

Review Paper

Business Groups: An Integrated Model to Focus Future Research

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ABSTRACT Business groups are the primary form of managing large business organizations outside North America. This paper provides a systematic and integrative framework for understanding business groups. We argue that existing theoretical perspectives of business groups pay attention to four critical external contexts, each of which draws from a specific theoretical perspective: market conditions (transaction cost theory), social relationships (relational perspective), political factors (political economy perspective), and external monitoring mechanisms (agency theory). Business groups adapt to these external forces by deploying various internal mechanisms along two key dimensions: one focuses on the distinctive roles of the group affiliates (horizontal connectedness) and the other focuses on coupling and order between the parent firm and its affiliates (vertical linkages). Based on these two dimensions, a typology of business group forms is developed: network (N-form), club (C-form), holding (H-form), and multidivisional (M-form). Utilizing this model we provide research questions which facilitate an improved future research agenda.

INTRODUCTION

Business groups are the dominant organizational form for managing large businesses outside North America. However, despite their importance to businesses around the world the research on this topic to date remains highly fragmented. Business groups usually consist of individual firms that are associated by multiple links, potentially including cross-ownership, close market ties (such as inter-firm transactions), and/or social relations (family, kinship, or personal friendship ties) through which they coordinate to achieve mutual objectives (Granovetter, 1994; Khanna and Rivkin, 2001; Leff, 1978; Strachan, 1976; Yiu et al., 2005). There has been a growing interest in the study

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of business groups among strategic management and organizational scholars (i.e. Chang and Hong, 2002; Feenstra et al., 1999; Granovetter, 1994; Guillen, 2000; Guthrie, 1997; Keister, 1998, 1999; Khanna and Palepu, 2000a; Khanna and Rivkin, 2001; Maman, 2002), but a systematic and integrative framework for understanding business groups seems elusive.

The absence of a clear framework for business groups is in part driven by two difficulties. The first is the fact that the labels for business groups often diverge in different countries and regions. For example, they are called *keiretsu* in Japan, *qiye jituan* in China, *business houses* in India, *grupos economicos* in Latin American countries, *grupos* in Spain, *chaebol* in South Korea, *guanxi qiye* in Taiwan, and *familyholdings* in Turkey (Granovetter, 1994). Furthermore, there are differences not only in the labels but also in the relevant organizational components associated with business groups (Khanna and Yafeh, 2007). For instance, Korean chaebols tend to adopt organizational arrangements in which a family dominates the ownership of a corporate parent and where member firms are often linked through vertical integration of inputs and outputs (Chang and Hong, 2000). In contrast, in Taiwan, despite being geographically close to Korea there are the *guanxi qiye* which focus more on partnership relations among individual or family investors that jointly control business operations and are more closely managed as a strategy network. As a result, researchers usually deploy their own definitions of what they consider a business group. As such, a comparison of research on business groups across different settings becomes difficult because the definition regarding what a business group is and the elements of the business group are highly contingent on a researcher's preference and the contexts in which business groups operate.

The second difficulty that has helped to drive this fragmentation is a diversity of perspectives and disciplinary paradigms that have been used to examine a wide variety of research questions and issues on business groups. However, there has been little systematic conceptual integration across perspectives in these studies. In particular, scholars have used four theoretical perspectives: transaction cost (TC) theory, a relational perspective, a political economy perspective, and agency theory. These perspectives have directed attention towards different aspects of the external environment of the business group with different issues of concern.

In this article we seek to address these difficulties and help develop a foundation to facilitate research progress in this important domain. To help build this foundation we initially discuss the definition of a business group. Particularly, we focus on the two fundamental characteristics of business groups that differentiate them from other forms of organization. The article will then review the existing literature on business groups from the four major theoretical perspectives noted above. Each of these theories targets a specific external context, including market conditions (TC theory), social relationships (relational perspective), political-economic factors (political economy perspective), and external governance mechanism (agency theory). We then integrate the four external contexts with the unique internal attributes associated with a business group. Here, we view business group as an adaptive response to the external forces by deploying various internal mechanisms along two key dimensions: one focuses on the distinctive roles of the group affiliates (horizontal connectedness) and the other focuses on coupling and order between the parent firm and its affiliates (vertical linkages). A 2 X 2 dimensional model is

developed that allows us to classify business groups into four business group organizational archetypes. This typology highlights similarities that help to identify organizations as business groups despite being in different settings and referred to by different local names, and helps us derive potential research questions for understanding better these unique business organizations.

The manuscript will help to move this important domain forward in several ways. First, it will help to establish a clearer definition of business groups so that future researchers are sure they are discussing the same topic. Second, the research will bring together the different theoretical streams to help highlight that business groups act to match their structural arrangements with the external environment context in which they find themselves. The result is that there are different forms of business groups depending on the environment in which they operate. The resulting framework of the different types of business groups will help researchers better differentiate what type of business groups they are discussing and as such what particular prior findings may be relevant. Third, the research will lay a foundation for the critical issues that future research should explore as we move forward in this domain.

DEFINITION OF BUSINESS GROUPS

A variety of different definitions have been used to identify business groups. The most common one refers to business groups as a collection of legally independent firms that are linked by multiple ties, including ownership, economic means (such as inter-firm transactions), and/or social relations (family, kinship, friendship) through which they coordinate to achieve mutual objectives (Granovetter, 1995; Khanna and Rivkin, 2001; Leff, 1978; Strachan, 1976; Yiu et al., 2005). Within this definition there are two distinctive characteristics that in combination can be used to distinguish business groups from classical business organizations.

The first characteristic is that member firms in a business group are bound together by various ties such as common ownership, directors, products, financial, or interpersonal ties. Goto (1982) specifies five key types of ties among member firms in a business group: cross-shareholding, interlocking directorates, loan dependence, transaction of intermediate goods, and social relationships. The potential reliance on social relations, in addition to economic connections, is one of the characteristics that differentiates a business group from other organizational forms such as a multinational corporation or a holding company as it occurs in North America since both have stronger economic ties but social ties are relatively less important as compared to a business group.

The second characteristic of business groups is that while the affiliated firms in the group are linked there will typically be a core entity offering common administrative or financial control (Leff, 1978), or managerial coordination among member firms (Khanna and Rivkin, 2001; Strachan, 1976). The core entity is similar to the concept of a central actor in the hierarchical networks in social network theory (Burt, 1983; Mizruchi, 1994). The central actor has greater structural autonomy and control over resources and information, and thus increased potential to influence other member firms in the social network. The core entity can be the founding owner who may be either a family group, an individual entrepreneur, a financial investor such as a bank or financial institution, or

a state-owned enterprise. In this sense, a business group is like an organization where there is a powerful parent company or 'core' company that is surrounded by offspring or descendant organizations — group affiliates or member firms — in which the parent company holds a controlling share or dominant ownership or social position. The relationship between a core firm and an affiliate varies according to the extent to which the core firm has vertical control over the latter in terms of ownership and social coordination (Lorenzoni and Baden-Fuller, 1995). The presence of the core entity differentiates a business group from a horizontal type of network in which no network member is subject to the dominant control of other member firms in the group.

The presence of the two characteristics mentioned above separates business groups from other organizational forms. Future researchers should seek to ensure that their samples of business groups possess such characteristics to assure greater comparability of business groups in the research and to differentiate business groups from other organizational forms such as the multidivisional form (Hoskisson et al., 1993) or strategic networks (Jarillo, 1993).

MAJOR THEORETICAL PERSPECTIVES ON BUSINESS GROUP RESEARCH

The fragmentation of the literature on business groups is caused not only by the diversity of definitions but also by the number of theoretical perspectives that have been used to examine business groups. Scholars primarily use four theoretical perspectives to examine business groups: transaction cost theory, a relational perspective, a political economy perspective, and agency theory. Through these theoretical lenses, researchers have directed attention to different external contexts that shape and determine the origin and structural arrangements of business groups. Table I exhibits a summary of these perspectives in terms of their assumptions, respective focus on contextual factors, research focuses, and key contributions to the study of business groups. We shall briefly review each theory in turn.

Transaction Cost Theory and External Market Conditions

The most popular theoretical foundation for business groups is TC theory. Following the works of Coase (1937) and Williamson (1975, 1981, 1985), students of TC theory view markets and organizations (hierarchies) as two alternative governance and coordinating mechanisms that control the exchange of goods and services, and the key for managers is to choose between the organizational arrangements which achieve lower transaction costs (Tece, 1981). In country situations with well-established market institutions, the capacity for efficient market transactions is improved through better market information, contracts and respective enforcement mechanisms, and external monitoring and control systems. In economies with poor market institutions, the facility to conduct business is improved through administrative processes imposed within organizational hierarchies through power and authority of the executives involved.

