

The Relationship between Earning Accrual Component and Earning Cash Component with Return and Dividend

Narges Bijari, Mojtaba Hosseinpour, Jamal Mohammadi

Accounting and Senior Auditor of South Khorasan Audit Court

Abstract

Accounting and financial reporting as an information system is responsible for satisfying informational needs for users of financial reports, especially shareholders and credit holders. Thus, the most important goal of accounting in the view of users is to provide and to offer useful information for user decision making. Power of offering useful information to facilitate their decision making procedure in the light of future situation is known as accounting information predictability. Since accounting takes into account needs of information users, it is important to offer accounting earnings for measuring and estimating firm performance and forecasting profitability and operational cash flows. Therefore, understanding the role and features of the accounting earnings and its components to forecast firm future profitability is one of the major subjects in the accounting theory and accounting research literature. Different queries from financial investors and analysts have shown that, even though to analyst cash flows indicating information content of earning accruals and earning cash flows to forecast return and dividend. Profitability information has preference over cash flows. In this research, the relation between an earning accrual component and earning cash component with return and dividend was studied. To test the hypothesis, 96 firms as sample were chosen. To test hypothesis 1, first we calculated variations in the accruals independent variable (ACC) and operational cash flows (CFO). Next, we have calculated return dependent variable (RET). Also, to test hypothesis 2, using accruals independent variable (ACC) and operational cash flows (CFO), we investigated the relation between operational cash flows (CFO) and accruals and we calculated dividends dependent variable (DIV). The research results show that there is a direct and meaningful relation between earning accruals and earning cash flows and return. Also, there is a direct

and meaningful relation between earning accruals and earning cash flows and dividend. These findings have concluded that even though we cannot rely on accruals and cash flows to forecast next period earnings, we can forecast return and dividend of next period with accruals and cash flows.

Keywords: accrual earnings, operational cash flows, return stock, dividend

Introduction

Securities analysts, investors and credit providers who participate in the capital market, pay special attention to the net profit figure as the last information item of loss and profit. Profit as the last result of accounting process is calculated under the influence of accounting trend chosen by the management. The main purpose of financial report is to contribute to the user specially investors in financial decision making. Regarding the financial aspect of information, financial report and accounting system play a vital role in investment market. Accordingly, framers of accounting standards try to increase the coordination between accounting system and the useful information that investors needed. They consider the main purpose of accounting as providing the information needs of investment market. Therefore, assessing the profitability of accounting information in evaluating the share or pertaining the accounting information to the firm's value is introduced as the main pattern in financial accounting researches.

Accounting earnings and its related components are taken into account as the information which is considered by people when making decisions. This figure is calculated and identified based on accruals. According to accrual approach, profit can be calculated based on income research principles and expense and income conformity. On accrual basis, identifying

Corresponding author: Narges Bijari, Accounting and Senior Auditor of South Khorasan Audit Court.
E-mail: Nargesbijari80@gmail.com

incomes and expenses is not necessarily in line with receiving and paying cash; therefore in determining the profit, judgment plays an important role.

Statement of the problem

Accounting process is a series of information related to the activity, operation results and also the source and consumption of firm's cash is provided for the one-year financial period. Investors and financial analysts can find about the financial status using this information.

Information about the cash flows can help people in making decision regarding liquidity assessment and reimbursement capability of the debts of a business unit. This information can be useful in evaluating opportunities and risks of business units and the management stewardship responsibility.

Predicting cash flows and its changes was favorable for investors, managers, financial analysts, creditors and researchers. This interest for using cash flows in share evaluation models is the evaluation of payment ability of the firm and performance assessment of commercial unit. If we can predict the cash flows properly, a part of information requirement of users related to the cash flows will be provided. Two criteria of "net profit" and "cash flows operation" have been always criticized by different theorists regarding the prediction ability of each of them to estimate profitability and future cash flows.

Net profit according to accruals basis is identified and reported. Usually using accruals basis leads to creating difference in the amount of reported and pure operational profit resulted from operation and as a result, reporting accruals in financial forms. Net profit is divided into cash and accrual components. Accrual component is also dividable into other components.

