The current issue and full text archive of this journal is available on Emerald Insight at:
www.emeraldinsight.com/1359-0790.htm

Investment opportunity and anticipatory smoothing in corporate enterprises in India

Sandeep Goel
Department of Finance, Management Development Institute, Gurgaon, India

Abstract

Purpose – Income smoothing is exercised by the management for numerous reasons. Growth opportunities available to a firm are a very important reason but an undermined area for income smoothing by the management. This paper aims to review the income smoothing practices in corporate enterprises in India with respect to growth pattern of a firm as measured by investment opportunity set (IOS) defined in Fudenberg and Tirole's (1995) model. In India, the main corporate ownership model is promoter dominated shareholders model. This makes the study unique highlighting the role of board for income smoothing. The study contributes by extending this model to earnings per share definition with IOS by a firm. The study also investigates the level of income smoothing and its impact on the informativeness of earnings in regard to IOS.

Design/methodology/approach – The enterprises have been chosen on the basis of their performance in terms of profit generation [profit after tax (PAT) performance] for the year 2007-2008 as per Economic Times October 2007 Survey in a private sector. The period to be covered is from 2003-2004 to 2007-2008. 2007-2008 has been a year of global recession which is an indicative reason for income smoothing by the corporate. DeAngelo model has been used for calculating discretionary accruals and detecting income smoothing. Fudenberg and Tirole's (1995) model has been specifically used in studying the relationship between IOS and income smoothing. Specifically, we use three variables to construct an index of the IOS of each firm, market-to-book assets, market-to-book equity and the earnings price ratio.

Findings – An examination of the units shows that there is smoothing behaviour exercised by them. Analytical results of anticipatory smoothing and the IOS propose that concern about job security creates an incentive for managers to smooth earnings in consideration of both current and future relative performance. More explicitly, the extent of smoothing is expected to be negatively related to the level of IOS in periods of low current/high future performance and positively related to the level of IOS in periods of high current/low future performance. The empirical results confirmed our predictions.

Research limitations/implications – The sampling requirements were met by 12 units only of top 25 units, taken for the study. So, the present study was confined to only 12 profit-making corporate enterprises in the private sector in India, leaving all other enterprises. Though these companies constitute a significant size of Bombay Stock Exchange's market capitalization for completeness of data, still the size can be extended for further study. The present study has not considered public sector units and closely held companies. The scope of the units can be extended to other units in diverse sectors with different size and scale of operations. It would further verify the present discussion and also provide future enlightenment on the issue of income smoothing. The magnitude of discretionary accruals has been analysed in regard to potential earnings management. But, discretionary accruals are not directly available. They are calculated as a proxy using a model. Estimating discretionary accruals is still a tedious task.

Practical implications – The results clearly indicate that growth opportunities available to a firm are potential indicative of a firm's income smoothing behaviour. The findings of this study are

Journal of Financial Crime
Vol. 23 No. 3, 2016
pp. 655-670
© Emerald Group Publishing Limited
1359-0790
DOI 10.1108/JFC-09-2015-0048

المنارة للاستشارات
www.m

important to standard setters and regulators, as it highlights the need for an effective regulation for detecting income smoothing. There is a strong need to have well-defined policies and regulatory mechanism with respect to prevent and detect income manipulation practices at an early stage. Standard-setting bodies can consider the attributes of assets and liabilities and changes in them also with the fundamental process of measurement of income. In short, the evidence argues for a revenue/expense and asset/liability view of earnings, rather than the cash-flow view of earnings. The findings of this study are important to policymakers and other stakeholders, as it highlights the need for an effective board in discharging their role qualitatively, rather than quantitatively.

Social implications – It brings out the importance of fair accounting for shareholders.

Originality/value – It is an original paper which highlights the income smoothing behaviour in Indian corporate enterprises in terms of growth opportunities available to them.

Keywords Performance, Growth, Discretionary accruals, Income smoothing, Investment opportunity set

Paper type Research paper

1. Introduction

Income smoothing is a form of earnings management and is generally defined as the dampening of fluctuations in reported earnings over time (Ronen and Yaari 2008, p. 317). In other words, management is inclined to take actions to increase earnings when earnings are relatively low and to decrease earnings when earnings are relatively high. The main reason that managers smooth earnings is “maximizing their own wealth”. Goel’s (2012) study evaluates the implications of discretionary accruals for earnings management in the Indian corporate enterprises. His analysis indicates that there is presence of accrual management in the units.

When making discretionary accounting choices managers consider expected future earnings (Fudenberg and Tirole, 1995, p. 77). Analytical results by Fudenberg and Tirole (1995) propose that job security concern creates an incentive for managers to smooth earnings in consideration of both current and future relative performance. There is a support for this job security and anticipatory income smoothing theory.

Ahmed *et al.* (2000) provided more direct test to this effect. He hypothesized that the extent of smoothing would vary directly with managers’ job security concerns as proxied by the degree of competition in firms’ product markets, product durality and capital intensity. Their results show that managers of firms in more competitive industries and durable goods engage to a greater extent in income smoothing.

So, there is a relationship that exists between “investment opportunity set or growth opportunities” and anticipatory income smoothing by managers.

Managers of firms with lower growth opportunities as measured by the investment opportunity set (IOS) are likely to have greater job security concerns than managers of other firms. A greater extent of income smoothing is expected from managers of such firms. So, when current earnings are “poor” and expected future earnings are “good”, managers of firms with lower growth opportunities resort to income-increasing accruals and vice versa.

