The impact of family-firm structure and board composition on corporate transparency: Evidence based on segment disclosures in Malaysia

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Abstract

The aim of this study is to contribute to the growing literature on the quality of accounting disclosures by family firms by investigating whether the alignment (entrenchment) effect leads to high (low) corporate transparency. Unlike previous studies, this study also examines the relationship between board composition and corporate transparency by distinguishing between the two types of nonexecutive directors, namely independent and affiliated directors. Using the enhanced segment disclosures by Malaysian firms in 2001/2002 as a proxy of corporate transparency, the results indicate that family firms are more inclined to disclose all the required items for the primary basis of segment reporting, consistent with Ali, Chen, and Radhakrishnan (2007) and Wang (2006). The result also indicates that firms with higher proportion of affiliated directors are more likely to make greater segment disclosures. However, no evidence is found to support the contention that independent directors and institutional investors promote corporate transparency, consistent with previous Malaysian studies.
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1. Introduction

An important area of accounting research receiving much attention recently, emphasizes the influence that corporate governance may exert on corporate transparency (Ahmed & Duellman, 2007; Ajinkya, Bhojraj, & Sengupta, 2005; Ali, Chen, & Radhakrishnan, 2007;

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Beekes & Brown, 2006; Beekes, Pope, & Young, 2004; Fan & Wong, 2002; Garcia-Lara, Garcia-Osma, & Penalva, 2007; Karamanou & Vafeas, 2005; Wang, 2006). The dimensions of corporate transparency these studies investigate include quality of earnings in terms of accruals quality, earnings informativeness, and accuracy and bias of management earnings forecast.[1] Two internal corporate governance characteristics that are extensively investigated are ownership structures and board attributes. Given that the two extreme types of ownership structure, namely diffused ownership (widely held shareholder system) and concentrated ownership (controlling shareholder system), give rise to two types of agency problems — Type I (manager opportunism or the misalignment effect) and Type II (owner opportunism or the entrenchment effect) (see, for example, Gilson, 2006; Villalonga & Amit, 2006) — recent studies have begun to focus more on the linkage between family firms and the quality of accounting disclosures (see, for example, Ali et al., 2007; Chen, Chen, & Cheng, 2008; Patelli & Prencipe, 2007; Wang, 2006).

The effect of ownership structure on corporate transparency remains an unsettled area of research interest. For example, Fan and Wong (2002) argue that the entrenchment effect and the proprietary-information effect associated with concentrated ownership result in corporate opacity and low informativeness of accounting earnings. Wang (2006), on the other hand, argues that a founding family firm with its unique concentrated ownership is "less likely to engage in opportunistic behavior in reporting accounting earnings because it potentially could damage the family's reputation, wealth and long-term firm performance" (p. 622). When the alignment effect overwhelms the entrenchment effect, the family firm would be inclined to report high quality financial information. Ali et al. (2007) show that the difference in Type I agency problems across family firms and nonfamily firms dominates the difference due to Type II agency problem. Thus, they observe that family firm reports higher earnings quality than nonfamily firm. This study contributes to the current debate on the alignment versus entrenchment effect of family firms by investigating whether family firms are associated with greater corporate transparency.

The proxy used as an indicator of corporate transparency is the early adoption of an accounting standard associated with greater disclosure, namely the disaggregation of accounting information by business segments. Companies that adopt Financial Reporting Standard (FRS) 114, previously known as Malaysian Accounting Standard Board (MASB) 22, prior to its effective date, are deemed to be proponents of corporate transparency. The standard on segment disclosure is chosen primarily because, during the study period, there is evidence to suggest users' dissatisfaction with the quality of segment disclosures as illustrated in the AIMR Corporate Disclosure Survey 2000 and OECD White Paper on Corporate Governance in Asia 2003.

In Malaysia, from 1987–2001, companies listed on Bursa Malaysia were required to comply with the original International Accounting Standard (IAS) 14. The revised IAS 14, which became effective for periods beginning on or after 1 July 1998, has not been immediately adopted in Malaysia. With the introduction of MASB 22, in 2001, listed companies in Malaysia are required to disclose segment data similar to the requirements under the revised IAS 14 for the periods beginning on or after 1 January 2002. The FRS 114-cum-

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[1] Earnings informativeness is often measured by the earnings response coefficient (or earnings explanatory power for returns) and earnings conservatism (or asymmetric timeliness of earnings, .i.e., speedier recognition of bad news than good news in earnings).

IAS 14 (revised) presents major departures from the original IAS 14. The differences include the adoption of a two-tier segmentation with either the business segment or the geographical segment as the dominant basis of segment reporting (primary), consistent use of accounting policies across segments, and a standardized measure of segment results across companies.

Since FRS 114 requires additional disclosures, such as depreciation and amortization expenses and other significant noncash expenses by reportable segments, it follows that companies that adopt FRS 114 prior to its effective date were voluntarily disclosing more information especially for the primary basis of segment reporting. In addition, unlike the original IAS 14, FRS 114 requires disclosures of segment liabilities in the primary segment reports and capital expenditure, if any, in both the primary and secondary segment reports.

Another tension in the corporate governance literature is the efficacy of the two different types of nonexecutive directors. Various codes on "best practice" in corporate governance around the world advocate, that the composition of the board of directors should have a mix of executive and nonexecutive directors (see, for example, Cadbury Report, 1992; King Committee Report, 1994; Bosch Committee Report, 1995). The argument is that nonexecutive directors, who are presumably independent of management, provide a check and balance; they are expected to monitor and control the actions of self-serving executive directors on behalf of the external shareholders.