Operational cash flow = net profit \pm accruals

Operational cash flows have problems regarding conformity and timing. Net profit does not have such problems. Since accounting, in identifying incomes and expenses considered in calculating net profit from accruals basis, follows two principles of revenue realization and conformity, therefore net profit as the result of accounting process is in a superior position with regard to observing two features of conformity and timing. Thus, accruals' features as a distinction between accruals and cash and also the criteria resulted from these two basis i.e. operational cash flows and net profit is regarded by accounting researchers and theorists. On the other hand, followers of criteria based on cash basis emphasize the point that accruals accounting process, in most of the cases, requires judgments and estimates. Thus,

it may be influenced by managers' point of view. In responding this criticism, followers of accrual accounting criteria emphasize on the personal information transfer of managers through exercising judgments and their evaluation in accrual accounting process and believe that accruals in their nature have some personal information of managers about future profitability and cash flows and this way accrual accounting process can lead to reduction of asymmetry of available information between managers and information users.

Thus, in this research, the role of accruals earnings and the cash profit component, in predicting the return and profit of dividend of each share is assessed. It seems that this fact is a perfect test for analyzing the information content of each of these two components of net profit.

Significance of the study

Net profit have two accrual and cash components:
 Accrual component \pm cash component = net profit
 Accruals \pm operational cash flows = net profit

Accruals include balances derived from applying two principles of conformity and income realization in recording deals and events. The fact is that accrual accounting processes derived from managers' judgments automatically provides ground for leakage of confidential information through their viewpoints in identifying incomes and expenses. In this regard, accruals always are affected by managers' point of view. These viewpoints sometimes can be the result of information asymmetry and confidential information available to managers. With such a reasoning, accrual accounting can implicitly give information about future transformations (Abedi, 2007).

Review of literature

Cash return of each share dividend stake and profit of each share, for being real and tangible, have a special place among some beneficiaries of the firm. In fact, potential and de facto users of financial information are interested to be aware of liquidity and how it can be distributed since this information not only gives a clear picture of firm's status, but also makes it possible to assess future condition of it that undoubtedly is important in decision making process. Investors, creditors, managers and others in financial decision making rely on predictions and expectations and since financial investors and analysts use profit as the main criterion for assessing firms, they are intended to measure the level of

profitability to decide about keeping or selling their share. They judge about firm's condition by predicting profit. This subject is also important for poten-

tial investors. They try to invest and allocate capital resources by predicting cash flows and future profits. Table 1 and 2 show a summary of related literature.

Table 1. A Summary of Domestic Research

Researcher name	Year of research	Overall result of research
Rayat Kashani	1993	Accrual profit cannot provide a clear interpretation of the cash flows and also information about it.
Mohammad Mazar Yazdi	1995	Cash flow data of ascending contents do not have information about accrual flows data. There is no significant relation between unexpected return of firm's share and unexpected changes of cash resulted from operation.
Aqaie and Kordestani	1996	Accounting earnings compared to cash flow capabilities to predict future cash flows.
Mohammad Taghi Jannat Rostami	1992	Profits and flows of historical criticism can be considered as a suitable predictor of future cash flows.
Ahmad Modarres	2001	Predicting operational cash flows is significantly possible using historical profit.
Bahram Far	2004	There is a significant relation between dividend and the profit of each share. There is a significant relation between the profit of each share and the predicted profit of each share.
Bahram Far and Shams Alam	2004	Information about the accruals, investment return rate, and growth in fixed assets will impact on future abnormal returns.
Syed Abbas Hashemi and Ali Saghafy	2004	Accounting earnings and its components have the ability to predict future cash flows and, in fact, accounting earnings relative to cash flows, have greater ability to predict future cash flows.
Rezvan Hejazi and Sedigheh Dostian	2006	There is a significant relationship between net profit and stock return.
Bardodi	1989	The impact of accounting earnings is more than the flows resulted from operations.
Oview	1990	Accounting information mentioned in annual report includes information about change in next year profit.
Aston, Haris & Ohlson	1992	In a longer time period the correlation between profit and return increases and profit determines more returns.
Finger	1994	Previous profits can be considered as a perfect predictor for future profits and cash flows.
Dechow	1994	Profit that is evaluated in short intervals has a stronger relation with stock return.
Fairfied, Sweeney & Yohn	1996	Separating profit to operation profit, non-operational profit and income tax increases the prediction power.
Dechow, Kothari & Watts	1998	Historical profits compared to historical cash flows are better predictors of future operational cash flows.
Barth et al.	2001	Accruals profit increase the predicting power of profits about future cash flows for future horizons.
Barth et al.	2001	Separating profit to two cash and accrual components increase prediction significantly.
AI-Attar & Hussain	2004	Historical cash flows compared to historical profit have more power to predict future cash flows.
Nasir & Abdullah	2004	Companies having low cash flows (companies with profit higher than operational cash flows) have better performance relative to other companies.
Cheng & Hollie	2005	Main components of cash flows compared to sub components reflect different information regarding future cash flows.
Kim & Kross	2005	Relation between profit and operational cash flows of next year increase over time.

