2528-9705

Örgütsel Davranış Araştırmaları Dergisi
Journal Of Organizational Behavior Research
Cilt / Vol.: 3, Sayı / Is.: S2, Yıl/Year: 2018, Kod/ID: 81S297

EVALUATION OF THE IMPACT OF FINANCIAL STATEMENTS COMPONENTS ON OPERATING CASH FLOWS

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ABSTRACT

In the world of uncertainty forecasting seems critical. Thus, accounting is not an exception. Effective forecasting, therefore, is considered as one of evaluation measures of accounting information. So, the present study tries to seek a path to be able to increase the forecasting power of coming cash flows of business units for financial statements users. Obviously, these forecasting may accompany with a degree of estimation error and forecasting tries to decrease risk of decision making. To test the research hypotheses, the present paper enjoyed from 70 listed companies' data in Tehran stock within years 2001 to 2010 as well as multi-variate linear regression analysis. The results indicated that operating cash flows based on operating cash flows of prior periods as well as according to components of operating cash flows of prior periods could be predictable. The estimation power of operating cash flow of forecasting model based on the components of operating cash flow of prior periods (0.778) is approximately equal to estimation model according to operating cash flows of prior period (0.775).

Keywords: *Operating Cash Flows, Accruals, Forecasting, Multi-Variate Regression*

INTRODUCTION

Unfamiliarity with future during centuries has engaged human mind. Human as a curious being has always been in search of strategies to get informed about future and transforms it as he likes. To know the future, involves forecasting of future and as sciences are advancing, the forecasting of future becomes easier. Financial and accounting are, then, two fields depend on forecasting.

Significance of cash flow forecasting:

Financial reporter needs to empower financial statements users to predict more accurately the cash flows. This, of course, has been approved in form of theoretical framework of financial reporting which determines financial reporting purposes. In the statement of financial accounting concepts No.1 of a financial accounting standards board development (FASB) has been stated that "financial reporting for contribution to potential and actual investors, creditors, and other users, provides cost, time and uncertainty in future information inputs in the estimations (Saghafi et al, 2004). The perspective of these received cash under the influence of company's capability in creation of enough cash for its responsibilities at due date and the operating cash requirements including investment in operation, paying cash dividend of the stock, as well as the impact of investors and creditors' attitude about its effectiveness power on stock price (Financial Accounting Standards Board (FASB), 1978).

Geliş tarihi/Recieved: 12.11.2017 – Kabul tarihi/Accepted: 28.03.2018 – Yayın tarihi/Published: 21.08.2018

The theoretical framework of Iran's financial reporting states that "making economic decisions by financial statements users involves evaluation of power of business unit for creating cash, time and certainty of creation (Iran Accounting Standards, Auditing Organization Journal, issue 165).

The Iran Standard Accounting No.2 entitled" form of cash flow" due to emphasis on types of cash flow forms as well as their forecasting power asserted that "historical information relevant to cash flow can assist financial statements users in judgment about cost, time and level of confidence of occurrence of future cash flows".

Regarding the above points and the emphasis theoretical frameworks have against application of financial statements and their usefulness in forecasting of future cash flows, cost and time, the special attention of standard-setting boards to forecasting power of cash flows. This shows the demands of creditors and investors to forecast the cash flows that urges accounting standard makers to provide transparent information to investors and the capital market with full awareness of the importance of cash flows to investors in their decision theoretical concepts statement No. 7 (FASB 2000) and standard No.95 (FASB 1987) as statement of cash flows.

The theoretical concepts of financial reporting emphasize on accruals capability in forecasting future cash flows and know accrual accounting as a component of financial reporting which can affect on forecasting cash flows.

Operating cash flows:

Cash flows raised from operating functions must adjust with the results of operation activities (operating incomes and operating costs). That is, that group of cash flows relates to operating section of benefit and loss in case of cash flow should be classified as operating cash flow.

Operating activities consists of the major and continuous activities of generating operating revenue of business unit (Bozorg Asl, 2006). Based on Paragraph 11 of Iran's Accounting Standards No.2 of "the form of cash flow", operating activities, investment activities and financing activities are as follows:

Operating activities: include the principal and continuous generating activities of operative revenue of business units.

