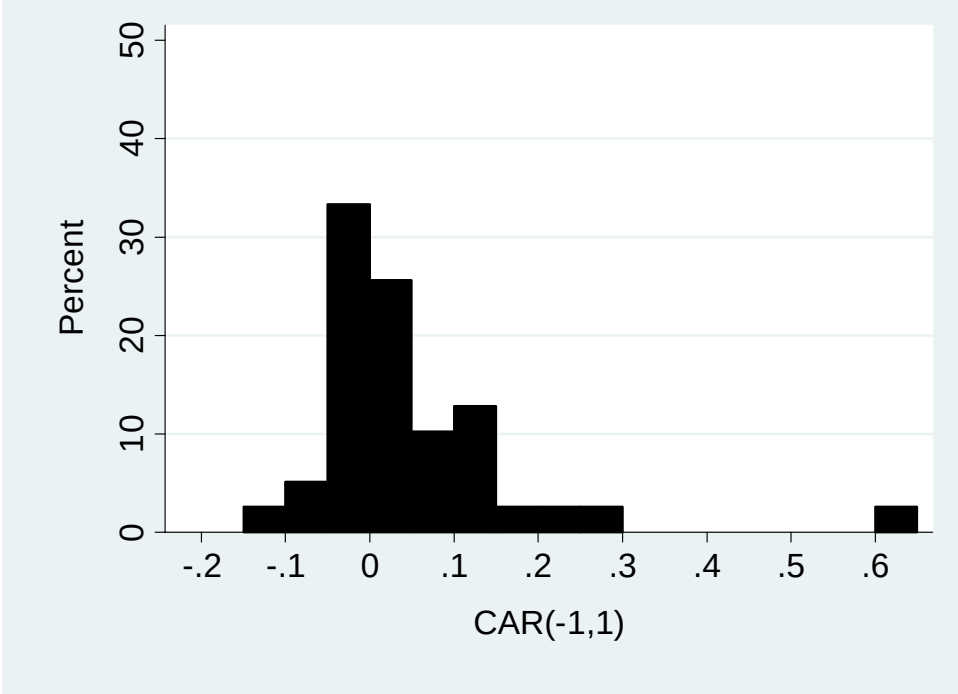


FIGURE 2
Histogram of CAR(-1,1) Values: 1994-2001 versus 2002-2008

A. 1994-2001



B. 2002-2008

