

THE ASSOCIATION BETWEEN COMPONENTS OF INCOME STATEMENT, COMPONENTS OF CASH FLOW STATEMENT AND STOCK RETURNS

Mohsen Dastgir, Hossien S. Sajadi, Omid M. Akhgar

Abstract

This paper investigates the association between components of income statement, components of cash flow statement and stock returns. A sample of 65 companies listed in Tehran Stock Exchange for the time period of 2003-2005. Regression analysis is conducted to test the research hypotheses. Results show that among components of income statements, the net income (loss), and among components of cash flow statement, cash flows from investing activities have a strong relationship with stock returns. However, the paper results show that there is a stronger association between stock returns and components of income statements relative to components of cash flows statement.

Introduction

The main purpose of financial reporting is to state the enterprise's financial position and performance to the users of financial information to help them in their decision making. Main instruments for transferring such information to the user groups are financial statements and supplemented notes which are the final product of accounting process and financial reporting

The income statement is a basic source of information for investment and other related decisions. Income measurement has always been a challenge for accounting standard setting bodies. In order to assess the future income and cash flows, investors rely on income reported. However, the components of income reported must be presented fairly and accurately. The cash flow statement, include important information about cash flows from various activities. Cash generated from operating activities and other sources is consumed for performing operation, paying dividends, repaying debts, etc. Cash inflows and outflows in any enterprise is the result of management decisions related to short-term and long-term operational plans, financing and investment plans.

The income statement and cash flow statement are two means of providing important information about firm's performance. Investors and other user groups extensively rely on the information that is disclosed in these two financial statements.

In this research, we investigate the association strength of the components of income statement and cash flow statement with stock returns.

Previous studies

Bernard and Stober (1989) investigate the nature and amount of information in cash flows and accruals. They find no

evidence that stock prices respond in a systematic manner to release of information about the cash flow and accrual components of earnings and guess that the information content of these two components of earnings may not be systematically different.

Watson and Wells (2005) study the association between various earnings and cash flows measures of firm performance and stock returns in Australian Stock Exchange. They report that for profit making firms, earning based performance measures are found to be more closely associated with stock returns than cash flow based measures. However, for loss making firms, they find that neither earning nor cash flow based measures capture firm performance well.

Livnat and Santicchia (2006) test the association between cash flows, accruals and future returns. They find that, future quarterly earnings are more highly associated with current net operating cash flows than with accruals because accruals have less persistence and companies with extremely high (low) current quarterly accruals have significant and negative (positive) abnormal returns.

Rayburn (1986) investigates the association of operating cash flow and accruals with security returns. The results of his research support the association of both operating cash flow and aggregate accruals with abnormal returns.

Dechow (1994) studies the accounting earnings and cash flows as measures of firm performance. She finds that, both operating cash flows and accruals have incremental information content over each other and they are priced differently by the market.

Bown et al. (1986) report low correlation between percentage changes in alternative measures of cash flow and both percentage changes in earnings and percentage changes in traditional cash flow.

Sloan (1996) investigates whether stock prices reflect information about future earnings contained in the accrual and cash flow components of current earnings. He finds that, stock prices do not reflect fully information contained in the accrual and cash flow components of current earnings until that information impacts future earnings.

Wilson (1986) examines the relative information content of accruals and cash flows. He defines funds and accruals as cash from operations and total accruals, respectively and reports that these parameters are both significantly different from zero and from each other. This result indicates that these components of earnings have incremental information content beyond earnings and beyond each other. In particular, the non-cash component of earnings has incremental information content beyond the cash component. Wilson (1987) in another research studies the incremental information content of the accrual and funds components of earnings after controlling for earnings and finds that, at least one of these components has information content and after controlling for earnings, incremental information about the cash and non-cash components of earnings is precisely the same.

Haw et al. (2001) examine the nature of information in accruals and cash flows in an emerging capital market. Their results demonstrate that earnings have relative information content over operating cash flows and also earnings have greater persistence and predictability than operating cash flows.

Sharma and Iselin (2003) investigate the decision usefulness of reported cash flow and accrual information. They find that, judgments based on cash flow information are more accurate than judgments based on accrual information and the difference in judgment accuracy is more pronounced for insolvent (failed) companies than for solvent

(non-failed) companies. Sharma and Iselin (2003) in another research also investigate the relative relevance of cash flow and accrual information solvency assessments and find that, relative to accrual information, cash flow information enhances the accuracy of solvency assessments and cash flow information had greater relevance than accrual information for solvency judgments.

