Institutional Development, Institutional Resources and the Downscoping of Business Groups in Emerging Economies

Abstract

Business groups in emerging economies are reacting to changes in their business environment, and are becoming major players in international business. Institutional development in many emerging economies has reduced the benefits of unrelated diversification. While some business groups begin to restructure their product portfolios and become more focused, others remain highly diversified. Drawing from dynamic resource-based and institutional perspectives, this paper proposes that group-level resources and capabilities play an important role in determining how much business groups downscope in response to liberalization of markets. Empirical results based on a sample of Taiwanese business groups support that diversified business groups whose resources and capabilities are specific to pre-change institutional era are less likely to downscope. In contrast, business groups who had invested in market-based competencies are more likely to downsize their scope during the time of institutional change. International exposure was expected to accelerate strategic change, but this could not be confirmed empirically.

Keywords: Diversified business groups, institutional change, downscoping, emerging economies, resources and capabilities, Taiwan,

Introduction

Compared to their counterparts in U.S. and U.K, business entities in many emerging economies often diversify into a much wider array of product areas in the form of business groups. It is widely accepted that the lack of effective market-oriented institutions in these economies is a major reason for the existence of these diversified business groups (e.g., Leff, 1978; Khanna and Palepu, 1997, 2000, Khanna and Yefeh, 2007). With institutional development, these diversified business groups are generally believed to loose their competitive disadvantage (e.g., Chakrabarti, Singh, and Mahamood, 2007; Lee, Peng, Lee, 2008). Thus, they are expected to reduce their product scope (Chang, 2006; Hoskisson, Johnson, Tihanyi, and White, 2005; Peng and Delios, 2006).

However, while a number of researchers report some trends towards downscoping (e.g., Ahlstrom and Bruton, 2004; Bruton et al., 2003; Chang, 2006; Kim et al., 2004; Peng and Delios, 2006), others document that some business groups remain diversified or even continue to expand their product scope during institutional development (Chung, 2006; Chung and Mahamood, 2006, Ghemawat and Khanna, 1998; Khandwalla, 2002). Such divergent evidences suggest that business groups respond to institutional changes differently.

Why do some business groups reduce their product scope while others do not? A few recent studies have explored this issue from an incentive approach; they emphasize the role of the internal and external pressures that force the groups to implement changes (e.g., Hoskisson et al., 2005; Zhou and Peng, 2009). For instance, it is found that business groups facing increased foreign competition and having foreign capital participation, exited faster from unrelated businesses (Chung and Luo, 2008; Hoskisson, Cannella, Tihanyi, and Faraci, 2004). Business organizations with greater financial distress are also more likely to take on more radical restructuring measures such as divestment (e.g., Bruton, Ahlstrom and Wan, 2003, Choe and Roehl, 2007; Hoskisson et al., 1994). Some of the observed change in aggregate pattern may however due to churning effects as new firms pursue more focused strategies than established firms. Thus, we need to look at actual changes at the business group level to study whether and how groups change.

In this paper, we develop an institutional embeddedness perspective to explain why some firms downscope during a period of institutional change, while others do not. Specifically, we argue that business groups in emerging economies have in the past evolved as a consequence of institutional environments where institutional voids galore (Khanna and Palepu, 2000). In this process, they have developed "institutional" resources specifically to deal with these sorts institutional voids (Peng, Lee and Wang, 2005) and business models that fill, accommodate, or bypass institutional voids (Khanna and Palepu, 2010). Moreover, they can be expected to engage in political actions to sustain the institutional environment, leading to a mutual stabilization of strategies and the institutional context (Shaffer and Hillman, 2000).

If the institutional environment is reformed in ways that reduce institutional voids, different sorts of strategies become viable (Chakrabarti, Singh, and Mahamood, 2007; Gaur and Delios, 2006; Lee, Peng, Lee, 2008). New businesses may thus pursue more focused strategies that are less driven by the desire to share institutional resources across group member firms. However, existing business groups vary in their response. Our main proposition thus is that firms that are strongly embedded in the old institutional setting continue to exploit their institutional resources, while firms with marketable resources revise their strategies by downscoping.

Specifically, we examine how group-level resources and capabilities influence the downscoping decision of business groups. Drawing on resource-based theories (Penrose, 1959;

Teece, Pisano and Shuen, 1997) and institutional perspective (e.g., Peng, 2003; Peng, Lee and Wang, 2005), we propose that business groups with resources highly specific to pre-change institutional context are *less* likely to reduce their product scope, while business groups that had invested in market-based competencies are *more* likely to reduce their scope. Empirical evidence based on Taiwanese business groups lends support to our arguments.

Business Groups under Institutional Transitions

Institutions are complex set of interdependent formal and informal rules that vary across countries (Jackson and Deed, 2008; Schneider, Schulze-Bentrop and Paunescu, 2010). In emerging economies, these institutions fail to ensure efficient functioning of markets, thus creating institutional voids. Firms thus adopt a variety of strategies to adapt their to these contexts, for example by using personal networks to create trust within business relationships (Batjargal, 2003; Danis, Chiaburu and Lyles, 2010), or by forming JVs with firms controlling critical resources (Peng, 2003). Such strategic adaptations have been observed for both local firms (Danis et al., 2010; Peng and Heath, 1996; Shinkle and Kriauciunas, 2010) and foreign investors (Meyer, Estrin, Bhaumik and Peng, 2009).

Local firms have for long time tried to overcome such market imperfections by operating in business groups that internalize pertinent markets (e.g., Leff, 1978; Khanna and Palepu, 1997, 2000). While most of large conglomerates in Anglo-American countries have exited from unrelated product markets and become more focused in the 80s and 90s (Hoskission and Hitt, 1994; Hoskisson and Johnson, 1992; Hoskission, Johnson and Moesel, 1994), business organizations in many emerging economies continue to operate in a wide range of industries in the form of business groups (Khanna and Yafeh, 2007). .

In Anglo-American countries such as U.S., institutions supportive of impersonal transactions are well in place. Firms compete with others based primarily on their market-based capabilities such as technologies and marketing skills (Peng, 2003). Unrelated product diversification yields negative corporate-level performance outcome because it diverts away a firm's limited resources such as financial and human capital from defending its core market-based advantages, and it creates organizational complexity that would result in a loss of strategic control and innovation (Hitt, Hoskisson, and Ireland, 1990). Besides, a firm is unlikely to succeed in unrelated businesses because it lacks required competencies and complementary resources and its prior experience, however successful, offers little help (Rumelt, 1974).

In contrast, in many emerging countries institutions provide weak support to arm's-length market exchanges; companies must perform a wide range of functions in order to operate effectively (Khanna and Palepu, 1997). In this case, firms internalize some of these functions and consequently enter businesses that may have no technological synergies with their current lines of businesses. Large diversified business groups can also take advantages of institutional voids. For example, lack of information intermediaries makes it difficult for consumers to distinguish the quality of products. Such an institutional void enables business groups with reputations of quality products to enter new, even if unrelated, businesses in which there is substantial information asymmetry between sellers and buyers (Khanna and Palepu, 1997).