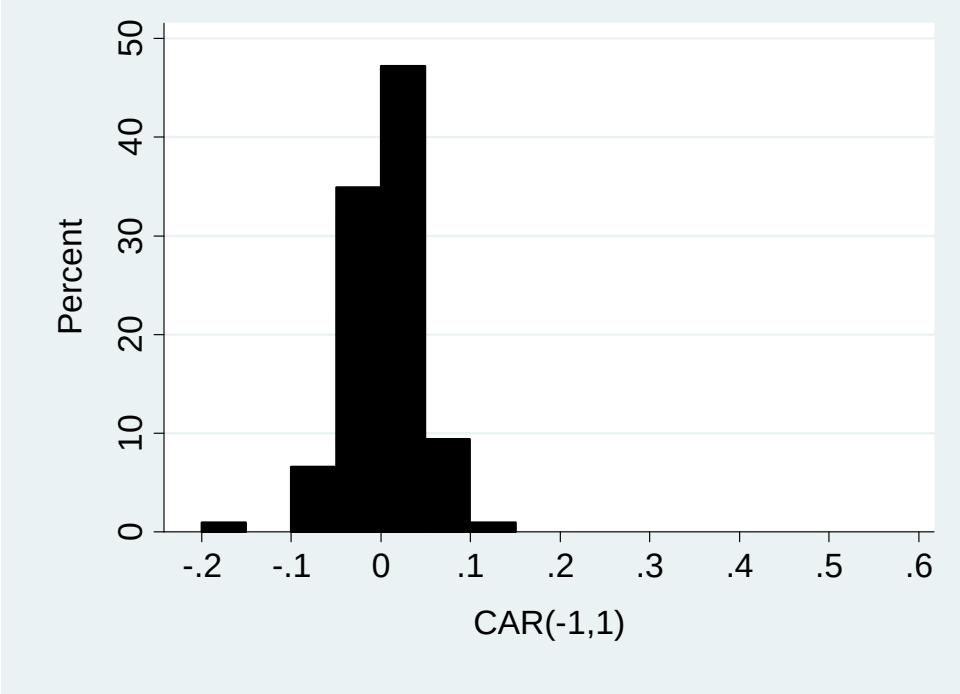
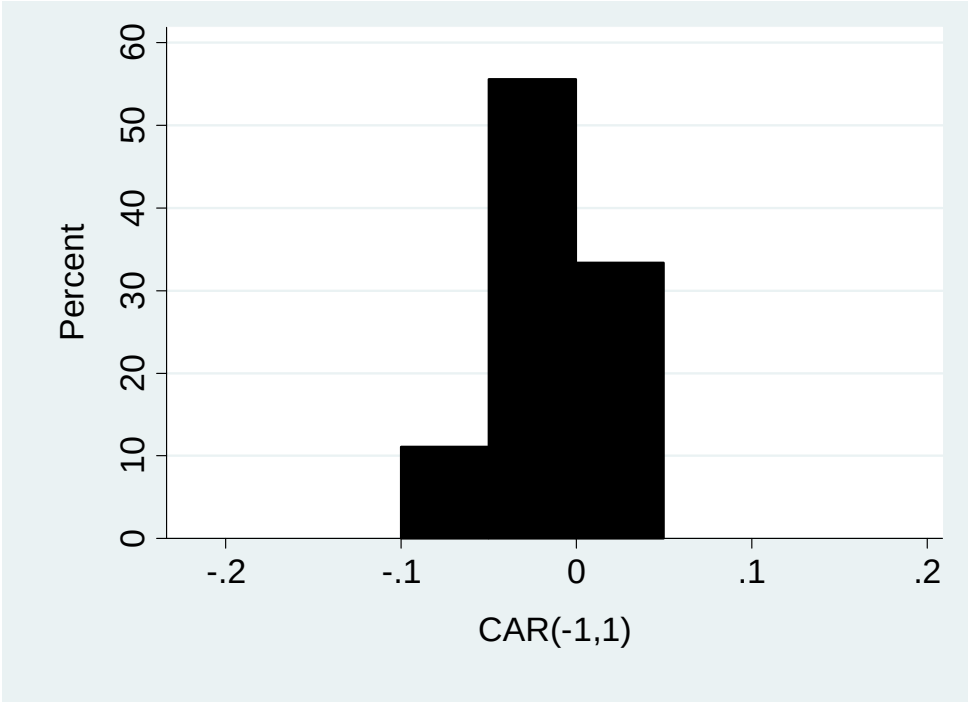


FIGURE A.1
Histogram of CAR(-1,-1) Values: 1994-2001 versus 2002-2008 (Mainland)