Research hypotheses

First hypothesis: accrual and cash components of profit have significant relation with return stock.

Second hypothesis: accrual and cash components of profit have significant relation with each share dividend.

Methodology

Statistical population and sample

Statistical population consists of a series of people or units who have at least a common quality.

Statistical population of this research were chosen from among firms admitted in Stock Exchange for the following reasons:

- 1) Easier access to the information of companies admitted in stock exchange of Tehran.
- 2) The reliability of information that firms announce to stock exchange is fairly higher, because it is expected that it owns a more comprehensible accounting system.

Statistical sample of this research, regarding the time zone of the research, is all firms admitted in Tehran stock exchange that have the following features:

- 1) Did not change their financial year during research period. To prevent potential problems in calculating the annual return and other variables used in this research.
- 2) Is not among the financial group firms like banks, investment companies. This principle for the different nature of these business units from other sample members and potential unfavorable results derived from their existence in research implications.
- 3) Companies in cement and sugar industry were set aside from statistical samples because of their unfavorable effects on research results derived from pricing constraints of their product sales by government.
- 4) Sample companies during years 2001 to 2006, their transactions were not stopped for more than one year.

Regarding the time zone of the research from 2001 to 2006 firms which were in Tehran stock exchange at that time were selected as sample.

Statistical population of this research were selected based on systematic elimination and with regard to the conditions mentioned.

Regarding the constraints mentioned, companies which met the essential conditions were 96 companies, in other words, the statistical sample of this research were 96 companies.

Research design

In this research, with regard to temporal characteristics of collected data, cross-sectional method 1 was used and correlation method was applied to analyze collected data. Thus, to determine the impact of accruals and cash profit on return and profit dividend of each share in future, research method in this research is cross-sectional correlation. In testing research hypothesis, Pearson and Regression correlation coefficient of two-variable were used.

Inferential statistics for research

First hypothesis testing: accrual and cash profit component has a meaningful relation with return stock.

Fitted model to evaluate the following hypotheses:

$$RET = \beta_0 + \beta_1 CFO_t + b ACC_t + \epsilon_t$$

Return : RET

Accruals :ACC

Cash flow operation : CFO

Correlation analysis

Correlation coefficient between independent variable of operational cash flows and return stock equals to -0.605 and the probability level related to its significance analysis ($H_0 : r = 0$) equals to 0.000 which is lower than 0.05, thus with 0.95 confidence, a direct significant relation is confirmed. Correlation coefficient between independent variable of accruals earnings and return of each share equals to -0.402 and probability level related to its meaningfulness analysis ($H_0 : r = 0$) equals to 0.000 which is lower than 0.05, thus with 0.95 confidence, the direct and significant relation is confirmed.

Regression model analysis

Determination model coefficient equals to 0.366 and it means that about 37% of response variable changes (return of each share) is justifiable by independent variable (operational cash flows and profit accruals). The probability level related to null hypothesis is based on the lack of relation between independent variables and response variable ($H_0 : \beta_1 = \beta_2 = 0$) equals to 0.000 which is lower than 0.05 thus with 95% confidence, this hypothesis is rejected and as a result a significant relation is observed between two independent variable and dependent variable and this way the first hypothesis is confirmed. Meanwhile, the probability level about the null hypothesis based on the lack of relation between independent variable of cash flow operation and share return ($H_0 : \beta_1 = 0$) equals to 0.000 which is lower than 0.05; thus, at 95% confidence level, the hypothesis is rejected and as a result a meaningful relation is observed

between accruals and return. Independent variable coefficient of accruals earnings equals to $-2E-6$ and it means that every one unit increase in independent variable (profit accruals) leads to $2E-6$ units decrease in response variable (return stock). The fitted model is:

$$RET = 1.636 + 3.25E-5 CFO_t - 2.3E-6 ACC_t$$

Second hypothesis testing: accruals and cash profit components have meaningful relation with each share dividend.

