International Journal of Empirical Finance
Vol. 4, No. 1, 2015, 47-52

The Effect of Nominal and Real Reporting Difference in Predicting Cash Flows of Companies in Tehran Stock Exchange

S. Toosi[1], M.H. Karbalai [2], H. Parsian[3], A. Shams Koloukhi[4]

Abstract

One main goal of an accounting system is providing on time, reliable and relevant information for the users of those information. Traditional basis of accounting for information provision is using historical values since these values are reliable and can be proved. When in developed countries, inflation caused asymmetry in economic structure, accounting and economic scholars tried to find new methods for dealing with these issues. Providing solutions in the frame of accounting standards such as FASB-33 in America and SSAP-16 in England, accountants mitigated created problems for accounting to some extent. This study aims to examine the effect of profit and loss from inflation in predicting cash flows of companies in Tehran Stock Exchange. In this regard, two hypotheses were formulated. Results show that unrecognized inflation profit has a positive correlation with future cash flows while it has no correlation with future cash flows.

Keywords: Real Reporting, Stock Exchange, Cash Flows, historical value

1. Introduction

One main input to company value is profit (Ohlson 1995). Profit is a measure of company performance with wide applications calculated as the sum of operational cash flows and accruals. In this study, the effect of usefulness of cash flow information on the confidence coefficient is examined that investors consider in case of accruals and cash flow during valuing companies. Previous studies have also examined relative information content, cash flow, and accruals (Biddle et al 1995, Bowen et al 1987, Dechow 1994). While profit is considered to have higher information content than operating cash flow, cash flow also contains useful information for investors in valuing companies. Reliability and usefulness of accruals is doubted since managers can manipulate them to change reported earnings based on accepted principals of accounting or their own will. If a manager manipulates opportunistically, this leads to diversion in reported earnings (Watts 1986). From the other hand, a manager can increase information content of earnings through disclosing private information (Healy and Palepu 1993). There are different reasons for investors to consider higher (lower) confidence coefficient for cash flow (accruals) in case of usefulness of cash flow information. Usefulness of cash flow information may lead investors to increase (decrease) their confidence coefficient about cash flow (accruals).

Previous studies have tested usefulness of cash flow and accruals in a regression whose dependent variable is stock return. In America, Subramanyam (1996) and Wilson (1986, 1987) have found that both cases have increasing information content towards each other while Bernard and Stober (1989) found little evidences in this regard. Dechow (1994) reported that earnings based on accruals is a better scale for measuring company performance rather than cash flow. This study examines usefulness of cash flow in pricing investors.

There are 6 factors affecting usefulness of cash flow as follows:

[1] Department of Accounting,Torbat-e-Jam Branch, Islamic Azad University, Torbat-e-Jam, Iran
[2] Department of Accounting,Torbat-e-Jam Branch, Islamic Azad University, Torbat-e-Jam, Iran
[3] Young Researchers and Elite Club, Torbat-e-Jam Branch, Islamic Azad University, Torbat-e-Jam, Iran
[4] Young Researchers and Elite Club, Torbat-e-Jam Branch, Islamic Azad University, Torbat-e-Jam, Iran

- **Range of Accruals**

Accruals are key outputs of accounting processes. Accruals 'earnings is higher than cash flow since accruals remove the problems that exist in timing, expenditure, and income adoption of cash flow (Dechow, 1994). However, more accruals lead to higher difference between reported earnings and reported cash flow.Such differences induce more care of investors, encouraging them to interpret earnings with caution. Higher accruals show the difference between accruals and cash flow as a sign of management (Teoh et al, 1998; Healy, 1985; De Fund and Jiambalvo, 1994). Thus, when accruals have bigger size, they tend to decrease (increase) confidence coefficient that investors suggest for accruals (cash flow).

- **Earnings Inconsistency**

In consistent earnings has low quality and benefit for investors (Chani and Louis, 1995; Tacker and Zarowin, 2006). Investors' prediction from earnings is less accurate when earnings is inconsistent. In that condition, investors tend to rely on more predictable information sources during profit interpretation for better evaluation of company value, present company performance, and exact prediction of company performance in future. When earnings (accruals) is inconsistent, investors consider higher (lower) confidence coefficient than cash flow (accruals).

- **Disharmony of Selecting Accounting Methods**

During evaluating company performance, investors examine not only reported company performance but also examine relative company performance in comparison with other companies (Christie and Zimmerman, 1994).This comparison removes any wide shock on company performance in the industry.

Comparison of one company with other companies is prevalent in capital market. For instance, Standard & Poor's compare similar companies for allocating budget to them. This institute claims to evaluate performance and position of a company towards similar companies. It also claims that their procedure is comparison. Thus, the considerable point is having a judgment frame (Standard & Poor's, 2002). Homogeneous companies have been defined as the companies which are in a specific industry.

A part of rewarded flexibility by GAAP enables managers to select from different accounting methods. When the managers report earnings which reflect different accounting methods, comparing companies' earnings becomes more difficult for investors. Thus, investors focus on cash flows since it is less impressed by different accounting methods.