Investment activities: consist of aacquisition or disposal of long term investments, tangible fixed assets and intangible assets as well as payment and collection facilities to independent business people except employees.

Finance activities: include activities lead to change in amount and composition of capital and borrowing of business units (except recorded overdrafts in calculation of cash).

Accruals: difference between operative interest and operative cash flow.

RESEARCH BACKGROUND

Many several studies so far, have been performed on forecasting future cash flows. In this section, a few of previously conducted studies are presented.

Dechow, Kothari and Watts (1998) introduced a profit and flow model of cashes and accruals assumed based on the process of random step and within which fixed and changing costs were used. The accruals were also consisted of received accounts and paid accounts as well as accounts receivable and accounts payable and inventory. Their model hypothesized that profit forecasts future performance of company much better than operative cash flow. Their model measured 1337 sample financial information during years 1963-1992.

Cheng and Hollie (2005) studied on the effect of different section of cash flows on operative cash flows. They compared different cash flows raised from components of profit and loss during some financial periods with net operative cash flows. The cash flows as their research variables were as follows: Cash flows raise from selling, total price of sold goods, operative costs, interest, tax and etc.

Orpurt and Zang (2009) stated that the possibility of creating operative cash flows and interest is interclosely related to value of the business unit. Therefore, the primary object of financial reporting is preparation of information to help accounting users for getting informed about price and time of cash flows and future interests. Barth (2001) in her study concluded that dividing revenue into its accrual parts can improve the forecasting capability of future cash flow and every accrual section will present different information about future cash flows. Adhikari and Duru (2006) argued about the free cash flow (FCF). Generally speaking, FCF defines as all created cashes by operative activities of the business unit that the company can divide it among the shareholders without affects on the company's level of growth. In their studies, they found out that FCF exists in financial literature and investment world, though no specific definition has been identified in practice. Thus, two measurement methods are considered for it.

1. Method of improving cash flow rises from operating activities.
2. Method of improving net profit Giolli and Hien (2009) indicated that percentage of firms receive profit forecasting as well as cash flow forecasting have been increased within years 1993-2005, from 2.5 % to 2.57%.

This increasing process has made researchers to do studies about application of these forecasts with changes in their structure.

Giolli and Hien (2009) study purposed to assess different aspects of cash flow forecasting analysis and degree of accuracy and practicality of them. In this study, they considered the principal dimensions of cash flow forecasting quality with other forecasting such a projects within which and other changes relevant to the interest rarely are present monthly in estimation of costs including tangible and intangible assets in forecasting the profit.

Wasely and Shaung (2006) conducted research to measure volunteer presentation experiences in forecasting cash flows. They understood that managers provide cash flows according to good news in cash flow in response to investors' demand about cash flow information.

Plot et al (2009) through analysis of real cash flow in comparison with business unit value (market capitalization plus debt minus cash) concluded that market significantly has evaluated the companies' values lower than their real value. Their results showed that capital market possesses such a great discount rate which caused ignorance of future revenue in measurement of the company's value. This means that the discount rate is so high that most of the future cash flows have been declined.

One of important issues in accounting related studies is the role of accounting in pricing stocks. Previous evidences indicate that accrual profit plays an outstanding role in the prices of pricing since it reduces problems of timing and inconsistent hidden in cash values (Ball and Brown,1968; Dechow,1994). However, usefulness and validity of accruals is doubtful because managers can manipulate them in order to moderate the reported profit through adaptation with accepted principles of accounting according to their desire. If management manipulate the profit opportunistically, this authority can distort the reported profit (Watts & Zimmerman,

1986). On the other hand, management can through permission of distribution of confidential information causes information load of profit increase (Healy & Palepu, 1993).

The past studies which emphasized on developed markets like U.S.A. and England investigated that whether accruals add information to cash flows for increase of profit capability in explanation of efficiency or not and if Discretionary and involuntary accruals have different value. A few researchers proposed that both cash and accrual flows possess increasing nature compared with each other and are priced differently by market (Bowen & Burghstahler,1987; Dechew, 1994; Wilson, 1986, 1987). On the other hand, other evidences proved the presence of increasing information content of each component compared to the other (Bernard, & Stober, 1989). In a study, Subramanyam (1996) understood that market values discretionary accruals more since ooptional components of earnings probably can maximize profit ability in reflection of basic price. Walhen (1994) reported that discretionary accruals hold increasing information content in disclosure of commercial bank loan loss of business banks.