Using a TC perspective, scholars in the study of business groups draw attention to the nature of external market conditions relative to a group's internal organizational

Table I. A summary of four mainstream theoretical perspectives on research of business groups

	<i>TC theory</i>	<i>Relational perspectives</i>	<i>Political-economic perspective</i>	<i>Agency theory</i>
Basic assumption	Hierarchies and markets are two alternative coordinate mechanisms. The choice of governance mode depends on the level of transaction costs.	Organizations are embedded in the social context. Whether a firm can survive or not depends on how well it is aligned with the social context.	Organizations as tools to achieve the state/government political-economic objectives.	While one party (principal or principals) delegates the decision making responsibility to a second party (agent or agents), because of their conflict of interests, the agent(s) may not act in the principal(s)'s best interest.
Key contextual factors as the determinant of business groups	External market conditions.	Social settings, including traditions, culture, and social norms.	The role and function of the state and government.	Motivation and interests of dominant shareholders and monitoring of managers.
Key internal variables to examine	Internal transactions, diversification, vertical integration, and control/coordination mechanisms.	Inter-firm relations for transactions, trust, and concerted strategic behaviour.	Relationship between government policies and business groups' diversification and control mechanisms.	Ownership structure, corporate governance, and relationships between majority versus minority owners.
Contribution to business group research	Powerful to explain how external market conditions, particularly intermediaries, influence the foundation and evolution of business groups.	Successfully explained the heterogeneity of business group patterns in different societies.	Revealed the direct relationships between government and business groups.	Identify the unique agency relationship between dominant and small owners (shareholders) instead of between owners and managers.
Limits of the theory in explaining business groups	Cannot explain why business groups exist in environment with developed market institutions.	The scope of contextual factors is too broad to allow concrete prediction of the phenomenon. Has not taken into account the forces of globalization on the persistence of cultures, values, and norms.	Unable to explain why business groups are still a dominant form of business in countries where government interventions in business activities are minimal.	Cannot explain all motives such as stewardship and pro-organizational behaviour.

arrangements. This has led Khanna and Palepu (1997) to argue that in emerging economies overall transaction costs are high because there exists 'institutional voids' that gave rise to: inefficient factor markets for labour, capital and technology; a lack of adequate information in product markets; inadequate policy regarding government intervention; and ineffective and inefficient legal infrastructure to enforce contractual relations. To reduce transaction costs caused by such institutional voids, firms are organized into business groups which can act as substitute for the market institutions that are missing. For instance, firms trade through internal markets, which are coordinated by group management, in order to overcome ineffective and inefficient legal institutions (Khanna and Palepu, 2000a).

The focus of TC theory is on internal markets and inter-firm transaction mechanisms within a group organization, especially internal transactions of strategic factors such as capital, information, technology and know-how, and managerial personnel. For example, individual firms might join a business group in order to obtain investment funds through a group's internal capital market. As such, internal markets within group organizations might coordinate the allocation or exchange of various types of assets, goods, and services (Chang and Hong, 2000; Guillen, 2000). Therefore, TC theory offers a powerful analytical framework to offer insights into external market conditions and their relationship with resource specificity, and provides insights into the costs of configuring both strategy and structure in a business group.

Relational Perspective and Social Relationships

The relational perspective views business groups as evolving naturally from a society's traditions and social norms (Granovetter, 1994; Guthrie, 1997; Keister, 1998, 1999, 2001; Whitley, 1991). Compared to an economic theory like TC theory, the relational perspective argues that economic exchange is governed by the social institutions that influence the general patterns of trust and cooperation between organizations in a society (Whitley, 1991). This perspective is elaborated by Granovetter (1994) in regard to the relationship between the moral economy and business groups. Granovetter (1995) explained that the choice of organizing economic exchange may not always be determined by economic rationales as the 'minimum efficient scale' (Chandler, 1990) and 'minimum transaction costs' (Williamson, 1975, 1985). Instead, social factors such as symbolism, legitimacy, prestige, and power that occur in the relationships between the various parties also impact economic exchange. In applying the relational perspective to business groups, one needs to examine a society in terms of concepts such as the authoritative structure and role relationship and if they are built on traditions, social practices, and national cultural heritage (Chung, 2001; Collin, 1998; Hamilton and Feenstra, 1995; Luo and Chung, 2005; Orru et al., 1991; Whitley, 1991).

The relational perspective offers insightful descriptions and interpretations of the complex social phenomena being examined, particularly why inter-firm arrangements within groups vary across societies (Carney and Gedajlovic, 2002; Orru et al., 1991). Moreover, the relational perspective has been useful in understanding how business groups have evolved and are shaped by the social and cultural heritage in a particular country or regional context (cf. Guthrie, 1997; Keister, 1998, 1999, 2001).

Political Economy Perspective and Political-Economic Factors

Scholars employing a political economy perspective have examined business groups as a means to foster state control and advance industrial development (Khanna and Fisman, 2004). This school points to political-economic factors as the important determinant of a business group's strategy and structure. Business groups are viewed, accordingly, as a device of the state to achieve both political and economic policy objectives. There are two ways through which the state facilitates, promotes, and nurtures the formation and growth of business groups (Fields, 1995; Khanna and Palepu, 1999; Nolan, 2001; Schneider, 1997). One way is through the state's direct investment in the establishment of large business groups in specific industries that are regarded as strategic to a nation or a local region's economy (Kim et al., 2004b). The other way is the state's provision of critical resources, such as funds and subsidies, business licenses, technology, land, and information, to foster or develop business groups that the state considers strategic (Fields, 1995; Guthrie, 1997; Keister, 1998; Nolan, 2001; Tsui-Auch and Lee, 2003). In either case, business groups capture policy-induced or directed benefits (Aoki, 2001).

State control gives rise to a significant influence on business groups' authoritative structure and internal coordination mechanisms. In particular, when state ownership dominates, a business group is typically directed in accordance with state objectives. For example, in large business groups in China, government used such groups to monopolize strategic industries that are regarded as important to the national economy (Yiu et al., 2005). State ownership has a significant influence on a group's strategy making since its strategic objectives have to fit with state requirements.

Governments may also use indirect intervention by providing policy incentives that influence the development of business groups and set general objectives such as to retain employees or to contribute to local economic development without the requirement of focusing on a specific industry. For example, the government may offer institutional support such as investment funds and business licenses nurture and assist a rapid growth of business groups. These institutional supports will encourage business groups to be highly diversified since such institutional support or government favoured conditions are less industry- or technology-specific (Peng et al., 2005). As a result, the political economy perspective is helpful in explaining the political-economic factors, particularly the role and functions of the state and governments, on business groups.

Agency Theory and External Monitoring and Control Systems

Agency theory views business groups as a collection of agency relationships between the controlling and minority shareholders. One unique characteristic of the ownership structure in a business group is a vertical ownership structure through which a small fraction of ownership in different individual companies can control a large amount of assets through a 'pyramid' of ownership. This can be accomplished through either director ownership or owning shares with a disproportionate share of the ownership voting rights on key decisions. This ownership structure can allow the controlling shareholder to expropriate the wealth of minority shareholders by 'tunnelling' resources

within the business group (Chang, 2003b; Morck and Yeung, 2003). As a result, a business group can be regarded as a device for the core owner to tunnel or expropriate the wealth of the minority shareholders. This principal-principal agency view (Dharwadkar et al., 2000) has given rise to a wave of research that examines whether a business group creates wealth for shareholders in group versus non-group affiliates, or whether tunnelling occurs in business groups (Bae et al., 2002; Bertrand et al., 2002; Joh, 2003; Johnson et al., 2000; Kim et al., 2005).

Agency theory attributes the agency relationships in business groups to weak external monitoring and control mechanisms. Much of this can be attributed to the type of legal traditions adopted in the country. Common law has the greatest protections, German civil law less protection, and French civil law the least protection for minority shareholders (Hoskisson et al., 2004; La Porta et al., 1997). As a result, business groups, especially in the French civil law countries, developed complex internal control mechanisms. In addition to the vertical ownership structure as we have discussed above, individual firms within a group can share control with each other through cross-shareholdings and interlocking directorates. Cross-shareholdings are adopted in order to foster reciprocal and interdependent relationships among members firms in commercial and resource exchanges, and bind firms through equity ties into cohesive horizontal networks that protect them from market uncertainties, particularly takeover threats and competition.

Agency theory has been useful in examining the unique ownership structure in business groups where a core entity, such as a family, an entrepreneurial founder or family, usually dominates a majority of ownership and pools capital with that of other investors, such as public shareholders, who also share risks (Bebchuk et al., 1992). The controlling shareholder ensures that management acts as desired by either assigning family members in strategic positions and/or hiring professional managers on their behalf. Such corporate governance mechanism has an advantage in overcoming agency problems between the controlling shareholder and managers but raises another, perhaps more serious, agency problem: managers acting solely for the controlling shareholder, the family, and neglecting other minority shareholders. Therefore, agency problems come into existence not between owners and management but between controlling and minority shareholders themselves (Dharwadkar et al., 2000).

Overview — Four External Contextual Factors

Each of the four theoretical perspectives highlights the concern for a particular external contextual factor that impacts business groups. The four critical external contextual factors in the environment that can impact the nature of the business group and the theoretical perspective that highlights that contextual factor are: external market conditions (TC theory), social settings (relational perspective), political-economic factors (political economy perspective), and external monitoring and control systems (agency theory). A key premise of any effort to integrate these perspectives is that the different theoretical assumptions and linkages underlying each perspective provide reconcilable, complementary, and relatively comprehensive understanding of external contexts that influence internal functioning of business groups. The internal mechanisms that impact business groups will be discussed next. It will be discussed later but it should be noted

here that these four theoretical streams have the potential to have impact on each other which contributes to an agenda for future research (see the Discussion section later in the paper).