A. 1994-2001



B. 2002-2008

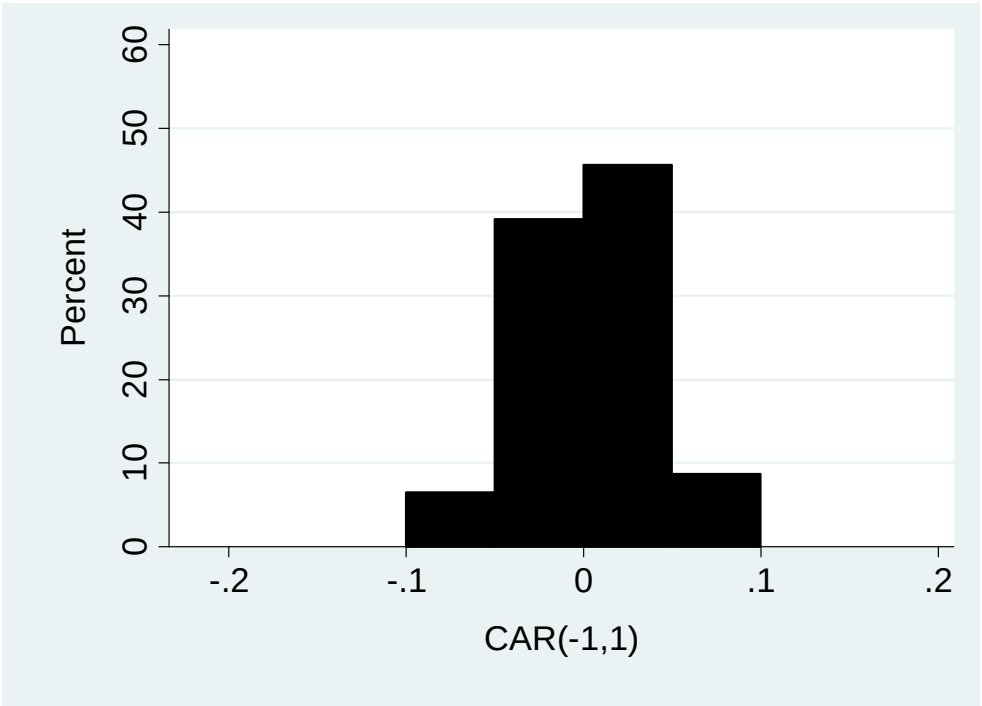
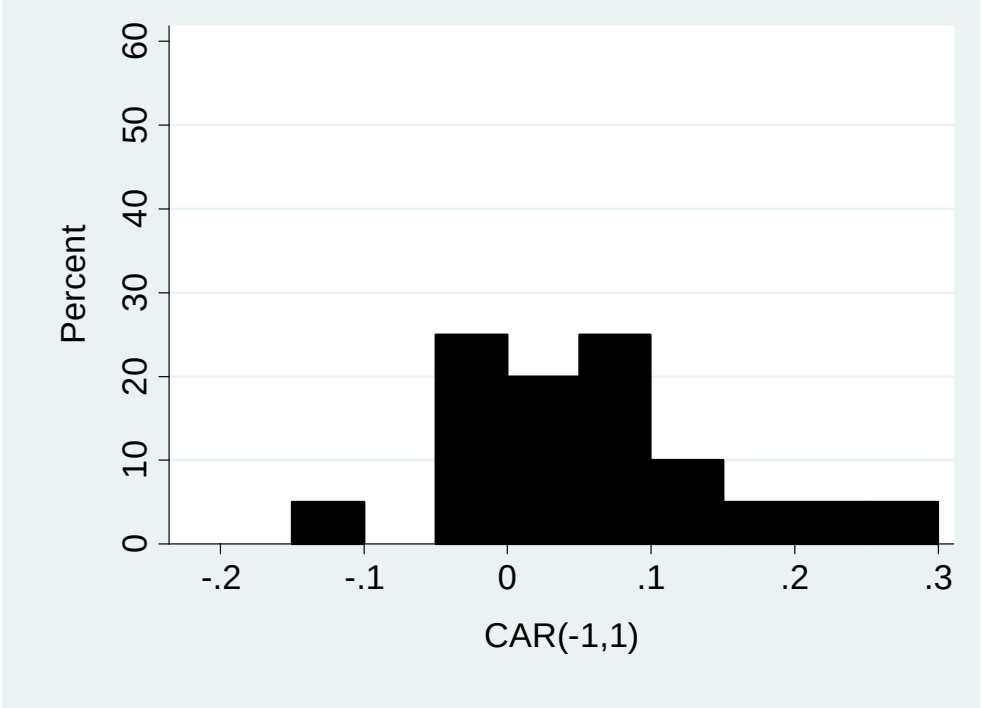


FIGURE A.2
Histogram of CAR(-1,1) Values: 1994-2001 versus 2002-2008 (Hong Kong)