The mentioned studies focused on developed markets of U.S.A. though, in Iran, Arab Maziar Yazdi's (1995) study showed that cash flows data have no increasing information compared to accrual data.

Nourosh and Mashayekhi (2004) in their research reported the lack of increasing inflation load in cash data compared to accrual data. Private companies in Iran disappear fast and less investor know them. But accounting approaches and standards are developing in Iran. Additionally, capital market systems and financial reporting is relatively weaker and newer and quality of auditing seems totally different from developed markets of U.S.A. and England enjoying from more sophisticated accounting systems and investors recognize them better.

The results obtained by Wilson represented existence of increasing information content in cash and accrual flows compared to each other (Wilson, 1986, 1987). Bowen et al (1987) in a research investigated about the increasing information content of accrual and cash numbers. The findings indicated that information related to the cash flows possess increasing information concern against interest. Furthermore, information relevant to cash flows hold increasing information content in comparison to information of both dividends and capital resulting from operations and associated information to accrual flows (income from operations, working capital) separately as well as separately and also together which have incremental information content against cash flows.

Bernard and Stober (1989) find no document in order to be able to confirm the increasing content of information in cash and accrual flows against each other. Ashiq Ali (1994) investigated on incremental content of profit, flow capital raised from cash operations and flows. In this study, incremental content of information of the flow capital resulted from operation per profit and cash flows were approved.

Significance of The Study:

In world of uncertainty, forecasting future is demanding. Accounting is accordingly one of fields depends on forecasting especially an efficient one. An effective forecasting measure would be useful for financial statements users. Therefore, thanks to significance of cash flow, the present research will evaluate the ability of operative cash flow of prior period and the components for forecasting the operative cash flow.

Considering the process of privatization and attraction of public participation in directing companies it is crucial for making rational decisions about investment in companies' stocks as

well as evaluation of their financial capital, proper settings are established in order to investors have an access to required information to get sure about flexibility of their interest increase as a result of investment in the company. Since the financial investors and analysts enjoy from interest and cash flows as one of major criteria for assessment of companies, investors prefer to measure rate of interest and future cash flows to be able to keep or sale their stock. This of course matters for potential investors because through forecasting future cash flow get involve in investment and allocation of their capital resources. What seems clear is that the subject of incremental content of cash and accruals is one of controversial topics in accounting. Several different papers have been published from 1980s to 1990s which have considered this issue. However, the main concern about inefficiency of accrual accounting information refers to decision making and uncertainty about reliability of accruals for a correct future forecasting. Accordingly, the importance of empirical studies have been performed so far is because of clarifying the role of accounting interest based on an accrual and cash basis in assessment of companies performance. Similar studies therefore, in new investment market of Iran which has face with popularity, can resolve investors, shareholders and decision makers' problems. Organization as the responsible institution for development of accounting and auditing standards can use from this information. It is clear that attitude toward accounting information systems and obtained information is critical. The current paper, accordingly, can contribute to clarification of methods of development of local standards in accordance with real needs of users.

Research Hypotheses:

A research hypothesis rises from presence of a relationship or impact among variables. The purpose of this research as was explained before is to evaluate forecasting power of operative cash flow based on prior operative cash flow and related components which similarly the following hypotheses are addresses:

H1: forecasting of operating cash flow based on prior operating cash flow is possible.

H2: forecasting of operating cash flow based on components of operating cash flows is possible.H3: forecasting model according to components of prior operating cash flow in comparison with forecasting model based on prior operative cash flow can more precisely estimate operative cash flow.

METHODOLOGY

The methodology occurs in form of semi-experimental and ex-post facto using previous information. The purpose and place of the present research are functional and library study respectively. It is also an exploratory research (an attempt to see whether a phenomenon exists or not). And finally, this study follows a correlation-descriptive methodology (descriptive studies try to describe and interperate conditions and relations and in descriptive-correlation study, the researcher investigates about relationship between two or more variables). To test the research hypotheses and with regard to nature of research information and data that is based on real information, the applied method is a multivariate regression for finding and measurement of the relationship among variables.