India witnessed two large corporate scams, namely, Satyam and Kingfisher in 2009 and 2012, respectively. It not only led to financial loss for the shareholders but also disturbed the status quo of the entire financial system. Incidence of any such scam questions the effectiveness of governance framework and quality of income. It requires a change in the regulatory regime. India had its transformation process in the form of new Companies Act, 2013 after a gap of 57 years since old Companies Act, 1956. This

المنارة للاستشارات
www.m

will act as a reference point to the nations globally and that is why this study becomes all the more relevant.

In countries like USA, there is shareholder model of corporate governance. Countries like Japan have coordinated model. But, in India, companies witness Promoter dominated shareholders model with strong control of the promoters. In private sector, majority of the companies are family-owned businesses having largest shareholder holding over 50 per cent. This calls for a special attention to the motivation of income smoothing and its detection at an early stage.

The policy formulators in India have been amending Clause 49 of Listing Agreement to inculcate sound governance practices among Indian corporates. This fact makes the present study important and timely. Also, a recent study by Pathak *et al.* (2014) stresses that each country has "its own standards, regulations and culture", and therefore there is a need to explore earnings management – board of director relationship in that specific context.

However, there have been limited studies exploring income smoothing in the Indian context. Therefore, the present study contributes to the literature by increasing the understanding about anticipatory income smoothing behaviour of managers in regard to the growth opportunities available as measured by IOS. The Fudenberg and Tirole (1995) model has been extended to test this behaviour by relating earnings per share (EPSP) to IOS, as EPSP shows the earning potential of the company and therefore adequately represents IOS by a firm. It arguably helps investors in assessing the reliability of companies' financial statements when they consider investment opportunities. This study is one of its own kinds on two grounds: highlighting the role of growth opportunities in income smoothing by management in Indian perspective and, most importantly, examining the role of EPSP in income smoothing by representing EPSP as IOS.

The rest of the paper is organized as follows. Next section presents a detailed literature review of related concepts for developing our predictions concerning earnings management and the contribution of the study. Proceeding Sections 3 and 4 explain the hypothesis formulation and objectives of the study. Section 5 discusses the research methodology. Section 6 presents the results of the analysis with Section 7 concluding the paper. Sections 8 and 9 present the limitations of the study and implications for future research.

2. Review of literature

2.1 Definitional perspective

Income smoothing has been a topic of extensive interest by the researchers. Initially, the researchers started with discussions and arguments as well as evidence on the existence of income smoothing activities. Researchers put forth different ideas and definitions of income smoothing. Ronen and Sadan (1981, p. 2) define income smoothing as "a deliberate attempt by management to signal information to financial users". Another depiction is:

> […] to characterize income smoothing as earnings management, we need to define the point at which managers' accrual decisions result in "too much" smoothing and so become earnings management (Dechow and Skinner, 2004, p. 238).

المنارة للاستشارات

www.m

Smoothing represents "garbling", that is, smoothing is an exercise undertaken by managers in an attempt to fool analysts and others and to enhance managerial compensation (Li and Richie, 2009).

Discussions and research on income smoothing expanded to include other issues such as measures of income smoothing, objective and motivation for income smoothing practices and relationship between income smoothing and firms value. Healy and Wahlen (1999) paper aptly describes the income smoothing or earnings management in regard to the management behaviour:

> Earnings management occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company (Healy and Wahlen, 1999, p. 365)[1].

2.2 Effect variables

Although the effect of income smoothing on earnings informativeness is not thoroughly investigated, the accounting literature so far theorizes two opposite effects of income smoothing on earnings informativeness. One viewpoint is that managers use income smoothing to make public their private information about the firm's future earnings (Ronen and Sadan, 1981). Here, income smoothing results in more information about future earnings and cash flows, which in turn is reflected in the stock prices. Alternative findings suggest that income smoothing alters information and makes stock prices less informative.

Hejazi and Fatemi (2008) suggests the following investment approach for firms: investment in growth model and investment in value model. In the growth model, the growth stock is introduced and the large magnitude of earnings is allocated to investors and stockholders by investing in this sort of stock in the long-, but not in the short term. In the value model, investors do not pay attention to the high future growth rates.

Meeting the analysts' expectations is important regarding growth opportunity because firms that meet or beat expectations enjoy higher returns (Bartov *et al.*, 2002). To be able to meet or beat the forecasts, managers turn to earnings management. If pre-managed earnings are below the forecast, managers use income-increasing earnings management. If pre-managed earnings are higher then the forecast, managers can choose between income-decreasing earnings management (saving it for a rainy day) or not managing the earnings (hoping for an increase in stock return).

A study defining earnings management as managers' opportunistic behaviour and thus misleading is the research of Leuz *et al.* (2003, p. 506). Managers have the incentive to conceal true firm performance. The extent of their discretion depends on the accounting rules in a country and the legal system. Institutional characteristics are also taken into account.

In their paper, Balli *et al.* (2010) re-examine the ties between international portfolio allocation and income smoothing. They propose a revised approach of measuring income smoothing via foreign asset holdings that focuses on factor income inflows as opposed to the commonly used net factor income in the literature mainly proposed by Sørensen *et al.* (2007).

Testing the triggering factor of income smoothing policy by the company management has not consistently been recovered. For example, Kustono (2011) stated that the inconsistency of their findings was caused by the measuring devices. These

المنارة للاستشارات

www.m

devices are thought to be unreliable. For distinction between value firms and growth firms, another method has been introduced by Madhogarhia and Kohers (2009). This method computes stocks' geometric mean of the variables.

