



Insider trading and the valuation of international strategic alliances in emerging stock markets

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Abstract

Because stock markets in emerging economies are relatively new, under-regulated, and often segmented, investors' responses to public announcements by firms in these economies may differ from responses in developed economies' stock markets. We draw on the institutional and corporate governance literatures to explain investor reactions to announcements of international strategic alliances (ISAs) between foreign and emerging-market firms. We argue that emerging economies' stock markets positively value ISAs; however, information leakages due to weak regulatory environments siphon off the "good news" before the ISA announcement date. The level of state ownership of publicly traded firms and the nationality of foreign partners both affect the size and timing of market reactions.

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INTRODUCTION

In most countries there are well-established "rules of the game" (North, 1990: 1) regulating securities trading and institutions. For example, insider trading – the buying or selling of a firm's securities either by or on behalf of someone with knowledge of non-public, material information about the company – is normally illegal. Regulations against insider trading are designed to protect non-insider shareholders and the investing public from opportunistic behavior by insiders (Banerjee & Eckard, 2001).¹

Although securities markets are well established in OECD countries, the "rules of the game" in the emerging economies are relatively new and underdeveloped. Their security markets suffer from market inefficiencies caused by weak regulatory institutions – in particular, the lack of formal legal shareholder protection (LaPorta, Lopez-de-Silanes, Shleifer, & Vishny, 1998) and law enforcement (Johnson, LaPorta, Lopez-de-Silanes, & Shleifer, 2000).

In efficient markets, financial markets react immediately to corporate announcements (MacKinlay, 1997; McWilliams & Siegel, 1997; McWilliams, Siegel, & Teoh, 1999; Miller, 1999). Inefficient markets, however, typically suffer from information leakages prior to the announcement dates (Bhattacharya, Daouk, Jorgenson,

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& Kehr, 2000). Information leakages can occur, for example, through individual transactions in response to public rumors and press articles prior to the event date, or from insider trading on non-public information related to the announcement. As a result, emerging economies' stock markets may not react to announcements. Bhattacharya et al. (2000: 70), for example, found that the Mexican stock market did not react to corporate news. They concluded that information leakages caused "prices to fully incorporate the information before its public release", thus making it a non-event.

Because stock markets in many emerging economies are relatively new, scholarly analysis of these markets is in its infancy: for example, we have limited understanding of how weak regulatory institutions affect market behavior. Our paper adds to the literature on the (in)efficiency of these markets by investigating the market reaction to announcements of a specific strategic action taken by an emerging-market firm (EMF): the formation of an international strategic alliance (ISA) between a foreign firm and the EMF.

ISAs are "cooperative arrangements, with cross-border flows and linkages" that employ resources and capabilities of organizations headquartered in different countries (Hitt, Dacin, Levitas, Arregle, & Borza, 2000: 449). While results are somewhat mixed, previous event studies of ISA announcements suggest that these alliances do create value (e.g., Fröhls, Keown, McNabb, & Martin, 1998; Ueng, Kim, & Lee, 2000). Moreover, strategic alliances between foreign firms and EMFs offer both potential synergies and growth opportunities to exploit the EMFs' home factor and product markets.

However, empirical studies of ISAs between emerging and developed market firms typically use OECD stock markets (e.g., the United States, France, and Germany) to measure the market reaction. No event study, to our knowledge, has examined the impact of ISAs on the market valuation of EMFs in their own home country's stock market. There have been a few event studies of Chinese ISAs, but only from the perspective of the developed market partner, not the Chinese partner (Chen, Hu, & Shieh, 1991; Hu, Chen, & Shieh, 1992).² Thus a fundamental question remains: *Does an ISA offer synergies and growth options that benefit shareholders in emerging stock markets?* Moreover, given the weak regulatory environments in most emerging market economies, an additional important question is: *Are the benefits to shareholders siphoned off before*

the announcement because of information leakages and insider trading in emerging stock markets? Therefore we examine two important research questions related to the *size* and the *timing* of changes in market valuation of EMFs in response to ISA announcements.

To address these research questions, we draw on the institutional environment and corporate governance literatures to explain stock price movements associated with the disclosure of ISAs involving foreign firms and EMFs. First, we examine whether weak regulatory institutions are more likely to generate information leakages that lead to insider trading. Second, we compare market reactions to ISA announcements involving EMFs with differing levels of state ownership. Third, we compare market reactions to ISA announcements involving developed vs emerging market partner firms. In each situation (weak regulations, state ownership, and foreign partner nationality), we develop hypotheses about the *size* and *timing* of emerging stock market reactions to ISA announcements. We test our hypotheses using an event study of China's stock market, examining investors' reactions to ISA announcements by Chinese firms between 1991 and 2004.

Our study contributes to the international business literature on market imperfections and separation of control, and provides new insights into the efficiency of securities markets in emerging economies. Moreover, our study is timely. More than US\$500 billion was invested into emerging economies' stock markets in 2005 and 2006 (Porter, 2007). These massive inflows increased market valuations, made them more volatile, and generated potentially negative spillover effects on other markets. For example, a 9% drop in share prices on the Shanghai stock exchange on 27 February 2007 was immediately followed by declines in other emerging economies' stock markets, and also in European and the US stock markets. These outcomes suggest that emerging economies' stock markets now have ripple effects throughout the global economy.

THEORY DEVELOPMENT

ISAs as "Good News" Events

Strategic alliances represent a popular vehicle through which to enter an international market (Hitt et al., 2000). ISAs are cooperative arrangements involving autonomous firms from different countries. They allow partners to share risk and resources, accumulate knowledge, and secure access

to the foreign markets. Stock market announcements of an ISA are typically viewed as “good news”, with positive market valuations around the announcement date.

Stock market reactions to ISA announcements involving both developed and emerging market partner firms have been the subject of several empirical studies. For example, Chen et al. (1991) found that the US stock market reacted positively to the announcement of Chinese–US ISAs, but the positive wealth effect was negatively related to the size of the foreign investment. Hu et al. (1992), in a follow-up study, found that the market valuation of US firms was positive when the US firms were not heavily internationalized. Cheng, Fung, and Lam (1998) found that announcements of Chinese–US ISAs increased the US firms’ market valuation. Several studies have also found a positive change in shareholder value associated with equity joint venture (JV) announcements (i.e., Koh & Venkatraman, 1991; McConnell & Nantell, 1985; Merchant & Schendel, 2000; Reuer & Koza, 2000).