In other words, the advantages of large diversified business organizations rest on the deficiency of the institutional contexts in which they are embedded. Since late 1980s, many emerging economies started out a series of institutional reforms, characterized by a move toward market liberalization and the establishment of market-oriented economic institutions (Hoskisson, Eden, Lau and Wright, 2000). Under the new institutional framework, unrelated diversification would be unnecessary and even costly. Recent empirical evidence has supported that institutional development in emerging economies reduces the benefits of diversification (e.g., Chakrabarti, Singh, and Mahamood, 2007; Gaur and Delios, 2006; Lee, Peng, Lee, 2008), increasing the competitive pressures for diversifying business organizations to focus on their market-based core competencies (Peng, 2003).

Nevertheless, business groups in emerging economies can often neutralize competitive threats by leveraging their market power and financial resources in multiple markets (Hoskisson, Cannella, Tihanyi, and Faraci, 2004). They can also use their local resources to enter co-opetition with multinational firms (Guillen, 2000; Khanna and Palepu, 2000). Hoskisson et al. (2004) report that increased competition resulted in fewer asset restructuring activities for group-affiliated firms than non-affiliated firms in French civil law countries. Similarly, Chittoor, Sarkar, Ray and Aulakh (2009) find that compared with unaffiliated firms, fewer Indian pharmaceutical firms affiliated with business groups responded to institutional change by pursing internationalization.

In addition, institutions typically progress slowly, and the establishment of market-oriented institutions is unlikely to be accomplished in any short period of time (North, 1990). The slow development of institutions in emerging economies may continue to provide some benefits for unrelated product diversification, especially in the early stages of institutional transitions (Peng and Zhou, 2005; Zhou and Peng, 2009). Slow institutional development may also fail to invite effective foreign competition and thus place moderate financial pressures on diversified business organizations, inhibiting managers to develop awareness of the need for changes (Dixon et al., 2010). Peng (2003) contends that during the slow progress of institutional transitions, both the old and new institutions co-exist and both exert influences on firm behaviors. Accordingly, he proposes that incumbent firms in early stages of institutional development tend to continue to compete with the relationship-based strategies that work well in the old institutional framework.

Institutional development may even create new entrepreneurial opportunities for diversified business groups. Deregulation and privatization open up markets that previously accessible only by the government (Chung, 2006). Key decision makers of diversified business groups can use their contacts with governments to gain required permits to expand into newly opened markets in the privatization and deregulation process (Ghemawat and Khanna, 1998).

In sum, institutional transitions in emerging economies would create competitive pressures on diversified business organizations to downscope (Hoskisson et al., 2005; Peng and Delios, 2006; Uhlenbruck, Meyer and Hitt, 2003), but such pressure is not necessarily imminent, given the slow progress of institutional development and the new market opportunities opened up by deregulation.

Studies examining why diversified business organizations around the world respond to institutional transitions differently largely concern the *incentives* of business groups to conduct organizational change. According to this stream of work, whether business groups will downscope is influenced by the external and internal competitive pressures putting on them. For example, Hoskisson et al. (2005) propose that business groups in countries with more active takeover markets are more likely to downscope. Similarly, Zhou and Peng (2009) reason that business groups in countries with more developed formal institutions will move faster toward market-oriented strategy. Empirically, it is found that institutional changes accompanied with opening to international business, such as increased foreign competition and foreign capital market participation, result in a faster exit from unrelated businesses (Chung and Luo, 2008; Hoskisson et al., 2004; Whitley and Czaban, 1998). Business organizations with financial distress under institutional transitions are also more likely to take on more radical restructuring measures such as divestment (e.g., Bruton, Ahlstrom and Wan, 2003, Choe and Roehl, 2007; Hoskisson et al., 1994).

In the next section, we draw from the resource-based theories and institutional perspective to theorize how group-level resources and capabilities influence the decision of diversified business groups to downscope during institutional development.

Theoretical Development: Institutional Resources

Business groups are a set of legally independent firms with formal and informal ties. These ties enable the members of a business group to take coordinate actions. Business groups thus are similar to conglomerates for instance in the U.S. (Chang, 2006; Khanna & Yafeh, 2007), although they vary more substantially in the degree of ownership control and coordination (Yiu, et al., 2007).

Members of business groups also share resources, such as knowledge, brand names, capital, personal ties, and etc. (Khanna and Rivkin, 2001). Like conglomerates, resource sharing within business groups is typically governed by mechanisms other than markets (Yiu et al., 2007). Such sharing of local knowledge has even been observed among business groups operating in overseas markets (Delios and Henisz, 2000).

Just as firms are endowed with heterogeneous resources, business groups differ in their resources and capabilities (Barney, 1991). For example, some business groups originate from privatization or transfers of businesses from government entities, notably in Russia and China (Yiu, Bruton and Lu, 2005). Other business groups have their origins in family businesses, notably businesses owned by Indians and overseas Chinese. Yet other business groups, such as

Taiwan's Acer, have their roots in an entrepreneurial start-up and have developed technological competences that proved valuable beyond the national boundary of the original business. These different origins have implications for the resources that the groups own and can utilize, and consequences for the strategies they pursue.

Resources and capabilities influence how businesses see and capture market opportunities (Penrose, 1959). They shape the growth direction of the groups in that the most profitable new entrepreneurial opportunities perceived by the groups lie where the groups expect the greatest benefits from resource deployment. Consequently, business groups typically expand into businesses where existing resources are readily deployable and where they can achieve economies of scope. In the same vein, resources that are highly specific to a particular context will encourage the groups to further exploit the resources in the same context (Meyer, 2006).

More importantly, group-level resources and capabilities affect how the groups respond to institutional changes. Changes in external institutions de-legitimizes certain organizational practices, and thus opens up opportunities for organizations to change their own strategies and practices (Danis et al., 2010; Greenwood and Hining, 1996). However, business groups' response to external changes depends on their own resources and capabilities, for several reasons. First, resources and capabilities, as part of the firms absorptive capacity (Cohen and Levinthal, 1990), determine how well an organization can acquire and integrate new knowledge. Consequently, they influence whether the group is able to develop new market-based capabilities to meet the increasingly competitive pressures from institutional development. Second, existing resources and capabilities may fail to serve as a guide for adaptive search (Newman, 2000), leaving the group perplexed about whether it should downscope and which businesses it should focus on. Resources may thus lock firms into their past patterns of business and act as a source of inertia inhibiting change (Hannan and Freeman 1984; Rawley, 2010). As Teece et al. (1994: 17) articulate, "if many aspects of a firm's learning environment change simultaneously, the ability to ascertain cause-effect relationships is confounded because cognitive structures will not be formed and rates of learning diminish as a result." Third, firms that have build resource specifically to cope with institutional voids, either by filling or bypassing them, may have business models that continue to be viable even under changed institutional circumstances. Hence, they would exploit these business models as long as possible, and engage in lobbying to sustain conditions where they are viable.

Thus, for multiple reasons, extreme institutional changes may inhibit organizational changes in organizations embedded in the old institutional framework (Dixon, et al., 2010; Newman, 2000). For example, Ghemawat and Khanna (1998) suggest that one potential reason for business groups in India to postpone or refuse to focus is the lack of market-based capabilities. They find that some diversified business groups in India did not have the skills to identify whether and how to proceed with restructuring, and this applies especially for groups whose primary activities involve interacting with government officials to obtain licenses, or to secure a favorable regulatory environment, for example in industries such as telecommunications, infrastructure operations, and banking.

