

## THE COUPLING OF OWNERSHIP AND CONTROL AND THE ALLOCATION OF FINANCIAL RESOURCES: EVIDENCE FROM HONG KONG\*

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### ABSTRACT

Theoretical and empirical research regarding the impact of corporate ownership on the behaviour and performance of firms have typically focused on consequences stemming from the separation of ownership and control. While large scale business enterprise characterized by such a separation is dominant in the US, Japan and the UK, firms in which ownership and control is coupled in the hands of individuals and their families are apparent in many other large developed economies and are dominant in most emerging markets. This paper examines consequences regarding the generation and allocation of financial resources stemming from the coupling of ownership and control among Hong Kong based firms. In doing so, we join insights from the economics literature regarding the incentive and risk bearing consequences of coupled ownership and control with the extant management, sociology and history literatures regarding Chinese family business groups and develop six hypotheses pertaining to patterns in the allocation of financial resources. Results indicate that coupled ownership and control is positively related with dividend payout levels and financial liquidity while it is negatively related to investments in capital expenditures. Consistent with these results, we also find that coupled ownership and control is positively related to short-term (accounting) profitability.

### INTRODUCTION

Berle and Mean's (1932) separation of ownership and control thesis lies at the core of most scientific inquiry examining the relationship between the ownership structure and the behaviour and financial performance of corporations (Shleifer and Vishny, 1997). According to this view, the fundamental issue in corporate gover-

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nance concerns agency costs related to the potentially divergent interests of shareholders and their managerial agents (Jensen and Meckling, 1976).

While large scale business enterprise characterized by the specialization and separation of ownership and management functions are dominant in the present day economies of the US (Chandler, 1977), Japan (Gerlach, 1992) and the UK (Charkham, 1994; Roe, 1994), such a separation is far less apparent in most other settings (La Porta, et al., 1999a). Indeed, large scale business enterprise in which ownership rights and management control are coupled in the hands of a small circle of family members and trusted business associates are dominant in many other national settings, including developed (Collin, 1998; La Porta et al., 1999a) as well as developing and transition economies (Ghemawat and Khanna, 1998; Khanna and Palepu, 1997).

In contrast to most corporate governance research, this study focuses on the consequences of coupled, rather than separated ownership and control. More specifically, this study examines the impact of such a coupling on the financial performance and allocation of financial resources among firms listed on the Hong Kong Stock Exchange (SEHK). Unfortunately, while business enterprise characterized by the coupling of ownership and control is widespread and comprise the major capitalist institutions in Southeast Asia and Hong Kong (Claessens et al., 1999a; Whitley, 1990) our knowledge of how such firms operate is rather limited (Granovetter, 1994). Hong Kong represents a useful setting for examining the impact of coupled ownership and control because while family business groups (FBGs) are integral to the territory's industrial landscape (Chan, 1996; Douw, 1995; Redding, 1998), its open economy, legacy of colonial rule and ties to Mainland China have endowed it with a broad diversity of corporate ownership structures. Thus, we are able to evaluate the consequences of coupled ownership within a single social context.

In the following section, Alfred Chandler's seminal distinction between managerial and personal capitalism (Chandler, 1990) is employed as a conceptual point of departure for our review of the literature. In this respect, Chandler's concepts of personal and managerial capitalism are employed as theoretical 'guideposts' (John, 1997, p. 200) which provide a basis for examining the techno-economic implications of coupled ownership and control structures.

While Chandler's analysis finds considerable support in the principal agent literature of finance and economics (e.g. Fama and Jensen, 1983), such an approach has been criticized as deeply rooted in US business history (Jones, 1997; Whitley, 1990), and because of its failure to consider and account for important contextual factors (Hamilton and Biggart, 1988; Jones and Rose, 1993). In contrast to the techno-economic approach of Chandler, some scholars have traced the consequences and rationale for the characteristic coupling of ownership and control in Hong Kong based FBGs to a culturally determined ethic of familism (e.g. Kao, 1993; Redding, 1990; Weidenbaum and Hughes, 1996). Additionally, historical accounts have emphasized the legacy of the founders of FBGs as economically impoverished refugees from Mainland China (Hodder, 1996) and as middlemen during Asia's colonial era (McVey, 1992). Sociological accounts have stressed how historical patterns of state authority and business-government relations have shaped the structure and consequences of corporate ownership and control (Hamilton and Biggart, 1988; Whitley, 1990) across East Asian societies.

The need to consider and control for the cultural, historical and institutional context in our examination of personal capitalism has led us to restrict our analysis to firms based in the Hong Kong territory. This decision permits us to hold constant a variety of material contextual considerations across our entire sample and, of equal importance, to utilize extant sociological, cultural and historical accounts of Chinese familism and their entrepreneurs as the basis for generating our hypotheses and interpreting this study's findings.

In the following section, we provide a comparative analysis of the relative advantages and disadvantages of coupling versus separating ownership and control. Subsequently, we draw upon research in the areas of economics, finance, management, sociology and history in order to formulate six hypotheses. These hypotheses suggest that patterns of generation and use of financial resources reflect *both* the microeconomic incentive structures of firms with coupled ownership as well as the particularistic values of their owner/managers. In the final half of the paper, we describe the methodological approach used to evaluate these hypotheses, present the results of our tests and discuss the theoretical and practical implications of our findings.

#### COUPLED VERSUS SEPARATED OWNERSHIP AND CONTROL

In his analysis of the dynamics of industrial capitalism, Chandler (1990) distinguishes between managerial and personal capitalism. The central feature of managerial capitalism is the separation of enterprise ownership by shareholders and its strategic and operational control by salaried, professional managers governed by a board of directors comprising managers (insiders) and external (outsiders) representatives of shareholders. According to Chandler (1990), the managerially controlled firm became the dominant US business form by the beginning of the twentieth century and has subsequently maintained that position. The separation of ownership and control set the stage for the creation of the hierarchically controlled, multidivisional and multinational enterprise.

In contrast, personal capitalism refers to 'firms managed by individuals or by small numbers of associates, often members of founders families, assisted by only a few salaried managers, or they (are) federations of such firms' (Chandler, 1990, p. 236). Control in the first generation of these firms typically rests with the founding entrepreneur and in later generations with a group of family members and trusted business associates.

While other researchers have followed in Chandler's wake and distinguished between large scale enterprise which has coupled versus separated ownership and control structures (e.g. Claessens et al., 1999a; La Porta et al., 1999a), the implications of these different ownership structures on the generation and allocation of financial resources is not entirely clear.

