

The Development of Earnings Management Research

Subhrendu Rath* and Lan Sun**

Earnings management directly affects the overall integrity of financial reporting and significantly influences resource allocation in an economy. The objective of this paper is to help academic researchers, regulators, and investors better understand issues surrounding earnings management. We review the research on earnings management from early 1960s to date. We particularly discuss the changes of different research focus in each stage of the development of earnings management research and the economic consequences of earnings management which directly affect capital resource allocation.

Keywords: Earnings management, capital market focus, non-capital market focus, economic wealth transfer, capital market efficiency

JEL Classification: M40, M41, M49.

1. Introduction

The practice of earnings management (hereafter EM) has attracted academic research attention since at least the 1960s. Early literature focus in this area was primarily on the impact of accounting choices on the capital markets. Both the Mechanistic Hypothesis and the dominant paradigm for financial accounting research in the 1970s, the Efficient Market Hypothesis were used to test the impact of accounting choices on the capital markets. However, the implications were contradictory.

The Mechanistic Hypothesis states that investors can be systematically misled by firms' accounting discretions since they do not utilize information sources other than firms' financial reports (see Ball 1972; Kaplan & Roll 1972). On the other hand, the Efficient Market Hypothesis states that investors cannot be systematically misled by accounting discretions as stock prices already incorporate all available information (see Fama, 1970; Mayer-Somners, 1979; Hines, 1982). When earlier hypotheses based on capital markets are unclear why firms were engaging in earnings manipulations, Watts and Zimmerman (1986) develop their Positive Accounting Theory and thus shift earnings management research focus from capital markets to non-capital market internal contractual incentives.

*Subhrendu Rath, School of Economics and Finance, Curtin University of Technology, GPO Box U1987, Perth WA 6845, Australia. E-mail: s.rath@curtin.edu.au

**Lan Sun, School of Economics and Finance, Curtin University of Technology, GPO Box U1987, Perth WA 6845, Australia. E-mail: Lan.sun@postgrad.curtin.edu.au

However, there is still no consensus on the purposes of earning management. It is not clear whether managers exercise discretion opportunistically, inflating earnings to maximize their compensation, or they signal the firms' prospect to outside investors. Contemporary research focus of EM has moved away from contractual incentives back to capital market again. Recent studies have examined managers' motives to influence stock valuation that influence equity offering by overstating earnings (e.g. Teoh et al. 1998a, 1998b), and/or manage earnings to meet analysts' forecast (e.g. Burgstahler & Eames, 1998).

The shift of research focus from capital market to non-capital market and then shift back to capital market again also reflects importance of capital market in EM research. Academics note the role of accruals in capital market valuation, and question whether market correctly prices the accrual component of earnings. Moreover, researchers also intend to identify possible trading strategy that can capture accrual anomaly to make abnormal return (Beneish, 2001). EM and its market reactions, ultimately, raise the question on markets efficiency. If the presumption of markets efficiency is valid, the effects of EM should be already incorporated into stock prices. Managers' discretion therefore should not correlate with future stock returns. However, Sloan (1996), Subramanyam (1996) and Xie (2001) document that markets actually priced the discretionary component of earnings. In fact, trading strategy from Sloan (1996) to capture accruals anomaly is the evidence of markets inefficiency.

In this study, we review the development of earnings management research, through the shift of research focus during different stages and studies of economic consequence of EM. The objective of this study is to help academic researchers and investors better understand the phenomenon of EM. The layout of the paper is as follows. Section 2 reviews earlier capital market research focus in 1970s; Section 3 reviews non-capital market research focus of 1980s; Section 4 reviews contemporary capital market focus since 1990 and discusses the main reasons for research focus shift back to capital market again; Section 5 analyses economic consequences of earnings management; Section 6 discusses security markets reaction; Finally, section 7 concludes and provides suggestions for future research.