Furthermore, certain types of resources can also lock business groups in prior strategies (Ghemawat, 1991) and thus inhibit their adoption of market-based strategies during institutional progress. For instance, durable, cospecialized, and nontradable resources have increasing returns to scale (Arthur, 1994; Ghemawat, 1991), and thus business groups find it beneficial to continue to exploit them. Some resources, such reputation or networks, have similar qualities because they can be used simultaneously for different activities and their use is non-rivalrous (Adler and

Kwon, 2002). Business groups with these types of resources are likely to be reluctant to change since any strategic changes may invalidate the values of their resources and thus may result in substantial losses (Amburgey, Kelly and Barnett, 1990). Makhija (2004) reports a decrease in values in Czech firms that undertook restructuring during institutional transitions due to the loss of administrative heritage. Burton, Ahlstrom and Wan (2003) find that turnaround strategies that jeopardize corporate relationships with stakeholders do not work or even produce negative consequences in East-Asian economies, where relationships are important in facilitating business transactions.

The historical environment in which business groups are embedded has significant effects on the types of resources and capabilities that business groups have acquired and accumulated over time (Dierickx and Cool, 1989). Managers of accumulate a major part of capabilities through on-the-job learning (Penrose 1959). Therefore the challenges that they have been facing in daily operations shape the capabilities they have developed over time.

A main challenge for these managers comes from the weak institutional framework in which they conduct their daily business. Emerging economies lack institutions that support arms' length impersonal exchange, such as reliable intermediaries and a transparent and effective legal framework (Khanna and Palepu, 2000; Khanna and Rivkin, 2001). As a result, transactions are primarily based on interpersonal and inter-organizational relationships (Peng, 2003). To conduct businesses in such environments requires business group managers to develop relationship-based capabilities. Such capabilities often take the form of managers' personal networks (Peng, 2003).

One such type of relationship-based capabilities is managers' personal relationships with local business associations, which act both as a forum for information exchange and a basis for lobbying (Greenwood, Suddaby and Hinings, 2002; Shaffer and Hillman, 2000). In emerging economies, such relationships are particularly important as they allow the business group to deal with certain aspects of institutional deficiencies (Danis et al., 2010; Luo, 2003; Peng, 2003). Weak contract enforcement in emerging economies encourages opportunistic behaviors and inhibits exchange between strangers. Managers' business networks provide information on reliable trading partners, reducing transactional hazards. These managerial ties also reduce uncertainty perceived by others (Burt, 1992), and thus enable the groups to attract business partners and customers (Xin and Pearce, 1996). In addition, the ties permit access to various resources (such as inputs, technologies and talents) when the markets for these intermediate inputs are under-developed (Guillén, 2000).

Managers may also develop personal relationships with local non-business communities in the course of overcoming institutional voids. For instance, when financial markets lack adequate accounting and auditing standards or when intermediaries such as investment bankers, venture capitalists and financial analysts do not exist or do not function efficiently, local ties, business related or not, can provide information and resources that are not available in the market, such as investment opportunities with lower risk of debtor default (Guillén, 2000; Peng and Luo, 2000).

These managerial personal relationships can be seen as a durable, non-tradable, and institution-specific investment that manages have made in order to overcome the institutional deficiency in pre-changed institutional era. Once established, these ties can be shared across businesses within the group (Kock and Guillén, 2001) and yield scope economies when utilized in different product areas. On the other hand, such investments are typically specific to the pre-changed institutional context, and are less valuable under the new institutional framework where institutions will support impersonal market transactions and competition will be based on market-based competences (Peng, 2003).

We expect that business groups whose managers have made substantial investments in building local business relationships are likely to postpone their adoption of market-based strategies such as downscoping. As previously mentioned, while emerging economies are moving toward the establishment of market-supportive institutions, the slow progress of institutional development may continue to provide rooms for relationship-based strategies to work. Business groups with such investments are thus likely to continue to utilize their relational investments in a wide range of domestic markets. On the other hand, such local relational capabilities are specific to pre-institutional contexts and thus can become a source of organizational inertia during institutional development (Hennan and Freeman, 1984; Yiu et al., 2005). The more local relationships a business group has, the more the group is embedded in the pre-change institutional contexts, and the less likely it will engage in organizational transformation to meet the demand from the institutional development (Greenwood and Hinings, 1996). Hence, we predict that,

H1: Business groups whose key managers have close relationships with local business networks are less likely to downscope.

Another type of relationship-based capability that business group managers may have developed from working under weak institutional frameworks is the ability to influence government policy and to deal with political actors (Chung, 2006; Shaffer and Hillman, 2000). The lack of transparent legal frameworks and the prevalence of red tape in emerging economies increase the discretionary power of government officials. Managers' personal relationships with political actors may help circumvent administrative barriers (Peng and Luo, 2000). These political ties may also provide access to information on administrative practices and forthcoming legal changes, thus reducing the uncertainty prevailing in emerging economies (Li and Zhang, 2007). They may even allow influence on decision-making processes in the parliament or government bureaucracies (Hillman, Zardkoohi, and Bierman, 1999).

We expect that business groups with greater political ties are less likely to adopt market-based strategies during institutional development. First, such ties shelter business groups from increased competition (Hoskisson et al., 2004). Political ties facilitate access to government purchase contracts or subsidized finance in a variety of industries, such that business groups with the ties are less vulnerable to the competitive threat that arises from institutional development. Second, as discussed, institutional development often opens up markets that previously accessible only governments and thus can create new entrepreneurial opportunities for unrelated diversification (Chung, 2006). Business groups with government ties are more able to capture these opportunities since their ties help them to gain permits to enter these newly open industries (Cuervo-Cazurra, 2006). Thus, we expect that,

H2: Business groups whose key managers have close relationships with governments are less likely to downscope.

Aggressive exit from unrelated businesses can create risk for diversified business groups. Such a strategy decisively reduces sales and leads to a loss of relational investment that business groups have previously built (Bruton, et al., 2003), while it does not automatically promise successful development of new market-based competitive advantages.

We expect that such risk should be lower for business groups with prior international experience. Business groups' prior experience in interacting with foreign competitors gives them the confidence and capability in implementing organizational changes such as downscoping. Prior international experience helps build the connections from which business groups can utilize to acquire complementary resources and knowledge needed to develop their market-based competencies as such complementary resources and knowledge may not be available in the home context (Makino et al., 2002; Yiu et al., 2005). By having experience competing in the global market, internationally experienced business groups may also have already equipped with a certain level of market-based competencies that are required for survival in the new institutional framework. These initial market-based capabilities ensure the group's absorptive capacity in learning new knowledge, increasing the confidence of business groups in focusing on strengthening their core market-based competencies.

Additionally, interacting with foreign customers and competitors cultivates business group managers' global mindsets (Carpenter and Fredrickson, 2001) and raise the awareness of the need for organizational changes in institutional development (Chung and Luo, 2008). International experience also enables the business groups to be better able to recognize and access the growth opportunities in foreign markets for their core lines of businesses (Holm, Eriksson and Johanson, 1996). Hence, we expect that,

H3: Business groups with greater international experience s are more likely to downscope.

Emerging economies under institutional development are progressing toward market liberalization (Hoskisson, Eden, Lau and Wright, 2000; Peng, 2003). Thus, some business groups, through interacting with increasing number of foreign competitors, may have invested in building market-based capabilities that are required for competing in the new institutional framework; for instance, research and development (R&D) investments.