García-Teruel *et al.* (2009) showed that firms with good accruals quality hold lower cash levels than firms with poor accruals quality. This finding suggests that the quality of accounting information may reduce the negative effects of information asymmetries and adverse selection costs, allowing firms to reduce their level of corporate cash holdings.

Sun *et al.* (2011) showed that poor earnings quality has a negative impact on the value of corporate cash holdings and a positive impact on the level of cash reserves. They found that the negative effect of poor earnings quality either neutralizes or more than offsets the positive effect of excess cash on firm value. Al-Qaisi (2011) showed that income smoothening increases the abnormal returns and market values of the companies.

Khajavi *et al.* (2011) examined the performance of traditional and new indicators of liquidity to forecasting companies' income smoothing. The results of their research indicated that there is significant relationship between traditional liquidity indexes and size of companies with income smoothing, and that the most important effective item is the level of inventory in the examined companies. The fact that there is evidence of a relationship between pre-managed, forecasted and reported earnings in relation to investment opportunity, makes it important for analysts, researchers as well as regulators to be able to detect those companies that are likely to engage/have engaged in income smoothing to meet the targets.

2.3 Gap areas

The primary focus of income smoothing research till date has been on motivations and forms of income smoothing by corporate. Also, this research has been mostly confined to the international perspective. Researchers have typically examined broad measures of income smoothing (i.e. measures based on total accruals) and samples of firms in which motivations to manage earnings are expected to be strong.

Overall, there is remarkably little evidence on income smoothing behaviour in regard to growth opportunities available to managers. So, the survey of the existing literature indicates that first, so far no specific work has been carried out on income smoothing in corporate enterprises in India. Second, the income smoothing behaviour of the management in context of growth opportunities needs to be examined. The present study examines the income smoothing behaviour in the Indian context, as India is eyed as one of the fastest developing nations of the world.

3. Hypothesis

Growth opportunities of a firm have been represented by IOS. The IOS of a firm may be viewed as a crucial characteristic of the firm with profound influence on the way that the firm is viewed by managers, owners, investors and creditors (Kallapur and Trombley, 2001a, 2001b).

There is a link between job security concern and income smoothing. The IOS is related to anticipatory income smoothing. Managers of firms with a low level of growth

المنارة للاستشارات

www.m

or investment opportunity engage in income-increasing earnings management as compared to managers of firms with a high level of investment opportunity set.

Therefore, in conformity with the Fudenberg and Tirole (1995) model of association between job security and income smoothing, our hypothesis relates IOS to the extent of smoothing as follows:

H1. The extent of income smoothing is negatively related to the level of IOS.

4. Objective of the study

The study specifically aims at the following:

- to analyse the income smoothing behaviour in the corporate enterprises in India;
- to examine the potential relationship between growth opportunities, measured by IOS and the discretionary accruals of firms; and
- to highlight the major areas of concern in income smoothing practices in these undertakings and suggest some suitable measures for future viability of the enterprises.

5. Research methodology of the study

5.1 Sample design and approach

The present study covers the listed companies in India. Keeping in view the differences in the objectives and functions of these companies, the present research would concentrate on only the companies in the private sector. The enterprises have been chosen on the basis of their performance in terms of profit generation [profit after tax (PAT) performance] for the year 2007-2008 as per the Economic Times October 2007 Survey, on select basis. The top 25 corporate enterprises were considered for the sample, as these are the one which contribute a significant portion of India's gross domestic product. Two criteria were used for the selection of the companies in the final sample. First, the enterprises should be in the private sector. Second, its accounting and market data, both were available for the study. Of these companies, 12 met the sampling requirement. These companies constitute a significant per cent of the stock market. A list of these companies appears in Appendix.

5.2 Period of the study

The period to be covered in the present research study would be of five years, ranging from 2003-2004 to 2007-2008. The 2007-2008 has been a year of global recession which is an indicative reason for income smoothing by the corporate. So, it would be meaningful enough to focus the attention on income smoothing practices of the enterprises chose and detect the various grey areas around global recession with regard to accruals management during this period.

5.3 Data used

For the purpose of the present study, the main data used are secondary in nature, keeping in view the nature of the study. The study uses both accounting and market data. The accounting data were obtained from the annual reports of the units and other such records for the relevant period. Market data for the units were obtained from the Bombay Stock Exchange (BSE) site.

المنارة للاستشارات
www.m

5.4 Tools/techniques used

5.4.1 Earnings management models

- *DeAngelo model* has been used for calculating discretionary accruals and detecting income smoothing in the present study, as this is the most comprehensive method yet simple in approach. The discretionary portion of accruals in the DeAngelo model is the difference between total accruals in the event year t scaled by total assets (At-1) and non-discretionary accruals (NDAt). The measure of NDAt rests on last period's total accruals (TAt-1). In other words:

$$DACit = \frac{(TAit - TAit - 1)}{Ait - 1}$$

where,

DACit is discretionary accruals for firm i in period t;

TAit and Ait-1 are total accruals and total assets for period t and t-l for firm i.