Multivariate linear regression:

In some of research problems especially those aiming at forecasting, determination of correlation among criterion variable (we want to predict it) and combination of forecasting variables which

each one has a relative correlation with criterion variable seems crucial. The way by which the predictor variables synthesize together is called "multivariate regression". In this method, a multivariate regression equation is computed that summarizes calculated values of forecasting in a formula. The equation coefficients for each variable will be specified based on their significance in forecasting of the criterion variable. Correlation degree between predictor variables in multivariate regression equation and criterion variable will be shown by coefficient. Multivariate regression consists of different methods and the difference is in form of choosing predictor variables. In the present research to determine regression the following relation will be used:

$$Y = a + b_1x_1 + b_2x_2 + \cdots + b_nx_n + u_t$$

Where,
Y: dependent variable
: Intercept α

$x_1x_n, \dots, x_2,$

Independent variables

$x_1x_n, \dots, x_2,$

$b_1: b_n, \dots, b_2,$:regression coefficient

u_t :error sentences.

In such a model the following major hypotheses are considered:

1. Xs are random variables, and no linear complete relation exists among two or more independent variables.
2. For all of observations, expected value of error utterance equals zero and variance value is constant.
3. Error utterances of different observations have no correlation with each other.
4. Error utterance is distributed normally.

In this research a few multivariate regressions will be tested.
The used models in the study are a type of self-return and time-series regression. Through Box-Jenkins method, these models are represented as follow:

To test H1, the first model i.e. the forecasting model of operative cash flows by use o historical operative cash flows was applied.

$$\text{Model 1} \quad CFO_{t+1} = \alpha + \beta CFO_t + \mu_t$$
$$\text{Model 1: } CFO_{t+1} = \alpha + \beta CFO_t + \mu_t$$

Where,

CFO_t: is operative cash flow for period t
To test H2, the second model, forecasting model of operating cash flows by use of components of operative cash flows as well as time-series regression model was used.

$$\text{Model 2} \quad CFO_{t+1} = \alpha + \beta_1 C\text{-}SALES_t + \beta_2 C\text{-}COGS_t + \beta_3 C\text{-}OTHER_t + \mu_t$$
$$\text{Model 2: } CFO_{t+1} = \alpha + \beta_1 C\text{-}SALES_t + \beta_2 C\text{-}COGS_t + \beta_3 C\text{-}OTHER_t + \mu_t$$

Where,

C-SALES: is cash flow raised from net selling of goods that is obtained by selling minus changes in received commercial accounts.

C-SALES: Net cash flows from product sales minus the change in accounts receivable from sales of businesses acquired.

C-COGS: Cash flow from cost of goods sold Cost of goods sold plus the change in inventory minus changes in accounts payable and acquired.

C-OTHER: Cash flow from operating cash flow and other items of income and expense net of estimated cash flows, including cash flows from other parts of the net cash flow from sales and cost of goods sold is calculated.

μ_t: error of model for period t

β: coefficient for explanatory variables

In order to test H3, the R^2 coefficients (power of explanation) of the first and second models were used. More this coefficient will be, more the model can explain. That is, it is a strong explanatory model and the independent variable(s) will be able to dependent variable much better.

Statistical population and sampling:

- ***Statistical population:***

The population includes all of accepted companies in Tehran stock exchange were accepted before 2001 and the study followed a 10 year period research from 2001-2010.

- ***statistical population:***

In the present research, the purposeful cconvenient sampling method used to select the research samples. In convenient sampling method those population samples are chosen that are in accordance with the researcher special criterion or criteria. In the present research the following conditions are considered in selecting sampling from the population:

1. Companies must have been accepted in Tehran stock until the end of March 2000 and their financial year was related to end of March.
2. Companies had not to change their financial year during the considered periods. The related company had to a continuous activity during the research and its stock has been transacted.
3. The needed financial information for doing this research within years 2001 to 2010 have to be available.
4. The company needs not to be an investment and financial intermediation company.