R&D investments have increasing returns to scale. The creation of R&D capabilities typically involves high fixed costs, yet marginal costs of application in different contexts are low. Thus, firms have incentives to exploit R&D capabilities in a greater number of markets in order to raise the return from their investments. Because the transfer of R&D capabilities often incurs high transaction cost with arm's-length mechanisms and is better managed within firms, R&D capabilities drive a business group's internal growth. However, the deployment of R&D capabilities is limited to technologically related product areas, because different products may follow different technological trajectories and draw on different bases of scientific knowledge.

By inviting increasing competitive pressures, institutional progress in emerging economies is likely to encourage business groups with R&D investments to downscope in order to strengthen their R&D capabilities, because high product diversification may hurt the development of R&D capabilities. A highly diversified business group tends to maintain financial control, rather than strategic control, over its various businesses in order to reduce managerial complexity (Baysinger and Hoskisson, 1989). Such controls emphasize short-term financial results and may thus lower commitment to R&D investments (Hitt, Hoskisson, and Ireland, 1990). Moreover, business groups diversifying into too many product areas may provide less managerial attention and financial resources for each product area to invest in emerging market-based core competencies.

We therefore predict that business groups which make greater R&D investments will move faster toward the adoption of market-based strategies and will proceed downscoping more aggressively.

H4: Business groups with greater R&D investments are more likely to downscope.

Methodology

Context and Data

Our study examines the downscoping behavior of business groups during institutional change. Our empirical setting is in Taiwan, where institutional peculiarities are prevalent, where business groups are major players in the economy, and where their origins and their exposure to institutions is likely to vary across firms (Chung, 2001). For example, a number of groups, such as Taiwan Cement, originated from privation of state-owned enterprises. Some groups, such as the Acer Group, began as entrepreneurial start-ups and have been completing in international markets in early stages of their development. Yet other groups, such as the Far Eastern Group, have oriented toward domestic markets and thus have had a significant level of exposure to local institutions. Taiwan was also included as an economy with strong business groups presence in major studies such as Chung and his colleagues, Khanna and Rivkin (2001) and Khanna and Yafeh (2007).

Despite economic growth and technical sophistication, in Taiwan many intermediaries that support market transactions are still under construction (Luo and Chung, 2005), and networking has been shown to play an important role in Taiwanese firms' behaviors (Chen and Chen, 1998; Chen, 2003). In addition, the government of Taiwan retains considerable direct and indirect influence on businesses (Amsden and Chu, 2003; Berger and Lester, 2005). Due to the prevalence of institutional influences, this setting has attracted researchers to investigate the interaction between institutions and business strategies.

Taiwanese business groups also provide a suitable context to analyze group-level strategies. Compared with business groups in some other Asian countries such as Korea and Japan, Taiwanese business groups are relatively less vertically integrated (Hamilton and Biggart, 1998). Yet, they are typically founded and controlled by common investors or families (Amsden and Chu, 2003), whose personal relationships have great influence on the development of the groups

(Numazaki, 1996). Feenstra, Huang and Hamilton (2003) suggest that resource sharing may be an important explanation for the activities of Taiwanese business groups.

Our initial sample consists of all 98 Taiwanese business groups featured in both the 1998 and 2002 editions of the directory *Business Groups in Taiwan* (BGT). This directory has been published since 1972 by the China Credit Information Service (CCIS), the oldest credit-checking agency in Taiwan and an affiliate of Standard & Poor's. Missing values reduce our final sample to 87 business groups with on average 26 member firms.

We follow earlier research on business groups in Taiwan (e.g., Chung, 2001; Khanna and Rivkin, 2001; Luo and Chung, 2005; Mahmood and Mitchell, 2004), and adopt the BGT operationalization of BG using multiple criteria to identify firms forming part of a business group. A key criterion is that 50% of the shares of member firms are owned by the same firm(s) or the same individual(s), or that member firms own more than 33% of the ownership of other member firms. Moreover, 50% of the shareholders, directors, auditors and decision makers have to be the same for the member firms. These criteria ensure that member firms of the BG in our sample are directed by common decision-makers, who would oversee the allocation of resources across the group.

Our study aims to examine the extent to which Taiwanese business groups had reduced their levels of product diversification during institutional change; we examine this change over the period between 1996 and 2000. Taiwan has undergone a series of major institutional change since the late 1980s. The beginning of the change involved deregulation and liberalization, such as the opening of stock markets to foreign institutional investors in 1991. However, the establishment of market-supporting intermediaries was slow. Luo and Chung (2005), by comparing Taiwan with mature markets such as U.S. and U.K. conclude that Taiwan in 1995 was still in the initial stage of building market infrastructure. Many market-supporting intermediaries, such as independent credit rating agencies and investment banks, were not available until after mid-1990s. We therefore use 1996 as the starting year for our observation. We choose the year of 2000 as the end of our observation. Taiwan was granted by the World Trade Organization (WTO) at January 1, 2002. Thus by the year 2001, most of formal policy change regarding globalization and deregulation had been accomplished. In addition, the year 2000 marked the first political regime shift away from the Kuo-Min-Tang (KMT), the ruling political party for more than 50 years since 1949. Since the value of managerial political ties, a key hypothesis in our paper, is sensitive to political regime change, we trace the change of product diversification until 2000.

The BGT directories report data of two previous years. We construct our dependent variables based on the change over a four-year period using data for 1996 and 2000, using the 1998 and 2002 BGT directories respectively. The explanatory variables and controls reflect the initial conditions in the year 1996.

Dependent Variables

Change in Product Diversification. Our dependent variable is the extent to which a business group has reduced the level of product diversification over our study period. It is measured by the change in the level of product diversification from 1996 to 2000. A positive value of this variable indicates an increase in the level of product diversification over the period. A negative value indicates the opposite; i.e., downscoping.

We measure the level of product diversification by the entropy measure (Hoskisson, Hitt, Johnson and Moesel, 1993; Delios and Beamish, 1999), which is calculated as $\sum_{i=1}^{n} P_i \ln(\frac{1}{p_i})$, where P_i is the share of the *i*th business in the total sales of the business group, and *n* is the total number of 4-digit SIC businesses of the group. This entropy measure differs from a single count measure of the number of business lines in that it only captures the number (i.e., *n*) of businesses in which a group operates, but also takes into account the extent of involvement that a group has in each business (i.e., P_i). Therefore, this measure gives a picture of how focused a business group is in its product scope. We obtained sales data from the BGT directory. Three researchers coded 4-digit SIC codes published by the Taiwanese government on the basis of each member firms description of products in the BGT directory.

Explanatory Variables

Two of our explanatory variables concern managerial capabilities (such as managerial local business and political ties) that drive the downscoping decision of a business group. To measure them requires us to identify managers with key roles affecting the entire business group. The BGT directory generates such a list by asking member firms to identify the core decision makers who have influence over each member firm within their group. This list is also commonly used by researchers who study managers of Taiwanese BG (e.g., Luo and Chung, 2005). Based on this list, we collect data for our explanatory variables regarding managerial characteristics.

Managerial ties with local business association. We identify managerial local business connections by tracking the business organizations that a manager has associated with as of 1996 from a variety of sources, including the BGT directory, two different versions of Who Is Who in Taiwan, and Manager Directory in Taiwan. Social capital theory suggests that social similarity, such as shared group affiliation, increases liking and influence (Belliveau, O'Reilly and Wade, 1996; Burt, 1992). Membership in clubs and societies, helps establishing personal ties because it ‘allows managers to get to know others with similar social interests, political affiliations, educational backgrounds, and professional work experiences’ (Carroll and Teo, 1996: 425).