Livnat and Zarowin (1990) survey the incremental information content of cash flow components. They find that there is no incremental information content of cash flows beyond net income. However, they show that the association of cash flows with stock returns increases when earnings are disaggregated into components of cash flows from financing, investing and operating activities and accruals.

Dastgir and Saeedi (2006) study the superiority of comprehensive income to net income as a measure of firm performance. They find that, that comprehensive income is not superior to net income for evaluating firm performance on the basis of stock return and price. For the state companies, they find that, firm performance evaluation on the basis of cash flows prediction using comprehensive income is superior to net income.

Further, research findings in Ball and Brown (1968) and Beaver and Dukes (1972) indicate that earnings have a higher association with security returns than cash flows with security returns.

Variables

Dependent Variable

In this research, the depended variable is firms' stock returns (SR). We collected the required data for this variable using Sahra Software (the Iranian software).

Independent variables

We use the components of income statements and components of cash flow statement as independent variables. We use the electronic archival data provided by Tehran Stock Exchange (TSE) to collect data.

The components which we choose as components of income statements are Gross Income per share (GI), Operation Income per share (OI), Income before Tax per share (IBT) and Net Income per share (NI).

The components of cash flow statement in this study are Cash Flows from Operating Activities per share (OC), Cash Flows from Investments Returns and Income Payable for Financing Activities per share (RC), Cash Flows from Income Tax per share (TC), Cash Flows from Investing Activities per share (IC), Total Cash Flows before Financing Activities per share (CBF) and Cash Flows from Financing Activities per share (FC).¹

Hypotheses

For studying the association between components of income statements and components of cash flow statement with stock returns, we test the following hypotheses:

H_1 : Among the components of income statement, operating income has a stronger relationship with stock returns.

H_2 : Among the components of cash flow statement, the cash flows from operating

activities have a stronger relationship with stock returns.

H_3 : Components of cash flow statement have stronger association with stock returns than components of income statement.

Sample

The sample of this study is selected based on the availability of the required data for the period of 2003 to 2005. From listed companies on Tehran Stock Exchange, first those companies having available data and their year end is 21st March (Iranian fiscal year end) is selected. Then investment and brokerage companies are omitted and 65 companies randomly selected for this study. The sample of 65 companies listed in Tehran Stock Exchange for the time period of 2003-2005 is shown in the table 1.

Hypothesis Testing

In this research we test each hypothesis in four situations. In first situation we use the pooling data approach for three years and 195 firm-year observations during 2003-2005. In other three situations we use the cross-sectional approach for each year during 2003-2005. In each situation we estimate various regression models. After estimating the regressions we compare the adjusted across the various regression models.

We tried to use regression models in each situation that have the same dependentvariable.

¹ These components are based on Iran's Accounting Standards. According to Iran's Accounting Standards all firms must disclose these items in statements of cash flows.

Table 1. A Sample of Companies Listed in Tehran Stock Exchange

Industry Groups	Year 2003		Year 2004		Year 2005		Total Sample	
	No.	%	No.	%	No.	%	No.	%
Metal Mines	2	3.1	2	3.1	2	3.1	6	3.1
Other Mines	2	3.1	2	3.1	2	3.1	6	3.1
Non-metal Mines	10	15.3	9	13.8	10	15.3	29	14.9
Drugs & Chemical	8	12.3	8	12.3	7	10.8	23	11.8
Plants & Equipments	8	12.3	7	10.8	6	9.2	21	10.8
Food	8	12.3	9	13.8	8	12.3	25	12.8
Rubber & Plastic	3	4.6	3	4.6	4	6.2	10	5.1
Oil Products	2	3.1	2	3.1	2	3.1	6	3.1
Textile	3	4.6	4	6.2	5	7.7	12	6.2
Main Metals	4	6.2	4	6.2	5	7.7	13	6.7
Metal Products	2	3.1	3	4.6	3	4.6	8	4.1
Appliances & Electrics	3	4.6	4	6.2	2	3.1	9	4.6
Auto	6	9.2	5	7.7	6	9.2	17	8.6
Others	4	6.2	3	4.6	3	4.6	10	5.1
Total	65	100	65	100	65	100	195	100

