Although financial reporting quality (FRQ) is not directly observable, prominent commentators claim that they know it when they see it and vigorously assert its importance as a mainstay of modern capital markets. Arthur Levitt, former chairman of the United States Securities and Exchange Commission (SEC), says “high quality accounting standards … improve liquidity [and] reduce capital costs”¹ and claims that “quality information is the lifeblood of strong, vibrant markets. Without it, liquidity dries up. Fair and efficient markets cease to exist.”² Easley and O’Hara [2004] show that the market exacts a premium to compensate investors for such information risk, lending conceptual support to Levitt’s claim. Consensus as to qualitative factors that can reduce FRQ is also emerging. The Senate of Canada [2003, p. 2] says “analysts generally agree that the financial scandals appearing almost daily for months in the media were the result of some combination of at least three factors: failed corporate governance; lax auditing and accounting standards and oversight; and the incentives, at times perverse, provided by executive compensation systems.” To date, however, the measurement of FRQ has eluded both researchers and those charged with improving it (See Appendix A, Figure 1).

The purpose of this study is to review and synthesize the literature on corporate oversight and its association with proxy governance measures that are presumed to be associated with FRQ. As Figure 1 indicates, we examine two components of oversight – board characteristics and audit committee characteristics – that can contribute to the effective monitoring of companies’ financial reporting. For each component, we summarize and interpret the results of US and international empirical research examining the association between variables that can affect monitoring effectiveness and three presumptive FRQ outcomes of monitoring effectiveness: (1) the ex post consequences of low FRQ, such as financial reporting fraud, GAAP violations and earnings restatements; (2) earnings management measures, such as abnormal accruals; and (3) the perceived informativeness of financial reports, manifest in earnings-returns associations, earnings response coefficients over short announcement-windows, and analyst perceptions of FRQ. To mitigate the influence of publication bias in the academic literature (i.e., the tendency to publish only studies that report statistically significant findings), we consider both published and unpublished studies (working papers).

This unique classification scheme provides a way of synthesizing the implications of empirical findings in a coherent framework, highlighting the role of corporate governance variables in enhancing FRQ. This synthesis has the potential to aid regulators, boards of directors, and forensic accountants who are concerned with improving the oversight of public corporations and reducing the opportunities provided to managers and others to engage in financial fraud.

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3 Cohen et al. [2004] provide an extensive review of two additional categories of empirical work not addressed in this review: (1) studies about the determinants of board or audit committee composition and monitoring effectiveness, (2) studies that investigate the relations between external audit quality surrogates (e.g., auditor selection, non-audit fees, auditor conservatism, auditor-manager conflicts) and board or audit committee characteristics.
The review proceeds as follows. Section 2 deals with the monitoring effectiveness of boards of directors, Section 3 considers audit committees and Section 4 concludes with a summary and suggestions for future research. Tables 1 and 2 summarize the studies reviewed in Sections 2 and 3, respectively. The rows contain the governance proxy-measures that are presumed to be associated with FRQ; the columns contain the presumptive FRQ outcomes. The first outcome, ex post consequences of low FRQ, is allocated two columns (fraudulent reporting and GAAP violations) to enhance the precision of the classification exercise (See Appendix B, Table 1).

1 BOARD MONITORING EFFECTIVENESS

Fama and Jensen [1983] see the board of directors as a company’s highest-level control mechanism with ultimate responsibility for the functioning of the firm. The empirical literature indicates that the composition and characteristics of the board influence its effectiveness. Proxy variables discussed in this literature comprise three main traits: board independence (Section 2.1), characteristics of outside directors (2.2), and CEO dominance of the board (2.3).

1.1 Board independence

Board independence depends on the appointment and active involvement of outside directors. Outside directors are generally believed to be more effective in monitoring

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4 Directors are usually classified as outsiders (i.e., non-executive, unrelated or independent), insiders (i.e., executive directors) or affiliated (“gray”) with the firm [Weisbach, 1988; Beasley, 1996; Klein, 2002a]. Outsiders have no ties to the firm other than being a board member. Insiders are current employees of the company. Consistent with the NYSE and NASDAQ listing requirements, affiliated directors are past employees, relatives of the CEO, or have significant transactions and/or business relationships with the firm as defined by Items 404(a) and (b) of Regulations S-X, or are on interlocking boards as defined by Item 402(j)(3)(ii) of Regulation S-X [Klein 2002a]. As per section 474 (2) of the TSE guidelines, an unrelated director is a director who is independent of management and is free from any interest and any business or other relationship which could, or could reasonably be perceived to, materially interfere with the director’s ability to act with a view to the best interests of the corporation, other than interests and relationships arising from shareholding.
management and enhancing FRQ than non-outside board members. Some financial economists, however, question the importance of boards and the value of outside directors. Demsetz [1983] and Hart [1983] argue that the board can do little to improve the already strong incentives for management to serve shareholder interests. They maintain that executive compensation contracts, which are designed to align shareholders’ and managers’ interests, and the incentives stemming from product, labor and capital markets provide adequate monitoring of management. According to this argument, regulation of boards aimed at increasing outside, independent representation cannot enhance the board’s monitoring function; indeed, it can impose constraints on management that are harmful to the interests of shareholders [Weisbach, 1988].

Although outsiders on the board are widely believed to be effective monitors of management, some studies suggest it is not ideal for a company to have a board composed of only outside directors. Williamson [1975] and Fama and Jensen [1983] argue that boards require both outside and non-outside directors to fulfill their duties. Outside directors serve as monitors and help minimize agency conflicts between shareholders and management; inside and affiliated directors provide firm-specific expertise that is valuable for planning the firm’s operations and development [Klein, 2002b].

In practice, very few boards, if any, are composed entirely of outsider directors.⁵ Hence, FRQ studies use two kinds of proxies for the extent of board independence. The more common proxy is the percentage of outside directors (or non-executive directors, “NEDs”). The second proxy is a dummy variable indicating whether the board has a majority of outside directors or not.

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1.1.1 Board independence and consequences of low FRQ

Empirical findings are mixed concerning the association between board independence and \textit{ex post} consequences of low FRQ. Beasley [1996] analyzes 75 firms that publicly reported financial statement frauds, matched with non-fraud firms, during 1980-1991. Results indicate that the percentage of outside (or non-executive) directors on the board has a significant negative impact on the probability of fraudulent financial reporting. Uzun \textit{et al.} [2004] report similar results in a more extensive review of US fraud cases (133 pairs of fraud and non-fraud companies from 1978 to 2001). Farber [2005] examines 87 firms committing fraud according to SEC Accounting and Auditing Enforcement Releases (AAERs) during 1982-2000. Matched univariate comparisons indicate that fraud firms have a significantly lower percentage and number of outside directors the year before a fraud is detected but that these differences are no longer significant five years later. This finding suggests that increasing outside director involvement is seen as a remediating measure following fraud detection.