ISAs and emerging stock markets. The extant research suggests positive market reactions to ISA announcements; however, changes in market valuation are measured for developed market firms listed on developed stock markets. Will the same positive market reaction to ISA announcements occur for EMFs listed on their home countries’ stock markets? We argue that EMFs should benefit from ISAs; ISA announcements in emerging economies’ stock markets normally should be viewed as “good news” by investors in these markets.

Our reasoning is straightforward, building on the partner selection research (Hitt et al., 2000). Domestic firms in emerging markets often collaborate with foreign investors to acquire resources and to establish beneficial relationships. Strategic alliances between foreign and EMFs offer both potential synergies and opportunities to exploit the EMFs’ domestic markets. Through knowledge spillovers, EMFs gain knowledge from their partners that can be used in other foreign markets. Given the need for capital, advanced technologies and market access that characterizes EMFs (Hitt et al., 2000), an ISA announcement with a foreign partner is likely to be “good news” and thus positively valued in the firm’s home stock market. However, this conclusion must be tempered with caveats.

Weak regulatory environment. Institutional theory suggests that organizations are influenced by “common understandings of what is appropriate and, fundamentally, meaningful behavior” (Zucker, 1983: 105). Institutions include any form of constraint that guides human interactions (North, 1990). Scott defined institutions as “cognitive, normative, and regulative structures and activities that provide stability and meaning to social behavior” (1995: 33). Institutions include formal written rules as well as informal codes of behavior (North, 1990). Formal rules and informal codes may be violated, necessitating the use of dispute settlement mechanisms and punishment. Thus important to the effectiveness of institutions is the cost of enforcing laws and the severity of punishments to be administered.

Formal rules are especially important for the efficient market hypothesis, which suggests that, even in securities markets with substantial information asymmetries, share prices are likely to reflect all relevant information (Fama, 1991). Of the three forms of the efficient market hypothesis: strong, semi-strong, and weak (Brealey & Myers, 1988), the US securities market, the world’s most efficient and most regulated stock market, is characterized by semi-strong efficiency.³ This suggests that securities markets elsewhere range from weak to semi-strong efficiency (Brealey & Myers, 1988: 287), and are probably weakly efficient in emerging economies’ stock markets because they are younger and less regulated.

In the absence of formal rules and dispute settlement mechanisms, identifying appropriate and meaningful behavior is difficult because the rules and expectations are ambiguous (Peng & Luo, 2000). Illegal behavior in one highly institutionalized environment may be accepted and “taken for granted” in less institutionalized environments, especially if government officials participate in and therefore implicitly condone the behavior.

The lack of formal rules clearly characterizes most emerging economies’ stock markets. Many emerging market countries established securities markets in the late 1980s and early 1990s, often triggered by the privatization of state-owned enterprises, to generate domestic capital, encourage local entrepreneurship, and assist in privatization. However, the development of strong regulatory institutions has lagged the growth of these markets (Hanousek & Podpiera, 2002; Meyer, 2001). For example, while insider trading laws exist in 87 of the 103 countries with stock markets, they are



enforced in only 38 countries (Bhattacharya & Daouk, 2002). Because regulatory institutions are important for market efficiency, the lack of formal legal shareholder protection (LaPorta et al., 1998) and poor legal enforcement (Johnson et al., 2000) suggest that emerging stock markets are weakly efficient.

Moreover, weak regulatory institutions allow firms and individuals to engage in behaviors that are illegal in more regulated environments. For example, insider trading may be “acceptable” or “taken-for-granted” behavior in weakly efficient securities markets. Bhattacharya et al. (2000) find support for this conclusion: their empirical test of announcements on the Bolsa Mexicana de Valores led them to conclude that weak regulation encouraged insider trading, causing them to be non-events.

Building on these conclusions, we argue that ISA announcements are “good news” events for EMF shareholders in emerging economies’ stock markets. However, when regulatory institutions are weak, information leakages lead to insider trading that captures the benefits from these announcements prior to the announcement date. Thus we expect:

Hypothesis 1a (size): The public announcement of an ISA has a positive effect on the market value of an EMF.

Hypothesis 1b (timing): When regulatory institutions in emerging economies’ stock markets are weak, the positive effect on market value of an EMF occurs before the public announcement of an ISA because of information leakages.

State Ownership of EMFs

A second factor affecting the valuation of ISAs is the high degree of state ownership of many EMFs listed on emerging stock markets. When state-owned firms are privatized in emerging markets, shares are typically given to local residents and/or sold to private buyers, with some percentage held by local and/or national governments. Government shares in formerly state-owned enterprises are usually nontradable; as a result, corporate governance varies across firms in emerging economies (Wang & Xu, 2004).

ISAs with foreign firms offer opportunities for transfers of knowledge, financial resources, and managerial skills that are in short supply in emerging economies (Hitt et al., 2000). Strategic

alliances facilitate the transfer of organizational learning from foreign partners to EMFs. Hitt et al. (2000) concluded that managerial expertise was particularly important for newly privatized firms to help them compete in their new environment. Alliances with foreign firms are a primary way for firms in emerging economies to build resource endowments and absorb tacit knowledge from their foreign partners (Uhlenbruck, Meyer, & Hitt, 2003). Moreover, alliances with foreign firms having positive international reputations can help state-owned enterprises enhance their own legitimacy. Former state-owned firms may also be better able to exploit their foreign partners’ resources by drawing on historical government ties. We therefore argue that an EMF with high state ownership should benefit relatively more from the announcement of an ISA than a firm with low state ownership.

Both the size of the market valuation gain and its timing are likely to be affected by the degree of state ownership of listed EMFs. Where the state remains as a majority shareholder in a privatized firm, market segmentation of shares by ownership provides opportunities for profitable information leakages, thus leading to insider trading.

Scholars have studied the incentive problems caused by the separation of ownership from control (e.g., Fama, 1980; Jensen & Meckling, 1976). Fama and Jensen (1983) hypothesized that a majority shareholder is insulated from the market for corporate control; an unrestrained majority shareholder can therefore expropriate funds from the organization. On the other hand, Shleifer and Vishny (1986) argued that majority shareholders can better monitor decisions, creating benefits for minority shareholders.

The relative strength of the incentives for expropriation vs monitoring by large shareholders may depend on the institutional environment. With weak regulatory institutions, owners can extract a substantial portion of a firm’s value (Atanasov, 2005). Because the government is often the major shareholder in publicly traded EMFs, managers of these firms are likely to act in the government’s interests: thus the rights of minority shareholders are not protected. For example, Hovey, Li, and Naughton (2003) found no evidence of monitoring in firms with high state ownership listed on China’s stock exchange in 1997–1999; ownership by institutional investors, on the other hand, was positively related to firm performance, thereby suggesting that only institutional investors practised monitoring.