- Fudenberg and Tirole (1995) model has been specifically used in studying the relationship between IOS and income smoothing. Since the IOS is not observable, there has not been a consensus on an appropriate proxy variable. Specifically, we use three variables to construct an index of the IOS of each firm. The three variables are market-to-book assets (MASS), market-to-book equity (MVE) and the earnings price ratio (EP). These variables are designed as follows:

$$MASS = \frac{[\text{Assets} - \text{Total equity} + \text{Shares outstanding} \times \text{Share closing price}]}{\text{Assets}}$$

$$MVE = \frac{[\text{Shares outstanding} \times \text{Share closing price}]}{\text{Total common equity}}$$

$$EP = \frac{[\text{Primary EPS before extraordinary items}]}{\text{Share closing price}}$$

EPSP shows the earning potential of the company and therefore adequately represents IOS by a firm, so EPSP has been used to represent IOS of a firm for the present discussion.

Following the methodology of Ahmed *et al.* (2000), firm-year observations are classified into three groups:

(1) firms which have high IOS, i.e. in which the current relative performance is good while the expected future relative performance is poor;

(2) firms which have low IOS, i.e. in which the current relative performance is poor while the expected future relative performance is good; and

(3) firms which have constant IOS, i.e. in which the current relative performance and the expected future relative performance are both either poor or good.

The focus is on Groups 1 and 2, where income smoothing is expected. Group 1 is expected to have negative mean and median discretionary accruals in conformity with

المنارة للاستشارات

www.m

the theory predicting that managers will have an incentive to manage earnings upward. Group 2 is expected to have positive mean and median discretionary accruals in conformity with the theory predicting that managers will have an incentive to manage earnings downward.

5.4.2 Statistical tools. Statistical tools have been used for testing the results accurately. These include descriptive statistics like arithmetic mean, median and standard deviation and regression analysis, *t*-test, pie charts and bar charts.

6. Results and discussion

This section covers the discussion of the results of the empirical analysis.

6.1 Descriptive statistics

Table I reports the descriptive statistics for the sample of firm-years used in the study. Discretionary accruals are shown using the *DeAngelo model*. The discretionary accruals have a mean (median) of −0.02 (0.01).

Table I also reports descriptive statistics on MASS, MVE, and the EP. The mean (median) is 4.06 (2.62) for MASS, 6.03 (5.02) for MVE and 0.06 (0.05) for EPSP. EPSP has the lowest standard deviation among all IOS variables. It again verifies the suitability of EPSP as IOS factor to be used for the present study.

6.2 Evidence in anticipatory smoothing

Anticipatory smoothing evidence has been reported in Ahmed *et al.* (2000). Table II provides results replicating prior evidence on anticipatory smoothing. Figure 1 presents the trend of discretionary partitions, and Figure 2 presents the accruals' trend. As in previous studies, Table II partitions the discretionary accruals results on the basis of "good" current and "poor" future performance, on one hand, and "poor" current and "good" expected future relative performance, on the other hand.

Variable	Mean	SD	Median	Minimum	Maximum
DACC	−0.02	0.07	0.01	−0.20	0.03
MASS	4.06	3.01	2.62	1.30	11.12
MVE	6.03	3.90	5.02	1.57	14.79
EPSP	0.06	0.03	0.05	0.03	0.13

Table I. Descriptive statistics of DACC and IOS variables

Description	Firms with (−ve) DACC	Firms with (+ve) DACC	Firms with (nil) DACC
Number	4	7	1
Mean	−0.08	0.02	
Median	−0.06	0.01	

Table II. Discretionary accruals partitioned by current relative performance and expected relative performance for the sample companies from 2003-2004 to 2007-2008

المنارة للاستشارات

www.m

The anticipatory smoothing hypothesis predicts earnings management via discretionary accruals in the second and third cell of the classification matrix in Table II. The discretionary accruals are expected to be negative in the second cell, as managers are expected to "save" current earnings for possible use in the future. The discretionary accruals are expected to be positive in the third cell, as managers are expected to "borrow" earnings from the future for use in the current period. The results of the replication correspond closely to those reported in Ahmed *et al.* (2000). When current performance is good and future performance is expected to be poor, the average and median discretionary accruals are −0.08 and −0.06, respectively. The prediction of anticipatory smoothing hypothesis is supported, with only four firms of total observations. Managers are assumed to be making income-decreasing discretionary accruals to reduce the threat of dismissal due to poor performance in the future.

When current performance is poor and future performance is expected to be good, the average and median discretionary accruals are 0.02 and 0.01, respectively. The predictions of the anticipatory smoothing hypothesis are again supported with seven firms of total observations. Managers are assumed to be making income-increasing accruals to reduce the threat of dismissal due to poor performance in the current period.

There is one firm (Tata Steel) which has zero discretionary accruals. It supports the evidence that the current relative performance and the expected future relative performance are both either poor or good.

6.3 Regression results

The replication reported in Table II corresponds closely to the anticipatory smoothing evidence reported in Ahmed *et al.* (2000). They do not, however, provide a direct test of the link between job security and income smoothing. A direct test, proposed in this study, is to evaluate the impact of the level of IOS on the extent of smoothing as the level

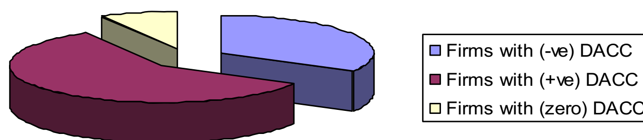

Figure 1. Discretionary accruals partition for the sample companies, 2003-2004 to 2007-2008