INTERNAL MECHANISMS OF BUSINESS GROUPS

Adopting the concepts of loose coupled system (Orton and Weick, 1990), we view business groups as making adaptive responses to their environment by creating a loosely coupled system of elements that respond to help the organization to mitigate the uncertainties and complexities in the environment. In other words, business groups emerge to solve the inconsistencies in the various institutional environments. Loose coupling of elements in the organization results in the elements being responsive but retaining evidence of separateness and identity (Weick, 1976). Thus, a loosely coupled system is one in which there is both distinctiveness and responsiveness (Orton and Weick, 1990). In part, these mechanisms represent strategic choices made by managers in response to environmental pressures. In the following, we will explore the adaptive attributes of business groups along two dimensions. The first dimension focuses on the distinctive and differentiated roles of group-affiliated business units by examining the horizontal connectedness among member firms in the group. The second dimension is the source of coupling which facilitates the control or ordering of resources within the group. This occurs primarily through ownership control of resources and is labelled here as vertical linkages, although other aspects of control are discussed as well. Each of these dimensions and their various internal mechanisms will be discussed in turn. Based on these two dimensions, we will further develop a typology of business group organizational archetypes in the subsequent section.

Horizontal Connectedness

Horizontal connectedness concerns the linkages among units themselves. Member firms in a business group are legally independent entities with distinctive self-identities, but they are interdependent with each other within the group. There are a variety of different types of internal mechanisms for tightening horizontal connections among member firms in a business group.

Internal transaction mechanism. This refers to the trading or allocation of goods and/or resources among individual firms that belong to the same business group (Chang and Hong, 2000; Guillen, 2000; Yiu et al., 2005). As mentioned above, due to the presence of institutional voids in emerging economies, firms trade through the internal market of a business group for critical resources, partially developed products or outputs (Khanna and Palepu, 2000a). Such inner workings function like an external market in which buyers and sellers are in equal positions with autonomous decision making and their transactions are determined by prices through negotiations or bargaining (Gertner et al., 1994). Advantages of transacting internal to the organization include generation of more accurate information (relative to external markets) on which to base resource allocation decision among the units, and result in superior capacity of asset deployment (Gertner

et al., 1994; Teece, 1980). Political-economic factors can further motivate the establishment of internal transaction mechanisms. The state's provision of either industry specific resources such as technology or general resources like capital increases available slack resources possessed by a given business group and therefore increases the possibility of sharing such resources between affiliated firms. In particular, when the state or government imposes social and political objectives such as an increase in employment or control over strategic industries, internal transactions are more likely to be in the form of cross subsidization rather than for the pursuit of efficiency (Fishman and Khanna, 2004).

Cross-shareholding. This refers to the situation in which individual firms in a business group hold ownership shares between each other. Cross-shareholding ownership creates interdependence among member firms and facilitates information and resource exchange. As Lincoln et al. (1992, 1996) noted, the rationale for cross-shareholdings is the reciprocity that enables firms to exert control over each other. Cross-shareholdings bind firms together by equity ties into a horizontal network that protect them from market uncertainties, particularly takeover threats and competition. Cross-shareholdings also create incentives for member firms to cross-monitor each other as a check on free riding (Chang, 2003a; Cheng and Kreinin, 1996; Lincoln et al., 1996).

Interlocking directorates. These occur when a person affiliated to one organization sits on the board of directors of another and thus are usually described as 'interorganization interlocks' (Linda and Mizuchi, 1986), 'corporate networks' (Windolf and Beyer, 1996), and 'managerial elite' (Pettigrew, 1992). Interlocking directorates are a type of non-ownership control and coordination although they can have a great impact on corporate behaviour in five aspects, including collusion, cooptation and monitoring, legitimacy, career advancement, and social cohesion (Mizuchi, 1996). For instance, interlocks, as an inter-organization mechanism, have been found to facilitate information/knowledge flows that influenced corporate strategy on acquisitions (Haunschild and Beckman, 1998). Interlocking directorates also can serve as a coordination mechanism for uncertainty reduction (Pfeffer and Salancik, 1978).

Social ties. This refers to the way that two or more entities that are part of an organizational social system behave towards each other. Social norms establish the nature of the behaviours that are expected. The relationships between individuals become the infrastructure for actors in the organizations to coordinate their activities. Such social ties provide business groups with an alternative system to share or trade goods and resources. The preference of social ties beyond the market is not driven by the pursuit of low cost efficiency but rather based on risk avoidance given historical practices or relations that are likely to be stable and trustful. The relational governance literature provides a good background literature on this topic (e.g. Poppo and Zenger, 2002). Social ties are treated as a non-ownership governance device through which managerial executives coordinate their activities to achieve mutual interests. In this sense, social ties create a community-like or club-like system that enables individual firms to share resources and/or jointly coordinate their activities.

Vertical Linkages

The second internal group mechanism is the vertical structure that functions as a command chain along the hierarchy from the dominant owner to individual firm management. This structure in business groups differentiates business groups from public corporations in the United States or other well-established market economies where ownership is largely dispersed by a large number of shareholders. Instead, in business groups, whether privately-owned or state-owned, there is typically relatively concentrated ownership structure in which one entity dominates or controls the majority of shares. To distinguish such a dominant owner from minor shareholders, and as noted in the discussion of agency theory due to their power over the minority shareholders in most markets, we shall use the term 'core owner elite' to refer to an individual, or an entity (such as an organization), or a collection of individuals/organizations, that, having the same interest, controls the dominant share of a business group's parent company and/or core companies. The presence of the core owner elite is mainly due to the lack of an effective external governance control mechanism and is often associated with underdeveloped property right systems. We discuss first who the core owner elites are typically. Subsequently we discuss the means by which that they assert their control over key units in the business group.

Core owner elite. This could be the entrepreneur(s) or family that founded a business group or the state that may still play a leading role in management (Goto, 1982; Leibenstein, 1968). Observations in Asian countries and regions, such as South Korea, and India, note that many business groups were founded by individual entrepreneurs/family members. Although many groups later transformed into public corporations, partly or wholly, by involving external investors from stock markets, entrepreneurial founding families have often maintained strong control over group strategic management. For instance, in Korea and Hong Kong, founding entrepreneurs or family members played a dual role by integrating owners and managers in business group strategic management (Chang, 2003a; Claessens et al., 2000). Compared to East Asia, families control a higher proportion of group firms in Europe (44.29 per cent and the firms are mainly non-financial and small firms), and each family associated business group holds fewer firms (Faccio and Lang, 2002).

The core owner elites obtain administrative authority over individual firms typically through a cross-ownership or pyramidal ownership structure. The pyramid typically has each unit at the upper level of the business group holding stock in other units at the next lower level of the group. For example, the holding company would be owned by the core owner elite. This holding company would then own 51 per cent of firm A, which owns 51 per cent of firm B, which owns 51 per cent of firm C, which owns 30 per cent of firm D. Separately, the family holding company may also control another (wholly-owned) firm F which owns 21 per cent of D. In terms of voting rights, the core owner elite would control 51 per cent of firm D. At the same time, the family can claim only 25 per cent of firm D's profits (51% X 51% X 51% X 30%, +21% through firm F). Often in such setting there will also be dual classes of stock — one for cash flow and the other for control. Dual class shares are used by 66%, 51%, and 41% of firms in Sweden, Switzerland, and

Italy, respectively (Faccio and Lang, 2002). The use of such stock arrangements can result in majority control through a relatively small direct investment by the core owner elite (Yurtoglu, 2003). In such pyramids there is an incentive for expropriation since the core owner elite can control the firm and self-deal benefits to themselves, since they may not take the majority of the cashflow rights that the firm may generate due to the ownership structure. In addition, tunnelling, a term used to refer to the transfer of assets and profits out of firms for the benefit of those who control them (Johnson et al., 2000), may occur. Tunnelling can take two forms: the controlling firm can transfer resources from other member firms for its own benefits through self-dealing transactions, or the controlling firm can increase its share of the firm without transferring any assets through means such as dilutive share issues and insider trading (Johnson et al., 2000). Tunnelling is facilitated with the use of a pyramidal ownership structure in the business group.

The presence of a core owner elite can often be traced back to the socio-cultural heritage of an economy. In Japan, the core owner elite are often financial institutions, particularly a main bank, which holds the dominant ownership of key business group firms. An important change in Japan after the 1940s was that several major financial institutions together with a major trading company replaced traditional the family-ownership structure (Berglof and Perotti, 1994; Gerlach, 1997). Today, Japanese business groups, known as *keiretsu*, are spearheaded by the main banks and principal firms (Lincoln et al., 1996). Banks as the core owner elite can also be found in the financial-industrial groups (FIG) in Russia (Perotti and Gelfer, 2001).