2. Earlier Capital Market Focus (1960s – 1970)

Early literature in EM was primary focused on the capital market. It starts in 1960s with the Mechanistic Hypothesis, which postulates a mechanical relationship between stock prices and accounting earnings. It assumes that investors make decisions solely based on the face value of financial statements and thus can be systematically misled by financial information because the book value of earnings used in predicting stock price are purely mechanical (Ball, 1972; Kaplan & Roll, 1972). The Mechanistic hypothesis predicts that stock price is associated with particular accounting changes. A earnings increasing accounts

change is accompanied by a positive abnormal stock return and an earnings decreasing change is accompanied by a negative abnormal stock return irrespective the effect of the change on the present value of cash flows (Ball & Brown, 1968). Ball (1972) and Kaplan and Roll (1972) assume that financial statements are the sole source of information regarding the firm, and investors use only accounting earnings to predict stock prices. They find stock prices are associated with the changes in accounting methods. As such, the Mechanistic hypothesis concludes that market is systematically misled by accounting procedures.

When the mechanistic hypothesis was prevalent, investors and practitioners believed that their stock prices were inflated as reported earnings were inflated by corporate managers¹. Managers also believed that they could mislead investors by manipulating accounting data². The Wall Street Journal, October 1, 1974 states that: *A lot of executives apparently believe that if they can figure out a way to boost reported earnings their stock price will go up even if the higher earnings do not represent any underlying economic change. In other words, the executives think they are smart and the market is dumb.* Thus the foregoing Mechanistic hypothesis suggests that the market is inefficient. The Efficient Market Hypothesis, however, predicts that there is no association between stock price changes and the changes of accounting choice. In 1970s, the Efficient Market Hypothesis started to dominate accounting and finance research. Fama (1970) states that in an efficient capital market stock prices fully reflect all available information. The implication of this hypothesis on earnings management is that managers who do not believe in or understand the concept of efficiency will engage in earnings manipulation. Nonetheless, their efforts will be fruitless since the market can see through the effect of earnings manipulation so that reported financial information cannot systematically mislead the market. By itself, the EMH provides no prediction for a stock price change in the presence of EM. In other words, any stock price change accompanying the managerial discretions is unbiased. In the efficient markets, there is no implication for managerial discretions as information is costless and available to all investors (Holthausen & Leftwich, 1983). As a result, investors are unable to earn excess returns regardless whether earnings are managed or unmanaged (Mayer-Somners 1976; Hines 1982). Furthermore, in an efficient market, there is no transaction costs, no contracting costs, and no information processing costs, financial reporting in process accounting earnings should make no difference under what kind of management judgements are employed³. Therefore, there is no reason for managers to engage in EM.

The proposition that EM behaviour is irrelevant to a firm's stock price can also be derived through the famous Modigliani and Miller's (1958) proposition that capital structure is irrelevant. They hold that in efficient markets, with zero transactions

¹ See Kaplan and Roll (1972, p.226) for a list articles in Barron's and the Financial Analysts Journal.

² For example, managers who supposed to switch to LIFO to increase cash flows (via reduced taxes) were concerned about the negative impact on the stock prices of resultant decrease in earnings.

³ The rational has been recognized by Watts & Zimmerman (1978, 1986) and Holthausen & Leftwich (1983).

costs, investors can costlessly create any capital structure. Capital structure is irrelevant; it is just form and has no value effects. Nevertheless, Modigliani and Miller (1963) show if taxes are introduced, where interest payments are tax deductible and dividend payments are not, capital structure does matter. It affects firm's cash flows and firm values. Hence, it is natural for us to argue that in the absence of taxation, it is meaningless for managers to inflate earnings to boost stock prices because capital structure itself is irrelevant. The MM assumption of corporate tax does not contradict the efficient market hypothesis. Testing for tax effects is just a joint hypothesis of testing the efficient market hypothesis, contracting, zero transactions and information costs. So the MM assumption in conjunction with the market efficiency predicts that there is no role for earnings management with market perfections.

3. Non-capital Market Focus (1980-1990)

Neither Mechanistic Hypothesis nor Efficient Market Hypothesis reveals why managers engage in earnings management in the first place. Watts and Zimmerman (1978) developed a Positive Accounting Theory (PAT), as an alternative to capital market incentives which focus on a firm's internal contractual incentives⁴. A firm can be viewed as a nexus of contracts and is inclined to minimize contracting costs associated with various contracted parties. PAT takes the view that firms' accounting choice should be chosen to minimize the contracting costs, so as to attain efficient corporate governance. Nevertheless, PAT assumes that managers are rational as well as investors and will choose accounting procedure to influence contractual outcomes for their interests. So when managers have flexibility to choose from a set of accounting policies in facing of changing circumstances, they will choose discretion for their own benefits which opens up the door for opportunistic behaviour ex post. Watts & Zimmerman (1978) formulate PAT around management compensation, debt covenant violations and political violations. They hypothesize that managers try to influence contractual outcomes of bonus plan and the debt covenant and reduce political costs by exercising judgement over accounting variables. As such, Positive Accounting Theory is also referred as "contracting theory" (Scott, 1997).