In contrast, Agrawal and Chadha [2005] report that the probability of financial statement restatements is unrelated to the proportion of independent directors, based on a matched-pairs logistic regression analysis of 159 US public companies announcing earnings restatements during 2000-2001. Abbott \textit{et al.} [2000] investigate 78 US firms sanctioned by the SEC for aggressive or fraudulent financial reporting (1980-1996). Pair-wise logit analyses indicate that audit committees have a mitigating effect on low FRQ if certain conditions are met, but the authors do not find a significant effect with respect to the proportion of NEDs on the board. In a later study, Abbott \textit{et al.} [2004] find the percentage of NEDs to be insignificant predictors of the probability that a firm will be subject to an SEC enforcement action for fraud or that firms will issue earnings restatements during 1991-1999. The percentage of NEDs is also insignificant in the logistic-
regression based fraud study by Carcello and Nagy [2004a] using 109 pairs of fraud and non-fraud companies during 1990-2001; however, in an ensuing study with a slightly different focus, Carcello and Nagy (2004b) report a significant negative association between the probability of fraud and the percentage of NEDs.

Publicly reported, fraud-like investigations are unusual outside the US, likely due to less active screening and enforcement by non-US stock market regulators compared with the SEC. Accordingly, we can identify only a few studies, relying on small samples, that examine this presumptive outcome of low FRQ. In Canada, Smaili and Labelle [2007] investigate a matched-pairs sample of 107 companies sanctioned by the Ontario Securities Commission (OSC) for defective financial statements during 2001-2005. Multivariate ordinal logit regression analyses suggest that firms with fewer independent directors are more likely to exhibit accounting irregularities and that their level of non-compliance with OSC guidelines is likely to be higher. In the UK, Peasnell et al. [2001] investigate a matched-pairs sample of 47 companies sanctioned by the Financial Reporting Review Panel (FRRP) for defective financial statements during 1990-1998. Their regression analyses suggest that the percentage of NEDs on the board has a marginal negative impact on the probability of disclosing low quality financial information. Song and Windram [2004] report a similar association for a matched-pairs sample of 27 FRRP firms during 1991-2000. In Australia, Sharma [2004] finds that the probability of fraudulent reporting decreases with the percentage of outside directors on the board, based on a sample of 31 ASX fraud firms during 1988-2000. Finally, Chen et al. [2006] using 169 fraud enforcements in China during 1999-2003, reports that director independence is negatively associated with fraud charges.
1.1.2 Board independence and earnings management

Klein [2002a] examines whether board characteristics are related to earnings management among S&P 500 firms for fiscal 1992-93. Using a cross-sectional variant of Jones’ [1991] model to capture abnormal accruals, she reports a significantly negative association between the incidence of abnormal accruals (suggesting earnings management) and (a) the percentage of outside directors on the board and (b) the fact that outsiders account for the majority of board members. This association is stronger using the majority-threshold measure than the actual percentage of outside directors, suggesting that majority rule efficiently drives board actions to promote FRQ, without precluding strategic input from specialized insiders. Xie et al. [2003], however, find conflicting results. Also considering S&P 500 companies during a similar period (1992, 1994, and 1996), they do not find any significant association between the percentage of outside directors and abnormal working capital accruals. Further, based on 1,621 US firm-year observations during 1994-2000, Vafeas [2005] reports that board independence variable is not associated with threshold-induced earnings management, proxies for which are the probabilities of (1) small earning increases or (2) negative earnings-surprise avoidance. Hence, overall, US results are mixed regarding the ability of board independence to curb earnings management activities.

In contrast, findings drawn from other Anglo-Saxon markets generally support the proposition that board independence mitigates earnings management. Peasnell et al. [2000] investigate the management of working capital accruals to reach earnings target thresholds, for a sample of 630 UK firms before and after the 1992 Cadbury report. Their results are consistent with higher percentages of NEDs mitigating earnings management aimed at avoid losses, especially in the post-Cadbury period. This suggests that UK regulations enhancing corporate
governance positively impacted boards’ monitoring functions. Similar results are reported by Peasnell et al. [2005] for UK firms between 1993-1996, by Gore et al. [2001] also for UK companies during 1992-1998, and by Jaggi and Leung [2005] for Hong Kong firms during 1998-2000. Moreover, the presence of a majority of NEDs on the board is found to mitigate earnings management activities in Australia [Davidson et al., 2005], and to result in more conservative accounting earnings in the UK [Beekes et al., 2004]. However, Park and Shin [2004] find that the percentage of outside board members is not associated with the practice of threshold-induced earnings management in Canada.

In the France, the percentage of independent directors is generally insignificantly associated with the extent of earnings management activities [Jeanjean, 2001; Piot and Janin, 2007]. The authors argue that this finding is consistent with a strong collegiality principle governing the functioning of French boards, which tends to dilute individual responsibilities and weaken the monitoring incentives of outside directors. In the similar Spanish context, Osma and D.A. Noguer [2005] report that the percentage of independent directors, or the fact that the board is in majority independent, has a counterintuitive positive effect on earnings management (1999-2001). Moreover, in East Asia, where ownership structures exhibit a degree of concentration similar to that of continental European countries, Bradbury et al. [2004] report that the percentage of independent directors is insignificantly associated with abnormal working capital accruals for 252 Singapore and Malaysia firms in 2000.

1.1.3 Board independence and other FRQ proxies

Few studies address the effect of board independence on other FRQ proxies. In Canada, Bujaki and McConomy [2002] investigate the comprehensiveness of Toronto Stock Exchange (TSE 300) companies’ disclosure relating to 14 TSE corporate governance guidelines. Regression
analyses show that a majority of unrelated directors on the board is positively associated with companies’ governance-comprehensiveness disclosure scores. Felo et al. [2003] use Association for Investment Management and Research (AIMR) scores to measure analyst-perceived FRQ. They find a positive association, robust to industry factors, between the percentage of independent directors and AIMR scores for 1992-93 and 1995-96.