The core owner elite can also be a government or government agency. There remain a number of nations where the state still maintains ownership control in business groups even after they are transformed from state-owned enterprises to private businesses. For example, in the People's Republic of China (PRC), more than 86 per cent of the largest business groups are actually controlled by state ownership (Chinese Enterprise Assessment Association, 2002). In other settings there are mixed models, with private entrepreneurs being the core owner elite but the state also playing a key role. For example, in Taiwan the government invested in large business groups in key industries during an early stage of industrialization, while the practice of 'joint investment and separate management' enabled the founder, individual or family, that established a network consisting of other investors, to control major business groups (*guanxiqiyè*) (Chung, 2001).

Control. There are three ways through which the core owner elite could effectively exert control over a business group's management. The first is to integrate the ownership and management of the businesses. This occurs when a core owner elite takes over a firm's strategic positions in management or assigns family or friendly personnel in key managerial or oversight positions. Similarly, a hybrid approach is found in the work by Kim et al. (2004a) where some business group affiliates are more powerful than other through a stronger ownership position in cross ownership as well as representation on an elite group among member firms (i.e. the Presidents Club). The second method for core owner elite to extend control over individual firms is to establish a vertical ownership structure, i.e. a corporate pyramid which was discussed previously. The third way that enables a core owner elite to control is to influence an individual firm's decision through its control of strategic resources, such as *technology*, distribution, production, etc, that

are critical to operations of other member firms. For instance, a core company, which is under the core owner elite's absolute control, could involve in individual firms through special supply contracts for provision of technologies, intermediate components, or distribution of the final outputs (Lorenzoni and Lipparini, 1999). Such business groups are like networks, as seen in Italy or Taiwan, in which individual firms are coordinated as partners to achieve complementary resources or task-related capabilities.

Integrating External Contexts and Internal Group Mechanisms

The four external contextual variables and the two key internal mechanisms interact with each other. Table II summarizes how business groups devise unique organizational attributes based on the two internal mechanism dimensions as a response to the four external contexts. In other words, the internal attributes of business groups reflect the external contexts. The outcome of the logic illustrated in Table II is seen in Figures 1 and 2 and Table III. A variety of business group organizational forms emerges and co-exists in different societies. In the following, we will develop a typology of major business group organizational forms.

VARIETIES OF BUSINESS GROUP ORGANIZATIONAL FORMS

In Figure 2, we develop a typology of business groups along two dimensions - horizontal connectedness and vertical linkage. The first dimension focuses on the distinctive and differentiated roles of group-affiliated business units by examining the horizontal connectedness in the group. The second dimension is the source of coupling or order, primarily through ownership control of resources, in a business group and is labelled vertical linkages.

Business groups with lower horizontal linkages would have individual affiliated firms of the business group separated with little interdependence in strategic actions. This is the case in Russian industrial groups that are looser alliances and not so different from non-group firms (Perotti and Gelfer, 2001). In this kind of business group, a firm's action is assumed to be less independent of others as it operates in a different industry or location. This typically occurs where individual firms are diversified and there is low relatedness between them in terms of assets, resources and capabilities, and industry specific resources. Although they may have common objectives, such as lobbying government in policy making or sourcing generic resources such as capital and labour, they do not necessarily adopt similar or complementary strategies since their competitive landscapes vary across markets and industries. As a result, an individual firm is loosely connected to other group-affiliated firms; however, an individual firm may access more generic group level competencies through the mobility of critical resources such as capital and information. Those firms that have stronger horizontal connections between individual firms in the business group are closely connected with each other. In these types of business groups, strategic management in one firm can be contingent upon actions or responses of others. In other words, the interdependence of firms becomes higher in these cases.

Table II. The influence of the four contexts on business groups' internal adaptation mechanisms

	<i>External market conditions</i>	<i>Social settings</i>	<i>Political-economic factors</i>	<i>External monitoring and control systems</i>
<i>Horizontal connectedness</i>	Imperfect external markets encourage business groups to develop internal transactions among firms	Social exchange relations offer reliable and stable networks for internal transactions	The state's support increases a group's slack of resources and therefore facilitates internal transactions	Cross-subsidization occurs and the dominant owner tunnels the wealth from minority shareholders
<i>Vertical linkage</i>	The core owner elite obtains administrative authority over individual firms by control of their ownership	Social order and social authoritative structure constructs the authoritative structure within a group	The state's direct investment in the ownership and then control over management of business groups	The dominant owner elite has managerial control through complex corporate governance structures

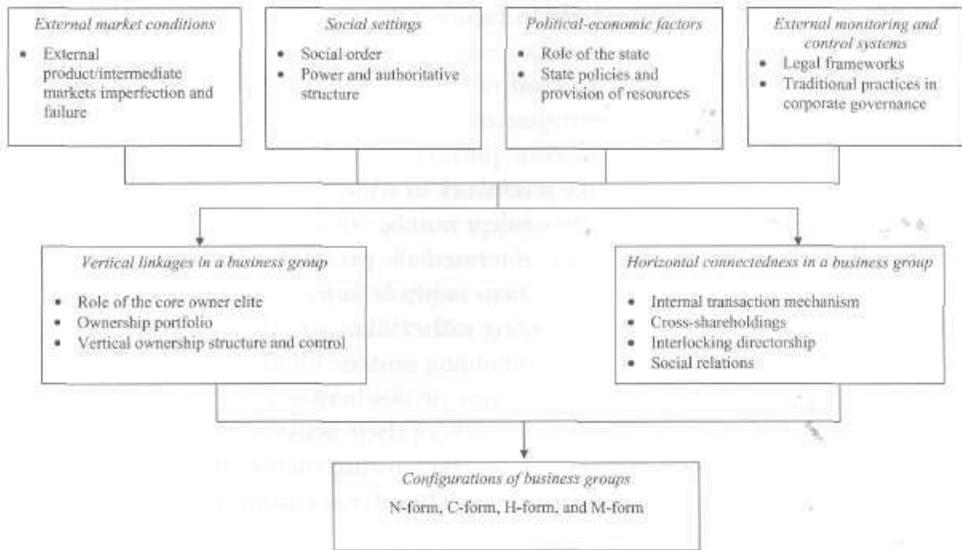


Figure 1. Contextual factors that influence internal structural parameters in business groups

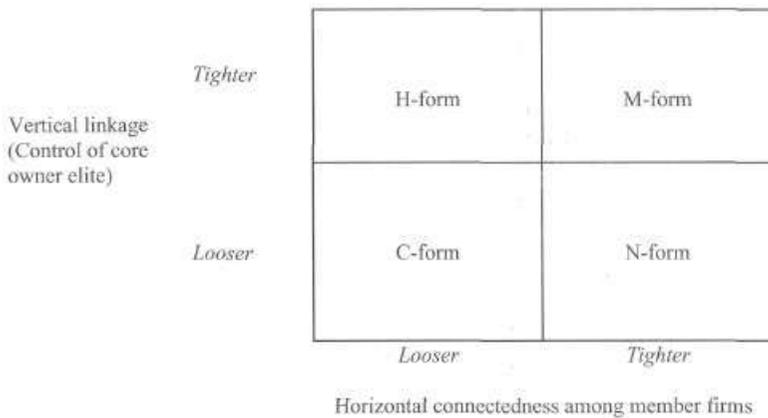


Figure 2. A typology of business group structural configurations

The second dimension refers to the vertical linkage between the core owner elite and affiliate firms in a business group. Vertical control is tighter where there is a parent company or core firm which usually holds ownership shares and control rights in subordinate affiliated firms. By contrast, in situations when a weaker vertical authoritative structure is found, individual firms in the business group are connected more by social relations, cross-shareholdings, interlocking directorship or control of resources rather than vertical ownership. In these types of business groups, individual firms are more like partners and/or members of a club rather than subordinates or subunits of a hierarchy.

Based on these two dimensions, four types of business groups are generated as exhibited in Figure 2: network (N-form), club (C-form), holding (H-form), and multidivisional

(M-form) forms. These are summarized in Figure 2. Each of these forms will be discussed in detail next.

N-Form Business Groups

This type of business group looks like a network in which one firm plays the leadership role by concentrating on one industry while a number of individual firms engage in the partnership as suppliers of technology, intermediate products, and other functions. In this structural arrangement the leading firm controls individual partner firms through inter-firm transactions and resource sharing rather than a vertical ownership structure though they may be linked by cross-shareholding and/or interlocking directorship with each other. At the same time, social relations or ties between executives of individual firms are equally important to the coordination of their activities. A typical example of such types of business groups is the *guanxi qiye* in Taiwan, such as the Lin Yuan Group, where numerous enterprises are organized around a large corporation in hi-tech industries or industries focused on exporting their goods.

C-Form Business Groups

Business groups falling in this category are more tightly linked through a formal president club or brand-named business association and thus develop more complex structures than an N-form, as each individual member might be a large corporation consisting of numerous subsidiaries and individual firms. A C-form business group offers a platform or infrastructure in which member corporations share strategic resources, such as information and financing, and coordinate with each other in a concert to achieve mutual benefits, such as public relations or lobbying governments in a regard to specific industrial policies. This can be seen in Japanese inter-market industrial groups such as Mitsubishi Corporation that use a presidential club to coordinate certain activities, such as public relations (Kim et al., 2004a; Lincoln et al., 1998; Orrù et al., 1989). Besides, member corporations of such groups might be engaged in cross-shareholding ownership arrangements, interlocking directorates and social relations to foster connections and coordination. Often this form of group is supported by a financial institution such as relationship with a main bank. Typical examples are the Japanese horizontal kieretsu and the financial-industrial groups in Russia.