Compensation contract, as one of the major focuses in PAT provides insight for opportunistic driven EM. The bonus plan hypothesis states that managers are more likely to shift future earnings to current period so that their utility will be maximized through bonus or personal compensations (Watts & Zimmerman, 1978). Unlike compensation contracts, both debt covenant hypothesis and political cost hypothesis are formed to explain contractual arrangements; the propensity of managerial opportunism is far from proven. The debt covenant hypothesis indicates that the closer a firm is to compromising debt covenants, the more likely management is to engage in income-increasing EM as higher

⁴Scott (1997) defines PAT as: "*concerned with predicting such actions as the choices of accounting policies by firms and how firms will respond to proposed new accounting standards*" (Scott, 1997, p263).

reported earnings will reduce the probability of technical default. The political cost hypothesis states that managers are more likely to engage in income-decreasing EM in the face of higher political costs such as higher taxes and other regulations. Watts & Zimmerman (1978) point out that managerial manipulation can be viewed as an efficient means to protect firms' value in facing rigid and incomplete contracts between firms and debtholders, and between firms and regulators. The EM literature is well founded by PAT and its three hypotheses.

Later, many empirical studies of EM have been devoted to test the implications of the three hypotheses. For example, Healy (1985) found that managers of firms with bonus incentive plan will use discretionary accruals to increase reported earnings thus increase their expected bonus. Sweeney (1994) studied a sample of 130 U.S. manufacturing firms that were first-time debt covenant violators from year 1980 to 1989. They found that the violators made significantly more voluntary income-increasing EM prior to the default. Jones (1991) studied the actions of firms to lower reported earnings during import relief investigations and concluded that to qualify for relief, there was a tendency for organization to manipulate discretionary accruals to reduce their reported earnings.

In this period, agency theory shed light in explaining contractual incentives of EM. Watts and Zimmerman (1978) apply agency theory in their PAT and argue that in order to reduce agency costs, shareholders use management compensation contracts as devices to motivate managers to act for maximizing firm value. However, managers may myopically distort firm's true performance to obtain gain on their performance contracts. Similar arguments apply to the debt covenants and the political costs, which deal with conflict between managers/owners and creditors, and managers/owner and regulators respectively. To date, more and more interpretation of contracting incentives recognize that EM is not necessary "bad", as it would only be valid if managers go too far and behave opportunistically. In fact, Beneish (2001) points out that contracting could be acting as an efficient control system; it may take into account any EM behaviour which ultimately improves the quality of financial information.

4. Contemporary Capital Market Focus (Since 1990)

Since 1990s, the research focus has shifted from non-capital market contractual incentives back to capital market incentives again. The reasons for such shift are noted by Dechow and Skinner (2000). First, the market efficiency concept prevailed among early accounting researches. Managers and practitioners believe that markets were at least of semi-strong form of efficiency, and consequently, the possibility that EM could affect the market was ignored. However, since 1990s, there is growing evidence that markets can be inefficient and investors can be irrational⁵. As such, researchers' attention has been brought

⁵ See Lakonishok et al., (1994) use behavioural finance literature to support the evidence of market anomaly.

more towards to the market-related contexts. Second, capital markets are usually available to a much wider spectrum of users of financial statements. This makes EM more likely to be effective as the cumulative effects of information asymmetry between investors and managers are significant. Third, since 1990s the stock market valuation based on accounting benchmarks substantially increased, making stock prices highly sensitive to accounting measures such as earnings. At the same time, as equity-based compensation for managers grew, managers' personal wealth became more tied to stock prices and ultimately to accounting earnings. In all, Dechow & Skinner (2000) distinguish capital-market incentives from contractual incentives through the analysis of four sets market incentives for EM, that is, analysis of EM around IPO and SEO, analysis of management incentives to meet earnings benchmarks, tests of market reactions, and tests for economic consequences of EM⁶.