On the one hand, many scholars have attributed many positive characteristics to firms with coupled ownership and control structures such as the FBGs found in Hong Kong. These firms have been described as the entrepreneurial engine of economic development in the Hong Kong territory (Redding, 1994; Seagrave, 1995; Weidenbaum and Hughes, 1996). As in many other parts of East Asia, the majority of these personally managed firms are small and medium sized enterprises that are owned and operated by first, second, or third generation migrants

from Mainland China (Whitley, 1990). These entrepreneurs have developed a reputation for cost-efficiency, responsiveness and flexibility as OEM manufacturers (Carney, 1998) and as pioneers in Mainland China's early industrialization (Vogel, 1988). Since these personally managed firms are situated within spatially concentrated production networks and spatially dispersed distribution networks, they are described as being highly adapted to dynamic and incrementally innovative product-markets (Glasmier, 1994; Whitley, 1992). Indeed, characteristics of these personally managed firms appear especially well suited to networked production and to industrial settings where their low managerial overhead and their ability to efficiently organize low-cost labour pools in non-complex technologies is a key competitive advantage (Carney, 1998; Lui and Chui, 1994; Redding, 1994). Additionally, Hong Kong's traditional role as a trading gateway to Mainland China has endowed its economy with a capital-intensive trade related infrastructure in sectors such as communications and transportation.

The economics and finance literature has highlighted a number of other important advantages of personally owned and managed enterprise. First and foremost, coupling ownership and control obviates the classic separation of ownership and control agency problem (Berle and Means, 1932) where salaried professional managers with little, or no ownership in the firm they manage use the firm's resources to pursue their own agendas at the expense of shareholders (Jensen and Meckling, 1976). In contrast, since they have a direct claim on their firm's residual income (Alchian and Demsetz, 1972), owner/managers have a strong incentive to ensure that capital is deployed sparingly and used efficiently and that indirect production costs are tightly managed (Brickley and Dark, 1987). In addition, the incentive effects of direct ownership reduce the need for third party monitoring and supervision (Carney and Gedajlovic, 1991). Indeed, when compared with enterprises operated by salaried professional managers with their characteristic elaborated hierarchies, high managerial overheads and weaker incentives with respect to direct cost control, the owner managed firm is a model of parsimony.

Other research has highlighted some disadvantages of coupled ownership and control structures in general and Hong Kong based FBGs in particular.

First, insofar as the tight coupling of ownership and control allows owner/managers to attenuate constraints to their discretion stemming from arm's length investors (Morck et al., 1988), it has been argued that firms with coupled ownership and control tend to exhibit the particularistic values of their owner/managers (Chandler, 1990; Demsetz and Lehn, 1985; Fukuyama, 1995; Kao, 1993). Chandler (1990) argues that the personalized character of family business is often manifested in terms of the selection of top management on the basis of family ties, rather than on the basis of professional expertise. Many researchers have described and documented this tendency among Chinese FBGs in particular (e.g. Fukuyama, 1995; Weidenbaum and Hughes, 1996; Whitley, 1990; Wong, 1988). Kao (1993) bluntly suggests that among Chinese FBGs, an incompetent relative will be preferred to a competent outsider.

Chandler (1990) contends that the lack of managerial capacity limits the ability of personally managed firms to compete internationally due to a lack of coordination and monitoring capabilities needed to manage geographically distant and dispersed business activities. Chandler has also argued that the personalized character of firms with coupled ownership and control may have the effect of reducing a firm's ability to develop the multiple functional capabilities needed to

compete in oligopolistic product markets (Chandler, 1977). Accordingly, there may be limited managerial capacity to coordinate the activities of functional areas or perform detailed capital budgeting, and such firms may be at disadvantage in capital intensive and technologically dynamic industries.

In echoing the Weberian argument regarding the necessity for rational-legal bureaucracies as a prerequisite for the modernization of society, Fukuyama concurs and proposes that 'restrictive family bonds constrain the development of universal values and impersonal ties necessary for modern business organization' (Fukuyama, 1995, p. 65). Perhaps reflecting a consensus in the literature regarding Hong Kong and Southeast Asian FBGs, Redding concludes that they are governed by 'values which facilitate the initiating phase of entrepreneurship but which place barriers to the higher levels of coordination necessary for growth of the individual firm to large scale' (Redding, 1988, p. 109).

A second disadvantage of personally managed firms cited in the literature relates to their inefficient risk bearing properties. Indeed, the seminal work of Fama and Jensen (1983) indicates that separating ownership from control has significant advantages in terms of risk bearing insofar as it allows for risk to be borne by widely dispersed and diversified shareholders rather than being concentrated in the hands of owner/managers (Shleifer and Vishny, 1997). Such a concentration of risk increases the firm's effective cost of capital (Fama and Jensen, 1983) and may result in risk averse strategic behaviour among firms with coupled ownership and control (Chandler, 1990).

Such an analysis is consistent with studies which have found that Chinese FBGs tend to be generally risk averse (Kao, 1993) and to favour investments in generic rather than specialized assets (Redding, 1994). Similarly, Chinese FBGs have been found to prefer projects with short payback periods (Chen, 1995; Limligan, 1986).

Coupling ownership and control also has negative implications regarding a firm's ability to raise financial capital. At the most fundamental level, this occurs because the maintenance of coupled ownership and control (and its associated incentive benefits), requires that firms rely primarily on the personal wealth of owners of internally generated cash flow to fund new projects. As such, personally managed firms may face a financing constraint not confronted by firms with widely dispersed ownership run by salaried professional managers. Additionally, firms with coupled ownership and control may have difficulty raising capital on favourable terms since arms-length minority investors run the risk that majority owners may use their control rights to expropriate private benefits of control at their expense (La Porta et al., 1999b; Shleifer and Vishny, 1997). One recent study provides strong empirical support for this proposition in the context of most East Asian economies (including Hong Kong) insofar as family ownership is found to be associated with lower stock market valuations (Claessens et al., 1999b).

The preceding discussion suggests that the coupling of ownership and control characteristic of personally owned and managed firms has both advantages and disadvantages relative to professionally managed firms with widely dispersed ownership. On the one hand, coupling ownership and control creates a powerful incentive for owner-managers to manage their operations efficiently and profitably. On the other hand, such tight control also allows majority owners to adopt inefficient practices that reflect their own particularistic values and interests. In addition, the coupling of ownership and control has significant negative implications regarding a firm's ability to raise capital and manage risk.

In the following section, we generate a series of six hypotheses that describe how the relative advantages and disadvantages of coupled ownership and control impact upon the generation and use of financial assets in the specific context of Hong Kong based firms.

#### HYPOTHESES

Financial resources are the economic lifeblood of business enterprise. The generation and disposition of financial resources in a particular firm is closely tied to the incentive structures operative in that firm (Jensen and Meckling, 1976; Mintzberg, 1983). Choices regarding alternative means of generating financial resources and the disposition of those resources also reflect firm level cultural phenomena (Redding, 1988; Tam, 1990), as well as macroeconomic (Krugman, 1994; Porter, 1990) and institutional (Whitley, 1992; Wilkinson, 1996) forces in the macro-environment.