After regarding these conditions, 70 firms from among accepted companies in Tehran stock were selected and studied.

The data collection and processing:

The data relevant to the research variables were gathered from financial statements and notes to the accepted companies in Tehran stock as well as referring to publish journals, Tadbir Pardaz soft ware, and web site and library of the stock exchange. The collected data first were stored in form of regular time series in form of databases. Then, through transferring the data into EXCEL and Eviews software, the data were analyzed.

Test of hypotheses:

The descriptive statistics shows values of mean and standard deviation. Knowing about descriptive statistics contributes to understanding the mean of data, the correlation between

them as well as relative assessment of distribution of variables. In this part, the most important descriptive statistics related to the variables were explained.
Table 1 shows the result.

Table 1: descriptive statists of variables in the study period

Cash flow from other operating cash flow items	Cash flow from cost of sales	Cash flow from sale of goods	Operating cash flow	
C-OTHER	C-COGS	C-SALES	CFO	symbol
8102	50168	676443	182864	mean
-8538	18259	237372	32663	median
1508328	646654	7068542	2743928	maximum
-667832	-2825	3806	-146796	minimum
216571	92841	1156315	411183	Standard deviation
3.827	3.692	3.057	3.370	skewdness
26.711	17.880	12.927	15.567	skewdness
6000	2667	1313	1965	Jarkobra statistic
0.195	0.087	0.072	0.080	Possibility of jarkobra statistic

Table 1 indicates that the mean of operative cash flow (CFO) equals with 182864, mean of cash flow from selling is 676443, average cost of sales resulting from cash flows equals 50168 and average cash flow from other income and expense items is 8102.
Among the major variables in two models, C-OTHER has the lowest mean and cash flow from cost of sales holds the lowest standard deviation and C-SALES has the highest mean and standard deviation.
Jarkobra statistic with K-square distribution and degree of freedom 2, evaluates the hypotheses (the distribution is normal: H0, the distribution is not normal: H1). According to this statistic the H0 was not rejected for all of variables therefore the distribution is normal.

- *study of correlation among research variables:*

The correlation coefficient shows the degree and type (direct or inverse) of relationship and computes as square root of coefficient of determination. Thus, correlation coefficient can be either positive or negative and range from -1 to +1. The correlation among the research variables are presented in Table 2.

Table 2: correlation among the research variables

Cash flow from other operating cash flow items	Cash flow from cost of sales	Cash flow from sale of goods	Operating cash flow t+1	Operating cash flow	
0.253	0.643	0.824	0.881	1	Operative cash flow
0.162	0.559	0.732	1	0.881	Operative cash flowt+1
0.275	0.945	1	0.732	0.824	Cash flow from sale of goods
0.464	1	0.945	0.559	0.643	Cash flow from cost of sales
1	0.464	0.275	0.162	0.253	Cash flow from other operating cash flow items

The correlation results between variables show that a strong and positive correlation, 0.881, between operative cash flow of a period later (CFOt+1) and current operative cash flow (CFOt). The highest correlation, 0.945, is also between cash flow from sale of goods with cash flow from

cost of sales (0.94). additionally, the correlation between CFOt+1 with CFOt is 0.732 which is greater than CFOt+1 with cash flow from current period sales cost, 0.559 that this also is higher than correlation between other items of income and expense and cash flow from current period 0.162. Therefore, the correlation between COFt+1 with CFOt exceeds its correlation with components of CFOt correlation. The findings thus, indicate that the correlation between CFOt with its components in the current period is greater than the correlation between CFOt+1 with its components in the current period.

Reliability of the research variables:

The results of the research variables are presented in tables 3 to 6. According to Unit Root Tests of the Levin, Lin , Chu,Im, Pesaran and Shin, since P-Value was smaller than 5% all of the independent and dependent variables were in reliable level. That is, the mean and variance for variables during the time as well as the variables covariance were constant during different years.