We measure managerial local business ties by the number of key managers in a group who have served as a leader or manager in a local business or non-business association, such as a golf club or a charity. Our measure of managerial networks has to capture the local networking capabilities that a manager can mobilize to enter new local markets. Since membership alone does not indicate a strong relationship between a person and other people in the association, we employ a person’s involvement as a leader or a manager to capture his or her local networking capabilities. The appointment as a leader or a manager in an association indicates that the person not only is known by other members, but also is trusted by and can exert influence on other members. This experience enables managers to gain necessary resources to enter a new local business.

To fully explore the effect of managerial ties, we also measure managerial local business ties and other local ties by the percentage of key managers within a business group who meet the criterion, and a dummy variable that indicates the existence of ties, which has the value of one if at least one key manager in a group has served as a leader or manager in a local business or non business association and zero otherwise.

Managers’ Political Ties. We measure managers’ political ties by the number of key managers who had worked for the government, government-related agencies, or state-owned enterprises. Managers with such work experience should have developed personal relationships with political actors.

International Experience. We measure the international experience of a business group by its foreign sales ratio. This measure captures the extent to which a business group has interacted with foreign customers and competitors. We obtained the data from the BGT directory.

R&D Intensity. A group's R&D intensity was measured by the sales-weighted average of R&D expenditures as percentage of sales of the member firms, as reported in the TEJ database.

Control Variables. We control for the size of the business groups. Larger groups may have more resources to support product diversification. We measure group size by the logarithm of total employment of the business group. We also control for initial level of product diversification by including the entropy measure at 1996. Business groups with higher levels of product diversification are more likely to downscope. To control for the extent of external pressures from foreign stakeholders, we include a dummy indicating the presence of foreign ownership in at least one member firms of a business group. Business groups that depend financially on foreign investors may under greater pressure to adopt a market-based strategy and downscope (Chung and Luo, 2008; Hoskisson et al., 2005). We include two industry-level control variables in the analysis. Core industry growth is the sales growth of the core industry of a business group. BG in fast-growing domestic markets may have low incentives to expand into new markets. Finally, service oriented groups is a dummy equal to one if the main industry of a business group belongs to a service industry. Some service sectors, such as banking and telecommunication, are subject to greater government scrutiny and thus may be more conservative in conducting any major strategic changes such as downscoping.

Table 1 reports summary statistics and correlations for the variables. Although some of the independent variables are significantly correlated at the 0.05 level, the largest variance inflation factor of our empirical models is 2.21 and the mean value is 1.45, suggesting that multicollinearity does not threaten the validity of our coefficient estimates (Neter, Kutner, Nachtsheim and Wasserman, 1999).

Results

Table 2 presents the results of the determinants of downscoping behavior of business groups. Models 1 report the main results. Model 2 replaces managerial association with the respective ratios. Model 3 replaces the variables with the respective dummy variables. Our dependent variable indicates the difference of the levels of product diversification from 1996 and 2000. A positive efficient of an independent variable indicates that an increase in this variable results in the increase in the level of product diversification during the period. A negative effect of a variable means that an increase in the variable leads to downscoping of the business group. Of the 87 business groups in our sample, 37 reduced their level of product diversification and became more focused over our study period. On average, our sample groups increased the level of product diversification by 0.1 from 1996 to 2000. This increase in the product diversification is consistent with the finding of Chung and Mahmood (2006) in their study of top thirty Taiwanese business groups over the similar period.

H1 hypothesizes that managerial relationships with local business and non-business associations discourage downscoping. We expect the coefficients for managerial local business and non-business ties to be positive. The result in Column 1 supports that managerial local business ties are positively associated with the increase in the level of product diversification (beta = 0.24, $P<0.05$) and the results are robust across the other two measures in Columns 2 and 3. However, ties with other local associations appear to have a significant and positive effect on downscoping (beta = -2.93, $p<0.05$). Thus, H1 is partially supported.

H2 hypothesizes that managerial political ties discourage downscoping and we predict the coefficient of this variable to be positive. The result in Column 1 shows that the coefficient of absolute number of managerial political ties is not significant. However, this variable is significant and positive when the ratio measure of political ties is employed (Column 2, beta = 0.65, $p<0.05$), providing moderate support to this hypothesis. It may be likely that managerial political ties have more impacts on a group's strategic direction when managers with such ties have greater presences in the top management team.

H3 predicts that prior international experience of business groups encourages downscoping. Consistent with H3, the coefficient of international experience is negative, suggesting that international experience indeed decreases the level of product diversification over the period between 1996 and 2000.

H4 argues that a business group's R&D investment should facilitate downscoping. The coefficient of international experience is negative (beta = -.75, $p<0.1$), suggesting that business groups with greater international experience have undergone a decrease in the level of product diversification over the study period. We include that H4 is supported.

Most of the control variables show the expected patterns. Large business groups have increased the level of product diversification over the study period, while business groups with higher initial levels of product diversification and with foreign ownerships have become more focused. The only unexpected finding is the growth of core industry. It appears that business groups whose core industry grew faster have become more diversified in their product portfolios. Hoskisson et al. (2004) report that business groups often gain extra resources during economic growth and it might be possible that business groups experiencing growth in their core industry were able to obtain excess resources that enable their exploration in other businesses.

Discussion and Conclusions

Our empirical results show that the downscoping of business groups is, as we hypothesized, a function of the nature of their resources. In particular, we found that diversified business groups with resources and capabilities specific to pre-change institutional era, such as managerial ties with local business associations and political actors, are less likely to downscope. In contrast, business groups who had invested in market-based competencies are more likely to downsize their scope during the time of institutional change.

Unexpectedly, our empirical findings indicate that managerial relationships with local non-business associations help reduced the level of product diversification over our study period. One potential reason might be that unlike managerial relationships with local business associations that lock the business groups into the old way of doing businesses (i.e., based on relationship-based capabilities), managerial relationships with local non-business associations may enable the access of knowledge and opportunities required to develop their market-based competencies, since local non-business associations such as golf clubs may also include managers from multinational firms and entrepreneurial start-ups and represent a wider source of information and entrepreneurial stimulation. In other words, ties with business association present a strongly institution-bound capability that can be the source of strategic substantive inertia, while social ties outside the business economy do not create such inertial constraints.

This paper contributes to the understanding of downscoping behavior of business groups in emerging markets by providing a resource-based perspective of business group growth and downscoping. We have argued that, like the growth of firms, business groups' scope reduction is a function of their resource endowments. Resources in turn are an outcome of past business activities of the group. Our empirical finding shows that the relationship-based capabilities that business groups have developed in dealing with institutional voids in pre-change institutional era can influence how the groups respond to institutional changes.

This study also adds to the literature on corporate restructuring. Prior studies have primarily focused on the incentives of organizations to implement changes by examining, for instance, the corporate governance and top management team composition of an organization (e.g., Johnson, 1996); yet this line of literature has paid little attention to the role of resources and capabilities in influencing the change of organizations (Kraatz and Zajac, 2001). This is an important literature gap for emerging economy businesses, as many of which likely lack the capabilities to recognize the direction of organizational changes and to implement effective changes (Bergh and Lim, 2008; Ghemawat and Khanna, 1998). The empirical findings of this study support that the nature of resources of a group indeed affects the extent to which the group responds to institutional change by making strategic changes in its product portfolio.