On the other hand a special report on nonexecutive directors in *The Economist* (20 March 2004, pp. 71–73) cautions that independent directors may not behave so independently, and thus compromising their objectivity and loyalty to the shareholders. In addition, the report warns that ignorance may be the dangerous price of independence. The report, citing Carter and Lorsch (2004), further highlights a special breed of nonexecutive director who is not independent. This nonindependent nonexecutive director is often known as an affiliated or "grey" director. Klein (1998), Hermalin and Weisbech (2003), Matolcsy, Stokes and Wright (2005), Peng (2004) and Fich (2005), among others, highlight the distinction between an affiliated director and an independent director, who are both nonmanagement members of the board. According to Klein (1998), apart from being a part timer, an affiliated director is usually an ex-employee, or related to the firm's controlling family, or an interlocking director, or a professional with significant business or financial ties with the firm. Similarly, Peng (2004) defines affiliated and independent directors as "nonmanagement directors who have family and/or professional relationships with the firm or firm management and nonmanagement directors with no such relationship respectively" (p. 454). Since affiliated directors have prior associations with the firm, they often have intimate knowledge of the firm and its industry compared to many independent directors, and, thus, shareholders may feel affiliated directors rather than independent directors are better serving them.

Although a few studies on board composition and firm performance acknowledge the dichotomy between independent and affiliated directors (see, for example, Anderson & Reeb, 2004; Daily & Dalton, 1994; Dalton, Daily, Ellstrand, & Johnson, 1998; Hermalin & Weisbech, 2003; Peng, 2004), there is a notable lack of empirical evidence on the relative efficacy of the two distinct types of nonexecutive directors in promoting corporate transparency. Past studies predominantly examine the monitoring role of independent directors or nonexecutive directors by treating independent and affiliated directors as a homogenous group. As a first attempt to assess the relative influence of independent versus affiliated directors in fortifying corporate transparency, and in response to the call for

researchers to focus on how ownership structures shape accounting policies in emerging markets and transition economies (Fan & Wong, 2002, p. 404), this study considers whether ownership structure (family firm versus nonfamily firm) and board composition (independent director proportion and affiliated director proportion) influence the timing of adoption of an accounting standard.

Malaysia provides an ideal setting to investigate the influence of family firm ownership and board composition on corporate transparency. First, family firms are prevalent in Malaysia. An article in the *South China Morning Post* (dated 28 August 2002, as cited by Jaggi, Leung & Gul, 2009) states that Hong Kong has the third highest percentage of family ownership of listed companies in the region after Indonesia and Malaysia. This is further supported by Liew (2007), who concludes, based on evidence presented by Claessens, Djankov and Lang (1999) and World Bank (2001), that "companies in Malaysia are typically controlled by a small group of related parties and managed by owner–managers" (p. 726). Second, data on board mix is readily available, since the annual reports of listed companies in Malaysia must include the profile of each of the directors and specify whether the director is an executive, nonindependent nonexecutive, or independent nonexecutive.[2]

The results indicate that family firms (proxied by the proportion of family members on the board) and boards with a greater proportion of affiliated directors are more inclined towards early adoption of FRS 114 in full (disclose all primary segments items) than delayed adoption. The significance of this research is as follows: First, the finding that family firms are more likely to make greater segmental disclosures is consistent with Wang (2006) and Ali et al. (2007) who show that Type II agency problems are overshadowed by Type I agency problems. Second, our results show differential effects on the contribution of independent versus affiliated directors in enhancing corporate transparency. Thus, treating both independent and affiliated directors as a homogenous group may mask their equivocal influences on board monitoring and performance.

The rest of the paper proceeds as follows: Section 2 reviews prior studies and develops the hypotheses. Section 3 describes the identification of early adopters, the procedure to match early adopters against nonearly adopters, empirical tests, data collection, and sample characteristics. The findings are presented in Section 4, and Section 5 describes the main conclusions, practical implications, limitations of the study, and suggestions of avenues for future research.

2. Prior studies and hypothesis development

As mentioned above, there are two types of agency costs. Type I arises from the separation of corporate ownership from corporate management, whereby shareholders who invest in the business do not intend to play an active role in its management (Jensen & Meckling, 1976). They designate firm managers to run the company with the goal of maximizing shareholder wealth. This can lead to conflict-of-interest situations, whereby

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[2] Paragraph 9.25 of the Bursa Malaysia Listing Requirements states that the particulars of each director shown in the annual report must include the name, age, nationality, qualification, and whether the position is an executive or non-executive one and whether such director is an independent director. Among other particular, to be disclosed of each director is any family relationship with any director and/or major shareholder.

managers, as agents for owners, may take actions which are not in the best interest of the owners. The dysfunctional "managerial opportunism" includes management's incentive to adopt investment and financing decisions that are disproportionately more beneficial to them, management's shirking, perquisite consumption, and management's atrophy, whereby they do not watch over the affairs of the firm as diligently as owner–managers. In order to align the interests of managers and owners, owners have to incur monitoring costs, such as appointing independent directors and auditors, and managers have to bear bonding costs, such as the imposition of a performance-based remuneration structure. Thus, Type I agency costs for firms managed by nonowners are higher than owner-managed firms. Ang, Cole and Lin (1999), Singh and Davidson (2003), and Fleming, Heaney and McCosker (2005) provide direct evidence that agency costs, measured in terms of asset utilization and operating expenses, are higher for outsider managed firms than firms that are managed by owners (insiders) themselves.

However, owner–managers, as exemplified by the family firm, can create Type II agency costs, whereby owner–managers become so dominant and entrenched that they become predators to the minority owners (Morck & Yeung, 2003; Morck, Shleifer, & Vishny, 1988; Shleifer & Vishny, 1997). This concentrated ownership creates "owner opportunism," when owner–managers engage in self-dealing transactions that benefit themselves at the expense of minority owners, or practice nepotism by installing family members who suffer from honest incompetence and deficits of expertise (Hendry, 2002; Schulze, Lubatkin, Dina, & Buchholtz, 2001). Wang (2006) and Ali et al. (2007) argue and provide empirical evidence that the difference in agency costs across family and nonfamily firms due to Type I agency problems (managerial opportunism or that misalignment effect) overwhelms the difference in agency costs across family and nonfamily firms due to Type II agency problems (owner opportunism or the entrenchment effect). Specifically, Wang (2006) observes that family firms report better quality earnings in terms of lower absolute abnormal accruals, larger earnings response coefficient and less persistence of transitory loss components in earnings. In the same vein, Ali et al. (2007) document that family firms have larger earnings response coefficient, exhibit less positive discretionary accruals, have greater predictability of cash flows, and are more likely to provide voluntary disclosure of bad news through earnings warnings.