Table 3: reliability of CFO

Panel Unit Root Test				
Sample: 2001-2010				
No. of total observations	No. of Companis	Sig.	statistic	method
H0: presence of unit root				
700	70	0.0289	-5.13176	Levin, Lin & Chu
700	70	0.0496	8.43880	Im, Pesaran & Shin

Table 4: Reliability of cash flow from sale

Panel Unit Root Test				
Sample: 2001-2010				
No. of total observations	No. of Companis	Sig.	statistic	method
H0: presence of unit root				
700	70	0.0398	5.31851	Levin, Lin & Chu
700	70	0.0327	9.75816	Im, Pesaran & Shin

Table 5: Reliability of cash flows arising from the cost of sales

Panel Unit Root Test				
Sample: 2001-2010				
No. of total observations	No. of Companis	Sig.	statistic	method
H0: presence of unit root				
700	70	0.0451	5.33421	Levin, Lin & Chu
700	70	0.0391	8.46753	Im, Pesaran & Shin

Table 6: Reliability of current period cash flow of other items of income and expense

Panel Unit Root Test				
Sample: 2001-2010				
No. of total observations	No. of Companis	Sig.	statistic	method
H0: presence of unit root				
700	70	0.0000	-7.94226	Levin, Lin & Chu
700	70	0.0194	-2.06536	Im, Pesaran & Shin

Table 7: results of regression for model 1

Dependent variable: OCFt+1
Method: Least squares panel

Sample: 2000-2010				
No. of companies: 70				
Total observation: 700				
$CFO_{t+1}=\alpha+\beta CFO_t+\mu_t$				
Sig.	statistic t	Sd.	coefficients	
0.0455	1.924752	15872.37	30550.37	α
0.0000	28.24706	0.035335	0.998099	β
797.8964	statistic F		0.776242	Coefficient of determination(R^2)
0.000000	Sig of F		0.775269	Modified coefficient of determination (R^2)
			2.219324	Durbin-Watson statistic

The obtained results of regression are reliable only when the fitted regression is significant totally. To make the regression significant the variance analysis (F test) was used. According to the data in Table 7, since the level of significance (0.000) is lower than 0.05, therefore, it can be said that the index of goodness of fit model. That is F statistic is significant and therefore the regression is significant. The statistical significance means that the computed correlation with certain level of confidence differs from zero. If the computed correlation coefficient varies insignificantly with zero, it can be hypothesized that there is no correlation between the variables or the selected sample size is not large enough to show this correlation. Overall, it was observed that the regression model is possible to estimate.

To test the independency of data, Durbin –Watson statistic was used. In general, Durbin-Watson test measures series correlation among regression residues. In present model, value of this statistic equals 2.219 which shows there is no correlation among consecutive residues. Coefficient of determination represents rate of changes in the dependent variable can be explained by regression. In fact, it is a criterion for strength of the linear relation and equals to amount of explained changes by the model to total changes. As much it closes to 1, the relationship between dependent and independent variables will be stronger.

As Table 7 shows, coefficient of determination equals 0.766 and moderated coefficient of determination is 0.775. Coefficient of determination indicates that about 77% of dependent variable changes (CFOt+1) can be explained with the independent variable (CFOt). Also, through the independent variable, ooperating cash flow data for the current period, 77% of CFOt+1 can be predicted. Notice that when it is said that the calculated correlation coefficient is statistically significant it means; logically a real correlation exists among variables. For instance, if correlation is meaningful in 0.01, we conclude that with one percent of probability, the computed correlation is due to sampling errors.

According to the resulted, the values of level of significance (p-value) shows that each coefficient of β equals zero. To be a significant coefficient, it was compared with 0.05 level of significance. If this probability is lower than 0.05, it is deduced that the coefficient is meaningful. Based on Table 7, β is significant and positive, thus there is a positive and meaningful correlation between CFOt and CFOt+1. It should be said that regression coefficient result (0.998) tells the relation is good enough. This indicates that higher CFOt, higher CFOt+1 will be.

Therefore, the first hypothesis was approved. That is operative cash flow based on previous operative cash flows are predictable.

The second model:

$$CFO_{t+1} = \alpha + \beta_1 C\text{-}SALES_t + \beta_2 C\text{-}COGS_t + \beta_3 C\text{-}OTHER_t + \mu_t$$

Test of second hypothesis:

This hypothesis states that operative cash flow based on segments of operative cash flow of previous period is predictable.