This paper also adds to the dynamic resource-based perspective. Researchers have called for the addition of the market environment into the resource-based view since it is the environment that determines the value of resources owned by firms (e.g., Priem and Butler, 2001). This study responds to this call by considering environmental (institutional) changes that can invalidate the values of some resources. Our empirical results show that business groups whose (relationship-based) capabilities lose value under the new rule of game in post-change institutional era are more likely to stick to their original strategies.

The study, like all studies, has its limitations. First, our empirical study has primarily focused on managerial resources. However, our theoretical reasoning would suggest that the entire resource portfolio of the business group is relevant for its path of expansion or downscoping. Thus, we suggest that future researchers explore a wider range of resources, though it may be challenging to measure such resources consistently at the group level.

Second, we have chosen to empirically investigate business groups in Taiwan, which offers the unusual opportunity for a group-level study in an environment of considerable diversity of groups. However, we suggest that our idea be tested in other national contexts to assess the generalizability of our empirical findings.

In terms of managerial implications, our theoretical approach suggests that firms ought to investigate their resource endowment to assert whether and how drastically to downscope their operations. Given that current resources and capabilities are a result of investments made in the past, firms should invest ahead and build their dynamic capabilities in order to respond the future institutional and environmental changes.

References

Adler, P. S. and Kwon, S.-W. 2002. Social capital: Prospects for a new concept. Academy of Management Review, 27(1): 17-40.

Amburgey, T. L., Kelly, D. and Barnett, W. P. 1993. Resetting the clock: The dynamics of organizational change and failure. Administrative Science Quarterly, 38(1): 51-73.

Amsden, A. H. and Chu, W.W. 2003. Beyond Late Development: Taiwan's Upgrading Policies., Boston, MA: MIT Press.

Anand, J. and Delios, A. 2002. Absolute and relative resources as determinants of international expansion. Strategic Management Journal, 23: 119-134.

Arthur, W. B. 1994. Increasing Returns and Path Dependence in the Economy. Ann Arbor: University of Michigan Press.

Barney, J. B. 1991. Firm resources and sustained competitive advantage. Journal of Management, 17(1): 99-120.

Baysinger, B. and Hoskisson, R. E. 1989. Diversification strategy and R&D intensity in multiproduct firms. Academy of Management Journal, 32(2): 310-332.

Belliveau, M. A., O'Reilly III, C. and Wade, J. B. 1996. Social capital at the top: Effects of social similarity and status on CEO compensation. Academy of Management Journal, 39(6): 1568-1593.

Berger, S. and Lester, R. K. (Eds.). 2005. Global Taiwan: Building Competitive Strengths in a New International Economy., NY: M. E. Sharpe.

Bergh, D. D. and Lim, E. N.-K. 2008. Learning how to restructure: absorptive capacity and improvisational views of restructuring actions and performance. Strategic Management Journal, 29: 593-616.

Bruton, G. D., Ahlstrom, D. and Wan, J. C. C. 2003. Turnaround in East Asian firms: Evidence form ethnic overseas Chinese communities. Strategic Management Journal, 24:519-540.

Burt, R. S. 1992. Structural Holes. Cambridge: Harvard University Press.

Carpenter, M. A. and Fredrickson, J. W. 2001. Top management teams, global strategic posture, and the moderating role of uncertainty. Academy of Management Journal, 44(3): 533-545.

Carroll, G. R. and Teo, A. C. 1996. On the social networks of managers. Academy of Management Journal, 39(2): 421-440.

Chakrabarti, A., Singh, K. and Mahmood, I. 2007. Diversification and performance: Evidence from East Asian firms. Strategic Management Journal, 28: 101-120.

Chang, S-J. (Ed.) 2006. Business Groups in East Asia: Financial Crisis, Restructuring and New Growth. Oxford: Oxford University Press.

Chen, T.-J. 2003. Network resources for internationalization: The case of Taiwan's electronics firms. Journal of International Business Studies, 40(5): 1107-1130.

Chen, H. and Chen, T.-J. 1998. Network linkage and location choice in foreign direct investment. Journal of International Business Studies, 29(3): 445-468.

Chittoor, R., Sarkar, MB, Ray, S. and Aulakh, P. S. 2009. Third-World Copycats to Emerging Multinationals: Institutional Changes and Organizational Transformation in the Indian Pharmaceutical Industry. Organization Science, 20(1): 187-205.

Choe, S. and Roehl, T. W. 2007. What to Shed and What to Keep: Corporate Transformation in Korean Business Groups. Long Range Planning, 40(4-5): 465-487.

Chung, C.-N. 2001. Markets, culture and institutions: The Emergence of large business groups in Taiwan, 1950s-1970s. Journal of Management Studies, 38(5): 719-745.

Chung, C.-N. and Luo, X. 2008. Institutional Logics or Agency Costs: The Influence of Corporate Governance Models on Business Group Restructuring in Emerging Economies. Organization Science, 19(5):766-784.

Chung, C.-N. and Mahmood, T.P. 2006. Taiwanese business groups: Steady growth in institutional transition. In Chang, S.-J. (ed.), Business Groups in East Asia: Financial Crisis, Restructuring and New Growth. Oxford: Oxford University Press: 70-93.

Chung, H.-M. 2006. Managerial ties, control and deregulation: An investigation of business groups entering the deregulated banking industry in Taiwan. Asia Pacific Journal of Management, 23(4): 505-520.

Cohen, W.M. & Levinthal, D.A. 1990. Absorptive capacity: A new perspective on learning and innovation. Administrative Science Quarterly, 35: 128-152.

Cuervo-Cazurra, A. 2006. Business groups and their types. Asia Pacific Journal Management, 23:419-437.

Danis, W.M, Chiaburu D.S. and Lyles, M.L. 2010. The impact of managerial networking intensity and market-based strategies on firm growth during institutional upheaval: A study of small and medium-sized enterprises in a transition economy, Journal of International Business Studies, 41(2): 287-307.

Delios, A., & Beamish, P.W. 1999. Geographic scope, product diversification, and the corporate performance of Japanese firms. Strategic Management Journal, 20: 711-727.

Delios, A. and Henisz, W.J. 2000. Japanese firms' investment strategies in emerging economies. Academy of Management Journal, 43(3): 305-323.

Dierickx, I. and Cool, K. 1989. Asset stock accumulation and sustainability of competitive advantage. Management Science, 35(12): 1504-1511.

Dikova, D., Sahib, P.R. and van Witteloostuijn, A. 2010. Cross-boder acquisition abandonment and completion: The effect of institutional differences and organizational learning in the international business service industry, Journal of International Business Studies, 41(2): 223-245.

Dixon, S. E. A., Meyer, K. E. and Day, M. 2010. Stages of organizational transformation in transition economies: A dynamic capabilities approach. Journal of Management Studies, Published Online: 5 Aug., DOI: 10.1111/j.1467-6486.2009.00856x, 1-21.

Feenstra, R. C., Huang, D.-S., & Hamilton, G. G. 2003. A market-power based model of business groups. Journal of Economic Behavior & Organization, 51: 459-485.

Gaur, A.S. and Delios, A. 2006. Business group affiliation and firm performance during institutional transition. Working paper.

Ghemawat, P. 1991. Commitment: The Dynamic of Strategy. New York: Free Press.

Ghemawat, P. and Khanna, T. 1998. The nature of diversified business groups: A research design and two case studies. Journal of Industrial Economics, 46(1): 35-61.

Greenwood, R. and Hinings, C. R. 1996. Understanding radical organizational change: Bringing together the old and the new institutionalism. Academy of Management Review, 21(4): 1022-1054.