The fitted model to analyze the hypothesis is:

$$DPSt = \beta_0 + \beta_1 CFO_t + \beta_2 ACC_t + \epsilon_t$$

Dividends : DPS

Accruals :ACC

Operational cash flows : CFO

Correlation analysis

Correlation analysis between independent variable of operational cash flows and dividend equals to -0.674 and the probability level about its significance analysis ($H_0 : r = 0$) equals to 0.000 which is lower than 0.05; thus, with 0.95 confidence a meaningful direct relation is confirmed. Correlation coefficient between independent variable of accruals profit and dividend of each share equals to -0.435 and the probability level about its significance analysis ($H_0 : r = 0$) equals to 0.000 which is lower than 0.05 thus with 0.95 reliability a direct meaningful correlation is confirmed.

Regression model analysis

Determination model coefficient equals to 0.455 and it means that about 45% of the response variable changes (dividend of each share) by independent variable (cash flows operations and profit accruals) is justifiable. The probability level about statistical null hypothesis based on lack of relation between independent variable and response variable ($H_0 : \beta_1 = \beta_2 = 0$) equals to 0.000 which is lower than 0.05. Thus, the hypothesis is rejected with 95% confidence. Since a meaningful relationship is observed between two independent variables of cash flows operations and profit accruals and the dependent variable of dividend of each share; thus, the second hypothesis is also confirmed. Meanwhile, the probability level about statistical null hypothesis based on the lack of relationship between independent variable of cash flows operations and dividend ($H_0 : \beta_1 = 0$) equals to 0.000 which is lower than 0.05; thus, this hypothesis is rejected with 95% confidence, as a result, a meaningful relationship is observed between accruals profit and dividend. Independent variable coefficient of accruals equals to 0.005 and it means that each one unit increase in independent variable (profit accruals) leads to 0.005 unit increase in response variable (dividend of each share). The fitted model is: $DPSt = 5667.6 + 0.293 CFO_t + 0.005 ACC_t + \epsilon_t$

Table 2. Summary of modeling results and tests for analyzing research hypotheses

Research hypotheses	Determination coefficient	Balanced Determination coefficient	Probability level Fisher statistics	Test results
one	0.391	0.378	0.000	Hypothesis conformity
two	0.455	0.455	0.000	Hypothesis conformity

Conclusion

One of the main weak points of accounting profits as a factor for predicting return and dividend is that there may be a kind of bias 1, because in most of cases identifying incomes and expenses of a period requires to do judgments and also the allocation procedure is not rule governed. Despite these pitfalls, accounting earning is considered as a basis for tax calculation, a factor for determining dividend policy, a guide to investment and decision making, criteria for evaluation of management Stewardship duty and a factor for prediction. There are many evidences that management,

accountants and users are basically more intended to profit; thus, in number one conceptual announcement, using historical profit are evaluated and since one of the financial reporting goals is to highlight different dimensions of profitability units. Thus, it seems that paying attention to accruals and cash profits as an important effective factor to predict return and dividend can be considered as important. Therefore, analysis of the role of accruals and cash earnings and identifying the possible relationship between the volatility of accruals and cash earnings with returns and dividend of the firm has formed the main subject of this study.

Recommendations relating to the application of research findings

A) With regard to research findings, indicating that there is a direct relationship between accruals and cash earnings and stock return, it is recommended to financial analysts that in predicting next period return pay more attention to accruals and cash earning of the current period.

B) Accruals and cash flow can introduce dividend. To predict the dividend, users can rely on accruals and cash flows.