We contend that small investors in emerging stock markets may share in the benefits with majority shareholders in two situations that have not been considered in the literature. Both cases involve high state ownership of privately listed EMFs. The first case occurs when the controlling shareholder is a government attempting to legitimize its new stock market. Nascent markets have many new investors that do not use fundamental analysis, largely because trustworthy information is difficult to obtain. Instead, these investors speculate and may engage in “herd behavior”. For instance, small Chinese investors are likely to buy stocks of firms mentioned in the state-owned press (Porter, 2007). In addition, the state-owned press is likely to control information disclosure, providing more frequent and favorable coverage of high-state-ownership firms than of low-state-ownership firms. Alternatively, small speculators may focus on the trading activity of certain broker dealers to infer information before the public announcement. Fama and Jensen (1983) suggest that, when herding behavior occurs, widespread expropriation by the government will drive small investors out of the market. To avoid this possibility, we argue that the government refrains from expropriating funds from publicly traded EMFs in which it is a major shareholder. Thus small investors should share in the gains from ISA announcements on emerging stock markets.

In the second case, if small investors have ties to the majority shareholder (the government), there may be substantial relational capital such that investors in firms with high state ownership believe there is a strong likelihood that the government will help rather than harm investors with government ties. In this case, the close ties between securities investors and the government provide opportunities for small investors to profit from information leakages. These investors can be government-appointed executives or external investors with government ties. Key to this counter-intuitive logic is that the government is a monopolist in the establishment and enforcement of law (Sundaram & Black, 1992). With this monopoly, the state’s regulatory institutions may refrain from investigating or punishing investors with government ties. When the firm has high state ownership, close ties between insiders and securities traders imply that inside information is more likely to be “cashed in” through insider trading. We therefore expect relatively less “cashing in” on insider information by low-state-ownership firms when regulatory institutions are weak.

In sum, the market response to an ISA announcement should be greater for high- than low-state-ownership firms, reflecting the relative expected gains in long-term performance from their alliances with foreign firms. Where regulatory institutions are weak, market segmentation by ownership exacerbates the incentives for insider trading such that greater information leakages occur for high-state-owned firms in weak regulatory environments. Thus:

Hypothesis 2a (size): The positive effect on the market value of an EMF in response to the public announcement of an ISA is larger for a high-state-ownership firm than for a low-state-ownership firm.

Hypothesis 2b (timing): When regulatory institutions in emerging stock markets are weak, information leakages are larger for high-state-ownership firms than for low-state-ownership firms; as a result, a stronger market response occurs before the public announcement of an ISA involving a high-state-owned firm compared with a low-state-owned firm.

Developed Market vs Emerging Market Partners

Scholars have begun to study home-country differences in the context of selecting an ISA partner (Hitt et al., 2000). A foreign partner from a strong institutional environment is more likely to have effective corporate governance, as well as firm-specific, capabilities that are attractive to EMFs. Given the critical differences between capabilities of firms from emerging and developed markets, EMFs are likely to seek foreign partners with strong capabilities in order to build competitive advantage (Hitt et al., 2000). Uhlenbruck et al. (2003) argue that privatized firms are likely to learn the most from foreign partners, especially if the foreign partners are from developed market economies. Moreover, Guler, Guillen, and MacPherson (2002) contend that diffusion of practices results from pressures for firms to learn how to improve. There is evidence, for example, that EMFs with established ties to developed market firms are more likely to adopt longer-term objectives regarding market position, product markets, and product differentiation strategies (Hooley, Cox, Shipley, Fahy, Beracs, & Kolos, 1996). The nationality of the foreign partner should therefore affect the valuation of ISAs in emerging markets. When the foreign partner is from a country with a stronger economy and more



technological capabilities, the reaction to such an ISA on the emerging stock market should be more positive.

Not only should the market valuation be larger for ISAs involving developed rather than emerging market partners, but there also should be stronger incentives for information leakages. Early informed traders are more likely to engage in early aggressive trading prior to a public announcement (Brunnermeier, 2005). The early aggressive trading makes it more difficult for other investors to infer information – or, as Brunnermeier states, the early informed traders “throw sand in the eyes” of other market investors (2005: 418). This behavior increases the early investors’ profits, particularly in countries with stock markets that do not have rules governing insider trading or that fail to enforce insider trading laws.

We extend Brunnermeier’s (2005) arguments to two different types of information leak – one that conveys highly positive information suggesting higher *ex ante* profits, and one that conveys less positive information suggesting lower *ex ante* profits. In general, traders want to trade aggressively to exploit an information advantage: that is, the gap between the informed investor’s fundamental value of the stock and the price of the stock. The greater the information advantage, the more aggressively early informed traders are expected to trade. In contrast, a small information advantage limits potential profits and leads to less aggressive trading behavior (Brunnermeier, 2005). Drawing on this logic, we expect the greater potential benefit of ISAs involving developed market partners, as opposed to emerging market partners, to incentivize early informed traders, who then trade more aggressively on their private information. Thus:

Hypothesis 3a (size): The positive effect on the market value of an EMF in response to the public announcement of an ISA is larger when the partner firm is from a developed rather than an emerging market economy.

Hypothesis 3b (timing): When regulatory institutions in an emerging economy stock market are weak, information leakages are larger for alliances involving developed rather than emerging market partners; as a result, a stronger market response occurs before the public announcement of an ISA involving a developed market partner compared with an emerging market partner.

METHODOLOGY

Empirical Setting: China’s Stock Market

China offers an effective context for studying how emerging stock markets react to the announcement of ISAs (Wang & Xu, 2004). Stock exchanges were established by China in 1990 with the explicit purpose of financing state-owned enterprises and improving their performance. The Shanghai Stock Exchange (SHSE) opened its doors in 1990; the Shenzhen Stock Exchange (SZSE) in 1991. Both exchanges are non-profit, self-regulatory legal entities (CSRC, 2004: 51). Almost all companies listed on China’s stock market are restructured state-owned enterprises.

The regulatory environment in China tightened significantly with the introduction of the Securities Law, China’s first comprehensive legislation regulating the stock exchanges. The Securities Law was issued in December 1998 and took effect on 1 July 1999 (CSRC, 2004). The law gave CSRC the primary power to regulate China’s securities markets, including admission to trading, issuing and implementing regulations, and enforcing financial market regulations. China’s legislature also toughened the criminal law against insider trading (China Online, 2002).