Based on theoretical arguments and empirical evidence from Wang (2006) and Ali et al. (2007), it is hypothesized that family firms in Malaysia provide better financial disclosures through early adoption of FRS 114. Accordingly,

H1. *Ceteris paribus*, family firms are more likely to adopt FRS 114 prior to its mandatory date.

Independent directors are perceived as a potential solution to many of the corporate governance problems. The presence of independent directors on the board serves as a check on management on behalf of shareholders. Theoretically, they can monitor management effectively as they have no need or inclination to stay in the good graces of management, and can speak out, inside and outside the boardroom, in the face of management misdeeds, in order to protect the interests of shareholders (Clarke, 2006). Section 301 of the Sarbanes–Oxley Act of 2002 requires that all members of a listed company's audit committee be independent directors. The NYSE Rules stipulate that independent directors must constitute a majority of the board except when the company is a controlled company. The Combined Code in the United Kingdom specifies that nonexecutive directors should constitute not less

than one third of the board and the majority of nonexecutive directors should be independent of management and free from any business or other relationship which could materially interfere with the exercise of their independent judgment.

In Malaysia, the role of independent directors in improving corporate governance has also been recognized. One recommendation of the voluntary Malaysian Code on Corporate Governance released in March 2000 is that at least one third of corporate board members be independent directors. This requirement is now embodied in paragraph 3.14 of the Bursa Malaysia Listing Requirements. In addition, the Listing Requirements also stipulate that the audit committee must comprise a majority of independent directors and the chairman of the audit committee must be an independent director (paragraphs 15.10 and 15.11). In the 2008 Budget Speech delivered by the Malaysian Prime Minister in September 2007, he announced various measures to further strengthen corporate governance which are now incorporated in the revised Malaysian Code on Corporate Governance (2007). The key amendments include establishing an Auditing Oversight Board under the auspices of the Securities Commission, prohibiting executive directors from becoming members of the audit committee, and mandating an internal audit function for all publicly listed companies.

Using the principal–agent setting, Patelli and Prencipe (2007) argue for the coexistence of two control mechanisms to reduce agency costs, namely independent directors and voluntary disclosure. A higher level of disclosure imposes costs on the agents, limiting their opportunistic behavior and the personal benefits of control. With higher disclosure, principals are more likely to discover and sanction agents' self-dealing activities, which deter the agents from pursuing dysfunctional behavior. In the presence of independent directors who limit the agent's opportunistic behavior, ex-ante, the release of voluntary information is less costly to the agents because they have less to gain from retaining such information.

Despite the appealing explanation on the usefulness of independent directors, the empirical evidence on the contribution independent directors make to corporate transparency is generally mixed. Cheng and Courtenay (2006) show that firms with higher a proportion of independent directors, or with a majority of independent directors on the board, have higher levels of voluntary disclosure in Singapore. Cornett, Marcus and Tehranian (2008) reveal that independent directors effectively restrain earnings management among Standard and Poor's 100 firms in the United States. Patelli and Prencipe (2007), using both the legal and stricter definition of independent directors, show that independent directors promote voluntary disclosure among Italian companies with dominant shareholders. On the other hand, Ho and Wong (2001) and Haniffa and Cooke (2002) do not find any significant relationship between independent directors and the extent of voluntary disclosure in Hong Kong and Malaysia, respectively.

Based on the above-mentioned explanation, the following hypothesis is posited:

H2a. *Ceteris paribus*, firms with a greater percentage of independent directors on their boards are more likely to adopt FRS 114 prior to its mandatory date.

Although securities regulators emphasize the importance of independent directors, other studies by Dalton et al. (1998), Bhagat and Black (1999), Hermalin and Weisbech (2003), Carter and Lorsch (2004), Anderson and Reeb (2004) and Fogel and Geier (2007) do not find that independent directors add value. Fogel and Geier (2007) provide one possible explanation as to why the presence of independent directors does not have the intended

effect of promoting good corporate governance or generating better financial returns for shareholders. They assert that under the Sarbanes–Oxley regime, which gives short shrift to the role and efficacy of independent directors by focusing on the independence of auditors and internal controls, company managers are accountable to independent directors who have vastly less information about what is occurring inside the company than the company's managers. As a result, company managers, who have the information advantage over the directors are notionally accountable to a board of strangers and they have no real accountability to the owners.

Carter and Lorsch (2004) concur with the idea that independence has its downside; in fact, sometimes independence can make directors even more captive to management's view of the business. To overcome this inconvenient truth, they suggest that it might be better if a board has a few nonexecutive directors who have deeper knowledge of the company and its industry because of prior association even though this knowledge prevents them from being classified as truly independent (page 46).

Dalton et al. (1998) contend that nonmanagement directors whose affiliation is derived from a professional or business relationship (i.e. supplier, customer, legal counsel, and management consultant) may be highly effective at the resource dependence and counseling/ expertise board roles due to their industry contacts, business acumen, specialized knowledge, and skills. They are appointed as board members so that the firm can tap into the resources that they bring. Similarly, Anderson and Reeb (2004) posit that directors classified as affiliates often have skills in knowledge-based fields such as law, finance, accounting, and consulting, and they are sought after for their value-adding advice and counsel.

Given the potential contribution from nonexecutive affiliated directors who possess better firm-specific knowledge than independent directors, it is rather disappointing to note that several studies that document a link between financial disclosure quality and nonexecutive directors (see, for example, Beekes et al., 2004; Karamanou & Vafeas, 2005 and Ajinkya et al., 2005) do not make a distinction between independent and affiliated directors. Accepting that independent and affiliated directors are two different breeds of nonexecutives who are conceptually not identical, the following hypothesis is proposed in order to test for their differential contributions, if any, in promoting corporate transparency:

H2b. *Ceteris paribus*, firms with a greater percentage of affiliated directors on their boards are more likely to adopt FRS 114 prior to its mandatory date.