Regarding value relevance, association studies based on returns-earnings associations are generally inconclusive. Vafeas [2000] reports that the relation between stock returns and earnings for US public firms (1990-1994) does not vary significantly with the percentage of board NEDs. Ahmed et al. [2006] draw a similar conclusion in New-Zealand (1991-1997) using the percentage of outside directors. However, Anderson et al. [2003] focusing on S&P firms in 2001, find that earnings response coefficients (ERCs) – measures of the association between abnormal returns and unexpected earnings – are marginally higher, suggesting that earnings are more informative, as the percentage of outside directors on the board increases. However, Petra’s [2007] findings, based on the quarterly ERCs of a large US sample (1996-1999) do not confirm Anderson et al.’s findings.

To summarize, the evidence to date is consistent with board independence enhancing FRQ in Anglo-Saxon but not in other countries, most notably in Continental Europe. Thus, the impact of board independence on FRQ depends on the culture and mores of the country being studied.

1.2 Outside director characteristics

Beyond the presence of outside directors on boards, several characteristics are believed to capture directors’ monitoring incentives. The main proxies include ownership variables (the percentage of firm equity held by outside directors, or the presence of outside block-holders on
the board), and characteristics such as the tenure and the number of additional directorships held by outside directors.

1.2.1 Ownership by outside directors

The degree of ownership held by outside directors (i.e., number of common shares held by outside directors divided by the total number of shares) is predicted to be positively associated with FRQ. Morck et al. [1988] and Jensen [1993] argue that encouraging outside directors to hold substantial equity stakes enhances their incentives to monitor top management. Moreover, the presence of outside blockholders serving on the board – usually benchmarked at 5%-10% of total shareholders’ equity – is predicted to enhance governance because such directors have both the financial incentives and the independence to effectively evaluate and monitor management and their policies. According to Jensen [1993], such outside block-holders are active investors, individuals or institutions that simultaneously hold large equity positions in a company and actively participate in its strategic development. In the US, this is referred to as a strategy of relationship investing [Klein, 2002a].

Empirical evidence is generally consistent with equity ownership in the firm providing outside directors with greater incentives to monitor management. Beasley [1996] finds a negative association between the percentage of firm equity held by outside directors and the likelihood of financial statement fraud. Dechow et al. [1996] investigate 92 firms subject to AAERs for alleged GAAP violations during 1982-1992. They find that firms subject to AAERs from the SEC are less likely to have outside block-holders relative to control firms. Smaili and

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6 More and more empirical studies use outside blockholders’ related variables. However, most of them do not specify that these blockholders be on the board of directors, which makes the interpretation uneasy with respect to the board’s monitoring function. The direct monitoring is usually advanced in such cases; these relations remain out of the scope of this review, which focuses on the characteristics of governance and auditing structures (the presence of outside blockholders on the audit committee is discussed later).
Labelle (2007), however, using FRQ measures ranging from restatements to financial statement fraud, do not find a difference in board ownership between defaulting reporting issuers (DRI) and non-DRI firms in Canada.

1.2.2 Tenure and additional directorships of outside directors

Two characteristics – tenure and additional directorships of outside directors – have received little consideration, probably reflecting the costs of collecting data on such variables as the number of years each outside director has served on the board. Beasley [1996] argues that board seniority enhances directors’ capacity to monitor top management, since more senior directors hold more secure positions and can therefore better resist group pressure to comply with management’s wishes. Consistent with his view, he finds a negative association between the likelihood of financial statement fraud and the average tenure of outside directors, consistent with the notion that tenure increases outside directors’ ability to monitor management effectively. However, average tenure of outside directors is positively associated with abnormal working capital accruals of S&P 500 firms according to Xie et al. [2003].

Existing theories concerning the influence of the number of directorships on monitoring intensity are equivocal. Fama [1980] argues that the market for outside directors provides incentives for them to be good monitors of management. Being directors of well-operated companies signals the directors’ value to the external market, which rewards them with additional directorships. Because the number of additional directorships can signal an outside director’s reputation as a monitor, the mean number of additional directorships is predicted to promote FRQ. Contrariwise, Morck et al. [1988] argue that monitoring top management requires time and effort. As the number of additional directorships increases, higher demands on directors’ time and
effort decrease the amount of attention they can devote to monitoring a single firm. Thus, a higher number of directorships is predicted to be associated with lower quality monitoring.

Beasley [1996] reports that the likelihood of fraudulent reporting increases as outside directors hold more directorships in other firms. His finding thus supports the view that additional directorships distract outside directors from effectively fulfilling their monitoring responsibilities. The literature also suggests that there is a cut-off point concerning the optimal number of directorships. When the number of additional directorships exceeds 2.0, financial statement fraud is more likely; when the number is below 2.0, there is no significant association between the number of additional directorships and fraud likelihood. In Canada, Smaili and Labelle (2007) do not find a significant difference in the number of directorships held in other firms.

1.3 CEO board dominance

Management incentives and attitudes are critical factors determining FRQ [Thornton, 2002; Senate of Canada, 2003]. Responsible for the firm’s overall operations, the Chief Executive Officer (CEO) holds the highest management rank, so his/her characteristics shed light on management incentives and attitudes. Research has tried to gauge the extent of CEO power over the board. CEO domination is generally predicted to decrease the board’s monitoring effectiveness and therefore FRQ. Five proxy variables for CEO domination have been proposed: (1) inside directors on the board, (2) CEO founder status, (3) the fact that the CEO chairs the board, (4) board size, and (5) the fact that the CEO sits on the board’s monitoring committees.

1.3.1 Inside directors on the board

Inside (executive) directors are predicted to be inferior monitors of CEO decisions because they are below the CEO in the company hierarchy. One can estimate their likely influence using ownership measures (i.e., number of shares owned by executive directors divided
by total number of shares held by all board members) or directorship attributes (i.e., proportion of seats held by executive directors). Jensen and Meckling [1976] argue that management equity ownership mitigates agency costs because managers with greater stock ownership have stronger incentives to increase stock value through effective operating, investing, and financing decisions. However, high equity ownership can motivate managers to attempt to inflate stock price through misleading or fraudulent reporting.

Dechow et al. [1996] report that inside directors’ estimated degree of influence is significantly higher for AAER firms than for a control sample, using three measurements: (1) proportion of total board stockholdings held by inside directors, (2) percentage of insiders on the board, and (3) likelihood of having insider-dominated boards (i.e., boards with more than 50% of seats held by executive directors).7 Comparing 107 firms subject to OSC enforcement actions for alleged accounting irregularities to a control sample, Smaili and Labelle (2007) find similar results in Canada with regard to measures (1) and (2).