In order to test the second hypothesis, the second model, forecasting CFO model by use of components of CFO and time series regression occurred.

The second model:

$$CFO_{t+1} = \alpha + \beta_1 C\text{-}SALES_t + \beta_2 C\text{-}COGS_t + \beta_3 C\text{-}OTHER_t + \mu_t$$

The results of regression are shown in table 8.

Table 8: results of regression related to the second model

Dependent variable : CFOt+1				
Method: least squares panel				
Sample: 2000-2010				
No. of companies: 70				
Total observations: 700				
$CFO_{t+1}=\alpha+\beta_1 C\text{-}SALES_t+\beta_2 C\text{-}COGS_t+\beta_3 C\text{-}OTHER_t+\mu_t$				
Sig.	Statistic t	Sd.	coefficient	
0.0382	1.487633	16839.66	25051.23	α
0.0000	21.77952	0.045975	1.001308	β_1
0.0000	-15.91623	0.621351	-9.889576	β_2
0.0000	9.270899	0.090924	0.842944	β_3
270.3675	Statistic F		0.780580	(R^2)
0.000000	Sig. of F		0.777693	Moderated R^2
			2.312227	Durbin-Watson statistic

For significance of regression, the regression analysis (Test F) was used. Based on the data on Table 8, since the level of significance (0.000) was smaller than 0.05, therefore, it can be said that the goodness of fit of the model index of model, statistic F is meaningful and consequently the regression is significant. Statistical significance sounds that the computed correlation, with certain degree of confidence differs from zero. It was observed that in general, the regression equation is computable. To test independency of the data, the Durbin –Watson statistic was used. In fact, the Durbin-Watson test measures series correlation among regression residues. In this model the value of the statistic is 2.31 that show no correlation exists among consecutive residues.

According to Table 8, coefficient of determination equals 0.781 and the moderated coefficient of determination 0.778. the moderated coefficient of determination explained approximately 78% of the dependent variable changes (CFOt+1) through the independent variables (Operating cash flow from current period sales, cost of sales of current period operating cash flow and cash flow from operations Other income and expenses of the current period) and the independent

variables, the data of period operating cash flow, the company can predict 78% of CFOt+1 changes.

As Table 8 shows, the coefficients of β are significant and these coefficient is positive for operating cash flow from the sale of the current period and cash flow from operations other income and expenses of the current period and negative for operating cash flow from costs of sales of the current period. therefore, there is a positive and strong correlation between operative cash flow raised from sales of the current period and operative cash flow from other incomes as well as costs of the current period with operative cash flow of next year and a negative and significant correlation between operative cash flow from cost of sales of the current period with operative cash flow of the next year. It should be said that considering the regression coefficients (0.843-9.889 and 1.001) the relation is proper. Thus, the second hypothesis is confirmed. That is operative cash flow based on segments of operative cash flow of the previous period is predictable.

Test of the third hypothesis:

The third hypothesis is proposed as:

The forecasting model according to the components of operating cash flows of prior periods compared to the forecasting model based on operating cash flows of prior periods can appropriately estimate the cash flow. To test the third hypothesis, R^2 coefficient (explanatory power) of the mentioned first and second models was used. Higher this coefficient is it means that explanation power of model is great and the independent variable(s) can explain the dependent variables accordingly. A comparison of Tables 7 and 8 indicate that the two moderated coefficients of models are equal (0.77). This indicates that CFOt and the components explain or forecast equally CFOt+1. As a result, there is not a statistically significant variance between power and accuracy of CFOt and its components forecasting. Consequently, the third hypothesis is rejected. It shows that power of forecasting of the model of CFO based on current period cash flow and its components equally can explain or forecast CFOt+1. Therefore, statistically a significant difference is present between power and accuracy of forecasting CFOt and its components. As a result, the third hypothesis was rejected. That is, the power of more precise estimation of CFO of the forecasting model according to components of the operating cash flow of prior periods was not larger than forecasting model of operating cash flow of prior periods and they are relatively the same.