In synthesizing accounts from the sociology, history and management literatures regarding the particularistic values of Hong Kong based entrepreneurs with that of Chandler (1977, 1990) and research from the fields of economics and finance regarding the more general microeconomic effects of personal capitalism, the hypotheses that follow relate coupled ownership and control to specific patterns in the generation and use of financial resources.

##### *Dividend Policy*

Given the undesirable risk bearing properties of coupled ownership and control structures (Fama and Jensen, 1983), owner/managers may view a high dividend strategy as an essential aspect of their own personal wealth preservation (Chandler, 1990). That is, from the perspective of an owner/manager who has a large proportion of his wealth invested in a firm, the retention of retained earnings may be seen as an undesirable concentration of risk which can be reduced by extracting dividends and reinvesting in other businesses, or geographic areas. As such, because of its inefficient risk bearing attributes, the coupling of ownership and control is expected to be positively associated with dividend payouts.

Additionally, several local institutional and cultural factors also suggest that the coupling of ownership and control will be associated with high dividend payouts among Hong Kong based firms.

First, as migrants from a historically turbulent Mainland China (Hodder, 1996), many entrepreneurs who founded Hong Kong FBGs brought with them what Kao (1993, p. 27) calls deeply held 'life-raft values'. Such a legacy, stemming from generations of economic and political uncertainty (Redding, 1990), has profoundly impacted their worldview and business practices (Brown, 1995). It has been frequently argued that uncertainty about the future permeates the management style of FBGs. Kao (1993, p. 27) describes how the principle 'keep your bags packed at all times, day or night' is central to the business practices of FBGs. A logical corollary of such uncertainty about the future is the preference for dividend payouts over retained earnings.

Second, the personalized and family-centric character of firms with coupled ownership and control in Hong Kong (Redding, 1990; Weidenbaum and Hughes, 1996) has some important implications regarding dividend policy. More specifi-

cally, cultural norms of joint property ownership and equal male inheritance may be expected to promote higher dividend payouts among Chinese FBGs based in Hong Kong. Property and assets are commonly controlled via a family or ancestral trust (Wong, 1985). On the death of a founding entrepreneur, estates typically remain undivided and managed as a collective family property, a consequence that frequently leads to severe succession tensions (Tam, 1990; Wong, 1988). Since such familial trusts mandate that firms remain intact, there are strong pressures to extract capital through dividend payouts to family members.

Where property is not held in common, the practice of equal inheritance among male offspring produces a continuing dilution of ownership shares (Redding, 1990). By the third generation, each family member's share may be quite small, due to subdivision. Since it is also probable that brothers will have different numbers of children, there is a strong likelihood of asymmetric holdings among descendants. Cousins with unequal portions of shares may be unwilling to cooperate with dominant others, and those with minor shares may possess little operational and emotional attachment to the enterprise. Wong (1988) suggests that as minority shareholders, they will be more concerned with immediate, tangible benefits of dividend payouts than longer-term business prospects.

In summary, both considerations regarding the microeconomic incentive structures of firms with coupled ownership and control, as well as the particularistic values often ascribed to Hong Kong FBGs suggest that the coupling of ownership and control will be associated with high dividend payouts.

*Hypothesis 1:* The coupling of ownership and control among Hong Kong based firms is positively related to the payment of dividends to shareholders.

#### *Capital Investment*

A corollary of high dividend payout is low capital investment. If capital is extracted from a firm via dividends, it is not available for reinvestment. According to Chandler (1990), the logic of managerial enterprise rests upon sustained capital expenditures in efficiently scaled production facilities, in distribution and marketing assets, and the managerial and functional expertise needed to effectively coordinate the two.

Fukuyama (1995) notes that family business groups such as those found in Hong Kong have performed best in light manufacturing businesses such as apparel, toys, electronic sub-components and computer peripherals, and do less well in industries that are capital intensive. Yoshihara (1988) presents evidence which indicates that relative to other indigenous and foreign firms operating in Southeast Asia, firms with coupled ownership and control hold dominant positions in light manufacturing and in banking and have a substantial presence in property development and import/export trade. In contrast, such firms play only a minor or secondary role in the more capital-intensive sectors of petrochemicals, metals and oil exploration. Redding (1990) provides corroborating support, and argues persuasively that FBGs have a marked strategic preference for projects characterized by labour-intensive, rather than capital-intensive technologies.

Relatedly, it has been argued that restricting resource commitments in dedicated assets or lock-in investments maximizes resource flexibility and is central to the FBGs' adaptive-entrepreneurial capabilities (Chen, 1995). That is, capital investment is typically directed to generic assets that can be readily deployed to respond

to shifts in fashion and volume (Redding, 1994). Whatever capital is employed is worked intensively and demand above capacity is met by subcontracting (Whitley, 1992).

A preference among FBGs for liquidity over large fixed asset capital investments may also stem from the effect of weak appropriability regimes upon investment decisions. Since the regulatory mechanisms and institutional infrastructure of many Southeast Asian countries are still developing, their weak appropriability regimes and unenforceable property rights are a disincentive for investments in customized and dedicated assets. Such institutional environments may produce a skew towards the adoption of generic and low asset specificity investments (Hill, 1995).

In summary, the relative advantages of coupled, rather than separated ownership and control in labour intensive industries and in national contexts characterized by weak appropriability regimes suggest the following hypothesis.

*Hypothesis 2:* The coupling of ownership and control among Hong Kong based firms is negatively related to capital expenditures.

#### *Product–Market Diversification*

A commonly ascribed product–market development pattern among FBGs is the establishment of a business in intermediate processing, sub-components, OEM or subcontract manufacturing, with subsequent diversification into trading, property, commodity, and other manufacturing businesses (Whitley, 1992). Whitley describes this pattern of diversification as ‘opportunistic investment’ and argues that the resulting diverse business portfolios appear to lack the coherence of a competence-based rationale. A strategic choice view of the FBG is found in Lasserre and Schutte (1995), who portray a product–market trajectory beginning with trading and moving on through manufacturing, banking, and real estate with an ultimate goal consisting of a ‘golden diamond’ comprised of positions in trade, industry, property and finance.

Several additional factors suggest that coupled ownership and control among Hong Kong based firms is positively related to the product–market scope of a firm. First, the undiluted control of assets provides a variety of benefits to majority owners. Yet to the extent that the owner’s share of a firm’s equity constitutes a significant portion of his or her wealth, then there is a high degree of risk which may be reduced by creating a business with a diversified portfolio of assets. In other words, wealth preservation goals may induce owners to manage their assets as a *de facto* mutual fund (Williamson, 1975).

Second, family ownership creates segmenting forces in FBGs (Wong, 1985). To manage this tension, families may agree upon different spheres of activity for each sibling, resulting in multiple diverse lines of business within the same family concern. Under these circumstances, the FBG firm may develop in quite unrelated directions.