3. Methodology

3.1. Identifying early adopters and matching procedures

Early adopters were identified from online searches using the Bursa Malaysia database (http://announcements.bursamalaysia.com). The 2001 and 2002 annual reports and annual audited accounts (excluding financial statements ending 31 December 2002) were text-searched for specific phrases unique to MASB 22 such as "primary reporting," "segment liabilities," "MASB 22," "Standard 22" and "Standard No 22." The searches were conducted in November 2002 and April 2003. Upon detailed inspection of the relevant annual reports or annual audited accounts of the "hit" companies, it was found that some of

these documents, although having the above phrases, are not related to MASB 22 adoption. For example, Fututech Berhad (formerly Ulbon), in its annual report 2001, disclosed in Note 2 (a): Significant Accounting Policies:

> The promulgated standards MASB 19: Events After the Balance Sheet Date, MASB 20: Provisions, Contingent Liabilities and Contingent Assets, MASB 21: Business Combinations, MASB 22: Segment Reporting, MASB 23: Impairment of Assets and MASB 24: Financial Instruments: Disclosure and Presentation have been adopted prior to their effective dates.

However, under Note 31: Segmental Information, the annual report states:

> No segmental reporting is prepared as the Group's activities are carried out primarily in Malaysia and the Group's operations are substantially in the manufacturing sector only.

Eliminating the inappropriate "hits," 32 different companies that adopted MASB 22 prior to its effective date were identified.[3]

The early adopters were matched on a paired basis with nonearly adopters based on a similar board of exchange (main or second board), sectoral classification, financial year-end, and number of business segments (plus or minus one is acceptable if exact matching is not possible). The number of business and geographical segments were obtained from the segment disclosures in the notes to the financial statements. Thus, a total of 64 companies comprising 32 early adopters of FRS 114 and a control group of 32 nonearly adopters were examined in this study (see Appendix A).

The early adopters' segment disclosures were scrutinized, and the accounting treatments for the ten mandatory items in the primary segment reporting format were coded as follows (see Appendix B): (A) allocated to segments, (U) disclosed in aggregate in the segment report without allocating to segments, i.e., unallocated, (NA) not applicable (since the items are also not disclosed elsewhere in the consolidated financial statements, and (ND) not disclosed in the segment report although they are disclosed elsewhere in the consolidated financial statements. Early adopters with at least one item designated "ND" were judged not fully compliant with FRS 114 disclosures and categorized as partial early adopters, and the remaining as full early adopters. These procedures yielded 15 full and 17 partial early adopters.

3.2. Early adoption model

Two logistic regression models, binary and multinomial, were tested. In the binary model, the dependent variable is dichotomous and takes the value of either one (early adopters) or zero (nonearly adopters) and in the multinomial model, the dependent variable is trichotomous and takes the value of zero (full early adopters), one (partial early adopters) and two (non early adopters). As explained in Ireland (2003), in a multinomial model, these

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[3] One company, Amtel, was excluded as its financial year-end 30 November 2002, is very near the effective date of MASB 22, financial year-end 31 December 2002. Subsequently, the search for early adopters was also widened to include financial statements for 2000, but this procedure yielded only one company, i.e., Khind. In 2000, Khind operated in a single business segment and adopted the geographical segment as the primary reporting format. Khind disaggregated its total liabilities into Malaysia and rest of the world segments.

codings serve merely to identify the different outcomes. They are meaningless in themselves and do not imply any rankings or ordering in the multinomial model (p. 981). The motivation to run both binary and multinomial models comes from Powell (1997). He shows that in modeling the relationship between a firm's characteristics and its takeover likelihood, more insight can be gained from segregating takeover targets into hostile or friendly targets than treating them as homogenous. He cautions that "the use of a binomial specification to model takeover likelihood is likely to be incorrect and conclusions based on such a model are likely to be misleading and result in incorrect inferences regarding the characteristics of firms subject to takeover" (p. 1026).

Following prior studies such as Haniffa and Cooke (2002), Prencipe (2004) and Wan-Hussin, Che-Adam, Lode and Kamardin (2005), in addition to the variables of interest, namely representation by family members on a board as a proxy for family firms and other board characteristics, we also included six control variables to explain early adoption of FRS 114. These are firm size which is proxied by natural log of total assets (LNASSET), DEBT which is measured as total loans divided by shareholders equity, INST which is the cumulative ownership by the four largest institutional investors, return on assets (ROA), board size (BSIZE), and a dummy variable CEOMALAY which indicates whether the Chief Executive Officer is ethnic Malay or Chinese.[4]

Barry and Brown (1986) and Lang and Lundholm (1996) posit that larger firms have an incentive to disclose more than smaller firms because the annual reports of the larger firms are more likely to be scrutinized by financial analysts. Chow and Susela Devi (2001) and Wan-Hussin et al. (2005) show that segment disclosure in Malaysia is related to firm size. Smith and Warner (1979) suggest that by supplying more information to debt suppliers, voluntary disclosure can reduce the agency costs for highly leveraged firms. This argument is reinforced by McKinnon and Dalimunthe (1993) who argue that by providing segment information, debt suppliers can make better predictions about the growth, risks, and return prospects of diversified companies, or group of companies. Bradbury (1992), Mitchell, Chia and Loh (1995) and Chow and Susela Devi (2001) show that there is a positive relationship between financial leverage and the level of segment disclosure.

Institutional investors have the incentives to collect information and monitor management, thus they are able to demand greater corporate transparency and promote accounting-report integrity. Yeo, Tan, Ho and Chen (2002), Chung, Firth and Kim (2002), Jung and Kwon (2002), Koh (2003) and Cornett et al. (2008) provide evidence that institutional investors monitor and constrain the self-serving behavior of managers in the United States, Australia, Korea and Singapore.

Segment information may also reveal the existence of business opportunities to competitors and harm the disclosing firm's competitive position (Nichols and Street, 2007). Thus, the proprietary costs arising from disclosing segment information, tend to be particularly high for growing companies. Return on assets is included as a control variable as proxy for proprietary costs.