1.3.2 CEO as firm founder and CEO family ties

Dechow et al. [1996] predict and find that GAAP violators are more likely than non-violators to have founding CEOs, who are less accountable to boards. Similarly, Agrawal and Chadha [2005] find that the probability of earnings restatement is higher in firms where the CEO belongs to a founding family. Surveying 98 Hong-Kong firms, Ho and Wong [2001] find that the percentage of CEO family members on the board has a significant negative impact on a voluntary disclosure index of financial reporting items. Contrary to expectations, however, Jaggi and Leung

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7 These findings relate to univariate tests performed by Dechow et al. [1996]. Their multivariate analysis involves a factor analysis of corporate governance variables, which makes it more difficult to appreciate the specific effect of individual characteristics. One factor, called “low oversight of management” is significant in explaining the probability of opportunistic earnings manipulation in some circumstances. This factor is positively associated with the percentage of insiders on the board, the percentage of board holdings held by insiders, and the fact that the CEO is the founder of the company; it is also negatively associated with the presence of an audit committee.
[2005] find that the percentage of CEO family members tends to mitigate earnings management for Hong Kong companies during 1998-2000.

1.3.3 **CEO as chair of the board**

Jensen [1993] argues that it is hard for a board to discipline a CEO who is also the board chair (a situation often labeled as CEO duality). Loebbecke *et al.* [1989] argue that CEO-duality firms are likely to exhibit lower FRQ because the CEOs can manipulate financial reporting to achieve their own aims. In 75% of the fraud cases they examine, a single person controls the firm’s operating and financial decisions. Dechow *et al.* [1996] find that firms manipulating earnings are more exhibit CEO duality. These results, however, are based on univariate comparisons across firms.

Multivariate studies report mixed results for the association between CEO duality and FRQ. Significant results come from US studies by Carcello and Nagy [2004a, 2004b], who find that CEO duality is positively associated with the probability of financial statement fraud, and by Abbott *et al.* [2000] who report a weak positive association between CEO duality and the probability of companies attracting SEC sanctions for aggressive reporting or fraud. A Canadian study by Smaili and Labelle (2007) also finds CEO duality to be positively associated with the likelihood of companies attracting OSC sanctions.

CEO duality is generally insignificantly associated with different FRQ proxies outside the US: (a) voluntary disclosure index [Ho and Wong, 2001], and the magnitude of earnings management [Jaggi and Leung, 2005] in Hong Kong; (b) probability of public criticism of accounting practices and of earnings restatements in the UK [Fergusson et al., 2004],8 (c) extent of earnings management in the UK [Fergusson et al., 2004; Peasnell et al., 2005] and in Australia [Davidson et al., 2005], (d) probability of fraudulent reporting in China [Chen et al., 2006], and (e) returns-earnings associations in New-Zealand [Ahmed et al., 2006]. Generally, then, the fact that the CEO also chairs the board does not seem to be significantly associated with FRQ except in the US.

1.3.4 Board size

Jensen [1993] and Yermack [1996] argue as boards grow, they become less likely to function effectively and easier for CEOs to control. To support their proposition, they cite group productivity studies by Steiner [1972] and Hackman [1990], which show that as groups add members they become less effective because coordination and information-processing costs outweigh the benefits of drawing on more people’s expertise. Jensen [1993] proposes that “when boards get beyond seven or eight people they are less likely to function effectively” (Italics added). Yermack [1996] argues that firms with smaller boards, consisting of less than ten directors, are better performers. In contrast, Chaganti et al. [1985] believe large boards are valuable due to the breadth of their knowledge and the services they can provide.

Empirical studies are inclusive. Beasley [1996] reports that board size is positively associated with the likelihood of financial statement fraud; however, Uzun et al. [2004], Carcello

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8 In the UK, Peasnell et al. [2001] even find that firms that cumulate CEO and chairman positions are less likely to be censured by the FRRP for defective reporting, contrary to their anticipations.

UK studies suggest that board size is not significantly associated with the probability of FRRP censure [Peasnell et al., 2001; Song and Windram, 2004] or the extent of earnings management [Peasnell et al., 2005]. However, board size is negatively associated with short-term earnings management, proxied by abnormal working capital accruals, both in the US [Xie et al., 2003] and in Singapore-Malaysia [Bradbury et al., 2004]. The findings are inconsistent with the proposition that large boards are poor monitors of FRQ. However, two studies using earnings-returns associations suggest that small boards are associated with higher FRQ than large boards: one in the US by Vafeas [2000],9 the other in New-Zealand by Ahmed et al. [2006].

1.3.5 CEO presence on board-monitoring committees

Jensen [1993] believes that the most important functions of the board are to provide high-level counseling and to set rules regarding hiring, firing, and compensating CEOs. Thus, CEOs can enhance their board influence by sitting on specialized board committees, such as the compensation committee and the nominating committee.10 The compensation committee aims to

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9 Vafeas [2000] suggests the possibility that there exists a firm-specific, optimal board size with regard to the value relevance of accounting numbers. He finds that the earnings-returns relation is the strongest for small board firms (five to ten directors). This relation is also marginally significant for medium-sized boards (ten or eleven directors), but insignificant for firms having more than fourteen directors.

10 Stock exchange regulations have been tightened concerning compensation and nominating committees. Toronto Stock Exchange (TSX) guidelines [474, p. 9] are that committees of the board of directors should generally be
align executive officers’ compensation with performance. CEOs cannot participate in this activity objectively without at least appearing to further their own interests.\(^\text{11}\) Stock exchange regulations have long precluded CEOs from serving on audit committees. Before 2003, however, CEOs could sit on compensation committees. Klein [2002a] reports greater earnings management by firms with such CEO-friendly boards, consistent with weaker monitoring of financial reporting.

With regard to nominating committees, Shivdasani and Yermack [1999] argue that the CEO has incentives to attempt to reduce monitoring pressure by exerting influence on director selection. They mention two ways a CEO can participate in director selection: (1) The board has a separate nominating committee and the CEO serves as a member. (2) Such a committee does not exist but directors are selected by the entire board including the CEO. They report a negative association between the CEO’s involvement in director selection and board independence (expressed as the proportion of outside directors).