Third, institutional environments with weak appropriability regimes produce conditions favourable to the pursuit of opportunistic investment strategies. Khanna and Palepu (1997) claim that conglomerate organization can add value in such institutional settings by imitating the functions of several institutions that are present only in advanced economies. For example, a conglomerate with a reputation for quality products can use its group name to enter new businesses even if



those businesses are completely unrelated. As Khanna and Palepu put it: 'because the misdeeds of one company in a group will damage the prospects of the other, all the group companies have credibility when they promise to honor their agreements with any single partner. They [conglomerates] provide a haven where property rights are respected' (1997, p. 17).

In summary, considerations regarding the risk bearing capacity of firms with coupled ownership and control, as well as the family-centric values of Hong Kong based entrepreneurs suggests the following hypothesis.

*Hypothesis 3:* The coupling of ownership and control among Hong Kong based firms is positively related to product-market diversification.

#### *Disposal of Fixed Assets*

To the extent that FBGs select diversified business portfolios as a wealth protection strategy, the corollary of Hypothesis 3 is that they will be more likely to be active in disposing under-performing assets. In contrast, firms controlled by salaried managers will be more likely to attempt to effect a turnaround of under-performing assets. The expected difference between 'churning' and 'turnaround' strategies should be reflected in higher observed levels of asset disposals in firms with coupled ownership and control.

Indeed, many analysts cite the adoption of simple organizational structures and the paucity of professional managers in FBGs as reasons why they are ill prepared to effect turnaround strategies (Kao, 1993; Redding, 1990; Whitley, 1992). Redding (1990) suggests that firms with coupled ownership and control make little use of financial control mechanisms and lack the means of monitoring and detecting the effects of strategic adjustments.

Asset disposals may also stem from a speculative orientation. Chu and MacMurray (1993) suggest that FBGs tend to be 'deal structurers' rather than 'builders' who favour short-term rents to enterprise building. Similarly, Lasserre and Schutte (1995) argue that the entrepreneurial success of FBGs owes much to the systematic exploitation of market imperfections stemming from either temporary scarcity or arising from access to privileged contacts (*guanxi*), and non-publicly available information. Many of these opportunities are self-limiting or otherwise ephemeral and once others locate the niche, assets are liquidated and diverted to another opportunity.

Tachiki (1997) observes that FBGs are most at ease with deal-driven investments, which are managed on a project by project basis. Projects commonly have a higher priority than formal business divisions and entrepreneurs prefer to observe the development of an investment before formally committing to it (Tachiki, 1997). Chen (1995) proposes that a competitive advantage of the FBG is rooted in deal-making skills, and notes that a mentality of 'fast-in' and 'fast-out' permeates the deal-making approach of FBGs. To the extent that such projects require capital investment, we should expect to see them reflected in relatively high levels of asset disposals.

In summary, the lack of a managerial cadre able to effect managerial based turnaround strategies and a propensity for entrepreneurial speculation and deal making among Hong Kong based firms with coupled ownership and control suggests the following hypothesis.

*Hypothesis 4:* The coupling of ownership and control among Hong Kong based firms is positively related to the disposal of fixed assets.

#### *Financial Liquidity*

From a purely economic viewpoint, the retention of large cash balances is generally interpreted as an inefficient use of assets, a cause for corrective action, and may render a firm vulnerable to takeover (Jensen, 1988). On the other hand, the maintenance of high balances in cash and other liquid investments rather than in fixed asset, or inventory accounts limits the risk exposure of owner/managers and their firms. Moreover, since deal-making and speculative acquisitions are central to FBGs' operations, large cash balances must be kept on hand to facilitate quick responses to ephemeral business opportunities.

A preference for liquidity may also be seen as a central tenet of FBG entrepreneurial style. Limligan (1986) describes a cash generation cycle in which cash investments in non-liquid assets are said to be in 'slumber' or 'put to sleep.' A key entrepreneurial objective is to accelerate the cash generation cycle and entrepreneurs may favour projects with short slumber periods that do not tie up cash. Long slumber periods require larger paybacks to compensate for additional risk.

In summary, the needs of firms with coupled ownership and control to manage their owners' risk exposure and the opportunistic investment strategies often ascribed to FBGs are both facilitated by the maintenance of high liquidity margins.

*Hypothesis 5:* The coupling of ownership and control among Hong Kong based firms is positively related to levels of corporate liquidity.

#### *Short-Term Profitability*

The five hypotheses outlined above collectively suggest that both the microeconomic incentives of coupled ownership and control as well as the particularistic values of Hong Kong based entrepreneurs orient FBGs towards strategic behaviour that involves rapidly harvesting and re-deploying financial assets. Harvesting, a strategy to maximize short-term cash flow, may be manifested by dividend taking (Hypothesis 1) and minimal capital expenditures in fixed assets (Hypothesis 2). Capital accumulation and allocation is achieved by deal-driven diversification (Hypothesis 3), and high rates of asset utilization and disposal (Hypothesis 4). Such deal making is greatly facilitated by the maintenance of high levels of corporate liquidity (Hypothesis 5).

The absence of commitments to specialized industry specific assets allows resources to be switched to high return sectors contributing to the generation of cash flow. As such, firms that employ this sort of harvesting approach can be expected to place a heavy emphasis on short-term profitability. Accordingly, accounting profits are more likely to be articulated as strategic goals in FBGs than alternative financial market based performance measures which factor in both long and short-term expectations into a firm's stock price (Lubatkin and Shrieves, 1986). In support of this conclusion, Redding (1990) has argued that this pattern of resource utilization among FBGs reflects their marked preference for projects characterized by quick payback periods.

In summary, the concern for short-term cash flow among FBGs which reflects both the microeconomic incentives of coupled ownership and control as well as

the values of Hong Kong based entrepreneurs suggest that FBGs will place an emphasis on short-term profit goals.

*Hypothesis 6:* The coupling of ownership and control among Hong Kong based firms is positively related to short-term (accounting) profitability.

#### DATA COLLECTION AND SAMPLE DESCRIPTION

The Worldscope Disclosure Database (1994) is used as the primary data source for this study. The *Thornton Guide to Hong Kong Companies* (1995) is used as a secondary source in order to fill in gaps and omissions in the Worldscope database's data records for particular businesses. The final sample contains 106 publicly traded Hong Kong firms for which sufficient ownership and financial data was available for the 1993 fiscal year. The 106 firms examined in this study represent 85.4 per cent of the 124 Hong Kong based firms listed in the Worldscope database. To determine how representative the 106 firms in the final sample are of the 124 firms in the Worldscope database, t-tests were used to compare the values of market capitalization and total assets (Firm Size), net sales (Revenue), and return on invested capital (Profitability) between these two samples. These tests found no statistically significant differences in terms of these variables between the initial and final samples.