5. Economic Consequence of EM

Watts (1977) makes predictions about the likelihood that a company's financial reporting is based on the concept of efficient contracting. The contracting is said to be efficient if it is made toward minimizing agency costs amongst the various parties of the firm, which result in maximizing the value of the firm. However, the efficient contracting may not be always desirable. In the EM context, the agency conflicts between managers and shareholders, managers and debtholders, may induce managers to engage in opportunistic earning management that have adverse economic consequences for their firms, investors, and debtholders. Breton and Taffler (1995) summarize that the objectives of accounting manipulation are to alter the two bases of wealth transfer: the earnings per share and the debt/equity ratio, the underlying wealth transfers occur between managers and shareholders, and that between shareholders/managers and debtholders.

In general, managers engage in EM rely on the explicit and implicit contracts. In an owner-manager context, managers face a temptation to shirk as they know they have information advantages about the firm over owners. To motivate managers to work harder, owners offer managers a share of reported earnings. However, in the process of reporting, managers may distort earnings to maximize their personal wealth rather than shareholders' wealth. As such, economic wealth is transferred from shareholders to managers under compensation contracting. When managers enter into debt contracting, similar implications for wealth transfer occur. Debt contracts typically contain covenant such as profit margin, interest coverage, and restriction of dividend payment. Since covenant violations can be costly to the firm, owners/managers may try to avoid covenant violations

⁶ For example, Teoh, S., Welch, I., and Wong, T., (1998a, 1998b) study earnings management in the event of IPOs and SEOs; Burgstahler & Eames (1998) study management of earnings and analysts' forecasts to achieve zero and small positive earnings surprises; Subramanyam (1996) study market reaction by testing the Pricing of discretionary accruals; Holthausen & Leftwich (1983) study the economic consequence of accounting choice and its implications of costly contracting and monitoring.

by restating accounting figures, resulting in wealth transfer from debtholders to shareholder/managers. Economic theory assumes political process is a competition for wealth transfers, taxes and regulations transfer wealth to regulators from firms⁷. To the extent that a given firm is subject to potential wealth transfers in the political process, its managers have incentive to reduce the transfer via accounts manipulation. In particular, managers of larger firms are more likely to reduce reported earnings as favourable earnings are the “evidence” of a monopoly and thus subject to political pressures. Accounting researchers rely on economists’ conjectures and hypothesize that large firms are more politically sensitive and have relatively larger wealth transfers imposed on them (political costs) than smaller firms.

In order to identify the effect of wealth transfer in the presence of EM, the types of contracts need to be defined first since the potential wealth transfers are induced by the variety of conflicts among contracting parties. In particular, Scott (1997) points out that the effect of wealth transfer between contracting parties depends on whether EM activities are induced by debt contracts or compensation contracts. The greater the firm’s leverage level, the more likely managers will choose income-increasing manipulation in an effort to reduce the extent to which accounting-based debt covenants are binding. Likewise, managers will tend to choose income-increasing manipulations to increase their compensation if it is tied to accounting earnings. The implication of income based manipulation on economic wealth transfer is that if an income-increasing manipulation is made to prevent an impending technical default, stock prices are more likely to increase and thus economic wealth is transferred from debtholders to shareholders/managers. Similarly, an income-increasing manipulation, however, will presumably cause stock prices to fall if it is for management compensation purpose, hence, economic wealth transfer from shareholders to managers.

So if opportunistic managerial discretions adversely affect efficient contracting to be performed, and result into economic wealth distribution inequality, why accounting regulation still allows for management discretion in financial reporting? First, accounting regulation permits flexibility in financial reporting, with room for management discretion. Dye and Verrecchia (1995) explain that financial reporting requires managerial discretion, which in turn, provides investors with a more informative signal about firm prospect. Second, even though management discretion does not convey information, it is costly for the principal to eliminate all reporting judgements. Watts and Zimmerman (1986) state that not all managerial accounting manipulation will be eliminated as it may be too costly to eliminate all such manipulation. Evans and Sridhar (1996) also point out that some earnings manipulation and the associated increased compensation are a relatively low cost compromise compared to the elimination of reporting judgements. Those statements about too costly to eliminate all manipulation means that managers