H-Form Business Groups

Business groups of this type share similar structural arrangements to conglomerates in which a holding company invests in part or whole ownership of individual firms that operate in different markets/industries. As a result, H-form business groups are usually highly diversified. In an H-form business group a holding or parent company, which is controlled by the core owner elite, acts as the corporate headquarters in control of individual group affiliates through investments in others. These individual affiliates are like subsidiaries in a typical H-form firm, but they are usually legally independent affiliated firms. Whether a holding or parent company dominates or controls a majority

of ownership in a specific individual subsidiary is largely dependent on the latter's importance to its strategic objectives. These individual subsidiaries as core businesses provide the majority of the revenues for the holding company and as such the headquarters exert more direct control over management through dominant ownership positions. Government ownership is typically associated with H-form business groups. The government may at one time focus each business on a given area but over time the business tends to be opportunistic as new opportunities or needs arise that the government needs addressed. Singapore's Temasek Holding Pte has such an H-form structure and holds ownership in strategic Singaporean businesses including Singapore Airlines, Singapore Telecommunications, DBS Bank (the country's largest bank), and Raffles Holdings, a resort company. It acts as a government holding company that invests and manages state-owned or controlled strategic asset. Many business groups in China employ the H-form in strategic assets such as in energy (PetroChina), banking (Bank of China), utilities (Huaneng Power), chemicals (Sinopec), heavy industry (Baoshan Iron and Steel), telecommunications (China Telecom) and transport (Air China) (Maidment, 2006).

Moreover, a holding company can establish control over multiple layers by a vertical ownership structure or corporate pyramid, while individual firms might engage in cross-shareholdings and/or interlocking directorship. Internal transactions are more likely to involve capital or financing resources. subject to a holding company's coordination. Individual subsidiaries may involve multiple ties, including cross-shareholdings, interlocking directorates or social relations. Examples of this type of business group can be seen among large conglomerates in Hong Kong, the Pyramidal Enterprises Limited in India, and business groups in France (Encoua and Jacquemin, 1982).

M-Form Business Groups

In an M-form business group a parent company and/or core firm acts as the corporate headquarters by investing partially or wholly in ownership of individual group affiliates that are organized, according to strategic objectives of the parent company or core firms, either vertically in adjacent stages of production from raw materials supply, manufacturing, to distribution. In this way, the group affiliates are similar to those divisions in an M-form firm. Alternatively, individual divisions or affiliate firms operate in related industries, which enable them to share resources or core competencies. Therefore, internal transactions mobilize not only common resources, such as financing capital, but also industry-specific assets, such as technology, capital equipment, etc. Therefore, such business groups have stronger vertical linkages. Horizontal social relations are important for inter-firm linkages among core companies that lead others while cross-shareholdings and interlocking directorates are similarly important in order to defend external threats, such as hostile takeover or acquisitions. Many Korean chaebols such as LG and Samsung, groups such as Perez-Coampanc in Latin America, Belgian industrial business groups (Hentenryk, 1997), and family-controlled groups in Italy (Bianco et al., 2001) fall into this category.

Table III. Four types of organizational forms of business groups and their structural components

Structural components	N-form	C-form	H-form	M-form
<i>Horizontal connectedness</i>				
1. Internal transaction mechanisms				
• Intensity of internal transactions	Medium to high	Low	Low to medium	High
• Specificity of goods or resources transacted internally	Medium to high	Low	Low to medium	High
• Cross subsidization	Low	Low	Low to medium	High
2. Cross-shareholdings	Low to medium	Medium	Medium to high	Medium to high
3. Interlocking directorate	Medium to high	Medium	Low to high	Low to high
4. Social relations	Medium to high	Low to medium	Medium	Low to high
<i>Vertical linkages</i>				
1. Role of the dominant owner in management	Control over an individual firm and lead a group	Control over an individual firm and fit to a group	Control over a group through a parent company	Control over a group through strategic firms
2. Ownership portfolio as control mechanism	Weak	Weak	Medium to strong	Strong
3. Vertical ownership structure and control of resources	Weak	Weak to medium	Medium to strong	Strong
Examples	Taiwanese <i>guanxi qiyi</i> such as the Lin Yuan Group	Japanese horizontal keiretsu, and Financial-industrial groups such as the Alfa Group (FIGs) in Russia	Business groups in China, France, Hong Kong, Singapore, as well as Indian business groups such as Pyramidal Enterprises Limited	Large Korean chaebols, family business groups in Central Europe including Germany and Italy, Belgian industrial business groups, and groups such as Perez-Companac in Latin America

Table III summarizes the dimensions of these organization forms in more detail. Table III also includes additional descriptive richness and, as such, greater insights on these organizational forms which we did not include our discussion here given space constraints.

DISCUSSION

The analysis of business groups to this point highlights a variety of significant issues that need further development in future research. There are some broad issues that discussion of the four theoretical streams helps to bring into focus. The first of these is how these streams can interact with each other to potentially provide greater insight. For example, agency theory and the relational perspective can perhaps be combined to provide greater insight in understanding the strategic actions that business groups take. It is possible that agency theory takes different forms in different cultural settings and as a result business groups take different strategic actions. For example, the use of relational governance mechanisms in governing behaviours of member firms in a business group could be better understood by integrating the relational perspective and agency theory, which will be discussed later in this section.

Looking specifically at the model generated there are many potential research questions. The first is that while the model is theoretically logical with business group examples associated with the different ideal type forms, there is a need to empirically test various aspects of the model. Such a test would require the gathering of a large amount of data about business groups in very diverse settings. However, the insights the model provides may be helpful as we move forward with research in this critical domain.

In addition, there are other issues that the model helps to identify that merit investigation. Table IV summarizes many of these research concerns which are discussed in turn in greater detail below. For example, one of the key insights from this review is that a business group's choice of structure should match the requirements or forces of a given group's external and internal contexts. Thus, there is not a single type of business group in all settings; instead there are different types of business groups depending on the context faced. Also, the four forms of business groups can co-exist in a single economy with each of them corresponding to a particular set of internal and external contexts. However, we suggest that it is likely that one or two forms of business groups will be more dominant than the other forms, because some contextual forces are more prevalent in an economy at a certain stage of economic development. In all, there needs to be further development on how multiple domains of external contexts interact with internal mechanisms and which influence a group's structural configuration.

As Table IV suggests, one future research topic that flows from the model is whether the types of business groups classified here are ones that will necessarily also be true in the future. The underlying proposition of our model is that a business group is regarded as a structural configuration which has emerged in response to meet the external context. As such, there may be a path-dependent relationship between the environment and business group configuration. One may predict that improved market institutions in many emerging economies may result in business groups being transformed over time as the external environment changes (Hoskisson et al., 2005). For example, it is possible that

Table IV. Some questions to advance theory and research of business groups

<i>Research areas</i>	<i>Strategic issues</i>	<i>Example questions</i>	<i>Suggested topics</i>
Environment-business group relationship	Contextual factors and their influences on a group's structural configuration.	<ul style="list-style-type: none"> • How do different contexts shape and cast business groups' choice of structure? • How do business groups change over time in response to changes in external environment? • How do business groups and contexts co-evolve over time? • How do business groups transfer context-specific advantages, such as government support or social relations, to affiliate firm specific advantages? 	<ul style="list-style-type: none"> • Longitudinal study of how business groups were founded, developed, and evolved. • A comparison of business groups across societies.
Horizontal connectedness	Resource sharing and capabilities transfer between affiliates, types of interdependence among affiliates, coordination of affiliates to achieve group objectives or objectives with mutual interest, impact of horizontal coordination on affiliate performance.	<ul style="list-style-type: none"> • How do affiliates coordinate with each other to achieve objectives with mutual interests? • How do affiliates learn from each other? • What are the key determinants (e.g. ownership structure, firm demographic factors) of horizontal coordination among affiliates? • How does power matter in inter-firm relationships within a business group? 	<ul style="list-style-type: none"> • Role of formal and informal ties among affiliates and its influence on affiliate performance. • The effectiveness of resource sharing and transferring capabilities between affiliates on performance of affiliates.

Vertical linkages

Ownership structure, interaction between core entities (as core owner elite) and small owners, control mechanisms adopted by parent firms to govern affiliate firm behaviours.

- Do, and how do, core owner elites expropriate value through business groups from small owners?
- What shall business group change when the composition of the core owner elite changes?
- What is the impact of crossholdings between a parent company and affiliates on affiliate firm or group performance?
- How do group corporate governance shape group strategy formulation and implementation?
- What is the impact of inter-group networks, such as interlocking directorship, on group performance?
- To what extent and in what manners do social relations among group affiliates and between a parent company and affiliates affect group strategy formulation and implementation?
- What is the relative importance of formal governance mechanism (e.g. ownership structure), and informal governance mechanism (e.g. relational governance; group culture and norms) in governing affiliate firm behaviours?
- Are agency problems different in state-owned versus family owned business groups?