The firms included in the final sample represent a cross-section of Hong Kong firms with asset bases ranging from \$US9 million to \$US3.93 billion. These firms also represent a broad cross-section of economic activity and are active in 12 different economic sectors (Financial Services, Construction, Retailers, Oil and Gas, Recreational Products, Electronics, Transportation, Metals, Food, Textiles, Miscellaneous Industrial, and Printing).

#### VARIABLES AND MEASUREMENT

##### *Independent Variable*

*Inside ownership (INSIDE).* The extent to which ownership and control is coupled and vested in the hands of owner/managers in a particular business is measured by the percentage of outstanding shares closely held. This measure includes shares held by officers, directors and their immediate families, shares held in trust, as well as shares held by companies controlled by the same parties. Importantly, this measure accounts for the fact that the practice of cross-holding of shares between companies controlled by a single family is very common in Hong Kong (Redding, 1990; Whitley, 1992).

##### *Dependent Variables*

*Dividend payout (PAYOUT).* Free, or positive cash flow constitutes slack resources (Bourgeois, 1981; Cyert and March, 1963) which can be used for a variety of operational pursuits such as funding new capital expenditures, corporate acquisitions, corporate diversification, or simply strengthening a company's balance sheet position in current assets accounts such as cash, or inventories. Alternatively, positive cash flow can be removed from the company by making dividend payouts to

shareholders (Jensen, 1988). The dividend payout ratio used in this study (PAYOUT), is equal to the percentage of cash flow paid out to shareholders in the form of dividends.

*Capital expenditures (EXPEND).* Capital expenditures are investments made to acquire, build, or update fixed assets such as plant and equipment. Such expenditures are typically made to improve the efficiency of operations, or to accommodate expected future growth in the demand for a company's products and services. Such expenditures are an alternative to dividend payout in terms of the use of corporate cash flow (Jensen, 1988).

The extent to which a firm invests free cash flow in capital expenditures is measured by the ratio of its capital expenditures to its base of fixed assets. As such, this measure is equal to the percentage growth in a company's fixed asset base for a given year.

*Diversification (DIV).* Worldscope lists all the four-digit SIC industries in which a Hong Kong based firm operates. While this database does not list the revenues generated for each four-digit SIC code, it does rank them in order of importance. In this study, product market diversification is measured using the weighting method proposed by Caves (1975), and used by others including Caves et al. (1980), Pomfret and Shapiro (1981), and Gedajlovic and Shapiro (1998).

$$DIV = SP_i * d_{ij}$$

where,

- $i$  = a firm's primary market segment
- $j$  = a firm's secondary market segment
- $d_{ij}$  = 0 if the firm operates in only one four-digit industry
- = 1 if  $j$  is in the same three-digit industry as  $i$
- = 2 if  $j$  is in the same two-digit industry as  $i$
- = 3 if  $i$  and  $j$  are in different two-digit industries
- $P_i$  = a weight imputed to each industry, assumed to decline geometrically: 1, 2, 4, 8, 16.<sup>[1]</sup>

The DIV measure is similar to a standard Herfindahl measure of diversification, except that the industry weights are imputed from a geometric series rather than being taken from actual line of business data. This measure does account for the various elements of diversification noted by Palepu (1985) in that it accounts for the number of product market segments in which the firm competes, it factors in the distribution of sales across the segments and it incorporates a measure of relatedness.

*Asset disposal (DISPOSE).* Periodically most companies sell, or dispose of fixed assets. Proceeds from these sales constitute non-operational sources of cash flow. Like other sources of cash flow, asset disposals can fund new capital expenditures, be used to improve liquidity positions in current accounts, or be paid out to shareholders in the form of dividends.

In this study we use a measure equal to the ratio of proceeds from the sale of fixed assets to total fixed assets in order to evaluate the extent to which a firm relies

on asset disposals to generate cash flow. This measure is equivalent to the percentage of a firm's fixed assets that are disposed of in a given year.

*Liquidity (CASH).* A company can use cash flow from both operational and non-operational sources in a variety of ways. These cash flows can be channelled into internal growth, corporate acquisitions, or payments to shareholders. Alternatively, the cash generated by a firm can be retained so as to improve the firm's liquidity position. High liquidity provides greater coverage of current liabilities, which lessens the possibility of default. Additionally, high liquidity constitutes slack resources which may be a significant part of a company's 'war chest' and provides a firm with the resources and financial flexibility to take advantage of market opportunities (Bourgeois, 1981). The ratio of cash and equivalents to total assets is used to measure financial liquidity.

*Short-term profitability (ROIC).* Net profits are another source of cash flow for firms. As with other sources of cash flow, current profits can be used for a variety of operational and non-operational purposes. Accounting based measures of firm performance reflect current, rather than long-term financial performance. Indeed, accounting measures provide a snapshot of corporate profitability over an accounting period (typically one fiscal year) as opposed to market based measures which reflect long-term performance because they incorporate current as well as discounted future cash flows (Lubatkin and Shrieves, 1986). Significantly, accounting profits reflect current and employable cash flows as opposed to future expected cash flows.

Return on invested capital (ROIC), a commonly used accounting performance measure, is used in this study to measure short-term profitability. It is equal to net income (after taxes and interest, but before extraordinary items) plus income taxes and long-term debt interest expense stated as a percentage of the average capital invested (total assets – total liabilities) at the two latest year-ends. The log argument of ROIC is used to stabilize its variance of ROIC.

#### *Control Variables*

*Stock concentration (CONCEN).* This paper examines the effects of coupled ownership and control on firm behaviour. A related, but distinct dimension of a firm's ownership structure is ownership concentration. While coupled ownership and control is characterized by the personalization of a firm through significant direct ownership by company insiders, ownership concentration refers to the extent to which share ownership is dispersed. Importantly, measures of ownership concentration do not distinguish between shares concentrated in the hands of those who have direct managerial control over a firm and the shares held by shareholders that rely on professional salaried managers to operate the firm on their behalf. As such, measures of ownership concentration are indicative of the incentives any large owner has to monitor managers (Shleifer and Vishny, 1997) rather than on the particular incentive features of coupled ownership and control which constitutes the focus of this study.

We include a measure of ownership concentration as a control variable in our regression estimates because the monitoring incentives of large shareholders have been linked to many of the same capital allocation and generation phenomena this study relates to coupled ownership and control.<sup>[2]</sup> As such, the inclusion of the

ownership concentration terms permits the evaluation of the effects of coupled ownership and control while controlling for the monitoring incentives of concentrated ownership. Importantly, this estimation approach also permits the empirical evaluation of whether stock concentration and coupled ownership and control exert convergent or divergent influences on corporate capital allocation patterns. The variable CONCEN equal to the percentage of shares held by the largest shareholder is used for this purpose.

*Firm size (LASSETS).* In all multivariate analyses, the size of a company's operations is controlled for through the measure LASSETS, which is equal to the log (base 10) of a company's asset base. The log is commonly used for statistical purposes since firm size is known to be log-normally distributed.