As emerging economies’ stock markets mature, and regulatory institutions become stronger, the overall quality of the stock markets is likely to improve. Thus information leakages should diminish over time. To examine this argument, we divided our sample into two periods: 1991–1998 (before the Securities Law), and 1999–2004 (after the Securities Law). We test our hypotheses for the full period (1991–2004) and two sub-periods, 1991–1998 (weak regulatory environment) and 1999–2004 (relatively stronger regulatory environment), to determine whether less information leakage occurred in the more recent period.

China’s stock market is also segmented by ownership, a second potential source of market inefficiency (Bhattacharya et al., 2000). Roughly two-thirds of state and corporate (legal entity) shares on the Shanghai and Shenzhen stock exchanges are non-tradable (CSRC, 2004). Scholars have suggested that non-government shareholders can exercise their rights more freely (Wang & Xu, 2004), whereas government ownership of company shares may exacerbate corporate governance concerns and stock market quality (Tong, 2003). By comparing the market reaction to ISAs involving firms with higher and lower shares of government

ownership, we explore how market segmentation affects information leakages.

Datasets

We obtained daily stock market trades on the Shanghai and Shenzhen stock exchanges and the annual financial statements of China's listed companies from China Stock Market and Accounting Research Database (CSMAR) for the maximum available period, 1991–2004. The SDC Platinum Joint Ventures and Alliances database provides information on equity and non-equity alliances for the period 1988–2004. We limit our analysis to alliances between Chinese firms and firms from other countries.

We use the available data in both CSMAR and SDC Platinum to conduct an event study, calculating the cumulative abnormal returns (CARs) for Chinese firms listed on the Shanghai and Shenzhen stock exchanges. We excluded eight firms because they were listed on a Chinese exchange and also on at least one US, UK or Hong Kong stock exchange. Four firms were discarded because of confounding events around the ISA announcement date. The final sample is composed of 309 ISA announcements, of which 232 involved firms listed on the Shanghai stock exchange and 77 involved firms listed on the Shenzhen stock exchange. Table 1 discloses information on ISA announcements by year and by country of the foreign partner.

Event Study Methodology

An event study captures market response to an event, such as a company announcement that contains new information (e.g., Brown & Warner, 1985; Eden, Juarez, & Li, 2005; Fama, Fisher, Jensen, & Roll, 1969; McWilliams & Siegel, 1997). Researchers have shown that stock market responses to announcements provide a reliable indication of long-term firm performance (Healy, Palepu, & Ruback, 1992) and managerial assessments (Koh & Venkatraman, 1991).

In our study, the change in shareholder value attributable to the announcement thus reflects investors' assessment of the long-term performance of the Chinese partners of ISAs. This methodology determines the effect of an event on a firm's market value using expected stock returns as a benchmark.⁴ That is, we measure the change in shareholder value associated with the event as the difference between the actual stock return and expected stock return, referred to as the abnormal return. The sum of abnormal returns around the announcement day

is referred to as the CAR. The CARs created by the ISA announcements represent the change in shareholder value.

The length of the event window is one of the most crucial issues in event-study methodology. McWilliams and Siegel's (1997) review of event studies revealed that event windows ranged from 181 days (−90 to +90) to 3 days (−1 to +1). Empirical research has shown that, in general, short event windows typically capture the wealth effect associated with the event (Ryngaert & Netter, 1990). However, these authors also asserted that the nature of the event under study determines the appropriate length of the event window. If it can be shown, or argued, that information leakages are likely to occur, the window should include some time prior to the event announcement so that abnormal returns related to the information leakages are captured (McWilliams & Siegel, 1997). We therefore compute CARs for several periods around the event window. First, we examine CARs during two pre-announcement periods: days −25 to −2 (long pre-announcement window) and days −10 to −2 (short pre-announcement window). These two measures are used to test for evidence of information leakages. We report CARs for the announcement period, days −1 to +1.

To test Hypotheses 2a and 2b, we calculate the firm's state ownership. In China, some percentage of shares is held by local and/or national government. Typically, government shares in formerly state-owned enterprises are non-tradable, yet some shares may be tradable. As a proxy for state ownership, we use the portion of state-owned shares – tradable and non-tradable. We divided the total sample of Chinese firms into three roughly equal groups: high-, moderate- and low-government-owned shares. We test the state ownership hypotheses by comparing CARs of firms having low state ownership with CARs of firms having high state ownership. To test Hypotheses 3a and 3b, we divided the sample into two groups of ISAs, those involving foreign partners from emerging and partners from developed markets.

Our model is illustrated in Figure 1. The top panel shows market valuation on the vertical axis and time on the horizontal axis, divided into pre-announcement, announcement, and post-announcement windows. We expect ISA announcements to have a positive CAR (Hypothesis 1a), but when regulatory institutions are weak, the positive CAR occurs in the pre-announcement window due to information leakages (Hypothesis 1b). In the

**Table 1** ISA announcements, by year and country of the foreign partner (a) Shanghai-listed firms; (b) Shenzhen-listed firms

| | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | Total |
|----------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| <i>(a) Shanghai-listed firms</i> | | | | | | | | | | | | | | | |
| Australia | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 3 |
| Belgium | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Brazil | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| Canada | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 7 |
| Finland | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| France | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 1 | 1 | 1 | 6 | 2 | 1 | 15 |
| Germany | 0 | 0 | 2 | 4 | 3 | 1 | 1 | 1 | 2 | 0 | 3 | 2 | 1 | 1 | 21 |
| Hong Kong | 1 | 0 | 0 | 2 | 1 | 1 | 0 | 1 | 1 | 1 | 5 | 4 | 2 | 0 | 19 |
| Italy | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 3 |
| Japan | 0 | 0 | 2 | 5 | 5 | 3 | 1 | 6 | 2 | 1 | 3 | 8 | 4 | 2 | 42 |
| Malaysia | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Netherlands | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 3 | 1 | 0 | 7 |
| Norway | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| Philippines | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| Saudi Arabia | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Singapore | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 4 |
| South Korea | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 2 | 3 | 4 | 0 | 2 | 13 |
| Sweden | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 3 |
| Switzerland | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Taiwan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 3 |
| UK | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 2 | 1 | 0 | 1 | 10 |
| US | 0 | 0 | 1 | 6 | 6 | 3 | 6 | 10 | 3 | 9 | 10 | 10 | 1 | 5 | 70 |
| Uganda | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| Vietnam | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Total | 1 | 0 | 6 | 22 | 18 | 16 | 11 | 23 | 14 | 19 | 31 | 43 | 14 | 14 | 232 |
| <i>(b) Shenzhen-listed firms</i> | | | | | | | | | | | | | | | |
| Australia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| Belgium | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Canada | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 3 |
| Denmark | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Finland | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| Germany | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 1 | 0 | 1 | 2 | 7 |
| Greece | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| Hong Kong | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 0 | 0 | 1 | 2 | 2 | 9 |
| India | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Israel | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Italy | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 |
| Japan | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 1 | 0 | 4 | 3 | 1 | 0 | 12 |
| Netherlands | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 2 |
| Norway | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Russian Fed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Singapore | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| Taiwan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 3 |
| UK | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 3 | 1 | 0 | 7 |
| US | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 2 | 2 | 0 | 4 | 20 |
| Total | 0 | 0 | 0 | 1 | 2 | 5 | 3 | 12 | 6 | 6 | 12 | 12 | 7 | 11 | 77 |