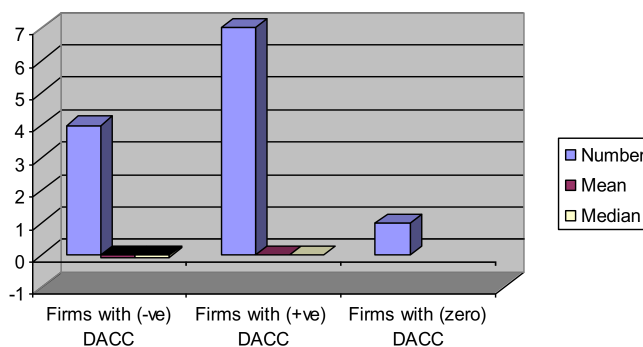

Figure 2. Discretionary accruals performance for the sample companies, 2003-2004 to 2007-2008

www.m

of IOS is related to job security. The regression results reported in this section indicate that the extent of income smoothing varies with managers' job security concerns as proxied by the level of IOS. The results of the regression on income smoothing are reported in Section 1 for the good current performance/poor future performance observations and in Section 2 for the poor current performance/good future performance observations. To test the sensitivity of the results to the estimation procedure used, the results are presented using *DeAngelo model* for the estimation of discretionary accruals and the cash-flow approach for the computation of total accruals.

6.3.1 Results for the good current performance/poor future performance partition. The hypothesis is that the extent of income smoothing is negatively related to the level of IOS. The expectation is that when current earnings are "good" and expected earnings are "poor", the managers will "save" current earnings for possible use in the future, resulting in the use of negative disclosure accruals in the current period. As the level of IOS increases, the concern for job in future decreases, and therefore the discretionary accruals will be less negative. As a result, we predict the coefficient on IOS, the proxy for job security concern, to be positive.

Table III report the regression results for discretionary accruals for the sample companies. The significant negative intercept in the four cases confirms the anticipatory smoothing evidence reported in Table IV. In addition, the IOS variable has a positive and significant coefficient as hypothesized. The results prove our hypothesis.

6.3.2 Results for the poor current performance/good future performance partition. The managers in this group of firms are expected to use positive disclosure accruals in the current period. As the level of IOS increases, the concern for the job in present decreases, and therefore the discretionary accruals will be less positive. As a result, we predict the coefficient on IOS, the proxy for job security, to be negative.

Table IV report the regression results for discretionary accruals for the sample companies. The significant positive intercept in the seven cases confirms the anticipatory smoothing evidence reported in Table II. In addition, the IOS variable has a negative and significant coefficient as hypothesized. The results prove our hypothesis again.

In addition, there is a case of Tata Steel, which has zero discretionary accruals during the period. It can be inferred that the current relative performance and the expected future relative performance are both either poor or good. Therefore, the relationship between IOS and income smoothing is constant.

Table III. Regression results for the good current/poor future performance partition model

Description	Coefficients	Standard error	*t*-stat	R^2
Intercept	−0.24	0.11	−2.14	
EPSP	3.00	2.02	1.49	
				0.52

Table IV. Regression results for the poor current/good future performance partition model

Description	Coefficients	Standard error	*t*-stat	R^2
Intercept	0.02	0.01	2.93	
EPSP	−0.07	0.11	−0.67	
				0.08

المنارة للاستشارات
www.m

It has been found that managers of firms with a low investment opportunity engage in income-increasing earnings management as compared to managers of firms with a high level of IOS. In short, the extent of income smoothing varies with managers' job security concerns as proxied by the level of IOS.

7. Conclusion

Regarding income smoothing practices in Indian corporate scenario, various concern areas have come to limelight. These have resulted in erosion of shareholders' value and gone almost untouched in these corporate enterprises.

The results are consistent with prior research on quality of earnings (Goel, 2014). Thus, it calls for an effective forensic audit regulation for the stakeholders' interests at large.

Analytical results of *anticipatory smoothing and the IOS* propose that concern about job security creates an incentive for managers to smooth earnings in consideration of both current and future relative performance. To provide a more direct evidence of anticipatory smoothing and job security, this study hypothesized that the extent of smoothing, as measured by DeAngelo measure of discretionary accruals, varies with managers' job security concerns as proxied by the level of the IOS or growth opportunities. More explicitly, the extent of smoothing is expected to be negatively related to the level of IOS in periods of low current/high future performance and positively related to the level of IOS in periods of high current/low future performance. The empirical results confirmed our predictions.

Managers of firms with a low level of growth or investment opportunity found to be engaged in income-increasing earnings management as compared to managers of firms with a high level of IOS. The prediction of anticipatory smoothing hypothesis in case of firms with good current performance and expected poor future performance was supported, with only four firms of total observations. Managers were assumed to be making income-decreasing discretionary accruals to reduce the threat of dismissal due to poor performance in the future.

The prediction of anticipatory smoothing hypothesis in case of firms with poor current performance and expected good future performance was supported, with only seven firms of total observations. Managers were assumed to be making income-increasing discretionary accruals to reduce the threat of dismissal due to poor performance in the in the current period. Tata Steel is the only firm which had zero discretionary accruals. It supported the evidence that the current relative performance and the expected future relative performance were both either poor or good.

Further, the regression results indicated that the extent of income smoothing varies with managers' job security concerns as proxied by the level of IOS. The results for the good current performance/poor future performance in the units was supported by the significant negative intercept in the four cases. The results for the poor current performance/good future performance in the units were supported by the significant positive intercept in the seven cases.

In addition, there was a case of Tata Steel, which had zero discretionary accruals during the period. It can be inferred that the current relative performance and the expected future relative performance were both either poor or good. Therefore, the relationship between IOS and income smoothing was constant.