*Financial leverage (DEBT).* Financial leverage has a direct impact upon corporate cash flows. The need for corporations to service their outstanding debt reduces funds available for other operational and non-operational uses. For example, debt payments reduce the funds available for the payment of dividends to shareholders and for capital expenditures. The ratio of long-term debt to market capitalization (DEBT) is used to control for the effects of financial leverage.

*Industry effects.* The competitive environment in which a firm operates must also be controlled for. The competitive environment dictates both the profit potential of a firm (Porter, 1980) and the relative importance of particular investment and strategic decisions. In this study, a series of industry indicator variables are used to control for a firm's competitive environment. These indicator variables correspond to the 12 economic sectors in which the sampled firms operate (i.e. Financial Services (FIN), Construction (CONS), Retailing (RETL), Oil and Gas (OIL), Recreational Products (REC), Electronics (TRON), Transportation (TRAN), Metals (METL), Food (Food) Textiles (TEXT), Miscellaneous Industrial (IND), and Printing (PRIN)). For statistical reasons, only 11 of the 12 industry indicator variables are entered into any one regression model. The twelfth variable represents the baseline condition.

## RESULTS

Table I provides means, standard deviations and correlations for all the variables used in this study (except for the industry indicator variables). As indicated in table I, the prevalence of coupled ownership and control amongst Hong Kong firms appears quite high. On average, insiders hold 52.84 per cent of outstanding shares in Hong Kong firms.

Of particular note among the correlations reported in table I is the correlation between the predictor variable (INSIDE) and the control variable stock concentration (CONCEN). Though the correlation between INSIDE and CONCEN (0.65,  $p < 0.01$ ) implies that these variables share 42.25 per cent common variance, the fact that they perform quite differently both in terms of the correlations reported in table I and the regression models presented in table II is strongly indicative of discriminant validity (Kerlinger, 1986). As such, these findings strongly suggests that INSIDE and CONCEN represent related but distinct con-

Table I. Means, standard deviations and correlation matrix<sup>a</sup>

	<i>INSIDE</i>	<i>PAYOUT</i>	<i>EXPEND</i>	<i>DIV</i>	<i>DISPOSE</i>	<i>CASH</i>	<i>ROIC</i>	<i>CONCEN</i>	<i>LASSETS</i>	<i>DEBT</i>
<i>INSIDE</i>	1.00	0.15	-0.18*	-0.00	0.03	0.15	0.13	0.65***	0.02	0.14
<i>PAYOUT</i>	0.15	1.00	-0.09	-0.26***	0.05	0.41***	0.31***	-0.09	-0.22**	-0.39***
<i>EXPEND</i>	-0.18*	-0.09	1.00	-0.19	0.32***	-0.07	0.25**	-0.13	-0.10	0.04
<i>DIV</i>	-0.00	-0.26***	-0.19*	1.00	0.02	-0.22**	-0.06	0.09	-0.00	0.13
<i>DISPOSE</i>	0.03	0.05	0.32***	0.02	1.00	0.26***	0.64***	0.06	-0.11	0.02
<i>CASH</i>	0.15	0.41***	-0.07	-0.22**	0.26***	1.00	0.40***	-0.14	-0.17*	-0.21**
<i>ROIC</i>	0.13	0.31***	0.25**	-0.06	0.64***	0.40***	1.00	0.07	-0.06	-0.03
<i>CONCEN</i>	0.65***	-0.09	-0.13	0.09	0.06	-0.14	0.07	1.00	0.20**	0.17*
<i>LASSETS</i>	0.02	-0.22**	-0.10	-0.00	-0.11	-0.17*	-0.06	0.20**	1.00	0.08
<i>DEBT</i>	0.14	-0.39***	0.04	0.13	0.02	-0.21**	-0.03	0.17*	0.08	1.00
Mean	52.84	21.03	6.30	1.06	3.55	15.55	15.92	41.08	6.78	20.01
<i>Stddev</i>	18.18	19.36	9.75	0.44	12.83	15.71	30.02	20.36	0.74	15.89

Notes:

<sup>a</sup>Two-tail test of significance.\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

structs. In addition, each of the regression models described below was estimated excluding the CONCEN term. Since the results excluding the CONCEN term were generally consistent with the findings reported here, interpretation problems related to potential multicollinearity is judged not to be a significant issue.

The six research hypotheses of this study are evaluated through a series of ordinary least square regression (OLS) models. In each of these models, INSIDE and the control variables are regressed on a dependent variable. CONCEN, LASSETS, DEBT and the industry indicator variables are present in the models to control for ownership concentration, firm size, leverage and industry effects respectively. The results from these estimations are summarized in table II.

Hypothesis 1 predicts a positive relationship between inside ownership (INSIDE) and dividend payout (PAYOUT). Results strongly support Hypothesis 1. INSIDE is positively related to PAYOUT ( $t = 3.463$ ,  $p < 0.01$ ). Interestingly, the control variable CONCEN is significantly and negatively related to PAYOUT ( $t = -2.635$ ,  $p < 0.01$ ), indicating that firms with concentrated ownership structures have lower levels of dividend payout. The identity of shareholders appears to play an important role in determining dividend policy. Coupling ownership and control promotes high dividend payout ratios, but concentrated ownership actually has a depressive effect on dividend payout ratios.<sup>[3]</sup> Hypothesis is strongly supported.

Hypothesis 2 predicts a negative relationship between capital expenditures and inside ownership. Hypothesis 2 is also strongly supported. INSIDE is significantly and negatively related to EXPEND ( $t = -2.304$ ,  $p < 0.05$ ), indicating that coupled ownership and control in Hong Kong is negatively related to investments in capital expenditures.

Hypothesis 3 predicts a positive relationship between inside ownership and product market diversification. Hypothesis 3 is not supported. Results indicate that there is no statistically significant relationship between INSIDE and DIV.

Hypothesis 4 predicts a positive relationship between inside ownership and a firm's propensity to dispose of fixed assets (DISPOSE). Hypothesis 4 is not supported. Hong Kong firms with a tighter coupling ownership and control are no more likely to dispose of fixed assets than other Hong Kong businesses.