References

- Abedi, M., (2007). The Effect of accruals in predicting profit, operating income and operating cash flows in future periods, Master's thesis, Islamic Azad University, Neishabur branch.
- Accounting Standards Board, (1991). Cash Flow Statement, Financial Reporting Standard , 1, FASB.
- Aghaie M. A. & Kurdistani G. (1996). The ability to predict cash flows and profit. Accounting analysis, pp. 55-42.
- Al-Attar, A. & Hussain, S. (2004). Corporate data and future cash flows, Journal of Business, Finance & Accounting, 31(7), 861-903.
- Ali Var, A., (n.d.). Cash flow statements. Accounting and Auditing Technical Research Center of Corporate Audit, 11 & 12.
- Arab Mazar Yazdi, M. (1995). Incremental information content of cash flows and accruals. PhD thesis, Tehran University.
- Bahramfar, N., Mehrani, K. (2004). An analysis of the relationship between each share profit, dividends and investment in listed companies in Tehran Stock Exchange, Journal of Accounting and audit review, XI, 36.
- Bahramfar, N., & Shams Alam H. (2004). Influence of accounting variables on subsequent abnormal stock returns of listed companies in Tehran Stock Exchange, Journal of Accounting Review Audit, XI, 37.
- Balkuie, A. (2002). Accounting theories, translated by Parsaeian, A., Tehran: Office of Cultural Research.
- Barth, D. Carm., & Nelson, K. (2001). Accruals and the prediction of future cash flow. The Accounting Review, 76(2), 27-58.
- Barth, M. E., Donald, P.C., & Karen, K.N. (2001). Accruals and the Prediction of Future Cash Flows, The Accounting Review, 76(1), 27-58.
- Bazargan A., Hijazi, E. & Sarmad, Z. (2005). Research Methods in the Behavioral Science, Agah Publications.
- Cheng , C.S., & Hollie, D. (2005). The usefulness of core and non-core cash flows in predicting future cash flows, Working Paper, University of Houston.
- Dechow, P., Kothari, S., & Watts, R. (1998). 'The Relation Between Earnings and cash flows , Journal of Accounting & Economics, 25 , 133-168.
- Noferesti, M. (1990). Statistics in Business and Economics. Vol II, Shahid Beheshti University Press.
- Hendrickson, A., & F. Van. B. (2005).Accounting Theory, translated by Parsaeian, A., Vol. I, Terme Publications.
- Fairfied, p., Richard, S., & Yohn, T. L. (1996). Accounting Classification and the predictive content of Earnings, Accounting Review, 71, 337-357.
- Financial Accounting Standards Board. (1978). Objectives of Financial Reporting by Business Enterprises, Statement of Financial Accounting Concepts , No .1, Stamford, CT: FASB.
- Finger, C. (1994). The ability of earnings to predict future earnings and cash flow. Journal of Accounting Research, 32 (Autumn), 210-223.
- Givoly, D., & Hayn, C . (1992). Transitory accounting: Information content and earnings Working paper management .Northwestern University, Evanston, IL.
- Jannat Rostami, MT. (1999). Examining the role of profit in predicting future cash flow benefits of investing in shares of listed companies in Tehran Stock Exchange, Accounting, Master Thesis, School of Accounting and management, University of Shahid Beheshti Beheshti .
- Khaki, GH. (1999). Research method with an approach to the thesis writing, National Scientific Research Center publication in cooperation with Dariot Cultural Center publication.
- Khalil Zadeh, H., (n.d.). Evaluation of the information content of financial statements in connection with earnings quality, Master's thesis, Islamic Azad University of Mashhad, p 122.
- Kim , M., & Kross, W. (2005).The Ability of Earnings to Predict Future Operating Cash Flows Has Been Increasing – Not Decreasing, Journal of Accounting Research, 43(2), 751-780.
- Modarres, A., (2001).Evaluation of a multivariate time series model to forecast operating cash flows. Ph.D. Dissertation of Accounting, School of Accounting and management, Allameh Tabatabai University.

- Noravesh, I., Faegh & Karami, GR. (2004). Evaluation of the relationship between operating cash flow, operating profit and economic value added with the wealth created for shareholders, *Journal of Accounting and Auditing Review*, XI, 37.
- Noravesh, I., & Ghulam Zadeh M. (2003). Investigating the behavior accounting earnings using time-series of Box - Jenkins, *Journal of Accounting and Audit Review*, 10, 31.
- Norita, N, A. (2004). Information Provided by Accrual and Cash Flow Measures in Determining Firms' Performance: Malaysian Evidence. School of Business, Monash University Malaysia, NO 2, Jalan Kolej.
- Ohlson , J.A., & Penman, S.H. (1992). Disaggregated accounting data as explanatory variables for returns. *Journal of Accounting, Auditing, and Finance* 7, 553-573.
- Rahmani, A. (2002). The usefulness of financial statement items other than profit in the profit forecasts. PhD thesis, University of Allameh Tabatabai, pp. 22-20.
- Thaqafi, A. & Hashemi, S. A. (2004). Analytical study of the relationship between operating cash flow and accruals, providing a model to predict operational cash flows, *Review of accounting and audit*, XI (38), 52-29.
- The Committee of issuing accounting guidelines of Corporate Audit, fundamentals of accounting theory and financial reporting in Iran (1997). Proposed Draft, Research Center of Specialized Accounting and Auditing Journal, issue 113.