Greenwood, R., Sudaby, R and Hinings, C.R. 2002. Theorizing change: The role of professional associations in the transformation of institutional fields, Academy of Management Journal, 45(1): 58-80.

Guillén, M.F. 2000. Business groups and economic development: A resource-based view. Academy of Management Journal, 43: 362-380.

Hamilton, G. G. and Biggart, N. W. 1988. Market, culture, and authority: A comparative analysis of management and organization in the Far East. American Journal of Sociology, 94 Supplement: 52-94.

Hannan, M. T. and Freeman, J. 1984. Structure inertia and organizational change. American Sociological Review, 49(2): 149-164.

Hillman, A. J., Zardkoohi, A. and Bierman, L. 1999. Corporate political strategies and firm performance: indications of firm-specific benefits from personal service in the U.S. government.

Strategic Management Journal, 20: 67-81.

Hitt, M. A., Hoskisson, R. E. and Ireland, D. R. 1990. Mergers and acquisitions and managerial commitment to innovation in M-forms firms. Strategic Management Journal, 11: 29-47.

Holm, B. D., Eriksson, K. and Johansen J. 1996. Business networks and cooperation in international business relationships. Journal of International Business Studies, 27: 1033-1053.

Hoskisson, R. E., Eden, L., Lau, C. M. and Wright, M. 2000. Strategy in emerging economies. Academy of Management Journal, 43(3): 249-267.

Hoskisson, R.E. and Hitt, M.A. 1994. Downscoping: How to Tame the Diversified Firm. New York: Oxford University Press.

Hoskisson, R.E., Hitt, M.A., Johnson, R.A. & Moesel, D.D. 1993. Construct validity of an objective (entropy) categorical measure of diversification strategy. Strategic Management Journal, 14: 215-235.

Hoskisson, R.E., and Johnson, R.A. 1992. Corporate Restructuring and Strategic Change: The Effect on Diversification Strategy and R&D Intensity. Strategic Mangement Journal, 13(8): 625-634.

Hoskisson, R.E., Johnson, R.A. and Moesel, D. D. 1994. Corporate Divestiture Intensity in Restructuring Firms: Effects of Governance, Strategy, and Performance. Academy of Management Journal, 37(5): 1207-1251.

Hoskisson, R. E., Cannella, A. A., Tihanyi, L. and Faraci, R. 2004. Asset restructuring and business group affiliation in French civil law countries. Strategic Management Journal, 25: 525-539.

Hoskisson, R. E., Johnson, R. A., Tihanyi, L., and White, R. E. 2005. Diversified business groups and corporate refocusing in emerging economies. Journal of Management, 31(6): 941-965.

Jackson, G. and Deeg, R. 2008. Comparing capitalisms: Understanding institutional diversity and it implications for international business, Journal of International Business Studies 39(4): 540-561.

Johnson, R. A. 1996. Antecedents and outcomes of corporate refocusing. Journal of Management, 22(3): 439-483.

Khandwalla, P. N. 2002. Effective organizational response by corporates to India's liberalisation and globalization. Asia Pacific Journal of Management, 19: 423-448.

Khanna, T. and Palepu, K. 1997. Why Focused Strategies May Be Wrong for Emerging Markets. Harvard Business Review, 75(4): 41-51.

Khanna, T. and Palepu, K. 2000. The future of business groups in emerging markets: Long-run evidence from Chile, Academy of Management Journal, 43(3): 268-285.

Khanna, T. and Rivkin, J.W. 2001. Estimating the performance effects of business groups in emerging markets, Strategic Management Journal, 22(1): 45-74.

Khanna, T. and Yafeh, Y. 2007. Business groups in emerging markets: Paragon or parasites?. Journal of Economic Literature, 65: 331-372.

Kim, H., Hoskisson, R.E., Tihanyi, L. and Hong, J. 2004. The evolution and restructuring of diversified business groups in emerging markets: The lessons from Chaebols in Korea. Asia Pacific Journal of Management, 21: 25-48.

Kock, C. J. and Guillén, M. F. 2001. Strategy and structure in developing countries: Business groups as an evolutionary response to opportunities for unrelated diversification. Industrial and Corporate Change, 10: 77-113.

Kraatz, M. S. and Zajac, E. J. 2001. How organizational resources affect strategic change and performance in turbulent environments: Theory and Evidence. Organization Science, 12(5): 632-657.

Lee, K., Peng, M. W. and Lee, K. 2008. From diversification premium to diversification discount during institutional transitions. Journal of World Business, 43: 47-65.

Leff, N. 1978. Industrial organization and entrepreneurship in the developing countries: the economic groups. Economic Development and Cultural Change, 26: 661-675.

Li, H and Zhang, Y. 2007. The role of managers' political networking and functional experience in new venture performance: Evidence from China's transition economy. Strategic Management Journal, 28: 791-804.

Luo, Y. 2003. Industrial dynamics and managerial networking in an emerging market: The case of China. Strategic Management Journal, 24: 1315-1327.

Luo, X. and Chung, C.-N. 2005. Keeping it all in the family: The role of particularistic relationships in business group performance during institutional transition. Administrative Science Quarterly, 50: 404-439.

Makino, S., Lau, C. M. and Yeh, R. S. 2002. Asset-exploitation versus asset-seeking: implications for location choice of foreign direct investment from newly industrialized economies. Journal of International Business Studies, 33: 403-421.

Meyer, K. E. 2006. Globalfocusing: From domestic conglomerate to global specialist. Journal of Management Studies, 43: 1109-1144.

Meyer, K. E., Estrin, S., Bhaumik, S. and Peng, M. W. 2009. Institutions, Resources, and Entry

Strategies in Emerging Economies, *Strategic Management Journal*, 31 (1): 61-80.

Meyer, K. E., Wright, M. and Pruthi, S. 2009. Managing Knowledge in foreign Entry Strategies: A Resource-based Analysis. Strategic Management Journal, 30(5): 557-574.

Mahmood, I. P. and Mitchell, W. 2004. Two faces: effects of business groups on innovation in emerging economies. Management Science, 50(10): 1348-1365.

Makhija, M. 2004. The value of restructuring in emerging economies: the case of the Czech Republic. Strategic Management Journal, 25: 243-267.

Neter, J., Kutner, M. H., Nachtsheim, C. J. and Wasserrman, W. 1999. Applied Linear Statistical Models (4th ed.)., New York: McGraw-Hill.

Newman, K. L. 2000. Organizational transformation during institutional upheaval. The Academy of Management Review, 25(3): 602-619.

North, D. C. 1990. Institutions, Institutional Change and Economic Performance. Cambrige, UK: Cambridge University Press.

Numazaki, I. 1996. The role of personal networks in the making of Taiwan's guanxiqiye. In G.G. Hamilton (ed.) Asian Business Networks, New York: Walter de Gruyter, 71-85.

Peng, M. W. 2003. Institutional transitions and strategic choices. Academy of Management Review, 28(2): 275-296.

Peng, M. W., and Delios, A. 2006. What determines the scope of the firm over time and around the world? An Asia Pacific perspective. Asia Pacific Journal of Management, 23(4): 385-405.

Peng, M.W. and Heath, P. 1996. The growth of the firm in planned economies in transition: Institutions, organizations, and strategic choice, Academy of Management Review 21(2): 492-528.