bottom panel, we illustrate Hypotheses 2a (size) and 2b (timing) for high and low degrees of state ownership of listed firms. For high state ownership, we expect larger CARs than for low state ownership; however, when regulations are weak, these CARs

occur in the pre-announcement window. The bottom panel could also represent the differential effect of developed and emerging market partner firms on market valuation of ISAs (Hypotheses 3a and 3b).

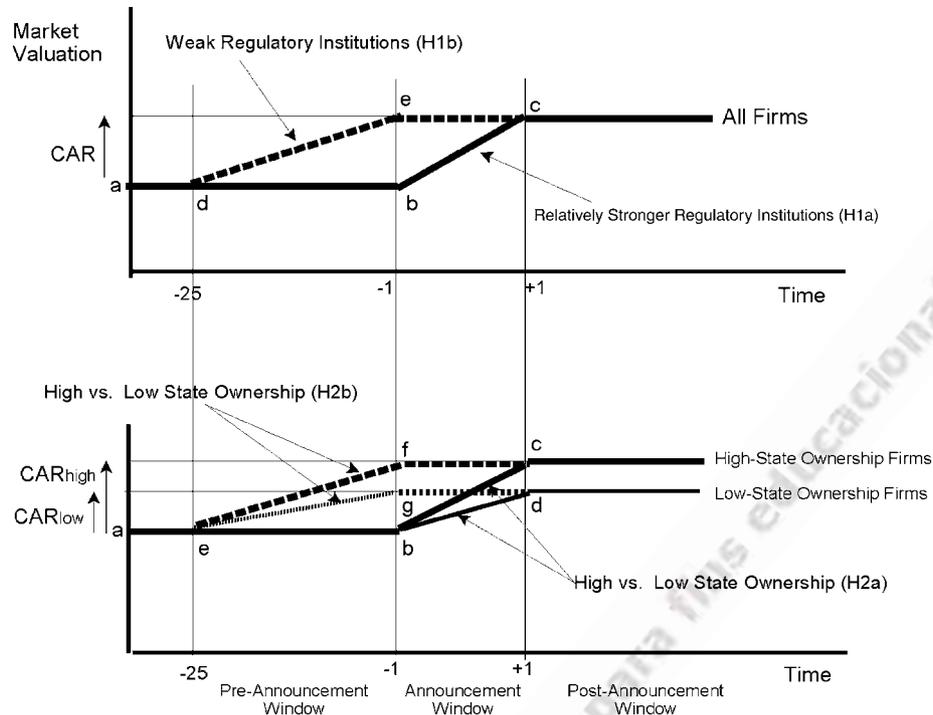


Figure 1 Emerging stock market reaction to the public announcement of an international strategic alliance.

RESULTS

Table 2 provides the event study results for the whole period, 1991–2004. These results compute CARs with pre-announcement market models using the Shanghai Composite Index and the Shenzhen Composite Index, respectively. To examine the robustness of the findings, we also compute CARs based on a post-announcement estimation period of 125 days (days +26 to +150). The two sets of results are similar, so we report the pre-announcement market mode results.

Panel a of Table 2 reports tests of Hypotheses 1a and 1b. CARs were positive and statistically significant in both pre-announcement windows (long: 0.87%, $p < 0.05$; short: 0.92%, $p < 0.01$). The CAR was not statistically significant during the announcement period.

We then split our sample into two groups to examine the effects of differences in the regulatory environment. Panel b provides results during the weak regulation environment (1991–1998). CARs for all firms were positive and statistically significant in both the long (2.13%, $p < 0.001$) and short (1.74%, $p < 0.001$) pre-announcement windows. In Panel c, we report CARs for the stronger regulation period 1999–2004; they were not significant for either the pre-announcement or announcement windows. In sum, our results

show positive CARs for ISA announcements (Hypothesis 1a). These results occur in the pre-announcement period, providing evidence of information leakages, especially in the weak regulatory period (Hypothesis 1b).

To test Hypotheses 2a (size) and 2b (timing), we compared the CARs of firms with high and low state ownership during the pre-announcement and announcement periods. The results in panel a of Table 2 for the whole period (1991–2004) reveal marginally statistically significant differences between CARs of high- and low-state-ownership firms in the pre-announcement period (long: 1.52% vs $-0.81%$, $p < 0.10$; short: 1.18% vs $-0.28%$, $p < 0.10$). CARs for firms with high state ownership were positive and statistically significant during both pre-announcement periods; the CARs for low-state-ownership firms were not statistically significant. During the announcement period, neither the CARs nor the difference in CARs between high- and low-state-ownership firms were statistically significant.

Panel b presents results for the weak regulatory environment, 1991–1998. The difference between CARs of low-state-owned and high-state-owned firms was not statistically significant in either pre-announcement window. High-state-ownership firms had a statistically significant (and positive)