Board size is included as a control variable, given its growing importance in contemporary financial studies, such as by Byard, Li and Weintrop (2006), Boone, Field,

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[4] Although Malaysia is a multicultural society with three main ethnic groups, the indigenous Malays (the majority), the Chinese, and the Indians, in the sample companies, the CEO is either Malay or Chinese.

Karpoff and Raheja (2007), Cheng (2008) and Coles, Daniel and Naveen (2008). Furthermore, board size is shown to be positively related to earnings management in Malaysia (Abdul-Rahman and Mohamed-Ali, 2006). Finally, Haniffa and Cooke (2002) show that the proportion of Malay directors on a board positively influences the level of voluntary disclosure in Malaysia, which is consistent with the notion that Malay-cum-Muslim CEOs adhere to Islamic business ethics which encourage transparency in business as espoused by Gambling and Abdel-Karim (1991).

3.3. Data collection and sample description

For all the sample companies, information from the annual reports relating to the board composition including proportion of family members on the board (FAMILY), proportion of nonexecutives (NONEXEC) comprising independent directors (IND), and nonindependent nonexecutive directors (AFFILIATE), size of board (BSIZE), largest four institutional investors (INST), and CEO ethnicity (whether Malay or Chinese) (CEOMALAY) were hand collected. Financial data such as total assets, short- and long-term loans, shareholders' equity, and profit before tax were also collected. Given that studies have shown that the governance mechanisms in family firms are different from nonfamily firms in terms of board leadership and CEO duality (Anderson & Reeb, 2003) data on board leadership were also collected to provide additional insight into the situation in Malaysia.

A summary of the characteristics of sample companies is reported in Table 1, partitioned by full, partial, and nonearly adopters. Panel A shows the characteristics of the sample by board of exchange. About two-thirds of the sample companies are from the Main Board. Panel B shows that the majority of early adopters had adopted FRS 114 for their financial years-end on or before 31 December 2001. With respect to sector, panel C indicates that more than 80% of our sample companies come from five sectors: construction, consumer products, industrial products, plantation, and property.

Panels D and E display information on the number of business segments and geographical segments. On average, the full early adopters have more business and geographical segments than the other two subgroups. Full early adopters are most likely to have a dual board leadership structure where the same person or different persons from the same family hold(s) both the CEO and Chairman roles, as shown in panel F. Likewise, panel G indicates that full early adopters are most likely to have an executive chairman. On the other hand, partial early adopters are least likely to have a dual board leadership structure. Finally, Panel H shows that full early adopters are more likely to have Malay CEOs than partial and nonearly adopters.

4. Empirical results

4.1. Univariate analysis

Table 2 gives the descriptive statistics of independent variables included in the study, partitioned by full early adopters, partial early adopters, and nonearly adopters. A comparison between full early adopters and nonearly adopters shows that full early adopters have a significantly higher proportion of affiliated directors, and are significantly larger and more

Table 1
Sample characteristics.

	Full early adopter	Partial early adopter	Nonearly adopter	Total
Panel A: by board of exchange				
Main board	10 (67%)	12 (71%)	22 (69%)	44 (69%)
Second board	5 (33%)	5 (29%)	10 (31%)	20 (31%)
Panel B: by year				
2001	10 (67%)	10 (59%)	20 (62%)	40 (63%)
2002	5 (33%)	7 (41%)	12 (38%)	24 (37%)
Panel C: by sector				
Construction	2 (13%)	4 (23%)	6 (19%)	12 (19%)
Consumer products	3 (20%)	4 (23%)	7 (22%)	14 (22%)
Finance	1 (7%)	1 (6%)	2 (6%)	4 (6%)
Industrial products	3 (20%)	3 (18%)	6 (19%)	12 (19%)
Plantation	5 (33%)	0	5 (16%)	10 (16%)
Properties	0	3 (18%)	3 (9%)	6 (9%)
Technology	0	1 (6%)	1 (3%)	2 (3%)
Trading/services	1 (7%)	1 (6%)	2 (6%)	4 (6%)
Panel D: by no. of business segments				
1	0	1 (6%)	1 (3%)	2 (3%)
2	2 (13%)	2 (12%)	4 (12%)	8 (13%)
3	5 (33%)	6 (35%)	11 (34%)	22 (34%)
4	1 (7%)	3 (18%)	7 (22%)	11 (17%)
At least 5	7 (47%)	5 (29%)	9 (28%)	21 (33%)
Panel E: by no. of geographical segments				
1	4 (27%)	8 (47%)	17 (53%)	29 (45%)
2	4 (27%)	6 (35%)	7 (22%)	17 (27%)
3	1 (7%)	2 (12%)	5 (16%)	8 (13%)
4	1 (7%)	0	2 (6%)	3 (5%)
At least 5	5 (33%)	1 (6%)	1 (3%)	7 (11%)
Panel F: by CEO duality				
CEO=Chairman	8 (53%)	4 (23%)	10 (31%)	22 (34%)
CEO ≠ Chairman	7 (47%)	13 (77%)	22 (69%)	42 (66%)
Panel G: by board leadership				
Chairman is executive	8 (53%)	4 (23%)	14 (44%)	26 (41%)
Chairman is nonexecutive	7 (47%)	13 (77%)	18 (56%)	38 (59%)
Panel H: by race of CEO				
CEO is Malay	6 (40%)	3 (18%)	6 (19%)	15 (23%)
CEO is Chinese	9 (60%)	14 (82%)	26 (81%)	49 (77%)

The figures in bracket may not add to 100% due to rounding.

profitable than nonearly adopters. Full early adopters are also significantly larger than partial early adopters. All the subgroups (full early adopters, partial early adopters and nonearly adopters) are significantly different in terms of proportions of affiliated directors and their total assets, as indicated by the F statistics.

4.2. Multivariate analysis

The Pearson pairwise correlations between the continuous independent variables are shown in Table 3. The proportion of family members on the board negatively correlates

Table 2
Descriptive statistics of independent variables (means).