⁷ Economic theories assume that individuals in the political process, like individuals in the market, act in their own self-interest (e.g., Olson, 1971; Stigler, 1971; Peltzman, 1976). Under this theory, the political process can be viewed as a competition between firms (shareholders)/managers and regulators.

can add some bias to disclosure at a low personal cost. Third, theory predicts that even though reported earnings contain some bias and result into wealth redistribution, in equilibrium, the contracting is still efficient. In positive accounting theory, Watts and Zimmerman (1986) argue that managerial discretion will improve the alignment of managers' interests with those of shareholders no matter whether managers take advantage of the discretion provided by compensation contracts or not. The theory implies that managers' discretion to maximize their compensation can also result in wealth gain to principals by lowering probabilities of debt covenant. Therefore, optimal disclosure policy allows some managerial manipulation in financial reporting.

6. Security Market Reaction

In theory, the concept of economic consequence states that accounting policy choice affect firm value regardless of the implications of efficient market theory (Scott, 1997). Previous studies examine economic consequences of EM by testing the subsequent firm performance in the presence of EM. The findings, in general, reflect the two competing perspectives. On one hand, if the opportunistic hypothesis holds, EM activities should negatively impact future firm performance because the manager is willing to sacrifice future cash flows for current period income. By providing misleading perceptions of firms' value, EM has the potential to cause significant resource misallocation. Dechow, Sloan and Sweeney (1996) report that firms subject to SEC investigation for EM experienced an average stock price decline of 9%. Beneish (1997) found that firms violated GAAP showed significant negative abnormal returns for two years following the violation. Teoh, Welch and Wong (1998a) and Teoh, Wong and Rao (1998) study EM surrounding equity issues and find firms with income-increasing discretionary accruals in the year of an initial public offer have significant subsequent stock underperformance. Teoh, Welch and Wong (1998b) and Rangan (1995) find a similar pattern for SEO.

On the other hand, managers can record discretionary accruals to convey private information about future firm profitability. If the point of EM is to signal the true economic value of the firm, income-increasing discretionary accruals is expected to generate positive excess stock return for the subsequent year (Holthausen, 1990). Healy & Palepu (1993) and Guay *et al.* (1996) also document managers use discretionary accruals to better reflect the impacts of underlying economic events on firm performance. Subramanyam (1996) uses a sample of 2,808 firms over the years 1973-1993 for a total 21,135 firm-year observations and finds that managers use discretion can provide useful information to both existing stakeholders and prospective investors and find discretionary accruals are positively associated with future stock returns. Investors, in this case, are not "fooled" by EM practices. Even though there is some degree of positive discretionary accruals involved, earnings can still be "high quality" and the allocation of economic resources is thereby enhanced (Hochberg *et al.* 2004).

In practice, the economic consequences of EM have been jointly concerned with capital market efficiency. Dechow (1994) argues that if accruals are largely due to opportunistic purpose of manipulation, the efficient market will reject high accruals in favour of cash flows. Alternatively, if accruals are informational purpose and largely the result of efficient contracting, accrual should be highly associated with future operating performance and stock return. Subramanyam (1996) interprets stock market responded positively to discretionary accruals as an evidence of market efficiency. This finding, however, can be interpreted differently that perhaps investors react naively to the higher reported earnings that results from higher discretionary accruals and thereby, the trading strategy based on accrual anomaly could be another evidence of market inefficiency. Sloan (1996) therefore casts doubt on Subramanyam's interpretation. He points out that if the market is efficient, it should react more strongly to cash flow component of earnings than accruals since accruals are less persistent and more likely to lead earnings reverse in the future⁸. He further argues that a one-year return of 10.4% over the market return for high accrual firms, in fact, implies market is inefficient. Xie (2001) raise further questions about capital market efficiency. He argues that market is inefficient as it overvalued discretionary accruals.