المنارة للاستشارات

www.m

8. Limitations of the study

There are some limitations of this study which could be categorized as under.

The sampling requirements were met by 12 units only of top 25 units, taken for the study. So, the present study was confined to only 12 profit-making corporate enterprises in the private sector in India, leaving all other enterprises. Though these companies constitute a significant size of BSE's market capitalization for completeness of data, still the size can be extended for further study.

The present study has not considered public sector units and closely held companies. The scope of the units can be extended to other units in diverse sectors with different size and scale of operations. It would further verify the present discussion and also provide future enlightenment on the issue of income smoothing.

The units have been found to be exercising income-increasing/income-decreasing discretionary accruals during the period. The scope of the relevant period can be further advanced to find out more instances of earnings management to further strengthen the discussion.

The magnitude of discretionary accruals has been analysed in regard to potential earnings management. But discretionary accruals are not directly available. They are calculated as a proxy using a model. Estimating discretionary accruals is still a tedious task.

The period in the study is of five years (2003-2004 to 2007-2008) to highlight earnings management motivation. This period is best suited to identify the effects of global recession on the practice of earnings management in India. Researchers may like to select a different period based on their perspective.

9. Implications for future research

The results clearly indicate that growth opportunities available to a firm are potential indicative of a firm's income smoothing behaviour.

The findings of this study are important to standard setters and regulators, as it highlights the need for an effective regulation for detecting income smoothing. There is a strong need to have well-defined policies and regulatory mechanism with respect to prevent and detect income manipulation practices at an early stage.

Standard-setting bodies can consider the attributes of assets and liabilities and changes in them also with the fundamental process of measurement of income. In short, the evidence argues for a revenue/expense and asset/liability view of earnings, rather than the cash-flow view of earnings.

The findings of this study are important to policymakers and other stakeholders, as it highlights the need for an effective board in discharging their role qualitatively, rather than quantitatively. There is a strong need to have well-defined policies and regulatory mechanism with respect to board composition because it is the board which makes or breaks a company. Board is the central pillar of corporate governance. Previous research has documented impact of board-related reforms on investor confidence (Lee and Shailer, 2008). If specific board-related reforms are formulated, they would not only lead to improved quality of earnings but also help in strengthening investor confidence.

All these possible areas will definitely add to the literature and strengthen it further. They will encourage future research opportunities in these fronts that are likely to enrich our knowledge and understanding of the earnings management phenomena.

المنارة للاستشارات
www.m

Note

1. Income smoothing and earnings management as defined above are used interchangeably in this study.

References

Ahmed, A.S., Lobo, G.J. and Zhou, J. (2000), "Job security and income smoothing: an empirical test of the Fudenberg and triole (1995) model", Working Paper, Syracuse University.

Al-Qaisi, M.K. (2011), "Income smoothening practicing effect on abnormal returns and market value", *International Research Journal of Finance and Economics*, Vol. 79, pp 120-127.

Bartov, E., Givoly, D. and Hayn, C. (2002), "The rewards to meeting or beating earnings expectations", *Journal of Accounting and Economics*, Vol. 33 No. 2, pp. 173-204.

Dechow, P.M. and Schrand, C.M. (2004), *Earnings Quality*, Research Foundation of CFA Institute Monograph.

ET 500 (2007), *The Economic Times*, New Delhi.

Fudenberg, K. and Tirole, J. (1995), "A theory of income and dividend smoothing based on incumbency rents", *Journal of Political Economy*, Vol. 103 No. 1, pp. 75-93.

García-Teruel, P.J., Martínez-Solano, P. and Sánchez-Ballesta, J.P. (2009), "Accruals quality and corporate cash holdings", *Accounting & Finance*, Vol. 49 No. 1, pp. 95-115.

Goel, S. (2012), "Demystifying earnings management through accruals management: an Indian Corporate Study", *Vikalpa*, Vol. 37 No. 1.

Goel, S. (2014), "The quality of reported numbers by the management: a case testing of earnings management in corporate India", *Journal of Financial Crime*, Vol. 21 No. 3, pp. 355-376.

Hejazi, R. and Fatemi, M. (2008), "Value stock and growth stock", *Journal of Hesabras*, Vol. 42, pp. 54-61.

Kallapur, S. and Trombley, M.A. (2001a), "The investment opportunity set determinants, consequences and measurement", *Managerial Finance*, Vol. 27 No. 3, pp. 3-15.

Kallapur, S. and Trombley, M.A. (2001b), "The association between investment opportunities set proxies and realized growth", *Journal of Business Finance and Accounting*, Vol. 26, pp. 505-519.

Khajavi, S.H., Ghorbani, A. and Maharlouie, M.M. (2011), "Survey of efficiency of modern and traditional liquidity indexes in forecasting income smoothing of companies", *Iranian Journal of Accounting Knowledge*, Vol. 2 No. 4, pp. 105-124.

Kustono, A.S. (2011), "The theoretical construction of income smoothing measurement", *Journal of Economics, Business and Accountancy Ventura*, Vol. 14 No. 1, pp. 59-78.

Lee, J. and Shailer, G. (2008), "The effect of board-related reforms on investors' confidence", *Australian Accounting Review*, Vol. 18 No. 2, pp. 123-134.

Leuz, C. *et al.* (2003), "Earnings management and investor protection: an international comparison", *Journal of Financial Economics*, Vol. 69, pp. 505-527.