CONCLUSION:

In the present research the effect of components of financial statements on CFO with emphasis on accruals in the accepted companies of Tehran stock exchange were assessed. The used variables used in the study were derived from the financial statements of the accepted firms in Tehran stock within years 2001-2010. In this paper, the hypotheses were evaluated and tested in form of two models. The descriptive statistic indicated that the mean of CFO equals 182864, mean of average cash flow from sales is 676443, mean of cash flow from cost of sales equals 50168 and mean of cash flow from other income is 8102. Among the major variables in two models, the C-OTHER has the lowest mean and cash flow from cost of sales has the smallest standard deviation and finally the C-SALES has the highest mean and standard deviation.

The results of correlation between the study variables showed that a strong and positive correlation (0.881) exists between CFOt+1 and CFOt. The highest correlation is between cash

flow from cost of sales and cash flow from sale (0.945). Also, the correlation between CFOt+1 with cash flow from current period sales is 0.732 and greater than cash flow from current period sales cost correlation (0.559) which is larger than correlation with cash flow from other items of income and the cost of the current period (0.162) either. As a result, correlation between CFOt+1 with CFOt exceed correlation with components of CFOt.

The results also suggest that the correlation between current period operating cash flow (CFOt) and its components in the current period is greater than operational cash flow of next period(CFOt+1) with its components in the current period. The results showed that the reliability of the dependent variables and independent variables in the study were stable during the study period. Reliability means that the mean and variance of variables and covariance of parameters were constant over time. The first hypothesis test results (operating cash flow is predictable based on operating cash flow of prior periods) showed total fitted regression is significant.

Test of the data independency in the fitted model for the first hypothesis showed that there is no correlation between successive residues. Coefficient of determination of the model equals to 0.776 and the adjusted coefficient of determination is 0.775. The coefficient of determination showed that almost 77 per cent of the variation in the dependent variable (operating cash flow of next year) could be explained by the independent variable (current period operating cash flow). And the independent variable, data from the company's operating cash flow during the current period, 77 percent of changes, operating cash flow of next year can be estimated. Coefficients in the model were significant and positive; therefore, operating cash flow of current year and operating cash flow next year were all significant and positive. This shows that how much operating cash flow of current year is larger operating cash flow of next year will be higher too. Consequently, the first hypothesis was confirmed that operating cash flow on the basis of the operating cash flow of prior periods is predictable.

Test of the second hypothesis (operating cash flow is foreseeable based on sections of operating cash flow of prior period.) showed that the fitted regression is meaningful for this hypothesis. Test of the data independency in the second hypothesis indicated that there is no correlation between successive residues. In this model, the coefficient of determination was 0.781, and the adjusted coefficient of determination 0.778.

Moderated coefficient of determination showed that almost 78 percent of the variation in the dependent variable (operating cash flow of next year) can be explained by the independent variables (operating cash flow from current period sales, cost of sales, operating cash flow of the current period, cash flow of other income and cost of current period). And the independent variable that is, the data of components of operating cash flows of the current period can estimate 78 per cent of changes in operating cash flow of the next year.

The coefficients of model were meaningful and they were positive for operating cash flow of sales of current period, operating cash flow of other incomes and costs of the current period. However, they were negative for operating cash flow of cost of sales during current period. Therefore, there is a positive and meaningful correlation between operating cash flow of sales in current period, operating cash flow of other incomes and current period costs with operating cash flow of the next year. Although, a negative and meaningful correlation exists between operating cash flow of costs of sales in the current period with operating cash flow of the next

year. Finally, the second hypothesis was approved. That is, operating cash flow is predictable based on components of operating cash flow of prior periods.

Test of the third hypothesis (forecasting model based on components of operating cash flow of prior periods in comparison to forecasting model on the basis of operating cash flow of prior periods is more powerful in estimation of operating cash flow) showed that moderated coefficient of determination of both model is equal (0.77). This indicates that cash flow of current period and its components explain and predict operating cash flow of next year equally. Thus statistically no meaningful difference is between power and accuracy of forecasting operating cash flow of current period and its components.

Eventually, the third hypothesis was rejected. This means, power of precise estimation of operating cash flow of the forecasting model based on components of operating cash flow of prior periods does not exceed the forecasting model based on operating cash flow of prior periods and they are relatively equal.

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