	Subsamples			Full sample	*t*-statistics			*F*-stat
	Full (1)	Partial (2)	Nonearly (3)		(1) versus (3)	(1) versus (2)	(2) versus (3)	
% Family members on board (FAMILY):	0.35	0.29	0.29	0.30	0.66	0.71	−0.09	0.34
% Independent directors on board (IND):	0.36	0.37	0.39	0.37	−0.83	−0.32	−0.51	0.42
% Nonindependent nonexecutive directors on board (AFFILIATE):	0.35	0.28	0.20	0.26	2.75 ***	0.96	1.41	3.57 **
% Nonexecutive directors on board (NONEXEC):	0.71	0.65	0.59	0.63	1.74 *	0.67	1.15	1.88
Asset (RM billion):	2.49	0.46	0.64	1.03	2.10 **	2.29 **	−0.89	7.08 ***
Natural log Asset (LNASSET):	20.71	19.24	19.67	19.80	2.26 **	2.91 ***	−1.21	5.57 ***
Total loans divided by shareholders equity (DEBT):	1.06	0.22	1.02	0.54	0.06	1.25	−1.62	0.78
% Institutional ownership (INST):	0.22	0.10	0.13	0.14	1.28	1.51	−0.59	2.20
Return on assets (ROA):	0.04	0.03	−0.03	0.00	2.28 **	0.16	1.23	1.68
Board size (BSIZE):	8.13	7.65	7.25	7.56	1.32	0.67	0.74	1.10
CEO ethnicity (Malay=1, Chinese=0) (CEOMALAY):	0.40	0.18	0.19	0.23	1.43	1.38	−0.09	1.50

Full (n=15) and partial adopters (n=17) are subsets of early adopters (n=32). There are 32 nonearly adopters.

*** Significant at 1% level or better (for *t*-test, two-tailed and assuming unequal variances).

** Significant at 5% level or better (for *t*-test, two-tailed and assuming unequal variances).

* Significant at 10% level or better (for *t*-test, two-tailed and assuming unequal variances).

with the proportion of nonexecutive directors, affiliated directors, independent directors and, with institutional ownership, total assets, and Malay CEOs. Firms with high institutional ownership appear to have a larger proportion of nonexecutive directors, a larger board size, and more total assets. Firms with a higher proportion of affiliated directors tend to have larger board size, more total assets and institutional investors, and perform better. Ignoring the fourth column, NONEXEC, none of the correlation coefficients among the independent variables is greater than 0.5. This suggests that multicollinearity is not a cause for concern. When the models are run using ordinary least squares regression, none of the variance inflation factors (VIFs) exceeds 2, which reinforces that the independent variables do not suffer from multicollinearity problems.

Tables 4 and 5 present parameter estimates of binomial and multinomial models with corresponding coefficient values and standard errors. For the binomial regression (Models 1 and 3), a positive sign on a parameter indicates that an increase in the corresponding variable increases the likelihood of early adoption and a negative sign indicates otherwise. For the multinomial regression (Models 2 and 4), the parameters are interpreted as an

Table 3
Pearson correlation matrix.

	2	3	4	5	6	7	8	9	10
1. FAMILY	−0.36 **	−0.43 **	−0.56 **	−0.38 **	0.04	−0.10	−0.21	−0.47 **	−0.26
2. AFFILIATE		−0.16	0.85 **	0.31 *	−0.09	0.33 **	0.30 *	0.27 *	0.14
3. IND			0.38 **	0.10	−0.04	0.02	−0.14	0.24	0.10
4. NONEXEC				0.35 **	−0.10	0.32 *	0.21	0.38 **	0.18
5. LNASSET					0.16	0.19	0.27 *	0.40 **	0.19
6. DEBT						−0.09	−0.19	−0.16	−0.14
7. ROA							0.29 *	0.05	−0.23
8. BSIZE								0.29 *	−0. 01
9. INST									0.45 **
10. CEOMALAY									

The dependent variables are described in Table 2.
∗∗ Correlation is significant at the 0.01 level (2−tailed).
 ∗ Correlation is significant at the 0.05 level (2-tailed).

indication of the probability of an event either being a full adopter or partial adopter, relative to the probability of being a nonearly adopter. In all specifications, the reference outcome is the probability companies whose financial statements ended before 31 December 2002, have not yet adopted FRS 114.

For Model 1, the Nagelkerke R^2 of 0.205 indicates a mild relationship between dependent and independent variables. In addition, the Hosmer and Lemeshow goodness of fit gives a chi-square of 3.37 (level of significance is 0.877), which indicates a good model fit between the actual and predicted value of the dependent variable. The percentage of correct classification for Model 1 is 67.2%. The results reveal FAMILY and NONEXEC are significant at the 10% level with positive direction. This suggests that the higher the proportion of family members on the board, which is a proxy for the family firm and the proportion of nonexecutive directors on board, the higher the likelihood that the company will adopt FRS 114 early.

For Model 2, the likelihood ratio is 95.90 and is highly significant. When early adopters are partitioned into full adopters and partial adopters, the strength of the relationship as indicated by the Nagelkerke R^2 is considerably higher than Model 1. Thus, the multinomial model has a better explanatory power than the binary model that treats full and partial early adopters as a homogenous group. For full early adopters, FAMILY is found to be significant at the 1% level with a positive coefficient, which suggests that a family firm is more likely to early adopt FRS 114 (with full disclosure). This result is consistent with H1 and previous studies that associate the family firm with greater disclosures (Ali et al., 2007; Wang, 2006). However, it is at odds with a Malaysian study by Haniffa and Cooke (2002) that shows that family firms tend to have lower voluntary disclosure. The reason could be due to the difference in the dependent variable of interest. Haniffa and Cooke (2002) examine an array of voluntary disclosures which include corporate social responsibility, prospective financial information, and other narrative disclosures, and not just segmental disclosure. Firms with a higher proportion of nonexecutive directors, Malay CEOs, and a larger asset size are also more likely to be full early adopters rather than nonearly adopters.

When NONEXEC is replaced with AFFILIATE and IND as indicated in Models 3 and 4 of Table 5, the overall results are qualitatively similar. However, IND is found to be

Table 4
Parameter estimates of the binomial and multinomial models (independent and affiliated directors are combined as nonexecutive directors — NONEXEC).