- Agency problems, including conflict interests between the core entity and other investors, and between owners and management.
- Evolution of corporate governance from business group foundation to later development.
- Influences of administrative heritages on ownership structure and corporate government.
- Comparison of different ownership types and their impact on group/affiliate strategy making and performance.

Table IV. *Continued*

<i>Research areas</i>	<i>Strategic issues</i>	<i>Example questions</i>	<i>Suggested topics</i>
Strategy and structure relationship: business group level	Group level strategies (such as diversification, restructuring, globalization, and corporate entrepreneurship and innovation), and means of diversification, the relationship between group strategy, structure, and group/affiliate performance, centralization versus decentralization between group versus firm levels, coordination by administrative, economic, and social mechanisms, group level resource bundles and allocation.	<ul style="list-style-type: none"> • How do business group allocate resources among group affiliates? • How do business group make decisions on corporate level strategies, such as diversification, globalization, and innovation? • What is the impact of the means of diversification (for instance, internal investment, partnership, and acquisitions) on group or affiliate performance? • What is the relationship between business groups and innovation output at the national level? • Will different types of business groups lead to different types of innovations? • What are the mechanisms for group-level staff to coordinate affiliates? • How does an internal market evolve over time when external markets move towards more fully developed market institutions? 	<ul style="list-style-type: none"> • Relationship between diversification, restructuring, and performance. • Impact of groups' means of diversification (such as internal ventures, strategic alliances, and acquisitions) on performance. • Entry in foreign markets (globalization) and performance of foreign affiliates. • Corporate entrepreneurship and innovation. • Evolution of internal markets over a period. • Impact of group pools of resources on performance of groups and affiliates. • Relationship between diversification, structure, and performance in groups and affiliates.
Strategy and structure relationship: affiliate firm level	External environment, particularly market competition and institutional forces, affiliate competitive advantages and strategic actions.	<ul style="list-style-type: none"> • What influences of internal legitimacy affect an individual firm's choice in terms of strategy and structure? • What are the competitive advantages or disadvantages of affiliates over independent firms? • Are the strategies of affiliates homogeneous or differentiated? Under what circumstances do affiliates adopt homogeneous strategies and when do they use differentiated strategies? 	<ul style="list-style-type: none"> • Autonomy of affiliates in strategy formulation and execution and its impact on affiliate performance. • Strategy differentiation (homogeneity or heterogeneity) of affiliates.

an H-form or N-form business group over time will transform towards an M-form structure focused on diversification into related industries. Similarly, there may be issues that promote inertia in the business group; for instance, research suggests business groups from similar country environments often imitate each other (Guillen, 2002). What similar business groups do may shape the response to change more than economic institutional evolution. Thus, external forces will lead to a dominant form of business groups in a society at a particular point in time, though other forms of business groups may exist as well.

However, if we examine more closely the evolution process of business groups, rather than evolving smoothly from one cell to another in the framework proposed, there is a possibility that some corrupted forms of business groups that combine the different characteristics of various cells may occur. Hill (1988) found when examining the H-form and M-form business organizations in the United States that there were far more corrupted or mixed forms than most researchers realized. Thus, to understand the full range of potential changes in business groups, the issues that shape the change and whether the change helps to move the business group to a new organizational form are critical concerns for future research. To be able to answer these questions on business group change there is a need for longitudinal studies on evolution and transformation of business groups (e.g. Khanna and Palepu, 2000b; Khanna and Yafeh, 2007) as well as comparative studies of business groups across societies where external environments, particularly market conditions, social settings, the role of governments, and external monitoring and control mechanisms, vary (e.g. Mahmood and Mitchell, 2004).

Another concern that arises out of the model is the need for a greater understanding of the range and impact of the different linkages among business group members, whether they are vertical or horizontal. For example, there may be a variety of vertical authoritative structures and horizontal coordination mechanisms in different types of business groups. Accordingly, there is a need to understand the impact this variety may have on the affiliate firm functioning. For example, when an individual firm receives investment from different groups, which business group does it belong to? Should it be regarded as a member of the business group which has an investment in a minority of its ownership or the one that has a majority of ownership? Similarly, there is a need to understand how organizational resources are transmitted or mobilized in the group. For instance, what is the role of internal markets in internal transfer of skill, abilities and knowledge between affiliate firms?

An additionally important aspect of the impact of different linkages that merits investigation is cross-subsidization or ownership among individual affiliate firms within a group. These linkages may be considered vertical because it involves ownership and may involve potential control, or horizontal coordination because it might facilitate firm linkages like equity alliances between a within group buyer and supplier. At this time it is unclear how cross-ownership impacts different business groups and member firm activities. Additionally, it is possible that the vertical and horizontal cross-ownership linkages may be different in the four business group forms. The result may be that the cross-ownership arrangements may impact domains such as knowledge transfer (a horizontal rationale) substantively different in the various business group forms. Similarly, the impact on concerns such as corporate governance (a vertical rationale) may also be

different. For instance, the conflicts of dominant versus minority shareholders (e.g. Chang, 2003b) may be different in various business group types. Similar to cross-shareholdings, interlocking directorships (e.g. Kim et al., 2004a) might have different implications for different business group forms and merit greater investigation in the future. There are also different types of owners such as a family, bank, or government entity that holds control of the business group. The implication of these various entities for group governance and in turn the impact on the business groups' strategic choices needs to be examined in the future.

In addition, the relational governance literature might provide additional insight into governance issues of business groups. The development and preservation of relational governance involves considerable costs in terms of time and resource allocation (Poppo and Zenger, 2002), but in environments where business groups are located such governance structures are obviously necessary. This literature might help to sort out the impact of the various owners mentioned above (e.g. families, banks, governments, etc). Moreover, perhaps relational governance will develop differently in group systems with vertical (buyer-supplier) versus horizontal (potential competitors at the same stage) linkages in the supply chain. Vertical partners are usually not at the same stage in the supply chain, and therefore have little competitive history as would horizontal partners. Future research might examine potential different emphases in regard to relational governance. For example, because buyer-supplier partners are likely over time to develop co-specialized capabilities (Jacobides, 2005), since they have less overlap and more complementarity capabilities in regard to competitive outputs than potential competitors at the same stage, such vertical partners may be able to focus on opportunity maximization in their partnerships versus opportunism minimization (Hansen et al., forthcoming). It seems therefore that insight from the relational governance literature might provide additional progress in regard to understanding governance issues in business groups.

It is also important that there should be greater understanding of the group's structure and its relationship to strategic choices. Future research may explore the relationship between the four structural configurations of business groups proposed and various strategic choices, and how the interactions between strategy and structure give rise to competitive advantages at both the business group level and the affiliate firm level. For example, the internationalization of business groups is an undeveloped research topic in international management. A basic assumption of the internationalization process is the accumulation of firm specific ownership advantages to be exploited in foreign markets. Would different forms of business groups generate different group-specific ownership advantages to facilitate its member firms in developing an international strategy? It has been found that Korean chaebols, an M-form business group classification in our paper, are more competitive in terms of producing quality final goods for the global market, while Taiwanese business groups, classified as an N-form business group, are more competitive in exporting quality intermediate goods (Feenstra et al., 1999). Similarly, Mahmood and Mitchell (2004) suggested that differences in the business group structure in Korea vs. Taiwan may give rise to differences in how the groups foster innovations among affiliate firms. The stronger vertical linkages in Korean chaebols may induce rigidities that entrench innovations, while the more diverse and flexible structure of

Taiwanese business groups encourages innovations. Do certain groups bestow parental advantages on their affiliate firms (Goold and Campbell, 2002) such as in an M-form, while other groups provide relational advantages among affiliate firms (Dyer and Singh, 1998) such as in an N-form? Therefore, future studies may continue to explore the relationship between group structure and the choice of different strategies such as corporate diversification, international diversification, innovation and entrepreneurial growth strategies as well as the type of advantages group parents bestow on their affiliate firms.

At the affiliate firm level, there is also a need to better understand how a group's internal legitimacy among affiliate firms operates. Internal legitimacy is defined as 'the acceptance and approval of an organizational unit by the other units within the firm and, primarily, by the parent company' (Kostova and Zaheer, 1999 p. 72). In business group organizations, internal legitimacy is crucial to the survival of an individual affiliate firm because its success is largely dependent upon whether it benefits from continuing access to organizational resources such as capital, assets, goods, information, and government support that are provided and offered by others affiliate firms and the parent company. Thus, any individual group affiliate faces two institutional environments: the external environment for external competition and the internal environment of the group for competing for group resources. And it is necessary for member firms to establish legitimacy in both institutional environments (Kostova and Zaheer, 1999).

It should be recognized that the model proposed here cannot address all issues relevant to business groups. For example, the level of economic development in which a business group competes is clearly important. While business groups are recognized here as filling gaps in the institutional environment the model does not specifically address economic development. The model here lays the foundation for understanding a highly fragmented domain and for clarity it keeps to a 2 X 2 matrix in categorizing business groups' organizational forms. A richer, more complex model may be able to address the level of economic development faced by business groups and add fresh insight to the understanding of business groups. Future research should also seek to bring fresh conceptual approaches and theoretical perspectives to the understanding of business groups. The research has laid a foundation, but fresh insight will come as researchers build on this model with additional empirical and theoretical approaches to facilitate understanding of this complex phenomenon.