Peng, M. W., Lee S.-H. and Wang D. Y. L. 2005. What determines the scope of the firm over time. Academy of Management Review, 30: 622-633.

Peng, M. W. and Luo, Y. 2000. Managerial ties and firm performance in a transition economy: The nature of a micro-macro link. Academy of Management Journal, 43: 486-501.

Peng. M. W. and Zhou, J. Q. 2005. How network strategies and institutional transitions evolve in Asia. Asia Pacific Journal of Management, 22:321-336.

Penrose, E. T. 1959. The theory of the growth of the firm, Oxford: Basil Blackwell.

Priem, R. L. and Butler, J. E. 2001. Is the resource-based "view" a useful perspective for strategic management research? Academy of Management Review, 26(1): 22-40.

Rawley, E. 2010. Diversification, Coordination costs, and organizational rigidity: Evidence from microdata, Strategic Management Journal 31(8): 873-891.

Rugman, A. and Verbeke, A. 2002. Edith Penrose's contribution to the resource-based view of strategic management. Strategic Management Journal, 23: 769-780.

Rumelt, R.P. 1974. Strategy, Structure, and Economic Performance. Cambridge, MA: Harvard Business School Press.

Schneider, M.R., Schulze-Bentrop, C. and Paunescu, M. 2010. Mapping the institutional capital of high-tech firms: A fuzzy set analysis of capitalist variety and export performance, Journal of International Business Studies, 41(2): 246-266.

Shaffer, B. and Hillman, A. J. 2000. The development of business-government strategies by diversified firms. Strategic Management Journal, 21(2): 175-190.

Shinkle, G.A. and Kriauciunas, A.P. 2010. 41(2): 267-286. Institutions, size and gae in transition economies: Implications for export growth, Journal of International Business Studies, 41(2): 267-286.

Tan, D. and Mahoney, J. T. 2007. The Dynamics of Japanese Firm Growth in U.S. Industries: The Penrose Effect. Management International Review, 47: 259-279.

Teece, D. J. 1982. Towards an economic theory of the multiproduct firm. Journal of Economic Behavior and Organization, 3: 39-63.

Teece, D. J., Pisano, G., and Shuen, A. 1997. Dynamic capabilities and strategic management. Strategic Management Journal, 18(7): 509-533.

Uhlenbruck, K. Meyer, K. E. and Hitt, M. A. 2003. Organizational transformation in transition economies: Resource-based and organizational learning perspectives. Journal of Management Studies, 40(2): 257-282.

Whitley, R. and Czaban, L. 1998. Institutional transformation and enterprise change in an emerging capitalist economy: The Case of Hungary. Organization Studies, 19(2): 259-280.

Xin, K. R. and Pearce, J. L. 1996. Guanxi: Connections as substitutes for formal institutional support. Academy of Management Journal, 39(6): 1641-1658.

Yiu, D., Bruton, G. D. and Lu, Y. 2005. Understanding business group performance in an emerging economy: Acquiring resources and capabilities in order to prosper. Journal of Management Studies, 42(1): 183-206.

Yiu, D. W., Lu, Y., Bruton, G. D. and Hoskisson, R. E. 2007. Business Groups: An integrated model to focus future research. Journal of Management Studies, 44(8): 1551-1579.

Zhou, J. Q. and Peng, M. W., 2009. Relational exchanges versus arm's-length transactions during institutional transitions. Asia Pacific Journal of Management, Published online: 24 April, DOI 10.1007/s10490-009-9142-7.

Table 1: Descriptive Statistics

	Mean	Std.Dev.	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Change in Product Diversification	0.10	0.56	1												
2. Level of Product Diversification at 96	1.81	0.74	-0.45	1											
3. Group size	5952	9146	-0.01	0.20	1										
4. Foreign ownership	0.95	0.21	-0.21	0.30	0.13	1									
5. Core industry growth	0.13	0.10	0.05	0.07	0.03	-0.08	1								
6. Service oriented group	0.36	0.48	0.12	-0.18	0.16	-0.18	-0.06	1							
7. Managerial ties with local business association	0.33	0.68	0.02	0.26	0.03	0.11	-0.12	0.06	1						
8. Managerial ties with local business association (ratio)	0.10	0.21	0.02	0.16	-0.04	0.10	-0.20	-0.04	0.87	1					
9. Managerial ties with local non-bus associations	0.28	0.56	-0.14	0.29	0.15	0.11	-0.05	0.06	0.67	0.59	1				
10. Managerial ties with local non-bus. Association (ratio)	0.08	0.17	-0.18	0.31	0.12	0.11	-0.08	0.02	0.62	0.64	0.94	1			
11. Political ties	0.33	0.62	0.07	0.14	0.11	0.03	-0.11	0.14	0.62	0.50	0.63	0.56	1		
12. Political ties (ratio)	0.09	0.18	0.06	0.18	0.08	0.01	-0.17	0.09	0.55	0.54	0.58	0.62	0.93	1	
13. R&D intensity	0.96	2.07	-0.07	0.01	0.01	-0.01	0.26	-0.13	-0.02	-0.05	-0.12	-0.11	-0.08	-0.09	1
14. Level of Internationalization at 96	0.04	0.10	-0.05	-0.17	-0.05	-0.04	0.15	-0.16	-0.04	-0.06	-0.05	-0.08	-0.10	-0.11	0.05

N=87, $p<0.05$ for Correlation coefficients greater than 0.21

Table 2 Empirical Results: Determinants of Downscoping Behavior of Business Groups

Dependent variable: Change in entropy measure between 1996 and 2000. A negative coefficient indicates that an increase in the variable leads to downscoping, while a positive coefficient indicates that an increase in the variable results in further diversification over the period.

	(1)			(2)			(3)		
Constant	0.12	(0.40)		0.05	(0.40)		0.10	(0.41)	
Group size in 1996	0.14	(0.05)	***	0.13	(0.05)	***	0.14	(0.05)	***
Level of product diversification in 1996	-0.41	(0.08)	***	-0.38	(0.08)	***	-0.42	(0.08)	***
Foreign ownership in 1996	-0.39	(0.27)	*	-0.37	(0.27)	*	-0.39	(0.28)	*
Service based groups	-0.11	(0.12)		-0.09	(0.12)		-0.10	(0.12)	
Core industry growth in 1996	0.75	(0.55)	*	0.83	(0.55)	*	0.76	(0.57)	*
Managerial ties with local business associations (absolute number)	0.24	(0.11)	**						
Managerial ties with local business associations (ratio)				0.58	(0.34)	**			
Managerial ties with local business associations (dummy)							0.26	(0.16)	**
Managerial ties with local non-business associations (absolute number)	-0.29	(0.14)	**						
Managerial ties with local non-business associations (ratio)				-1.10	(0.47)	**			
Managerial ties with local non-business associations (dummy)							-0.24	(0.16)	*
Managerial political ties (absolute number)	0.11	(0.12)							
Managerial political ties (ratio)				0.65	(0.39)	**			
Managerial political ties (dummy)							0.07	(0.15)	
R&D intensity in 1996	-0.04	(0.03)	**	-0.04	(0.03)	*	-0.05	(0.03)	*
Level of internationalization in 1996	-0.75	(0.56)	*	-0.71	(0.56)		-0.83	(0.58)	
N	87			87			87		
F	4.37			4.4			3.87		
Adjusted R-square	0.28			0.28			0.25		

*p<0.1 **p<0.05 ***p<0.01 (one-tailed test)