Table 2 Cumulative abnormal returns: low vs high state ownership (a) 1991–2004; (b) 1991–1998; and (c) 1999–2004

| | Shanghai Composite Index | | | Shenzhen Composite Index | | |
|-------------------------------------|--------------------------|-----------|--------------|--------------------------|-----------|--------------|
| | Pre-announcement | | Announcement | Pre-announcement | | Announcement |
| | –25 to –2 | –10 to –2 | –1 to +1 | –25 to –2 | –10 to –2 | –1 to +1 |
| <i>(a) 1991–2004</i> | | | | | | |
| All firms | 0.87* | 0.92** | 0.05 | 1.55*** | 0.83** | 0.19 |
| (SHSE=309; SZSE=305) | (2.40) | (3.10) | (0.54) | (3.27) | (2.71) | (1.31) |
| Low state ownership | –0.81 | –0.28 | –0.35 | –0.73 | –0.47 | 0.05 |
| (SHSE=103; SZSE=103) | (–0.424) | (–0.010) | (–1.023) | (–0.317) | (–0.075) | (0.062) |
| Moderate state ownership | 1.89* | 1.84*** | 0.34† | 2.66** | 1.63** | 0.61* |
| (SHSE=105; SZSE=101) | (2.340) | (3.402) | (1.677) | (2.788) | (2.620) | (2.181) |
| High state ownership | 1.52* | 1.18† | 0.15 | 2.73** | 1.32* | –0.09 |
| (SHSE=101; SZSE=101) | (2.252) | (1.937) | (0.260) | (3.224) | (2.318) | (–0.010) |
| Moderate vs low <i>t</i> -statistic | * | * | n.s. | * | * | n.s. |
| High vs low <i>t</i> -statistic | † | † | n.s. | † | * | n.s. |
| <i>(b) 1991–1998</i> | | | | | | |
| All firms | 2.13*** | 1.74*** | –0.31 | 3.49*** | 1.15** | 0.09 |
| (SHSE=120; SZSE=117) | (3.89) | (4.91) | (–0.26) | (3.94) | (2.60) | (0.49) |
| Low state ownership | 1.06 | 0.70* | –1.99** | 1.06 | –1.52 | –0.73 |
| (SHSE=31; SZSE=31) | (0.934) | (0.092) | (–2.694) | (0.932) | (–0.198) | (–0.809) |
| Moderate state ownership | 2.37* | 3.14*** | 0.26 | 3.90** | 2.62** | 0.95 |
| (SHSE=47; SZSE=44) | (2.270) | (4.177) | (0.744) | (2.791) | (2.972) | (1.585) |
| High state ownership | 1.84† | 1.17 | 0.21 | 4.38*** | 1.49 | –0.43 |
| (SHSE=42; SZSE=42) | (1.656) | (1.080) | (0.296) | (2.710) | (1.404) | (–0.198) |
| Moderate vs low <i>t</i> -statistic | n.s. | * | * | n.s. | * | † |
| High vs low <i>t</i> -statistic | n.s. | n.s. | * | n.s. | † | n.s. |
| <i>(c) 1999–2004</i> | | | | | | |
| All firms | 0.24 | 0.58 | 0.29 | 0.42 | 0.63 | 0.30 |
| (SHSE=189; SZSE=188) | (0.76) | (1.32) | (1.29) | (1.11) | (1.39) | (1.31) |
| Low state ownership | –1.62 | –0.10 | 0.36 | –1.51 | –0.01 | 0.38 |
| (SHSE=72; SZSE=72) | (–1.111) | (–0.073) | (0.572) | (–0.982) | (0.404) | (0.616) |
| Moderate state ownership | 1.52 | 0.83 | 0.40 | 1.69 | 0.86 | 0.36 |
| (SHSE=58; SZSE=57) | (1.118) | (0.853) | (1.586) | (1.256) | (0.873) | (1.508) |
| High state ownership | 1.26 | 1.18 | 0.10 | 1.51+ | 1.20 | 0.15 |
| (SHSE=59; SZSE=59) | (1.520) | (1.617) | (0.080) | (1.883) | (1.600) | (0.152) |
| Moderate vs low <i>t</i> -statistic | * | n.s. | n.s. | * | n.s. | n.s. |
| High vs low <i>t</i> -statistic | * | † | n.s. | * | n.s. | n.s. |

Z statistics in parentheses. Significance based on two-tailed test statistics († < 10%, * < 5%, ** < 1%, *** < 0.1% levels). Not significant = n.s.

CAR only in the long pre-announcement period (1.84%, $p < 0.10$); low-state-ownership firms had a statistically significant (and negative) CAR only in the short pre-announcement period (–0.70%, $p < 0.05$). During the announcement period, only the CAR for the low-state-ownership firms was statistically significant (–1.99%, $p < 0.01$); however, the CAR was sufficiently negative to generate a statistically significant difference between the CARs of high-state- and low-state-ownership firms (0.21 vs –1.99%, $p < 0.05$) during the event window.

Panel c provides results for the stronger regulatory environment period, 1999–2004. In neither

the pre-announcement nor the announcement windows was the CAR statistically significant, regardless of the firms' level of state ownership. However, the difference in CARs was statistically significant between high-state-owned and low-state-owned firms in the long pre-announcement window (1.26 vs –1.62%, $p < 0.05$) and marginally statistically significant in the short pre-announcement window (1.18 vs –0.10%, $p < 0.10$). The difference is not statistically significant for the announcement window.

We repeated the analysis using the Shenzhen Composite Index as the market index; these results

are in the right-hand panel of Table 2. For the most part, the results were similar to those using the Shanghai Index, with the exception that the difference in CARs for low vs high state ownership was somewhat stronger in the short pre-announcement window. We conclude that ISAs involving EMFs with high state ownership are much more likely to have positive market valuations (Hypothesis 2a), and that the valuation gains occur in the pre-announcement window, especially when regulatory institutions are weak (Hypothesis 2b).

In an extended analysis, we examined whether there were benefits to firms having a moderate, as opposed to low or high, level of state ownership. Although high state ownership is likely to produce favorable government ties and reduced likelihood of investigation, it also may yield excessive bureaucracy that produces resource inefficiencies. When the level of state ownership is very high, bureaucratic inefficiencies may outweigh relational benefits for the firm. A moderate level of state ownership may therefore provide a reasonable tradeoff between the benefits of government ties and the costs of bureaucratic inefficiencies.

These results are also reported in Table 2. Panels a (1991–2004) and b (1991–1998) show that firms with moderate levels of state ownership outperformed both low- and high-state-ownership firms. Firms with moderate state ownership had positive statistically significant CARs in both pre-announcement periods (Panel a, long: 1.89%, $p < 0.05$; short: 1.84, $p < 0.001$); (Panel b, long: 2.37%, $p < 0.05$; short: 3.14%, $p < 0.001$). They also had a marginal statistically significant and positive CAR during the event window for 1991–2004 (0.34%, $p < 0.10$), the only significant CAR during the event window for our Shanghai sample. This also occurred in the Shenzhen sample, where the CAR was even larger (0.61%, $p < 0.05$). These results suggest that EMFs with moderate levels of state ownership may particularly benefit from ISA announcements on emerging stock markets.⁵

To test Hypotheses 3a and 3b, we compared the CARs of ISAs involving developed market partners with CARs of ISAs involving emerging market partners. We present these results in Table 3 using both the Shanghai and Shenzhen Composite Indexes. Examining first the data based on the Shanghai Index, results for the total sample period (Panel a) indicate that CARs were positive and statistically significant for ISAs with developed market firms during both pre-announcement periods (long: 1.28%, $p < 0.05$; short: 1.14%, $p < 0.01$).