A. 1994-2001



B. 2002-2008

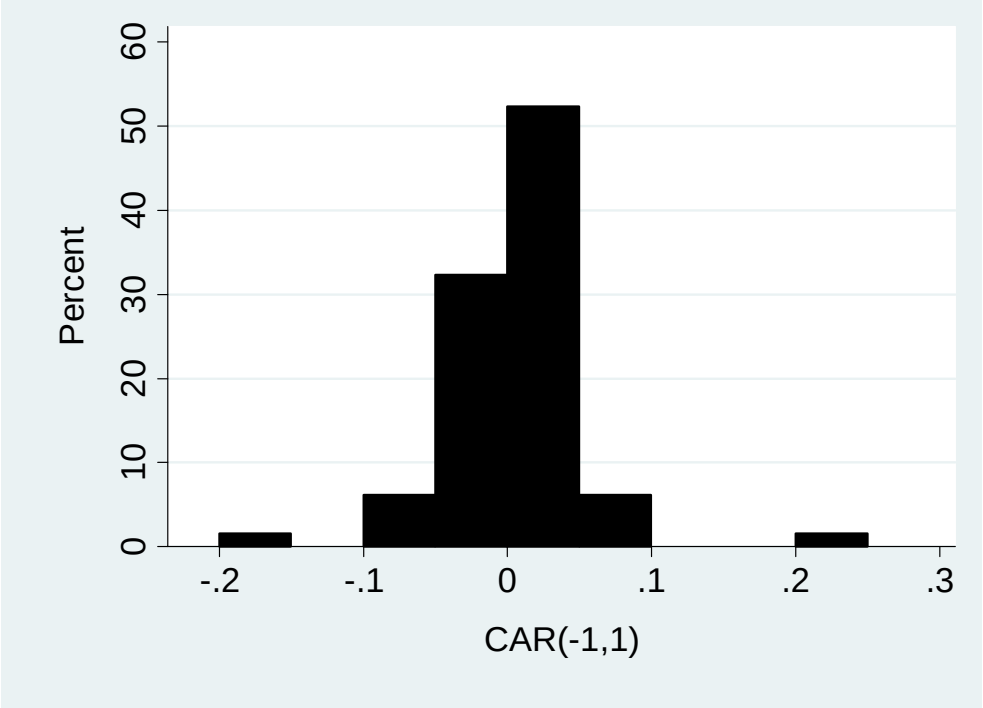
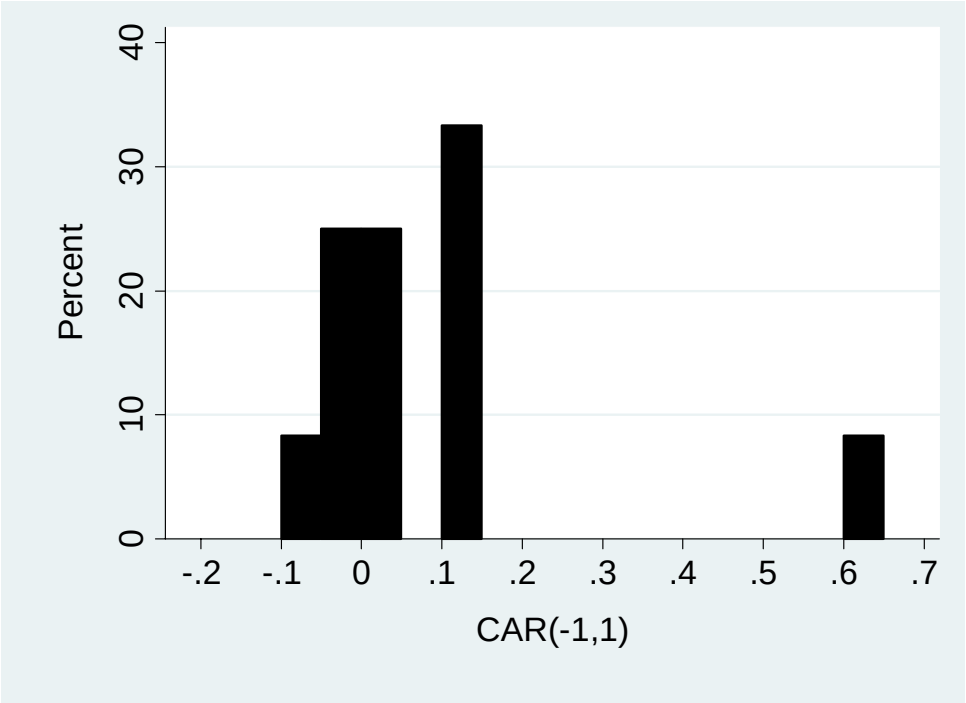


FIGURE A.3
Histogram of CAR(-1,1) Values: 1994-2001 versus 2002-2008 (U.S.)

A. 1994-2001



B. 2002-2008