Variables	Binomial — Model 1		Multinomial — Model 2			
	Full sample		Full early adopter		Partial early adopter	
	Coefficient	Standard error	Coefficient	Standard error	Coefficient	Standard error
Constant	−4.586	4.949	−30.371 ***	10.523	5.347	6.745
FAMILY	2.730 *	1.517	10.129 ***	3.262	−0.041	1.838
INST	0.011	2.035	2.113	2.824	−3.313	3.099
NONEXEC	3.089 *	1.805	6.480 **	2.842	2.427	2.164
CEOMALAY	0.949	0.780	2.626 **	1.279	0.411	0.933
BSIZE	0.130	0.159	0.318	0.251	0.172	0.197
LNASSET	0.030	0.245	0.899 **	0.423	−0.431	0.355
DEBT	−0.015	0.131	0.238	0.162	−0.225	0.326
ROA	2.752	2.317	2.698	3.373	3.213	3.049

	Model 2	Model 1
Likelihood ratio	78.03 ($df=8$)	95.90 ($df=16$)***
Nagelkerke R^2	0.205	0.503
McFadden R^2	–	0.279
Hosmer and Lemeshow	3.37 ($df=8$)	–
Percentage correct	67.2%	67.2%

In Model 1, the dependent variable is dichotomous and takes the value of either one (early adopters) or zero (nonearly adopters). In Model 2, the dependent variable is trichotomous and takes the value of zero (full early adopters), one (partial early adopters) and two (nonearly adopters). See Table 2 for variables description.
*** Indicates significant at 1% level or better.
** Indicates significant at 5% level or better.
* Indicates significant at 10% level or better.

insignificant, while AFFILIATE is significant with a positive direction in both models. This indicates that affiliated directors, rather than independent directors, may play an important role in influencing early adoption. Thus, H2b is accepted while H2a is rejected. The results replicate the univariate analysis that shows early adopters have a significantly higher affiliated director proportion than nonearly adopters, while the independent director proportions are almost identical for early and nonearly adopters.

The insignificant result for independent directors is consistent with prior Malaysian studies which document that independent directors do not constrain earnings management. (Abdullah and Mohd-Nasir, 2004; Mohd-Salleh, Iskandar, & Rahmat, 2005; Abdul-Rahman and Mohamed-Ali, 2006). A plausible explanation for the lack of association between independent directors and corporate transparency stems from the tendency of CEOs or controlling shareholders to nominate "independent" directors who are beholden to them. However, if they are not subservient to the CEOs/controlling shareholders, their lack of knowledge in the company's affairs hinders them from discharging their board duties effectively. Another likely reason for their apparent ineffectiveness is the propensity to select them for political reasons, to legitimize business activities, and for contacts and contracts, rather than for their expertise and experience (Haniffa and Hudaib, 2006).

Table 5
Parameter estimates of the binomial and multinomial models (independent and affiliated directors are distinct, indicated by variable IND and AFFILIATE, respectively).

Variables	Binomial — Model 3		Multinomial — Model 4			
	Full sample		Full early adopter		Partial early adopter	
	Coefficient	Standard error	Coefficient	Standard error	Coefficient	Standard error
Constant	−2.977	5.162	−28.727 ***	10.574	7.347	7.229
FAMILY	2.380	1.567	9.448 ***	3.305	−0.293	1.874
INST	0.270	2.072	2.325	2.929	−2.954	3.133
AFFILIATE	3.445 *	1.867	6.954 **	2.904	2.900	2.241
IND	0.688	3.152	2.661	5.197	0.063	3.712
CEOMALAY	0.888	0.783	2.604 **	1.289	0.353	0.937
BSIZE	0.083	0.168	0.263	0.258	0.113	0.212
LNASSET	0.012	0.246	0.911 **	0.430	−0.469	0.358
DEBT	−0.022	0.135	0.231	0.167	−0.232	0.332
ROA	2.742	2.324	2.739	3.430	3.075	3.001

	Model 3	Model 4
Likelihood ratio	77.16 (df =9)	94.71 (df=18)***
Nagelkerke R^2	0.220	0.514
McFadden R^2	–	0.288
Hosmer and Lemeshow	7.593 (df=8)	–
Percentage correct	68.8%	67.2%

In Model 3, the dependent variable is dichotomous and takes the value of either one (early adopters) or zero (nonearly adopters). In Model 4, the dependent variable is trichotomous and takes the value of zero (full early adopters), one (partial early adopters) and two (non early adopters). See Table 2 for variables description.

  *** Indicates significant at 1% level or better.
   ** Indicates significant at 5% level or better.
    * Indicates significant at 10% level or better.

It is also worth noting that institutional shareholding is not significant in all the models, consistent with Haniffa and Cooke (2002). Perhaps this observation that institutional ownership does not positively influence corporate transparency is unique for Malaysia. In Malaysia, the major institutional shareholders are government-linked investors such as the Ministry of Finance Incorporated (now known as Khazanah Holdings), Employees Provident Fund (EPF), which is a pension fund for private sector employees, Lembaga Tabung Haji (LTH) or the Pilgrim Fund, various *Amanah Saham* unit trusts that cater mostly for the indigenous Malay investors managed by Permodalan Nasional Berhad (PNB), a superannuation fund related to government employees serving in the Armed Forces, such as Lembaga Tabung Angkatan Tentera (LTAT), and various State Investment Foundations. These government-linked investors are not known to be active monitors, at least during the period of study.

The finding that a Malay CEO is associated with greater segmental disclosure is consistent with Haniffa and Cooke (2002). As argued earlier from the Islamic business ethics perspective, the propensity of Muslim-cum-Malay CEOs to adopt the segment reporting standard prior to its effective date seems compatible with Islamic social philosophy and principles of full disclosure (Baydoun & Willet, 2000).

When Models 3 and 4 were re-run by excluding four of the inconsequential control variables namely INST, BSIZE, DEBT and ROA, the results were quantitatively similar. In the multinomial model, the likelihood of adopting the full primary-segment disclosures is positively associated with family firm, affiliated directors, Malay CEO, and firm size. In the binomial model, the only variable that is significant is affiliated directors. However, with lesser independent variables, the R^2 is reduced, with moderate model fit.