As discussed previously, low board independence is widely believed to foster low FRQ. However, empirical findings to date do not support the hypothesized negative association between FRQ and whether the CEO sits on a nominating committee. Klein [2002a] does not find a significant impact on earnings management, nor do Bryan et al. [2004] in terms of value relevance of accounting numbers. Arguably, then, the nominating function is too far removed from the financial reporting function to represent an explicit threat to FRQ. (See Appendix B, Table 2).

\(^{11}\) Aboody and Kasznik [2000] and Yermack [1997] report that CEOs manage investor expectations on earnings downward before the issuance of stock option awards in order to increase the value of their compensation package.
2 AUDIT COMMITTEE EFFECTIVENESS

Table 2 summarizes empirical evidence on the associations between audit committee variables and FRQ proxies. The audit committee is generally seen as an important component of a firm’s overall corporate governance structure, particularly with regard to audit quality and oversight of financial reporting. Acting for the board of directors, the audit committee selects the external auditor (subject to shareholder approval) and meets separately with senior financial managers and auditors to review the firm’s financial statements, audit process, and internal accounting controls. The committee also challenges management, internal auditors, and external auditors to show that they are acting in the firm’s best interests. According to the US Blue Ribbon Committee Report (BRC Report), the audit committee is “the ultimate monitor” of the financial accounting reporting system [Klein, 2002b].

A growing literature suggests that at least three audit committee characteristics are likely to be associated with FRQ: independence (section 3.1 below), expertise (3.2), and diligence or involvement in monitoring (3.3).

2.1 Audit committee independence

Proxies for the audit committee’s degree of independence include the percentage of outside directors on the committee and dummy variables indicating a majority or totality of independent directors [Klein, 2002a; Bédard et al., 2004; Abbott et al., 2004]. Following the enactment of more stringent independence rules by North-American regulators, however, the variance in audit committee independence measures has greatly decreased, making it difficult for research to reliably infer the FRQ impact of voluntary changes in audit committee independence. Since December 1999, US stock exchanges require firms to maintain fully independent audit
committees. Similarly, in Canada, the audit committee must have at least three members, each of whom must be independent and financially literate [OSC, multilateral instrument 52-110]. Both the NYSE and NASDAQ concede some flexibility, allowing the appointment of directors who have business relationships with the firm if the board determines that it is in the best interests of the corporation for these individuals to serve on the audit committee. Despite this tolerance, once the reforms are fully implemented audit committee independence will tend to be almost uniform, especially for large, US-listed firms.

Klein [2002a] investigates the cross sectional relation between earnings management and audit committee independence for S&P 500 firms in 1992 and 1993. She finds a negative association between the magnitude of abnormal accruals and two independence measures: (1) percentage of outside directors, (2) the fact that the committee comprises a majority of outsiders. Jenkins [2002] investigates the relation between earnings management and audit committee effectiveness, estimated as a factor score that is positively associated with four audit committee characteristics: (1) percentage of outside directors, (2) the percentage of financial experts, (3) number of meetings per year, and (4) size of the committee. With respect to earnings management, her findings are consistent with the mitigating effects of outside audit committee members. Similarly, Vafeas [2005] finds that the percentage of inside directors on the audit committee is associated with a higher probability of reporting a small increase in earnings for 252 U.S. firms during 1994-2000. Investigating perceived quality of financial reporting, proxied by AIMR ratings for two samples of firms during 1989-1993, Wright [1996] reports a negative relation between AIMR ratings and the percentage of non-independent members on audit committees, and a significant negative association between the changes in both variables over the
1989-1993 period. Overall, these findings are consistent with audit committee independence enhancing FRQ.

In contrast, five recent US studies provide unsupportive results concerning the relation between FRQ and the percentage of outside directors on the audit committee: (1) Xie et al. [2003] and Yang and Krishnan [2005] for short-term and quarterly earnings management, respectively, (2) Uzun et al. [2004] regarding fraudulent reporting in the period 1978-2001, (3) Agrawal and Chadha [2005] concerning the likelihood of earnings restatement for companies in 2000-2001, and (4) Felo et al. [2003] with respect to the AIMR scores of FRQ for companies in 1992-93 and 1995-96. Moreover, Anderson et al. [2003] report that the percentage of outside members in the audit committee is unassociated with the informativeness of earnings after controlling for the independence of the full board.

Klein [2002a] reports that FRQ measures associated with the majority-independent variable are more pronounced than those associated with the percent of outsiders. This finding supports the view that an audit committee with a simple majority of outsiders is more likely to fulfill its duties effectively than a committee without a majority; however, further increases in the proportion of independent members are unlikely to be associated with increases in FRQ. Indeed, having an audit committee entirely composed of outsiders has no significant effect on the magnitude of abnormal accruals. The latter finding is not in keeping with the requirements of complete independence adopted by market authorities following the BRC [1999] recommendation.

Other US studies tend to support the role of fully independent audit committees when combined with other factors. Abbott et al. [2000] find that an audit committee composed exclusively of NEDs and which meets at least twice a year significantly reduces the probability
that a firm will be subject to an SEC enforcement action for aggressive or fraudulent financial reporting (1980-1996). Abbott et al. [2004] find that the likelihood of earnings restatement during 1991-1999 significantly decreases if all audit committee members are independent under the BRC [1999] definition; however, Lin et al. [2006] do not confirm this relation with a sample of restatement firms in 2000.

Bédard et al. [2004] find that the likelihood of aggressive earnings management – i.e., abnormal accruals that are markedly positive or negative for Compustat firms in 1996 – decreases if the audit committee meets this independence criterion. In terms of value relevance, Bryan et al. [2004] report that ERCs are marginally higher for Fortune 500 firms that use totally independent audit committees (1996-2000); however, Petra’s [2007] findings, based on quarterly ERCs over a similar time-period, do not confirm the latter results. Overall, contrary to Klein’s [2002a] results, findings from these later studies are consistent with the Sarbanes-Oxley and US stock market listing requirements improving FRQ.

In Australia, Davidson et al.’s [2005] findings are comparable to those of Klein (2002a) in the US, but their independence criterion is more loosely specified than Klein’s. Specifically, the magnitude of abnormal accruals is negatively associated with the fact that the audit committee comprises a majority of NEDs, but is insignificantly associated with the fact that the audit committee is composed fully of NEDs. In France, Piot and Janin [2007] do not find any association between abnormal accruals and the existence of a majority independent audit committee; only the presence of an audit committee is associated with lower abnormal accruals. This raises concerns with respect to the role of independent directors in the French governance context. Such concerns are even stronger in Spain, where the presence of a majority independent audit committee is positively associated with the magnitude of abnormal accruals [Osma and D.A.
Noguer, 2005]. In East Asia, Bradbury et al. [2004] find that two measurements of audit committee independence – the percentage of independent members and the fact that the committee is 100% independent – significantly curb abnormal working capital accruals.12

To date, no attempt has been made to reconcile these seemingly conflicting findings. Possibly, abnormal accruals play a different role outside the US, where researchers implicitly assume that managers and directors use them as vehicles for promoting their self interest. If managers and directors in Spain tend to make abnormal accruals in a co-operative context, attempting to convey value-relevant information to the market, then abnormal accruals would be poor proxies for low FRQ in that context.