Li, S. and Richie, N. (2009), "Income smoothing and the cost of debt", available at: http://69.175.2.130/~finman/Reno/Papers/IncomeSmoothingandtheCostofDebtJan2009.pdf

Madhogarhia, P. and Kohers, S.N. (2009), "Earnings management practices among growth and value firms", *Applied Financial Economics*, Vol. 19 No. 22, pp. 1767-1778.

Pathak, J., Karim, K., Suh, S. and Zhang, Z. (2014), "Do audit committee and characteristics of board of Directors Influence Earnings Management?", Working Paper.

Healy, P.N. and Wahlen, J.N. (1999), "A review of the earnings management literature and its implications for standard setting", *Accounting Horizons*, Vol. 4, p. 368.

المنارة للاستشارات

www.m

Ronen, J. and Sadan, S. (1981), *Smoothing Income Numbers: Objectives, Means and Implications*, Addison-Wesley, Reading, MA.

Ronen, J. and Yaari, V. (2008), "Earning management: emerging insights in theory", *Practice and Research*, 1st ed, Springer Science + Business Media, LLC, New York, NY.

Sørensen, B.E., Wu, Y.T., Yosha, O. and Zhu, Y. (2007), "Home bias and international risk sharing: twin puzzles separated at birth", *Journal of International Money and Finance*, Vol. 26, pp. 587-605.

Sun, Q., Yung, K. and Rahman, H. (2011), "Earnings quality and corporate cash holdings", *Accounting & Finance*, doi: 10.1111/j.1467-629X.2010.00394.x.

Further reading

Ahmed, A.S. (1996), "Discretionary Accruals, Earnings management and the Valuation of earnings." Working Paper Series, Texas A&M University – Mays Business School.

American Institute of Certified Public Accountants (1973), *Study Group on the Objectives of Financial Statements*, American Institute of Certified Public Accountants, New York, NY.

Ball, R., Robin, A. and Wu, J.S. (2002), "Incentives versus standards: properties of accounting income in four east Asian countries and implications for acceptance of IAS", *JAE Conference on Simon School of Business*, Working Paper No. FR 00-04, Boston, MA.

Balli, F., Rosmy, L. and Mohammad, O. (2010), "Income smoothing and foreign asset holdings", *Journal of Economics and Finance*, Vol. 34 No. 1, pp. 23-29.

Barley, B. and Levy, H. (1979), "On the variability of accounting income numbers", *Journal of Accounting Research*, Vol. 17 No. 2, pp. 305-315.

Barton, A.D. (1974), "Expectations and achievements in income theory", *The Accounting Review*, Vol. 49 No. 4, pp. 664-681.

Barnea, A., Ronen, J. and Sadan, S. (1976), "Classificatory smoothing of income with extraordinary items", *Accounting Review*, Vol. 51 No. 1, pp. 110-122.

Beneish, M.D. (1997), "Detecting GAAP violation: implications for assessing earnings management among firms with extreme financial performance", *Journal of Accounting and Public Policy*, Vol. 16 No. 3, pp. 271-309.

Beneish, M.D. (1998), "Discussion of: are accruals during initial public offerings opportunistic?", *Review of Accounting Studies*, Vol. 3 No. 1, pp. 209-221.

Beneish, M.D. (2001), "Earnings management: a perspective", *Managerial Finance*, Vol. 27 No. 12, p. 12.

Buckmaster, D. (1992), "Income smoothing in accounting and business literature prior to 1954", *The Accounting Historians*, Vol. 19 No. 2, pp. 147-173.

Buckmaster, D. (1997), "Antecedents of modern earnings management research: income smoothing in literature 1954-1965", *The Accounting Historians Journal*, Vol. 24 No. 1, pp. 75-91.

Burgstahler, D. and Dichev, I. (1997), "Earnings management to avoid earnings decreases and losses", *Journal of Accounting and Economics*, Vol. 24 No. 1, pp. 99-126.

Collins, D.W. and Hribar, S.P. (1999), "Errors in estimating accruals: implications for empirical research", Working Paper, University of Iowa.

Collins, J., Shackelford, D. and Wahlen, J. (1995), "Bank differences in the coordination of regulatory capital, earnings and taxes", *Journal of Accounting Research*, Vol. 33 No. 2, pp. 263-291.

DeAngelo, E., DeAngelo, H. and Skinner, D. (1994), "Accounting choices of troubled companies", *Journal of Accounting and Economics*, Vol. 17 Nos 1/2, pp. 113-143.

المنارة للاستشارات

www.m

DeAngelo, L. (1986), "Accounting numbers as market valuation substitutes: a study of management buyouts of public stockholders", *The Accounting Review*, Vol. 61 No. 3, pp. 400-420.

DeAngelo, L.E. (1988), "Managerial competition, information costs, and corporate governance: the use of accounting performance measures in proxy contests", *Journal of Accounting and Economics*, Vol. 10 No. 1, pp. 3-36.

Dechow, P.M. (1994), "Accounting earnings and cash flow as measures of firm performance: the role of accounting accruals", *Journal of Accounting and Economics*, Vol. 18 No. 1, pp. 3-42.

Dechow, P.M. and Skinner, D.J. (2000), "Earnings management: reconciling the views of accounting academics, practitioners, and regulators", *Accounting Horizons*, Vol. 14, pp. 235-250.

Dechow, P.M. and Sloan, R.G. (1991), "Executive incentives and the horizon problem: an empirical investigation", *Journal of Accounting and Economics*, Vol. 14 No. 1, pp. 51-89.