Although empirical studies suggest there is an economic role for EM, the economic role for EM to direct security markets is ambiguous given the variety of incentives for EM, and the lower testing power in detecting management discretions which is unobserved. Contemporary researches in interpreting economic consequences of EM, in general, can be classified into two streams. One stream argues that when investors can detect managers' motivations and incorporates discretionary accrual implications into stock price accordingly, management discretionary behaviour should not be correlated with future stock returns, capital markets reaction to EM thereby support the theory of market efficiency (Dechow *et al.* 1996; Teoh *et al.* 1998a, 1998b; Rangan 1995). Other stream, however, argues that investors cannot recognize EM behaviour and fail to incorporate information content of discretionary accruals into their expectations of future firm performance and into stock prices accordingly. Management discretionary behaviours therefore should be correlated with future stock returns. As such, trading strategies taking a long position on firms with high accruals and a short position on firms with low accruals can yield excess returns. Proponents of market inefficiency assert this to be another market anomaly and therefore conclude that the market is inefficient (Guay *et al.*, 1996; Koerniadi & Tourani-Rad, 2005). So how do markets react to EM if it is opportunistic behaviours versus signalling mechanism? The answer to this question, in particular, is the answer to what kind of economic role that EM is playing is important to investors,

⁸ Sloan (1996) uses elementary accounting—accrual reverse to explain why efficient market react more strongly to a dollar of good news in net income if that dollar comes from operation cash flow than from accruals. He also estimates separately the persistence of the operating cash flows and accruals components of net income for the firms with a large sample of 40,769 annual earnings announcements over the years 1962-1991, and find earnings are less persistence than cash flows which is consistent with his “accruals reverse” argument.

practitioners as well as regulators. Since regulators may impose restriction on accounting judgements if it is result into a misallocation of capital resources, and such restriction imposed may actually reduce the ability of financial reporting to convey inside information with investors and practitioners.

7. Conclusions

We provide a comprehensive review of the research on earnings management from early 1960s to date. In this historical development of earnings management research, we particularly discuss the changes of different research focus in each stage and the economic consequences of earnings management. We show that a well understanding of earnings management behaviour in financial reporting, only from one perspective is far from sufficient. Researchers should note that studies of earnings management have shifted their focus from capital market to non-capital market and now have shifted back to capital market again. Such shifts highlight that earnings management and its economic consequences have substantial impact on capital resource allocation.

Reference

- Ball, R. J. (1972), "Changes in accounting techniques and stock prices." *Journal of Accounting Research*, 10, 1-38.
- Ball, R. J. and P. Brown (1968), "An empirical evaluation of accounting income numbers." *Journal of Accounting Research*, 6, 159-178.
- Beneish, M., (1997), "Detecting GAAP violation: implications for assessing earnings management among firms with extreme financial performance", *Journal of Accounting and Public Policy*, 16, 271-309.
- Beneish, M., (2001), "Earnings management: a perspective," *Managerial Finance*, 27, 3-17.
- Burgstahler, D., Eames, M., (1998), "Management of earnings and analysts' forecasts to achieve zero and small positive earnings surprises", University of Washington Working Paper.
- Breton, G. and Taffler, R.J., (1995), "Creative accounting and investment analyst response," *Accounting and Business Research*, 25, 81-92.
- Dechow, P.M, (1994), "Accounting earnings and cash flows as measures of firm performance: the role of accounting accruals", *Journal of Accounting and Economics*, 18, 3-42.