Dechow (1994) found that operating cash flow is a weak measure of company performance for the companies with long business period. Thus, it is expected that investors consider higher (lower) confidence coefficient for cash flow (accruals) by increasing life cycle of operating cash flow of the company.

- **Capital Concentration**

Companies with concentrated capital have high amounts of fixed assets. For them, maintaining and replacing these fixed assets is essential for remaining as a profitable institute. A considerable cash is required for maintaining and replacing these fixed assets. Although companies with concentrated capitals can refer to different resources for providing required (operating, investment, financial) cash, created cash flows inside are more regarded by investors. This vision is more consistent with much emphasis of Standard & Poor's on information content of cash flows during evaluating repayment ability of the companies with concentrated capital (Standard & Poor's, 2002). While external sources of cash flow can act as a short-term financial provision source for the companies with concentrated capitals, it seems that investors want evidences that prove that these companies can fulfil their commitments, relying on their internal resources. Thus, cash flow (accruals) of profit is more (less) dependent on company value in the companies with concentrated capital.

- **Financial Health**

Companies in financial dilemma are under pressure for fulfilling their commitments and continuing their business. For these companies, creating operating cash flow is very important. Ohlson (1980) found that internal cash flow is significantly negative in a year before bankruptcy. Beaver (1966) reports similar results in the years before bankruptcy. Generally, companies which can't produce positive operating cash flow are disabled to continue their businesses as an active enterprise. For the companies in financial dilemma, ability of showing positive operating cash flow is very fundamental.

- **Financial Safety**

The companies with financial predicaments are under pressure for performing their commitment to survive. For these companies creating operational cash flows has special importance. Ohlson (1980) found that created cash flows inside is significantly negative a year before bankruptcy. Bior (1966) reported similar results a year before bankruptcy. Generally, the companies that can't create positive operational cash flows can't continue as active enterprises. So, for the companies with financial problems, showing positive operational cash flows is of great importance. Such companies are not able to provide cash flows from external resources. Not only ownership cost for these companies is higher, but also less external capital resources exist for the companies. The problem of increasing foreign capital raises the issue of relying on internal resources.

2. Materials and Methods

Hypotheses:

H1.Unidentified profit and loss resulting from inflation can help predicting future cash flows of operating activities.

H2.Unidentified profit and loss resulting from inflation can help predicting future cash flows of asset sale.

Methodology

This study uses an algorithm which extracts real information following 4 important steps. This algorithm rebuilds financial statements of the company in its life time till reporting date with a regulated basis according to inflation. Since differentiating between cash and non-cash items is the key that shows how accounting values are differently impressed by inflation, this algorithm sorts assets, monetary and non-monetary obligations. Since cash items are measured by nominal reporting based on a fixed number of required dollars for their settlement, this algorithm uses monetary values of nominal financial statements. This algorithm sets non-monetary items, estimating purchase date, using life cycles, goods turnover times, and etc. This algorithm extracts a wealth which is produced in every period and is measured using natural accounting features in bilateral accounting system such as excess relation settled based on inflation.

To examine if inflation profits and losses help predicting these principals, Equation 1 was used.

Equation (1)

$$\mathrm{CFO}_{t+i} = \alpha + \beta_{\mathrm{RMN}}\,\mathrm{RMN}_t + \gamma_1 \mathrm{CFO}_t + \gamma_2 \Delta\mathrm{AR}_t + \gamma_3 \Delta\mathrm{INV}_t + \gamma_4 \Delta\mathrm{AP}_t + \gamma_5 \mathrm{DEPN}_t + \gamma_6 \mathrm{OTHER}_t + \varepsilon_{t+i} \quad (1)$$

Where CFOt is operating cash flow; AR_t is accounts receivable; INV_t is inventory; AP_t is accounts payable; DEPN_t is depreciation of fixed assets and intangibles; OTHER_t is other accruals as a time function; Δ is the shift from $t+i-1$ to $t+i$; RMN is real earnings minus nominal earnings. It is estimated for any following 4 years, i.e. from i = 1 to i =4. For testing H1, the following hypotheses were formulated:

$$\mathrm{H}_0: \beta_{\mathrm{RMN}} \leq 0$$
$$\mathrm{H}_1: \beta_{\mathrm{RMN}} > 0$$

It is predicted that β_{RMN} is positive for at least one year. Following BCN, it is also predicted that the sign of γ_1 ،γ_2 ،γ_3 ،γ_5 و γ_6 estimations is positive while it is negative for γ_4. Based on predictions, when the assets are sold, inflation earnings appear in cash flow from sale asset and income from sale assets. Two models are used for testing this prediction. First model examines the ability of inflation earnings in predicting cash flow from sale (PPE) in the following periods by controlling consistency of cash flow from sale (PPE).