Dechow, P.M., Sloan, R.G. and Hutton, A.P. (1996), "Causes and consequences of earnings manipulation: an analysis of firms subject to enforcement actions by the SEC", *Contemporary Accounting Research*, Vol. 13 No. 2.

DeFond, M.L. and Jiambalvo, J. (1994), "Debt covenant effects and the manipulation of accruals", *Journal of Accounting and Economic*, Vol. 17 Nos 1/2, pp. 145-176.

DeFond, M.L., Jiambalvo, J.J. and Subramanyam, K.R. (1998), "The effect of audit quality on earnings management", *Contemporary Accounting Research*, Vol. 15 No. 1.

DeFond, M.L. and Park, C.W. (1997), "Smoothing income in anticipation of future earnings", *Journal of Accounting and Economics*, Vol. 23 No. 2, pp. 115-139.

Degeorge, F., Patel, J. and Zeckhauser, R. (1999), "Earnings management to exceed thresholds", *Journal of Business*, Vol. 72 No. 1.

Healy, P., Kang, S. and Palepu, K. (1987), "The effect of accounting procedure changes on CEOs' cash salary and bonus compensation", *Journal of Accounting and Economics*, Vol. 9, pp. 7-34.

Healy, P.M. (1985), "The effect of bonus schemes on accounting decisions", *Journal of Accounting and Economics*, Vol. 7 Nos 1/3, pp. 85-107.

Healy, P.M. and Palepu, K.G. (1990), "Effectiveness of accounting-based dividend covenants", *Journal of Accounting and Economics*, Vol. 12 Nos 1/3, pp. 97-124.

Imhoff, E.A. (1977), "Income smoothing – a case for doubt", *Accounting Journal*, (Spring), pp. 85-100.

Jones, J.J. (1991), "Earnings management during import relief investigations", *Journal of Accounting Research*, Vol. 29 No. 2, pp. 193-228.

Kang, S. (1999), "Earnings management to avoid losses and performance of accrual prediction models", Working paper, Yale University.

Kang, S.-H. and Sivaramakrishnan, K. (1995), "Issues in testing earnings management and an instrumental variables approach", *Journal of Accounting Research*, Vol. 33 No. 2, pp. 353-368.

Levitt, A. (1998), *The 'Numbers Game' Speech Delivered at NYU Centre for Law and Business*, Securities and Exchange Commission, New York, NY.

Levitt, A. (2000), "Testimony concerning commission's auditor independence proposal before the senate subcommittee on securities committee on banking, housing, and urban affairs", 28 September.

McNichols, M. and Wilson, P. (1988), "Evidence of earnings management from the provision for bad debts", *Journal of Accounting Research*, Vol. 26, pp. 1-31.

المنارة للاستشارات
www.m

Mishra, C. and Gobelli, D.H. (1998), "Managerial incentives, internalization, and market valuation of multinational firms", *Journal of International Business Studies*, Vol. 29 No. 3, pp. 583-598.

Schipper, K. (1989), "Commentary: earnings management", *Accounting Horizons*, (December), pp. 91-102.

Scholes, M., Wilson, G.P. and Wolfson, M. (1990), "Tax planning, regulatory capital planning, and financial reporting strategy for commercial banks", *Review of Financial Studies*, Vol. 3 No. 4, pp. 625-650.

Stern, J. (1972), "Let's abandon earnings per share", *Barron's*, Vol. 18 No. 2.

Stolowy, H. and Breton, G. (2000), "A review of research on accounts manipulation", presented at the 23rd Annual Congress of the European Accounting Association, Munich, March 29-31.

Wahlen, J. (1994), "The nature of information in commercial bank loan loss disclosures", *The Accounting Review*, Vol. 52 No. 2, pp. 455-478.

Wilson, P. (1986), "The relative information content of accruals and cash flows: combined evidence at the earnings announcement and annual report", *Journal of Accounting Research*, Vol. 24, pp. 165-200.

Appendix

Table AI. Index of companies included in the study

Sr. No.	Company	PAT (2007) Rs. Crore
1	Reliance Industries Ltd	12,075
2	Sterlite Industries Ltd	4,386
3	Tata Consultancy Services Ltd	4,213
4	Tata Steel Ltd	4,177
5	Bharti Airtel Ltd	4,062
6	Infosys Technologies Ltd	3,856
7	Wipro Ltd	2,942
8	ITC Ltd	2,755
9	Hindalco Ltd	2,687
10	Larsen and Toubro Ltd	2,251
11	Tata Motors Ltd	2,170
12	Grasim Industries Ltd	1,968

Source: ET 500 (2007)

About the author

Dr Sandeep Goel is presently an Associate Professor in the area of accounting & finance at Management Development Institute, Gurgaon, India. He holds "Double Doctorate", one in finance and another in accounting from Faculty of Management Studies (FMS), University of Delhi. He did his BCom(Hons). from Shri Ram College of Commerce, University of Delhi and MCom with specialisation in finance from Delhi School of Economics, University of Delhi. He has 20 years of industry and academic experience at senior levels in different organizations/institutions of repute, including Shri Ram Group, Delhi University and MDI. Sandeep Goel can be contacted at: sandeep@mdi.ac.in

For instructions on how to order reprints of this article, please visit our website:
www.emeraldgrouppublishing.com/licensing/reprints.htm
Or contact us for further details: **permissions@emeraldinsight.com**

المنارة للاستشارات

www.m

Reproduced with permission of copyright owner. Further reproduction prohibited without permission.

للاستشارات المنارة

www.m