- Dechow, P.M, Sloan, R. and Sweeney. A., (1996), "Causes and consequences of earnings manipulations: An analysis of firms subject to enforcement actions by the SEC", *Contemporary Accounting Research*, 13, 1-36.
- Dechow, P.M, and Skinner, D.J., (2000), "Earnings management: reconciling the views of accounting academics, practitioners, and regulators, *Accounting Horizons*, 14, 235-250.
- Dye, R. A. and Verrecchia, R. R. (1995). "Discretion vs. uniformity: choices among GAAP." *The Accounting Review*, 70, 389-415.
- Evans, J. and Sridhar.S (1996). "Multiple control systems, accrual accounting, and earnings management." *Journal of Accounting Research*, 34, 45-65.
- Fama, E.F., (1970), "Efficient capital markets: a review of theory and empirical work", *The Journal of Finance*, 25, 383-417.
- Guay, W., Kothari, S. and Watts, R., (1996), "A market-based valuation of discretionary-accrual models", *Journal of Accounting Research*, 34, 83-105.
- Healy,P.M., (1985), "The effect of bonus schemes on accounting decisions", *Journal of Accounting and Economics*, 7, 85-107.
- Healy,P.M and Palepu, K.G., (1990), "Effectiveness of accounting-based dividend Covenants", *Journal of Accounting and Economics*, 12, 97-123.
- Hines, R.D., (1982), "The usefulness of annual reports: The anomaly between the efficient markets hypothesis and shareholder survey", *Accounting and Business Research*, 297-309.
- Holthausen, R, W., (1990), "Accounting method choice: opportunistic behavior, efficient contracting and information perspectives", *Journal of Accounting and Economics*, 12, 207-218.
- Holthausen, R, W. and Leftwich, R. W., (1983), "The economic consequence of accounting choice: Implications of costly contracting and monitoring," *Journal of Accounting and Economics*, 5, 77-117.
- Hochberg, Y.V., Newman, Y.S. and Rierson, M. A., (2004), "Information in the Time-series Dynamics of Earnings Management: Evidence from Insider Trading and Firm Returns. Working Paper.
- Jones, J. (1991), "Earnings management during import relief investigations," *Journal of Accounting Research*, 29, 193-228.

- Koerniadi, H. and Tourani-Rad, A., (2005), "Accruals and cash flows anomalies: evidence from the New Zealand stock market", Research Paper Series of Auckland University of Technology.
- Kaplan, R. S. and R. Roll (1972). "Investor evaluation of accounting information: some empirical evidence." *Journal of Business*, 45, 225-257.
- Lakonishok, J., A. Shleifer, et al. (1994). "Contrarian investment, extrapolation and risk." *Journal of Finance*, 49, 1541-1578.
- Mayer-Sommer, A.P., (1979), "Understanding and acceptance of the efficient market hypothesis and the accounting implications", *The Accounting Review*, 54, 88-106.
- Modigliani, F. and Miller, M.H., (1958). "The cost of capital, corporation finance and the theory of investment." *American Economic Review*, 48, 261-297.
- Modigliani, F. and Miller, M.H., (1963). "Corporate income taxes and the cost of capital: a correction." *American Economic Review*, 53, 433-443.
- Olson, M. (1971). "The logic of collective action", Mass; Harvard University Press.
- Peltzman, S. (1976). "Toward a more general theory of regulation." *Journal of law and Economics*, 19, 211-240.
- Rangan, S., (1998), "Earnings management and the performance of seasoned equity offerings", *Journal of Financial Economics*, 50, 101-122.
- Scott, W.R., (1997), "Financial Accounting Theory", Prentice Hall, Scarborough.
- Sloan, R. G., (1996), "Do stock prices impound information in accruals about future earnings?" Working paper (University of Pennsylvania, Philadelphia, PA).
- Subramanyam, K. R., (1996), "The pricing of discretionary accruals", *Journal of Accounting and Economics*, 22, 249-281.
- Stigler, G. J. (1971). "The theory of economic regulation." *The Bell Journal of Economics and Management Science*, 2, 3-21.
- Sweeney, A.P., (1994), "Debt covenant violation and managers' accounting response", *Journal of Accounting and Economics*, 17, 281-308.
- Teoh, S., Welch, I., and Wong, T., (1998a), "Earnings management and the long run market performance of initial public offerings", *The Journal of Financial*, 6, 1953-1974.

- Teoh, S., Welch, I., and Wong, T., (1998b), "Earnings management and the post-issue performance of seasoned equity offerings", *Journal of Financial Economics*, 50, 63-99.
- Teoh, S., Wong, T., Rao, G., (1998), "Are accruals during initial public offerings opportunistic?" *Review of Accounting Studies*, 3, 175-208.
- Watts, R. (1977). "Corporate financial statements, a product of the market and political processes." *Australian Journal of Management*, 2, 53-75.
- Watts, R., and Zimmerman, J.L., (1978), "Towards a Positive Theory of the Determination of Accounting Standards", *The Accounting Review*, 53, 112-134.
- Watts, R. and Zimmerman, J.L., (1986), "Positive Accounting Theory", New Jersey: Prentice-Hall, Inc.
- Xie, H., (2001), "The mispricing of abnormal accruals", *The Accounting Review*, 76, 357-373.