Equation(2)

$$\mathrm{CF\_PPESale}_{t+i} = \alpha + \beta_{RMN}\,\mathrm{RMN}_t + \beta_1\,\mathrm{CF\_PPESales}_{t+i-1} + \varepsilon_{t+i}$$

$$\mathrm{Income\_AssetSale}_{t+i} = \alpha + \beta_{RMN}\,\mathrm{RMN}_t + \gamma_1\Delta\mathrm{PRETAXINC}_{t+i} + \gamma_2\mathrm{DETEQ}_{t+i} + \mu_{t+i} \quad (3)$$

Where $\mathrm{CF}_{\mathrm{PPESale}\ t,}$ is cash flow from sale (PPE),

$\mathrm{Income}_{\mathrm{AssetSale}\ t}$ is income from asset sale, $\mathrm{PRETAXINC}_t$ is pretax income,

and DETEQ_t is ratio of long term debt to book value of stockholders equity, respectively.

Since predictability of inflation earnings depends on life cycle of an asset and life cycle of an asset is longer than a year, it is estimated that β_{RMN} is positive in a period longer than a year and is potentially positive in a one-year period (H2). For consistency in CF_PPESale , it is predicted that β_1 is positive(H3).

3. Results

The results of regression tests are shown in Table 1, 2, and 3.

Table 1: Regression 1 results

Model		Un-standardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	88080.462	84219.120		1.046	.297
	RMN	-16.040	6.842	-.335	-2.344	.020
	CFO	.428	.276	.241	1.551	.022
	D.AR	-.048	.083	-.084	-.573	.567
	D.INV	.408	.073	.366	5.610	.000
	D.AP	.247	.077	.384	3.188	.002
	DEPN	9.948	1.271	.556	7.825	.000

Table 2: Regression 2 Results

Model		Un-standardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	12130.469	4286.116		2.830	.005
	RMN87	-.042	.141	-.021	-1.295	.069
	CF.PPESALE	-.002	.023	-.007	-2.099	.021

Table 3: Regression 3 Results

Model	Un-standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	8442.260	4511.487		1.871	.063
RMNeporting i	.011	.133	.006	.085**1**	.032
D.Pretaxine	.006	.003	.129	1.966	.051
DETEQ	2216.253	1383.370	.103	1.602	.110

According to the results of above tables, H1 and H2 are confirmed.

4. Discussion

Offered information by financial reporting is useful when it is reliable and relevant as different statements of FASB suggest. Relevant information is what helps users in making future economic decisions. According to statements of FASB, information is relevant when it has feedback value for past information, is on time, and predicts future events. Thus, one feature that is a measure for information content is predictability. Information content of an accounting item refers to its usefulness in decision-making. Results showed that profit and loss from inflation can help predicting future cash flow. This result agrees with the findings of Wilson (1986), Bowen et al. (1987); but, it disagrees with Ashiq Ali (1994), Dechow (1994), Subramanyam (1996), and In Mu (2001).

References

Arthur, N., Czernkowski, R., and Huynh, T. (2009).The Impact of Cash Flows and Accruals on Belief Asymmetry. The University of Sydney, www.ssrn.com.

Ashiq Ali (1994). "The Incremental Information Content of Earning‹4. Working Capital from Operation and cash flow”‹ Journal of Accounting Research‹ Vol. 32.

Bernard, L. V., & Stober, T.L. (1989). The nature and amount of information in cash flows and accruals. The Accounting Review, 4, 625-651.

Biddle, G., Seow, C. and Siegel , A.(1995). Relative versus Incremental Information Content. Contemporary Accounting Research 12, 1-23.

Bowen, R. M., Burghstahler, D., & Daley, L. A. (1987). The incremental information content of accruals versus cash flows. The Accounting Review, 62, 723-747.

Dechow, P. (1994). Accounting earnings and cash flows as measures of firm performance: the role of accounting accruals. Journal of Accounting and economics, 17, 3-42.

In-Mu, H., Daqing, Q, and Wu, W. (2001). The nature of information in accruals and cash flows in an emerging capital market: The case of China. The International Journal of Accounting, 36,391-406.

Healy, P. M., and Palepu, K.G. (1993). The effect of firms’ financial disclosure policies on stock prices. Accounting Horizon, 7, 1-11.

Ohlson, J. (1995). Earnings, book values, and dividends in equity valuation. Contemporary Accounting Research,11, 661-687. Roychowdhury, S. (2006). Earnings management through real activities manipulation. Journal of Accounting and Economics, 42,335-370.

Soares. N., and Stark. A.W.(2009).The accruals anomaly – can implementable portfolio strategies be developed that are profitable net of transactions costs in the UK?" Accounting and Business Research, 39, 58-114.

Subramanyam, K. R. (1996). The price of discretionary accruals. Journal of Accounting and economics, 22, 249-281.

Watts, R., and Zimmerman, J. (1986). Positive accounting theory. Englewood Cliffs, NJ: Prentice-Hall.

Wilson, G. P. (1986). The relative information content of accruals and cash flows: Combined evidence at the earnings announcement and annual report release date. Journal of Accounting Research, 24, 165-203.

Wilson, G. P. (1987). The incremental information content of the accrual and funds components of earnings after controlling earnings. The Accounting Review, 62, 293-322.