2.2 Audit committee expertise

The US Auditing Standards Board and the SEC recently adopted the recommendation of the Blue Ribbon Committee (BRC) that all audit committee members be financially literate and that at least one member demonstrate a high level of financial reporting knowledge, referred to as financial expertise. Financial literacy is defined as the ability to read and understand financial statements; financial expertise refers to previous employment experience in finance/accounting or professional certification in accounting or finance [McDaniel et al., 2002].

The requirement to have at least one financial expert in the audit committee assumes that such members enhance the committee’s effectiveness. Financial experts are expected to lead the audit committee to identify and ask knowledgeable questions that challenge management and external auditors to a greater extent and consequently enhance FRQ. However, even the BRC admits that “a director’s ability to ask and intelligently evaluate answers to such questions may not require expertise” [BRC, 1999, p. 25]. Similarly, AIMR argues that people without formal

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12 Partial independence measurements at the 51% and 67% thresholds yield insignificant results.
training in accounting or finance can be as insightful (and in some cases more so) than people with formal training [AIMR, 1999]. A more critical argument is that audit committee members with financial expertise may actually be less effective than members with other credentials, such as practical management experience [AIMR, 1999]. Moreover, financial experts and literates provide different but complementary viewpoints to the assessments of FRQ [McDaniel et al., 2002; Thornton, 2002]. Hence, an audit committee composed of solely financial experts or high proportion of financial experts may be less effective at monitoring financial reporting than a more balanced board.

Empirical research related to expertise variables is starting to produce useful evidence with respect to several FRQ surrogates, mostly in the US. Many studies focus on earnings management activities. Jenkins’ [2002] unpublished study suggests that audit committee effectiveness – a factor score positively associated with the proportion of financial experts on the audit committee – mitigates income-increasing earnings management. Xie et al. [2003] investigate S&P 500 firms and document negative associations between abnormal working capital accruals and two expertise variables: (1) the percentage of audit committee members having executive positions in other listed companies, and (2) the percentage of audit committee members with experience as investment bankers. Bédard et al. [2004] use a dummy variable to capture financial expertise, but extend their research to two other expertise fields: (1) governance expertise, measured with the average number of directorships held by outside non-related

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13 “The experts tend to ferret out less prominent, recurring and detailed accounting problems, such as: ‘Is this year’s depreciation calculation consistent with last year’s?’ The literates tend to ask useful, comparatively naïve questions about highly prominent, nonrecurring problems that are important to outside investors: ‘Does the company have any special purpose entities? If so, why aren’t they consolidated? What does this company’s ‘goodwill’ represent? How did management test it for impairment this quarter?’” [Thornton, 2002].

14 Since the effects of the percent of financial experts interact with those of the other three factors, the positive effect of the former variable on FRQ has to be interpreted cautiously.
members of the committee in unaffiliated firms, (2) firm expertise, measured with the average years of board service of outside non-related members of the committee. Using 1996 US data, they find that both financial and corporate governance expertise significantly reduce the probability of both income-increasing and income-decreasing aggressive earnings management but that overall business expertise only mitigates the probability of income-decreasing earnings management. However, Yang and Krishnan [2005], investigating the magnitude of quarterly earnings management during 1996-2000, report insignificant effects regarding the presence of a financial expert on the audit committee but mitigating effects associated with governance and business expertise.

Few studies have addressed FRQ surrogates other than earnings management. Farber [2005] finds that the number of financial experts on the audit committee is, on average, significantly lower in a fraud firm sample, compared to a control sample of non-fraud firms. Abbott et al. [2004] find that the likelihood of earnings restatement during 1991-1999 significantly decreases if the audit committee includes at least one financial expert according to the BRC definition, but Lin et al. [2006] do not confirm this relation in 2000. Agrawal and Chadha [2005] also provide evidence that firms whose audit committees include an independent director with financial expertise are less likely to restate earnings. Felo et al. [2003] find that the percentage of audit committee members with financial expertise positively impacts AIMR ratings, but only for 1995-96. This variable is negatively but insignificantly associated with FRQ in 1992-93. Bryan et al. [2004] find that ERCs of Fortune 500 firms are higher if all the audit committee members are financially literate according to the BRC definition.

Expertise or literacy variables have attracted little consideration outside the US. In Canada, Smaili and Labelle [2007] find that the number of financial experts on the audit
committee is negatively associated with the seriousness of accounting irregularities identified by the OSC. However, the financial literacy variable is not significantly associated with such irregularities. These results do not support the current Canadian policy, which only recommends the presence of financially literate members on the audit committee rather than the presence of a financial expert as in the US. Song and Windram [2004] examine the number of audit committee members with financial expertise in the UK. They find this variable to be an insignificant predictor of the probability of FRRP censure for defective reporting.

2.3 Audit committee activity and diligence

This final section on audit committees includes two variables commonly assumed to be proxies for the extent of the committee’s activity and diligence. First is the number of meetings held per year by the audit committee, or a dummy variable distinguishing active committees – ones that meet at least twice or four times a year – from others assumed to be less active. The second variable, less significant in terms of explanatory power, is the size of the audit committee. Both variables are expected to be positively related to FRQ.