Table II. Regression results<sup>a</sup>

<i>Result</i>	<i>Dependent variable</i>					
	<i>HYP #1 PAYOUT Supported</i>	<i>HYP #2 EXPEND Supported</i>	<i>HYP #3 DIV Not supported</i>	<i>HYP #4 DISPOSE Not supported</i>	<i>HYP #5 CASH Supported</i>	<i>HYP #6 ROIC Supported</i>
INSIDE	0.46*** 3.46	-0.30** -2.30	-0.07 -0.46	-0.07 -0.50	0.32** 2.41	0.28** 2.01
CONCEN	-0.38*** -2.64	0.15 1.07	0.08 0.49	0.08 0.55	0.33** -2.32	-0.21 -1.41
LASSETS	-0.13 -1.21	-0.04 -0.37	0.01 0.00	-0.09 -0.76	-0.23** -2.05	0.13 1.15
DEBT	-0.33*** -3.26	-0.01 -0.14	0.19* 1.72	0.00 0.09	-0.11 -1.09	-0.09 -0.89
FIN	-0.08 -0.34	-0.71*** -3.22	0.02 0.08	-0.49** -2.03	0.21 0.91	-0.40* -1.66
CONS	-0.19 0.19	0.09 0.66	-0.06 -0.39	-0.08 -0.51	-0.04 -0.30	-0.10 -0.70
RETL	-0.06 -0.36	-0.45*** -2.67	0.14 0.74	-0.19 -1.02	0.23 1.36	-0.23 -1.27
OIL	0.20 1.51	-0.15 -1.15	-0.19 -1.29	-0.20 -1.40	0.09 0.69	0.04 0.29
REC	-0.08 -0.61	-0.07 -0.56	0.00 0.06	-0.22 -1.62	0.00 0.04	0.07 0.49
TRON	0.05 0.35	-0.31** -2.37	-0.21 -1.38	-0.16 -1.09	0.38 2.82***	-0.03 -0.19
TRAN	-0.04 -1.15	-0.33** -2.29	-0.23 -1.42	-0.18 -1.17	0.29 1.95*	-0.11 -0.69
METL	-0.13 -1.15	-0.10 -0.88	0.07 0.54	-0.08 -0.67	-0.02 -0.14	-0.07 -0.53
FOOD	-0.02 -0.16	-0.04 -0.34	0.06 0.47	0.25* 1.95	0.28** 2.27	0.19 1.50
TEXT	-0.05 0.72	-0.29** -2.18	0.00 0.04	-0.23 -1.56	0.10 0.47	-0.20 -1.35
IND	-0.07 -0.38	-0.57*** -3.16	-0.02 -0.08	-0.37** -1.85	0.20 1.09	-0.37 -1.92
Adjusted R <sup>2</sup>	0.23	0.26	0.05	0.11	0.21	0.14
F	2.85***	3.16***	1.31	1.76*	2.65**	2.04**

Notes:

<sup>a</sup> Standardized betas and *t*-statistics.\*\*\**p* < 0.01, \*\**p* < 0.05, \**p* < 0.1.

Hypothesis 5 predicts that inside ownership in Hong Kong is positively related to financial liquidity (CASH). Hypothesis 5 is strongly supported. INSIDE is positively and significantly related to financial liquidity ( $t = 2.407$ ,  $p < 0.05$ ). Interestingly, we find that CONCEN is actually negatively related to financial liquidity ( $t = -2.318$ ,  $p < 0.05$ ) which indicates that while tighter coupling of ownership and control promotes financial liquidity, concentrated ownership has a depressive effect on liquidity. Hypothesis 5 is strongly supported.<sup>[4]</sup>

Hypothesis 6 predicts a positive relationship between coupled ownership and control and short-term profitability. Hypothesis 6 is supported. Inside ownership



in Hong Kong is positively and significantly related to short-term (accounting) profitability ( $t = 2.011$ ,  $p < 0.05$ ).

## DISCUSSION

Extant research on FBGs has typically focused upon kinship networks and industry levels of analysis, and has been largely driven by theorizing that emphasizes Chinese cultural heritage and the effects of the institutional environment in which they operate. The prevailing view is one of flexibility, capacity for structural adjustment and rapid capital accumulation, qualities that are partly attributed to underlying entrepreneurial astuteness.

This research has put firms with coupled ownership and control at the centre of its analysis and it provides support for many of the anecdotal and descriptive studies that have suggested that there are both advantages and disadvantages associated with this style of capitalism. The popular press, which focused on the vigour of the 'Asian Tigers' in the mid-1990s, is now currently equally likely to lament the problems of 'crony capitalism' (*Business Week*, 1996; *New York Times Magazine*, 1998). By examining Hong Kong based firms and patterns in their use of financial resources, this research begins to identify how the particularistic values of owner/managers and the microeconomic incentives of coupled ownership and control shape the strategic behaviour and financial performance of owner/managed firms.

The strong support for the dividend-taking hypothesis (Hypothesis 1) supports research from other national settings and other historical periods that finds that coupling ownership and control may retard enterprise development (e.g. Chandler, 1990). Similarly, our findings, which indicate that firms with coupled ownership and control invest less in fixed assets (Hypothesis 2) also suggest that such a governance structure may result in stunted business unit growth.

The finding that stock concentration is negatively and significantly related to dividend payout, indicates that other forms of Hong Kong enterprise with concentrated ownership choose to retain more of their earnings for operational purposes. In the case of Hong Kong firms at least, the identity of shareholders matters in investment decisions. This finding indicates that different classes of owners exert different forces on the firms they control and suggests quite strongly that shareholder interests are not homogeneous and reflect both the particularistic values and the divergent risk profiles of particular classes of shareholders.

Our finding that tighter coupling of ownership and control is positively related to financial liquidity (Hypothesis 5) supports the popular notion that FBGs are oriented towards deal making. Our finding that coupled ownership and control is negatively related to capital expenditures (Hypothesis 2) is also suggestive of the entrepreneurial style of FBGs. That no relationship exists between asset disposals and inside ownership (Hypothesis 4) suggests that FBG deal-making activities may be focused on projects requiring investments in liquid rather than fixed assets. Our finding that the coupling of ownership and control is positively associated with short-term profitability (Hypothesis 6) reflects these resource allocation decisions.

The often-attributed FBG characteristic of opportunistic and conglomerate investment is not supported here (Hypothesis 3). Two possible explanations

warrant further study. First, anecdotal evidence and descriptive studies appear unanimous in their assertions of wide diversification, but it is possible that other forms of Hong Kong based businesses are equally active in their diversification efforts. Second, FBG diversification may occur at the level of family estate, or private holding company, which suggests the need for empirical studies that focus on inter-firm networks rather than businesses as their unit of analysis (Biggart and Hamilton, 1992).

Finally, the support found for Hypothesis 6 suggests that FBGs are highly concerned with short-term accounting profits. Such a finding is reflective of underlying resource allocation patterns among firms with coupled ownership and control, most notably its association with high dividend payout levels (Hypothesis 1) and low investments in capital expenditures (Hypothesis 2). Collectively these results are consistent with the view that entrepreneurs are often less concerned with the development of their enterprises than with the capacity to generate short-term cash flow which is then withdrawn from the company.

### CONCLUSION

In the context of Hong Kong at least, the economics and finance literature on the one hand, and the history, management and sociology literatures on the other, are more complementary than contradictory. The patterns in the use of financial resources identified in this study are generally consistent with *both* the economics and finance literatures regarding the incentive effects of coupled ownership and control and much of the historical, sociological and cultural literatures in their treatments of the FBGs found in Hong Kong.