CARs for ISAs with emerging market partners were not statistically significant. During the announcement period, CARs were not statistically significant for either group. The differences in CARs between alliances with developed vs emerging market partners, however, were not statistically significant in the pre-announcement or announcement windows.

In Panel b, the results for the weak regulatory environment indicate statistically significant and higher CARs for ISAs involving developed market partners during both the long (3.43%, $p < 0.001$) and short (2.12%, $p < 0.001$) pre-announcement periods; CARs were not significant for alliances with emerging market partners. CARs were not significant for either group during the event window. The differences in CARs between alliances with developed vs emerging market partners were statistically significant in both pre-announcement windows (long: 3.43 vs -5.50% , $p < 0.05$; short: 2.12 vs -2.17% , $p < 0.10$), but not during the event window. Lastly, we report results from the stronger regulatory period in Panel c. Neither the CARs, nor differences between CARs, were significant for either group in any window.

Table 3 also presents results using the Shenzhen market index to compute CARs. The results are similar to those for Shanghai across Panels a, b and c, with the exception that the difference in CARs between alliances with developed and emerging market partners is now marginally statistically significant in Panel a in both pre-announcement windows.⁶

We conclude that ISAs with developed market partners are more highly valued than ISAs with emerging market partners (Hypothesis 3a), and that the gains are siphoned off by information leakages in the pre-announcement window (Hypothesis 3b).

DISCUSSION AND CONCLUSION

Because stock markets in emerging economies are relatively new, under-regulated, and often segmented, investor responses to public announcements by firms may differ from responses in developed stock markets. We drew on the institutional and corporate governance literatures to explain investor reactions to announcements of ISAs between foreign and EMFs. We argue that emerging economies' stock markets would positively value ISAs; however, information leakages due to weak regulatory environments were likely to siphon off the "good news" before the ISA announcement date. We also hypothesized that the level of state

Table 3 Cumulative abnormal returns: emerging vs developed market partner (a) 1991–2004; (b) 1991–1998; and (c) 1999–2004

| | Shanghai Composite Index | | | Shenzhen Composite Index | | |
|---|--------------------------|-----------|--------------|--------------------------|-----------|--------------|
| | Pre-announcement | | Announcement | Pre-announcement | | Announcement |
| | –25 to –2 | –10 to –2 | –1 to +1 | –25 to –2 | –10 to –2 | –1 to +1 |
| <i>(a) 1991–2004</i> | | | | | | |
| All firms | 0.87* | 0.92** | 0.05 | 1.55*** | 0.83** | 0.19 |
| (SHSE=309; SZSE=305) | (2.40) | (3.10) | (0.54) | (3.27) | (2.71) | (1.31) |
| Emerging | –0.78 | –0.40 | 0.04 | –0.85 | –0.78 | 0.25 |
| (SHSE=62; SZSE=60) | (–0.334) | (–0.305) | (–0.189) | (–0.185) | (–0.570) | (0.400) |
| Developed | 1.28* | 1.14** | 0.04 | 2.37*** | 1.16* | 0.17 |
| (SHSE=247; SZSE=245) | (2.475) | (2.959) | (0.632) | (3.296) | (2.573) | (1.060) |
| Emerging vs developed <i>t</i> -statistic | n.s. | n.s. | n.s. | † | † | n.s. |
| <i>(b) 1991–1998</i> | | | | | | |
| All firms | 2.13*** | 1.74*** | –0.31 | 3.49*** | 1.15** | 0.09 |
| (SHSE=309; SZSE=305) | (3.89) | (4.91) | (–0.26) | (3.94) | (2.60) | (0.49) |
| Emerging | –5.50 | –2.17 | –1.46 | –6.35 | –3.89 | –0.86 |
| (SHSE=62; SZSE=60) | (–1.385) | (–0.873) | (–1.050) | (–1.322) | (–1.466) | (0.012) |
| Developed | 3.43*** | 2.12*** | –0.38 | 5.59*** | 2.14** | –0.05 |
| (SHSE=247; SZSE=245) | (3.708) | (3.697) | (–0.708) | (4.651) | (3.166) | (–0.008) |
| Emerging vs developed <i>t</i> -statistic | * | † | n.s. | * | * | n.s. |
| <i>(c) 1999–2004</i> | | | | | | |
| All firms | 0.24 | 0.58 | 0.29 | 0.42 | 0.63 | 0.30 |
| (SHSE=309; SZSE=305) | (0.76) | (1.32) | (1.29) | (1.11) | (1.39) | (1.31) |
| Emerging | 0.81 | 0.25 | 0.59 | 1.15 | 0.35 | 0.66 |
| (SHSE=62; SZSE=60) | (0.449) | (0.166) | (0.437) | (0.584) | (0.214) | (0.480) |
| Developed | –0.50 | 0.32 | 0.38 | –0.30 | 0.35 | 0.35 |
| (SHSE=247; SZSE=245) | (–0.078) | (0.602) | (1.504) | (0.178) | (0.571) | (1.440) |
| Emerging vs developed <i>t</i> -statistic | n.s. | n.s. | n.s. | n.s. | n.s. | n.s. |

Z statistics in parentheses. Significance based on two-tailed test statistics ($† < 10\%$, $* < 5\%$, $** < 1\%$, $*** < 0.1\%$ levels). Not significant=n.s.

ownership of publicly traded firms and the nationality of foreign partners would each affect the size and timing of market reactions. We found strong evidence supporting all of our hypotheses.

Our results from the Chinese stock market strongly suggest the presence of information leakages where informed traders (e.g., insiders) engaged in transactions based on non-public information. The leakage dissipates to some degree for firms with high state ownership and, for that matter, for firms with moderate state ownership. Alternatively, low-state-ownership firms lack the firm-specific resources (such as the ability to accumulate and transfer knowledge or develop relational capital with the government) to derive benefits from the international alliance. Their weak ties may also represent a barrier to entry for foreign firms, and thus adversely affect the local firm's potential pool of alliance partners. We conclude that information leakages and insider trading can

be expected in nascent stock markets, especially when the government has a high or moderate ownership share in firms with stocks traded in these markets.