The number of meetings held is a proxy for the degree of effort the committee exerts in overseeing financial reporting. The BRC report does not address how often audit committees should meet. Likewise, US stock exchange regulations do not contain any specific rules regarding the frequency of audit committee meetings. However, Price Waterhouse [1993] suggests that audit committees should meet at least four times a year and make provisions for special meetings when warranted [Beasley, 1996]. Similarly, Morrissey [2000] recommends that for audit
committees to fulfill their monitoring responsibility effectively, they should meet at least to review interim and annual SEC filings.\textsuperscript{15}

To date, with one Australian exception, only US studies have considered the number of audit committee meetings.\textsuperscript{16} The empirical findings are mixed. With respect to earnings restatements, Abbott \textit{et al.} [2004] find a mitigating effect if the audit committee meets at least four times a year; but Lin \textit{et al.} [2006] do not, using the number of meetings. Regarding fraudulent financial reporting, Farber’s [2005] matched comparisons indicate slightly fewer meetings for fraud firms the year before the fraud is unveiled, but the trend reverses significantly five years later. Concerning earnings management, the number of audit committee meetings is a component of Jenkins’s [2002] effectiveness score that curbs such a practice; it also has a mitigating effect on abnormal working capital accruals [Xie \textit{et al.}, 2003], and on the probability of reporting a small earnings increase [Vafeas, 2005]. However, meeting frequency is insignificant in Bédard \textit{et al.} [2004], in Yang and Krishnan [2005], and in the Australian study on earnings management by Davidson \textit{et al.} [2005]. Also, Uzun \textit{et al.} [2004] report that the audit committee meeting frequency is not significantly associated with fraudulent financial reporting. Felo \textit{et al.} [2003] find that meeting frequency has no effect on FRQ as perceived by AIMR analysts. Finally, considering value relevance, neither the number of annual meetings [Anderson \textit{et al.}, 2003] nor the fact that the audit committee meets at least four times a year [Bryan \textit{et al.}, 2004] is associated with the magnitude of ERCs.

\textsuperscript{15} The Committee of Sponsoring Organizations of the Treadway Commission’s study on \textit{Fraudulent Financial Reporting: 1987 – 1997} finds that audit committees of companies that committed financial reporting fraud tended to meet only once a year (25\% of the 200 fraud firms examined did not even have audit committee).

\textsuperscript{16} The disclosure of this information is less widespread, and usually made on a voluntary basis, in other countries.
Audit committee size is another proxy for audit committee diligence. Menon and Williams [1994] argued that audit committees with less than three members are likely to be ineffective. As mentioned above, the OSC, NYSE, and NASD now require audit committees to have at least three directors, all of whom must be independent or financially literate. Hence, audit committee size is sometimes measured not by the number of directors, but with a dummy variable indicating that the committee includes at least (or has strictly more than\textsuperscript{17}) three members.\textsuperscript{18}

Whatever the FRQ variable used is, empirical results (again largely limited to the US environment) are mostly unsupportive. Audit committee size is not statistically different for fraud and non-fraud firms [Farber, 2005],\textsuperscript{19} and has no significant association with earnings management [Xie \textit{et al.}, 2003; Davidson \textit{et al.}, 2005] or analysts’ perception of FRQ [Felo \textit{et al.}, 2003]. Only two studies report that audit committee size is associated with FRQ: Lin \textit{et al.} [2006] regarding earnings restatements, and Yang and Krishnan [2005] regarding quarterly abnormal accruals. Abbott \textit{et al.} [2004] and Bédard \textit{et al.} [2004] use a dummy variable to indicate that firms meet the BRC recommendation of at least three members. They report insignificant associations between this variable and restatements or aggressive earnings management. Overall, then, audit committee size variables do not appear as FRQ contributors in the empirical literature (See Appendix B, Table 3).

\textsuperscript{17} Jenkins [2002] distinguishes audit committees having \textit{strictly} more than three members to derive her effectiveness score.

\textsuperscript{18} PricewaterhouseCoopers [2000], and others, claim that an audit committee with as many as six directors is likely to be more effective [Jenkins, 2002]. The size and composition of an audit committee are both associated with the overall board size and board composition [Klein 2002a]. Jensen [1993] maintains that large boards are less likely to function effectively. Given the limitation of board size, if the construct of optimal size is meaningful for audit committees, it makes sense to use a dummy variable rather than a continuous numerical one to measure audit committee size.

\textsuperscript{19} Beasley [1996] reports that audit committees of no-fraud firms has a mean (median) size of 2.7 (3) directors, while the mean (median) size is only of 1.8 (2) directors for fraud firms. However, he does not test this difference, nor consider the size variable in his Logit models.
3 CONCLUSION

This review provides a synthesis of empirical studies using measures that relate directly or indirectly to the concept of financial reporting quality (FRQ). Consistent with previous studies, we are unable to define FRQ unequivocally; however, the variables summarized in Figure 1 and in the columns of Tables 1 and 2 contribute to our understanding of that latent construct. We induce a profile of higher-FRQ firms and sub-profiles relating to three FRQ outcomes: the incidence of fraudulent financial reporting, earnings management and perceived FRQ or earnings informativeness.

Based mainly on US studies, we conclude that board independence is the most effective deterrent of fraudulent financial reporting. This is consistent with independent directors having strong incentives to improve FRQ or maintain it at an acceptable level to avoid being sued. In the US and to a lesser degree in the UK, board independence tends to curb earnings management. In the US, a fully independent, expert and active audit committee seems to be effective in this regard. In Continental Europe, however, opposite results are reported with respect to board independence and emerging evidence suggests that audit committee independence is not associated with reduced earnings management. Studies investigating analysts’ perceptions of FRQ and the value relevance of accounting earnings highlight board independence and audit committee expertise as FRQ contributors. Thus, as Figure 1 suggests, board independence and audit committee effectiveness have been shown to be associated with FRQ; however, different facets of board independence and audit committee effectiveness are associated with different FRQ outcomes.
Virtually all of the studies reviewed are vulnerable to the argument that they have omitted other, as yet unspecified variables related to FRQ and failed to consider the endogeneity of monitoring measures and FRQ measures. The insignificant and/or contradictory results found for Continental Europe suggest that cultural or legal variables need to be considered. Possibly, European managers see abnormal accruals as vehicles for conveying value relevant information to the market rather than vehicles for managing earnings to suit their selfish purposes. If companies institute more independent boards and more effective audit committees in response to low FRQ, the endogeneity audit committee characteristics and FRQ needs to be explicitly modeled for valid inferences to emerge from cross-sectional empirical studies.