CONCLUSION

In this article, we propose that each of the key theoretical perspectives of business groups - namely transaction cost theory, a relational perspective, a political economy perspective, and agency theory — have led to researchers focusing on a particular dimension of the external environment. This in turn has led to the focus on elements of business groups and typically ascribing the research findings to all business groups. However, our integration suggests that when the four key external dimensions are combined with two key internal coordination mechanisms, we are able to describe four basic types of business groups. Our framework is consonant with the widely supported principle that organizations adapt to their external environment with appropriate group structures, but we also

suggest through the loose coupling framework that there is significant managerial strategic choice with regard to this adaptation. As such, our integrative approach has yielded a synthesis suggesting that business groups have a variety of forms as do multidivisional structures (Hoskisson et al., 1993) or the multinational enterprise (Ghoshal and Nohria, 1989). Although we have described four ideal types, there may be other hybrid varieties not discussed.

In summary, we have provided a detailed and critical examination and comparisons of the main theoretical perspectives currently applied in business group research, and used this discussion to derive the principal differences among business group structures. Through this examination and by proposing numerous research topics for future research, we offer guidance for researchers to identify which theoretical lens should be adopted given different conditions and provide a number of topics that might be relevant for future research.

REFERENCES

- Aoki, M. (2001). *A Comparative Institutional Analysis*. Cambridge, MA: MIT Press.
- Bae, K. H., Kang, J. K. and Kim, J. M. (2002). 'Tunneling or value added? Evidence from mergers by Korean business groups'. *Journal of Finance*, 57, 2695-740.
- Bebchuk, L. A., Kraakman, R. and Triantis, G. G. (1992). 'Stock pyramids, cross-ownership, and dual class equity'. In Morck, R. (Ed.), *Concentrated Corporate Ownership*. Chicago, IL: Chicago University Press.
- Berglof, E. and Perotti, E. (1994). 'The governance structure of the Japanese financial keiretsu'. *Journal of Financial Economics*, 36, 259-84.
- Bertrand, M., Mehta, P. and Mullainathan, S. (2002). 'Ferretting out tunneling: an application to Indian business groups'. *Quarterly Journal of Economics*, 117, 121-48.
- Bianco, M., Bianchi, M. and Enriques, L. (2001). 'Pyramidal groups and the separation between ownership and control in Italy'. In Barca, F. and Becht, M. (Eds), *The Control of Corporate Europe*. Oxford: Oxford University Press.
- Burt, R. S. (1983). *Corporate Profits and Cooptation*. New York: Academic Press.
- Carney, M. and Gedajlovic, E. (2002). 'The co-evolution of institutional environments and organizational strategies: the rise of family business groups in the ASEAN region'. *Organization Studies*, 3, 1-30.
- Chandler, A. D. (1990). *Scale and Scope: The Dynamics of Industrial Capitalism*. Cambridge, MA: Belknap Press.
- Chang, S. J. (2003a). *Financial Crisis and Transformation of Korean Business Groups*. Cambridge: Cambridge University Press.
- Chang, S. J. (2003b). 'Ownership structure, expropriation, and performance of group-affiliated companies in Korea'. *Academy of Management Journal*, 46, 238-53.
- Chang, S. J. and Hong, J. (2000). 'Economic performance of the group-affiliated companies in Korea: resource sharing and internal business transactions'. *Academy of Management Journal*, 43, 429-48.
- Chang, S. J. and Hong, J. (2002). 'How much does the business group matter in Korea?'. *Strategic Management Journal*, 23, 265-74.
- Cheng, L. K. and Kreinin, M. E. (1996). 'Supplier preferences and dumping: an analysis of Japanese corporate groups'. *Southern Economic Journal*, 63, 51-60.
- Chinese Enterprise Assessment Association (2002). *Development Report of China's Large Enterprises (Groups) 2001-2002 (Zhongguo Daxing Qiyue (Jituan) Fazhan Baogao 2001-2002)*. Beijing: China Personnel Press.
- Chung, C. N. (2001). 'Markets, culture and institutions: the emergence of large business groups in Taiwan: 1950s-1970s'. *Journal of Management Studies*, 38, 719-45.
- Claessens, S., Djankov, S. and Lang, L. H. P. (2000). 'The separation of ownership and control in East Asian corporations'. *Journal of Financial Economics*, 58, 81-112.
- Coase, R. (1937). 'The nature of the firm'. *Economica*, 16, 386-405.
- Collin, S. O. (1998). 'Why are these islands of power found in the consciousness of oceans of ownership: institutional and governance hypotheses explaining the existence of business groups in Sweden'. *Journal of Management Studies*, 35, 719-46.
- Dharwadkar, R., George, G. and Brandes, P. (2000). 'Privatization in emerging economies: an agency theory perspective'. *Academy of Management Review*, 25, 650-69.

- Dyer, J. H. and Singh, H. (1998). 'The relational view: cooperative strategy and sources of interorganizational competitive advantage'. *Academy of Management Review*, 23, 660-79.
- Encoua, D. and Jacquemin, A. (1982). 'Organizational efficiency and monopoly power: the case of French industrial groups'. *European Economic Review*, 19, 25-51.
- Faccio, M. and Lang, L. H. P. (2002). 'The ultimate ownership of Western European corporations'. *Journal of Financial Economics*, 65, 365-95.
- Feenstra, R., Yang, T. H. and Hamilton, G. G. (1999). 'Business groups and product variety in trade: evidence from South Korea, Taiwan and Japan'. *Journal of International Economics*, 48, 71-100.
- Fields, K. (1995). *Enterprise and the State in Korea and Taiwan*. Ithaca, NY: Cornell University.
- Fishman, R. and Khanna, T. (2004). 'Facilitating development: the role of business groups'. *World Development*, 32, 609-28.
- Gerlach, M. L. (1997). 'The organizational logic of business groups: evidence from the Zaibatsu'. In Shiba, T. and Shimotani, M. (Eds), *Beyond the Firm: Business Groups in International and Historical Perspective*. New York: Oxford University Press, 245-73.
- Gertner, R. H., Scharfstein, D. S. and Stein, J. C. (1994). 'Internal versus external capital markets'. *Quarterly Journal of Economics*, 109, 1211-30.
- Ghoshal, S. and Nohria, N. (1989). 'Internal differentiation within multinational corporations'. *Strategic Management Journal*, 10, 323-37.
- Goold, M. and Campbell, A. (2002). 'Parenting in complex structures'. *Long Range Planning*, 35, 219-43.
- Goto, A. (1982). 'Business groups in a market economy'. *European Economic Review*, 22, 53-70.
- Granovetter, M. (1994). 'Business groups'. In Smelser, N. J. and Swedberg, R. (Eds), *Handbook of Economic Sociology*. Princeton, NJ: Princeton University Press.
- Granovetter, M. (1995). 'Coase revisited: business groups in the modern economy'. *Industrial and Corporate Change*, 4, 93-130.
- Guillen, M. F. (2000). 'Business groups in emerging economies: a resource-based view'. *Academy of Management Journal*, 43, 362-80.
- Guillen, M. F. (2002). 'Structural inertia, imitation, and foreign expansions: South Korean firms and business groups in China: 1987-95'. *Academy of Management Journal*, 45, 509-25.
- Guthrie, D. (1997). 'Between markets and politics: organizational responses to reform in China'. *American Journal of Sociology*, 102, 1258-304.
- Hamilton, G. G. and Feenstra, R. C. (1995). 'Varieties of hierarchies and markets: an introduction'. *Industrial and Corporate Change*, 4, 51-91.
- Hansen, M. H., Hoskisson, R. E. and Barney, J. B. (forthcoming). 'Competitive advantage in alliance governance: resolving the opportunism minimization-gain maximization paradox'. *Managerial and Decision Economics*, 28.
- Hauschild, P. R. and Beckman, C. M. (1998). 'When do interlocks matter? Alternate sources of information and interlock influence'. *Administrative Science Quarterly*, 4, 815-45.
- Hentenryk, G. K. (1997). 'Structure and strategy of Belgian business groups'. In Shiba, T. and Shimotani, M. (Eds), *Beyond the Firm: Business Groups in International and Historical Perspective*. Oxford: Oxford University Press, 88-106.
- Hill, C. W. L. (1988). 'Internal capital market controls and financial performance in multidivisional firms'. *Journal of Industrial Economics*, 37, 67-83.
- Hoskisson, R. E., Hill, C. W. L. and Kim, H. (1993). 'The multidivisional structure: organizational fossil or source of value?'. *Journal of Management*, 19, 269-98.
- Hoskisson, R. E., Gannella, A. A., Tihanyi, L. and Faraci, R. (2004). 'Asset restructuring and business group affiliation in French civil law countries'. *Strategic Management Journal*, 25, 525-39.
- 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, 941-65.
- Jacobides, M. G. (2005). 'Industry change through vertical disintegration: how and why markets emerged in mortgage banking'. *Academy of Management Journal*, 48, 465-98.
- Jarillo, J. C. (1993). *Strategic Networks: Creating the Borderless Organization*. Oxford: Butterworth Heinemann.
- Joh, S. W. (2003). 'Corporate governance and firm profitability: evidence from Korea before the economic crisis'. *Journal of Financial Economics*, 68, 287-322.
- Johnson, S., La Porta, R., Lopez-de-Silanes, F. and Shleifer, A. (2000). 'Tunneling'. *American Economic Review*, 90, 22-7.
- Keister, L. (1998). 'Engineering growth: business group structure and firm performance in China's transition economy'. *American Journal of Sociology*, 104, 404-40.