5. Conclusions

This study documents that companies with a higher proportion of family members on the board and affiliated directors are more inclined to provide greater disclosure of the primary segment items. My finding that the family firm is associated with a higher likelihood of increased segment disclosure is consistent with extant literature (Wang, 2006; Ali et al., 2007). The proportion of independent directors and the level of institutional shareholding are of no consequence in determining the likelihood that a company provides greater financial disclosure through early adoption of FRS 114. This finding, that independent directors do not add to quality financial disclosure, is consistent with previous Malaysian studies such as Abdullah and Mohd-Nasir (2004), Mohd-Salleh et al. (2005) and Abdul-Rahman and Mohamed-Ali (2006), but is at odds with the international evidence in the United States, United Kingdom, Italy and Singapore. When Malaysian data are used, as in this study, the results suggest that that the presence of independent directors is unlikely to enhance corporate transparency and there is even possibility that independent directors collude with CEOs to exacerbate the agency problem. My results agree with the position taken by the Asian Shadow Financial Regulatory Committee, that the value of amateur, part-time independent directors is doubtful and also suggest that controlling shareholders should be excluded from voting for independent directors to protect the rights of minority shareholders.[5]

While corporate governance guidelines all over the world specify that independent directors provide much in the way of benefits to shareholders, investors and regulators should be wary of situations where the CEOs select seemingly independent directors to give an illusion of active monitoring (Byrd & Hickman, 1992), when in fact these appointees are mere shills for management. Our study suggests that an affiliated director, the other type of nonexecutive director, who is often overlooked in prior research, could enhance corporate transparency, and therefore, more attention should be given to this category of nonexecutive director.

Future studies should examine carefully the profiles and attributes of affiliated and independent directors such as tenure (relative to the current CEO), multiple directorships (CEO or nonCEO, and if nonCEO, executive or nonexecutive) in other companies (related or unrelated), nature of affiliation (personal or professional), financial literacy, and political connection, to shed further light on which of these characteristics facilitate corporate transparency. Another subject for future studies is alternative measurements of the family firm such as the cumulative share ownership by all family members, subject to data availability. Based on insight from Effiezal, How and Verhoven (2007), future studies should also consider the heterogeneity of institutional investors in Malaysia. Their study

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[5] Statement No. 3 (July 11, 2005) issued during the Asian Finance Association Conference held in Kuala Lumpur, Malaysia.

indicates that only the Employees Provident Fund plays an effective role in strengthening corporate governance in Malaysia.

Although the current study only considers the disclosure of primary-segment items, I do not anticipate that the results would be materially different if the disclosure of secondary-segment items were also considered. The results of this study should be treated with caution, however because the sample of early adopters is unavoidably small.

Acknowledgements

Appendix A. Sample firms

Full early adopters	Nonearly adopters
Audrey International (M)	Abric
Batu Kawan	Brem Holding
Guthrie Ropel	CCM
Highlands and lowlands	Cosway
Hing Yap Knitting Ind	Daiman Development
IJM	Eurospan Holdings
Kossan Rubber Ind	Federal Furniture
Kuala Lumpur Kepong	Fourseason (M)
Kumpulan Belton	Globetronics Tech
Kumpulan Guthrie	HLG Capital
MTD Capital	Ho Hup Construction Co
Perak Corp	Intan Utilities
Sime Darby	IOI Properties
Ta Ent.	Jetson
Wembley	Kurnia Setia
	Malaysia Resources
Partial early adopters	Malaysian General Insurance
CCK	Nam Fatt Corp
DKLS Ind	Pie
Europlus	Plantation and Development (M)
F & N	QL Resources
Fiamma	Rex

Appendix A (*continued*)

Partial early adopters	*Nonearly adopters*
Hock Seng Lee	Sapura Motors
Khind	Sungai Bagan Rubber
Lityan Holdings	Sungai Bagan Rubber
Nexnews	Sunway City
Pacific Mas	Sunway Construction
Pancaran Ikrab	Sunway Inc
Paramount Corp.	Technoasia
Propel	UCP
Rohas	United Malacca
Sunrise	Wijaya
Super Ent. Holdings	Yeo Hiap Seng
Watta	

Appendix B. Mandatory disclosures for primary segment reporting

1. An enterprise should disclose segment revenue for each reportable segment. Segment revenue from sales to external customers and segment revenue from transactions with other segments should be reported separately. (Para 52)
2. An enterprise should disclose segment results for each reportable segment. (Para 53)
3. An enterprise should disclose the total carrying amount of segment assets for each reportable segment. (Para 56)
4. An enterprise should disclose segment liabilities for each reportable segment. (Para 57)
5. An enterprise should disclose the total cost incurred during the period to acquire segment assets that are expected to be used during more than one period (property, plant, equipment and intangible assets) for each reportable segment. While this sometimes is referred to as capital additions or capital expenditure, the measurement required by this principle should be on an accrual basis, not a cash basis. (Para 58)
6. An enterprise should disclose the total amount of expense included in the segment results for depreciation and amortization of segment assets for the period of each reportable segment. (Para 59)
7. An enterprise should disclose, for each reportable segment, the total amount of significant noncash expenses, other than depreciation and amortization, that were included in segment expense and, therefore, deducted in measuring segment results. (Para 62)
8. An enterprise should disclose, for each reportable segment, the aggregate of the enterprise's share of the net profit or loss of associates, joint ventures, or other investments accounted for under the equity method if substantially all of those associates' operations are within that single segment. (Para 65)
9. If an enterprise's aggregate share of the net profit or loss of associates, joint ventures, or other investments accounted for under the equity method is disclosed by reportable segment, the aggregate investments in those associates and joint ventures should also be disclosed by reportable segment. (Para 67)
10. The basis of pricing inter-segment transfers and any change therein should be disclosed in the financial statements. (Para 75)

Source: Malaysian Accounting Standard Board 22 — Segment Reporting (1 January 2002).

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