Restricting this study to an analysis of Hong Kong based firms has allowed us to control for social context in our evaluation of firms with coupled ownership and control. Such an approach has also provided us with the opportunity to draw upon contextually relevant literature in developing our hypotheses and in interpreting our findings. Since the single context nature of our research design obviates the possibility of making direct cross-national comparisons, further research regarding the consequences of coupled ownership and control in a variety of institutional settings appears warranted. In this respect, the relatively *laissez faire* nature of business government-relations in Hong Kong (Fukuyama, 1995) may limit the generalizability of this study's findings to settings such as Mainland China and South Korea (Amsden, 1989) where the state has played a much more interventionist and directive role in economic matters. Clearly, studies which investigate the moderating influence of social authority structures pertaining to business-government relations (Hamilton and Biggart, 1988) on the economic incentives of coupled ownership and control appear useful avenues for future research.

The patterns in the use of financial resources identified in this study have a number of managerial and public policy implications. First, firms with a tight coupling of ownership and control, such as the FBGs found in Hong Kong, often escape the scrutiny of outside investors which allows capital allocation decisions to reflect the particularistic values of entrepreneurs. In this respect, *Guanxi*, the personalization of investment decisions is generally considered a strength of FBGs (Chen, 1995; Luo and Chen, 1997). The crisis in Asian financial markets in late 1997 suggests that this form of capital allocation may have some serious limita-

tions (Rajan and Zingales, 1998). External investors holding minority interests in firms with coupled ownership and control, such as FBGs, are likely to require higher returns to compensate for the fact that many investments are personalized and not entirely transparent to outsiders (Claessens et al., 1999b; La Porta et al., 1997). As such, FBGs may face a capital constraint that limits their investment set to projects which can be financed from internal sources or from financial institutions from within a particular entrepreneur's network of personal contacts.

In essence, the tight control held by entrepreneurial families may limit their ability to seek capital outside their personal network. Recent turbulence in Asian financial markets has further exacerbated the difficulties for many Hong Kong businesses in need of outside capital. A tightening of bank credit and dropping stock prices presents a double dilemma for many Hong Kong FBGs. Tighter credit has required many such businesses to raise outside capital. At the same time, outside capital has become more costly to obtain. As such, in the wake of the Asian financial crisis, firms with coupled ownership and control, such as the FBGs, may be faced with pressures to depersonalize their investment practices and to make decisions more transparent.

The findings concerning liquidity and capital expenditures suggest that by coupling ownership and control, owner/managers may effectively deprive their firms of patient capital. This is not to say that firms with coupled ownership and control cannot mobilize capital, but that since it is personalized in the hands of one, or a few major owners who must manage their risk exposure, these companies will tend towards short-term strategic behaviour and prefer projects with quick payback periods (Chen, 1995; Chu and MacMurray, 1993).

In this respect, highly specialized assets may offer productivity enhancing capabilities, which are a source of competitive advantage for firms able to deploy them (Hill, 1995; Williamson, 1985). Patient capital is necessary to support investments where highly specialized assets are required. If the purpose of a governance structure is to align transactions possessing different attributes in an efficient and discriminating way (Williamson, 1991), then lack of patient capital and skilled professional managers may limit firms with tightly coupled ownership and control to deploy and efficiently utilize dedicated, firm-specific assets (Fukuyama, 1995). In the specific case of Hong Kong, the difficulty FBGs have had in building brand equity and in marketing intangibles is illustrative of this problem (Redding, 1990). The poor track record of FBGs in technologically complex industries is also illustrative (Leung and Wu, 1995).

On the other hand, generic assets are sometimes more productive than specialized assets (e.g. in industries marked by non-complex technology) (Dyer, 1996). In these settings, the entrepreneurial acuity, financial liquidity and flexible capital-allocation processes of personalized firms such as Hong Kong based FBGs are advantageous (Weidenbaum and Hughes, 1996). Indeed, it is the astute use of generic assets that is the basis for regimes of flexible-specialization (Sabel, 1988) that are often posited to be the functional equivalent of managerial hierarchy (Best, 1990).

Finally, our findings which establish a link between the particularistic values of owner/managers and a firm's resource allocation patterns resonates with a recurrent theme in the regional economic development literature, namely that stunted enterprise development may weaken a region's economy. In this regard, there is a growing consensus in the policy community that ineffective corporate governance

(e.g. Maher and Andersson, 1999; Sandstrom, 1998) related to the personalization of investment decisions and poor scrutiny of investment proposals resulted in a large number of non-performing bank loans, which was a major contributing factor to the Asian financial crisis of 1997 (Henderson, 1998). Clearly, from a public policy perspective, the impact of firm-level governance characteristics on regional economic development warrants further study.

A robust and high performance economy requires a mix of organizational forms capable of effecting coordinated and autonomous adaptations (Harrison, 1994; Williamson, 1991). In this regard, the findings reported here suggest clear relative advantages and disadvantages of firms with coupled ownership and control structures. As reflected in their superior short-term profitability, high liquidity levels and high dividend payouts, firms with coupled ownership and control can make efficient and flexible use of financial resources (Glasmeir, 1994; Whiteley, 1992). On the other hand, such tendencies, as well as their reluctance to make capital expenditures in specialized assets, makes them ill-equipped to compete internationally in capital intensive, oligopolistic and many technologically dynamic industries (Fukuyama, 1995; Redding, 1988). These considerations strongly suggest that enduring and broad-based regional economic development require firms with both coupled and separated ownership and control structures that are engaged in the economic activities for which they are best suited.

#### NOTES

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- [1] For example, if a firm operates in two industries, the revenues are assumed to be distributed in a 2:1 ratio, that is a 2/3 weight is attributed to the first SIC code and a 1/3 weight to the second SIC code. If the firm operates in three industries, the weights would be 4/7, 2/7 and 1/7.
- [2] For instance, previous research has linked ownership concentration to investment decisions (Harris and Raviv, 1991; Marris, 1964), strategic decision-making (Amihud and Lev, 1981; Hill and Snell, 1989), the stock and disposition of free cash flows (Jensen, 1988) and corporate profitability (Bentson, 1985).
- [3] These relationships are consistent across alternative specifications of the equation. Of particular note, a separate model was estimated in which profitability (ROIC) was entered as an additional control variable. As expected, ROIC is positively and significantly related to dividend payout ratios ( $t = 3.185$ ,  $p < 0.01$ ). That is, current profitability is positively related to dividend payout ratios. Controlling for current profit levels, INSIDE and CONCEN retain their significance, direction and magnitude.
- [4] A separate estimation was run including current profits (ROIC) as a control variable. As expected, ROIC is positively and significantly related to financial liquidity (CASH) ( $t = 4.157$ ,  $p < 0.01$ ). Importantly, INSIDE and CONCEN retain their significance, direction and magnitude when ROIC is controlled for in the estimation.

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