Appendix A

Figure 1. Financial Reporting Monitoring and Financial Reporting Quality (FRQ)

Effectiveness of Monitoring Financial Reporting

Financial Reporting Quality (FRQ)

Board of Directors
• Independence
• Outside director traits
• CEO dominance

Audit Committee
• Independence
• Expertise
• Activity/diligence

Consequences of Low FRQ
• Fraud/litigation
• Enforcement actions (GAAP violation)
• Earnings restatements/errors

Earnings Management
• Abnormal accruals
• Abnormal working capital accruals
• Aggressive earnings management

Financial Reporting Informativeness
• Earnings-returns associations
• Earnings-response coefficients
• Analysts’ perceived FRQ
### Appendix B

**Table 1. Board Monitoring and Financial Reporting Quality**

This table summarizes empirical studies testing the impact of board monitoring effectiveness on FRQ surrogates. Studies address US samples, except if otherwise indicated (Au: Australia; Ca: Canada; Ch: China; UK: United-Kingdom; Fr: France; Sp: Spain; EA: East Asia; HK: Hong Kong; NZ: New-Zealand). The relation between the different predictors and FRQ is generally anticipated to be positive; it is anticipated negative when marked (–). Note that the first three surrogates are negative proxies for FRQ. S (NS) is used to classify studies documenting a Significant (Non-Significant) impact of the predictor on FRQ, or Supportive (Non-Supportive) evidence of the hypothesized effect.

<table>
<thead>
<tr>
<th>Ex post consequences of low FRQ</th>
<th>Earnings management proxies</th>
<th>Perceived FRQ, earnings informativeness</th>
</tr>
</thead>
<tbody>
<tr>
<td>S / NS</td>
<td>Fraudulent financial reporting</td>
<td>GAAP violations, earnings restatements</td>
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</table>

#### Board independence variables

<table>
<thead>
<tr>
<th>% of outside directors on board</th>
<th>S</th>
<th>NS</th>
<th>S</th>
<th>NS</th>
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<th>NS</th>
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<tr>
<th>% of non-executive directors on board</th>
<th>S</th>
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<th>S</th>
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<tr>
<th>More than 50% of outside directors</th>
<th>S</th>
<th>NS</th>
<th>S</th>
<th>NS</th>
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<th>NS</th>
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<tbody>
<tr>
<td>Characteristics of outside directors</td>
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<td>Ex post consequences of low FRQ</td>
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<tr>
<td></td>
<td>NS</td>
<td></td>
<td></td>
<td></td>
<td>Xie et al. (2003)(^b)</td>
<td></td>
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<tr>
<td>Additional directorships (–)</td>
<td>S</td>
<td>Beasley (1996)</td>
<td></td>
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<tr>
<td></td>
<td>NS</td>
<td></td>
<td></td>
<td></td>
<td>Smaili and Labelle (2007 Ca)</td>
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</table>

### CEO dominant position

<table>
<thead>
<tr>
<th>Inside directors on the board (–)</th>
<th>S</th>
<th>Dechow et al. (1996)(^a), Smaili and Labelle (2007 Ca)</th>
<th></th>
<th></th>
<th>Ho and Wong (2001 HK)</th>
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<tbody>
<tr>
<td></td>
<td>NS</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>CEO chairs the board (–)</td>
<td>S</td>
<td>Abbott et al. (2000), Carcello and Nagy (2004a, 2004b)</td>
<td>Dechow et al. (1996)(^a), Smaili and Labelle (2007 Ca)</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>S / NS</td>
<td>Fraudulent financial reporting</td>
<td>GAAP violations, earnings restatements</td>
<td>Earnings management proxies</td>
<td>Perceived FRQ, earnings informativeness</td>
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<tr>
<td>CEO on nominating committee (–)</td>
<td>NS</td>
<td></td>
<td></td>
<td></td>
<td>Klein (2002a)</td>
</tr>
</tbody>
</table>

a Results from univariate tests only.

b Counterintuitive effect observed.

c Result observed for non-executive directors (NEDs).
Table 2. Audit Committee Effectiveness and Financial Reporting Quality

Summary of empirical studies having tested the impact of the presence or effectiveness of an audit committee on FRQ surrogates. Studies address US samples, except if otherwise indicated (Au: Australia; Ca: Canada; UK: United-Kingdom; Fr: France; Sp: Spain; EA: East Asia; HK: Hong Kong). The relation between the different predictors and FRQ is generally anticipated to be positive. Note that the first three surrogates are negative proxies for FRQ. S (NS) is used to classify studies documenting a Significant (Non-Significant) impact of the predictor on FRQ, or Supportive (Non-Supportive) evidence of the hypothesized effect.

<table>
<thead>
<tr>
<th>% of outside directors</th>
<th>S / NS</th>
<th>Ex post consequences of low FRQ</th>
<th>Earnings management proxies</th>
<th>Perceived FRQ, earnings informativeness</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of outside directors</td>
<td>S</td>
<td></td>
<td></td>
<td>Klein (2002a), Davidson et al. (2005 Au)</td>
</tr>
<tr>
<td>A majority of outside directors</td>
<td>S</td>
<td></td>
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<td></td>
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<tr>
<td>NS</td>
<td>Piot and Janin (2007 Fr), Osma and Noguer (2005 Sp)</td>
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</table>

**Audit committee independence**

**Audit committee expertise**

<table>
<thead>
<tr>
<th>% of financial experts / literates</th>
<th>S / NS</th>
<th>Ex post consequences of low FRQ</th>
<th>Earnings management proxies</th>
<th>Perceived FRQ, earnings informativeness</th>
</tr>
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<tbody>
<tr>
<td>NS</td>
<td>Song and Windram (2004 UK)</td>
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</table>
### Audit committee diligence

<table>
<thead>
<tr>
<th>S / NS</th>
<th>Ex post consequences of low FRQ</th>
<th>Earnings management proxies</th>
<th>Perceived FRQ, earnings informativeness</th>
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<td></td>
<td>Fraudulent financial reporting</td>
<td>GAAP violations, earnings restatements</td>
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#### Audit committee diligence

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<tbody>
<tr>
<td>Number / minimum of annual meetings</td>
<td>Farber (2005)(^a)</td>
<td>Uzun et al. (2004)</td>
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<tr>
<td>Audit committee size</td>
<td>S</td>
<td>NS</td>
</tr>
<tr>
<td></td>
<td>Farber (2005)(^a)</td>
<td>Abbott et al. (2004)</td>
</tr>
<tr>
<td></td>
<td>Xie et al. (2003), Davidson et al. (2005 Au), Bédard et al. (2004)</td>
<td>Felo et al. (2003)</td>
</tr>
</tbody>
</table>

\(^a\) Results from univariate tests only.

\(^b\) Counterintuitive effect observed.

\(^c\) Audit committee composed exclusively of NEDs and meeting at least twice a year.

\(^d\) Results obtained with factor analysis including the proxy.

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The opinions of the authors are not necessarily those of Louisiana State University, the E.J. Ourso College of Business, the LSU Accounting Department, or the Editor-In-Chief.