Our research also provides strong evidence that regulation can be effective. Virtually all of the information leakages in the 1991–1998 period disappear in the later period, under all circumstances. This suggests serious insider trading prior to regulation, but little if any thereafter. This outcome has a strong public policy implication, because it suggests that emerging market governments that introduce regulatory reforms into their stock markets can curtail information leakages and insider trading. Where regulations are weak, however, information leakages and insider trading are likely to capture all the “good news” gains.

More recently, China's regulators have attempted to increase the percentage of traded shares, improve the quality of public listings, and tighten security

regulations further (CSRC, 2004). However, reducing institutional uncertainty can produce both positive and negative outcomes. On the one hand, reduced state ownership of firms enhances corporate governance. On the other hand, large-scale selling of government-owned shares of stock can depress stock prices when individual investor skepticism is high, and thus may keep investors on the sidelines.

In fact, our results show that tighter regulations after 1998 produced no significant, positive returns to ISA announcements, in either the pre-announcement or announcement windows. This suggests that much of the increased returns in the earlier period may have been due to insiders speculating that they could drive up prices and then sell off shares in the post-announcement period. In other words, the market may not acknowledge long-term benefit to ISAs, but only a short-term opportunistic advantage. This conclusion speaks to market inefficiencies, and suggests the value and potential effectiveness of regulation.⁷

It is also possible that investors do not perceive ISAs to produce benefits for the local partner. Concerns about lack of transparency, corruption and “the lumbering nature of many of China’s SOEs” (Hovey et al., 2003: 120) may have prompted a more negative perception of ISA announcements on China’s stock market. Another possible explanation involves changes in liquidity, which can influence stock price volatility. Our event-study methodology controls for recent trends in the stock market and changes in volatility, but we are unable to control for shifts in investor behavior. Thus there are several alternative explanations for the lack of returns to ISAs in the stronger regulation in the 1999–2004 period.

Our research contributes to the international business literature on market imperfections and separation of control in markets with weak institutions. Our results suggest that studies of firms from countries with weak regulatory institutions may under- or over-report stock market responses to announcements, if researchers are not careful to consider potential leakages of information. Bhattacharya and Daouk’s (2002) study revealed that insider trading occurs in over 80 countries, with regulatory enforcement clearly lacking in many countries. Another implication of our study is that stronger institutions may deter some, but not all, insiders from capturing the “good news rents” before public investors can do so. Our results suggest strong evidence of insider trading in

China’s stock market before the regulatory reforms of 1999, and less salient evidence following the new reforms.

We also provide new insights into the research in strategic management on alliances. First, our results indicate that focusing on the market response for only one of the ISA partners – typically, the partner from a country with strong regulatory institutions – can understate the overall market reaction to an ISA announcement. Instead, the stock market performance of all ISA partners should be evaluated. Second, the extant literature has suggested that ISAs enhance shareholder value. We found, however, that ISAs involving low-state-ownership firms and foreign partners from emerging markets did not usually produce positive returns. These results lead to a research question: “Why form an alliance if it does not appear to enhance shareholder value?” Institutional theory suggests one plausible explanation: these firms may be imitating actions of other firms by forming ISAs in high-uncertainty environments.

Our study has some limitations. First, we obtained information from SDC Platinum, which may not include all alliance announcements such as those made by a Chinese news agency. Another potential limitation is that some choices are not likely to be random, but instead are deliberate decisions by firms and their managers to “self-select” into their preferred choices. One such self-selection issue is identifying managers who trade on inside information. This issue might entail the use of a Heckman (1979) procedure; however, developing a sample of firms with managers that actually traded on insider information is difficult because it requires managers to admit violating securities laws. Nevertheless, we acknowledge these potential limitations to the present study.

Our study suggests several promising future research avenues. We focused on macro issues of an emerging market undergoing major changes, especially a stock market during its infancy. This suggests an opportunity to extend the present study by examining the effects of different types of ISA (e.g., R&D vs non-R&D and large vs small firms) on the market valuation of ISAs for emerging-economy firms. In addition, Hitt et al.’s (2000) study can be extended by examining the performance implications associated with partner selection, with emphasis on firm-specific factors of the EMFs. In the present study, few firms were dual-listed; however, there is also an opportunity for comparative analysis of announcements. For example, the March 2007

shock to the Chinese markets produced an 8% drop for shares of Industrial and Commercial Bank of China on the Shanghai exchange, but only a 1.8% decline of its shares in Hong Kong (Porter, 2007).

Another opportunity for future research involves using conditional event studies, in which some firms choose not to announce publicly an event (Prabhala, 1997). Developing a sample of Chinese firms that elected to forgo announcing an ISA can prove difficult – a firm may choose not to announce, but it may be unreported by the business media. Testing this conditional issue may be feasible in the future as more data become available from Chinese authorities (Prabhala, 1997).

In conclusion, our study represents a first step toward understanding the wealth effects of EMFs engaging in ISAs. The results reported herein suggest that, although challenging, governments in emerging market countries must regulate their stock markets and enforce trading regulations if their stock markets are to become efficient in the near term. We hope that our work stimulates further research on EMFs, nascent stock markets, and the use of event-study methodology.

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NOTES

¹In the United States, the 1934 Securities Exchange Act and 1968 Williams Act Amendments regulate insider trading, deterring opportunistic behavior by executives and informed investors with non-public information about firm value (Meulbroek, 1992). The US Securities Exchange Commission has authority to enforce securities laws, bring charges against market professionals, and revoke licenses.

²Event studies on macro issues include market efficiency (Kim & Singal, 2000), co-integration across markets (Zhu, Lu, Wang, & Soofi, 2004), and the Asian currency crisis (Lo & Chan, 2000).

³The strong form argues that information and trading costs are zero, so that inside information is incorporated into securities prices and not useful to a trading strategy. The semi-strong form posits that prices reflect information to the point that marginal benefits of acting on information do not exceed marginal costs. Insiders may profit from using non-public information, but after the information is announced publicly, it has no further trading value. In the weak form, all available public information is not reflected in stock prices so that well-informed investors, in addition to insiders, can take advantage of other investors.

⁴See Brown and Warner (1985) for more details.

⁵We also calculated *t*-tests for differences between moderate and high state ownership levels in Table 2; however, the *t*-statistics were largely statistically insignificant. The only marginally significant *t* occurred in the 1991–1998 period, with the Shenzhen index as the market ($p < 0.10$).

⁶Lastly, about one-fifth of our sample ISAs is non-equity based. An *ex post* analysis revealed no statistically significant differences in CARs between equity and non-equity ISAs.

⁷We are indebted to a reviewer for this point.

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