- Keister, L. (1999). 'Where do strong ties come from? A dyad analysis of the strength of interfirm exchange relations during China's economic transition'. *The International Journal of Organizational Analysis*, 7, 5-24.
- Keister, L. (2001). 'Exchange structures in transition: lending and trade relations in Chinese business groups'. *American Sociological Review*, 66, 336-60.
- Khanna, T. and Fisman, F. (2004). 'Facilitating development: the role of business groups'. *World Development*, 32, 609-28.
- Khanna, T. and Palepu, K. (1997). 'Why focused strategies may be wrong for emerging markets'. *Harvard Business Review*, 75, 41-51.
- Khanna, T. and Palepu, K. (1999). 'Policy shocks, market intermediaries, and corporate strategy: the evolution of business groups in Chile and India'. *Journal of Economic and Management Strategy*, 8, 271-310.
- Khanna, T. and Palepu, K. (2000a). 'Is group affiliation profitable in emerging markets? An analysis of diversified Indian business groups'. *Journal of Finance*, 55, 867-92.
- Khanna, T. and Palepu, K. (2000b). 'The future of business groups in emerging markets: long run evidence from Chile'. *Academy of Management Journal*, 43, 268-85.
- Khanna, T. and Rivkin, J. W. (2001). 'Estimating the performance effects of business groups in emerging markets'. *Strategic Management Journal*, 22, 45-74.
- Khanna, T. and Yafeh, Y. (2007). 'Business groups in emerging markets: paragons or parasites?'. *Journal of Economic Literature*, 45, 331-72.
- Kim, H., Hoskisson, R. E. and Wan, W. P. (2004a). 'Power dependence, diversification strategy and performance in keiretsu member firms'. *Strategic Management Journal*, 25, 613-36.
- Kim, H., Hoskisson, R. E., Tihanyi, L. and Hong, J. (2004b). '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.
- Kim, W. A., Lyn, E., Park, T. J. and Zychowicz, E. (2005). 'The wealth effects of capital investment decisions: an empirical comparison of Korean chaebol and non-chaebol firms'. *Journal of Business Finance and Accounting*, 32, 945-71.
- Kostova, T. and Zaheer, S. (1999). 'Organizational legitimacy under conditions of complexity: the case of the multinational enterprise'. *Academy of Management Review*, 24, 64-81.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A. and Vishny, R. W. (1997). 'Legal determinants of external finance'. *Journal of Finance*, 52, 1131-50.
- Leff, N. H. (1978). 'Industrial organization and entrepreneurship in the developing countries: the economic groups'. *Economic Development and Cultural Change*, 26, 661-75.
- Leibenstein, H. (1968). 'Entrepreneurship and development'. *American Economic Review*, 58, 72-84.
- Lincoln, J. R., Gerlach, M. L. and Takahashi, P. (1992). 'Keiretsu networks in the Japanese economy: a dyad analysis of intercorporate ties'. *American Sociological Review*, 57, 561-85.
- Lincoln, J. R., Gerlach, M. L. and Ahmadjian, C. L. (1996). 'Keiretsu networks and corporate performance in Japan'. *American Sociological Review*, 61, 67-88.
- Lincoln, J. R., Gerlach, M. L. and Ahmadjian, C. L. (1998). 'Evolving patterns of keiretsu organization and action in Japan'. In Staw, B. M. and Cummings, L. L. (Eds), *Research in Organizational Behavior*, 20. Greenwood, NJ: JAI Press.
- Linda, S. and Mizuchi, M. S. (1986). 'Broken-tie reconstitution and the functions of interorganization interlocks: a reexamination'. *Administrative Science Quarterly*, 31, 522-39.
- Lorenzoni, G. and Baden-Fuller, C. (1995). 'Creating a strategic center to manage a web of partners'. *California Management Review*, 37, 146-63.
- Lorenzoni, G. and Lipparini, A. (1999). 'The leveraging of interfirm relationships as a distinctive organizational capability: a longitudinal study'. *Strategic Management Journal*, 20, 317-38.
- Luo, X. and Chung, C. N. (2005). 'Keeping it all in the family: the role of particularistic ties in business group performance during institutional transition'. *Administrative Science Quarterly*, 50, 404-39.
- Mahmood, I. P. and Mitchell, W. (2004). 'Two faces: effects of business groups on innovation in emerging economies'. *Management Science*, 50, 1348-65.
- Maidment, P. (2006). Beijing's balancing act. <http://www.forbes.com> (accessed on 28 June 2006).
- Maman, D. (2002). 'The emergence of business groups: Israel and South Korea compared'. *Organization Studies*, 23, 737-58.
- Mizuchi, M. S. (1994). 'Social network analysis: recent achievements and current controversies'. *Ada Sociologica*, 37, 329-43.
- Mizuchi, M. S. (1996). 'What do interlocks do? An analysis and assessment of research on interlocking directories'. *Annual Review of Sociology*, 22, 271-99.

- Morck, R. and Yeung, B. (2003). 'Agency problems in large family business groups'. *Entrepreneurship: Theory and Practice*, 27, 367-84.
- Nolan, P. (2001). *China and the Global Economy: National Champions, Industrial Policy, and the Big Business Revolution*. Basingstoke, New York: Palgrave.
- Orru, M., Hamilton, G. G. and Suzuki, M. (1989). 'Patterns of inter-firm control in Japanese business'. *Organization Studies*, 10, 549-74.
- Orru, M., Biggard, N. W. and Hamilton, G. G. (1991). 'Organizational isomorphism in East Asia'. In Powell, W. W. and DiMaggio, P.J. (Eds), *The New Institutionalism in Organizational Analysis*. Chicago, IL: University of Chicago Press.
- Orton, D.J. and Weick, K.E. (1990). 'Loosely coupled systems: a reconceptualization'. *Academy of Management Review*, 15, 203-23.
- Peng, M. W., Lee, S-H. and Wang, D. Y. L. (2005). 'What determines the scope of the firm over time? A focus on institutional relatedness'. *Academy of Management Review*, 30, 622-33.
- Perotti, E. and Gelfer, S. (2001). 'Red barrons or robber barrons? Governance and investment in Russian financial-industrial groups'. *European Management Journal*, 49, 1601-18.
- Pettigrew, A. M. (1992). 'On studying managerial elites'. *Strategic Management Journal*, 13, 163-82.
- Pfeffer, J. and Salancik, G. (1978). *The External Control of Organizations: A Resource Dependency Perspective*. New York: Harper and Row Publishing.
- Poppo, L. and Zenger, T. (2002). 'Do formal contracts and relational governance function as substitutes or complements'. *Strategic Management Journal*, 23, 707-25.
- Schneider, B. R. (1997). 'Big business and the politics of economic reform: confidence and concertation in Brazil and Mexico'. In Maxfield, S. and Schneider, B. R. (Eds), *Business and the State in Developing Countries*. Ithaca, NY: Cornell University Press.
- Strachan, H. (1976). *Family and Other Business Groups in Economic Development*. New York: Praeger.
- Teece, D. J. (1980). 'The diffusion of an administrative innovation'. *Management Science*, 26, 464-70.
- Teece, D. J. (1981). 'Internal organization and economic performance: an empirical analysis of the profitability of principal firms'. *Journal of Industrial Economics*, 30, 173-99.
- Tsui-Auch, L. S. and Lee, Y.J. (2003). 'The state matters: management models of Singaporean Chinese and Korean business groups'. *Journal of Management Studies*, 24, 507-34.
- Weick, K. E. (1976). 'Educational organizations as loosely coupled systems'. *Administrative Science Quarterly*, 21, 1-19.
- Whitey, R. D. (1991). 'The social construction of business systems in East Asia'. *Organization Studies*, 12, 1-28.
- Williamson, O. (1975). *Markets and Hierarchies*. New York: Free Press.
- Williamson, O. (1981). 'The modern corporation: origins, evolution, attributes'. *Journal of Economic Literature*, 19, 1537-68.
- Williamson, O. (1985). *The Economics Institutions of Capitalism*. New York: Free Press.
- Windolf, P. and Beyer, J. (1996). 'Co-operative capitalism: corporate networks in Germany and Britain'. *British Journal of Sociology*, 47, 205-31.
- Yiu, D., Bruton, G. 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, 183-206.
- Yurtoglu, B. B. (2003). 'Corporate governance and implications for minority shareholders in Turkey'. *Corporate Ownership and Control*, 1, 72-8.