H_1 Testing

To test the first hypothesis by using the pooling data, we estimate the following regression models:

$$SR_i = \alpha + \beta GI_i + \varepsilon$$

$$SR_i = \alpha + \beta OI_i + \varepsilon$$

$$SR_i = \alpha + \beta IBT_i + \varepsilon$$

$$SR_i = \alpha + \beta NI_i + \varepsilon$$

Where:

SR is stock returns, GI is gross income (loss) per share, OI is operating income (loss) per share, IBT is income (loss) before tax per share and NI is net income (loss) per share.

In order to test the first hypothesis by using the cross-sectional data, we estimate the following regressions for 2003 to 2005:

2003

$$SR_i = \alpha + \beta LOG(GI_i) + \varepsilon$$

$$SR_i = \alpha + \beta LOG(OI_i) + \varepsilon$$

$$SR_i = \alpha + \beta LOG(IBT_i) + \varepsilon$$

$$SR_i = \alpha + \beta LOG(NI_i) + \varepsilon$$

2004

$$SR_i = \alpha + \beta LOG(GI_i) + \varepsilon$$

$$SR_i = \alpha + \beta OI_i + \varepsilon$$

$$SR_i = \alpha + \beta LOG(IBT_i) + \varepsilon$$

$$SR_i = \alpha + \beta LOG(NI_i) + \varepsilon$$

2005

$$LOG(SR_i) = \alpha + \beta LOG(GI_i) + \varepsilon$$

$$LOG(SR_i) = \alpha + \beta LOG(OI_i) + \varepsilon$$

$$LOG(SR_i) = \alpha + \beta LOG(IBT_i) + \varepsilon$$

$$LOG(SR_i) = \alpha + \beta LOG(NI_i) + \varepsilon$$

H_2 Testing

For testing the second hypothesis by using the pooling data, we estimate the following regressions for 2003 to 2005:

$$SR_i = \alpha + \beta OC_i + \varepsilon$$

$$SR_i = \alpha + \beta RC_i + \varepsilon$$

$$SR_i = \alpha + \beta TC_i + \varepsilon$$

$$SR_i = \alpha + \beta IC_i + \varepsilon$$

$$SR_i = \alpha + \beta CBF_i + \varepsilon$$

$$SR_i = \alpha + \beta FC_i + \varepsilon$$

Where:

OC is cash flows from operating activities per share, RC is cash flows from investments returns and income payable for financing activities per share, TC is cash flows from income tax per share, IC is cash flows from investing activities per share, CBF is total cash flows before financing activities per share and FC is cash flows from financing activities per share.

In order to test the second hypothesis by using the cross-sectional data, we estimate the following regressions for 2003 to 2005:

2003

$$SR_i = \alpha + \beta LOG(OC_i) + \varepsilon$$

$$SR_i = \alpha + \beta LOG(RC_i) + \varepsilon$$

$$SR_i = \alpha + \beta TC_i + \varepsilon$$

$$SR_i = \alpha + \beta LOG(IC_i) + \varepsilon$$

$$SR_i = \alpha + \beta CBF_i + \varepsilon$$

$$SR_i = \alpha + \beta FC_i + \varepsilon$$

2004

$$SR_i = \alpha + \beta OC_i + \varepsilon$$

$$SR_i = \alpha + \beta RC_i + \varepsilon$$

$$SR_i = \alpha + \beta TC_i + \varepsilon$$

$$SR_i = \alpha + \beta IC_i + \varepsilon$$

$$SR_i = \alpha + \beta CBF_i + \varepsilon$$

$$SR_i = \alpha + \beta FC_i + \varepsilon$$

2005

$$LOG(SR_i) = \alpha + \beta LOG(OC_i) + \varepsilon$$

$$LOG(SR_i) = \alpha + \beta RC_i + \varepsilon$$

$$LOG(SR_i) = \alpha + \beta TC_i + \varepsilon$$

$$LOG(SR_i) = \alpha + \beta LOG(IC_i) + \varepsilon$$

$$LOG(SR_i) = \alpha + \beta LOG(CBF_i) + \varepsilon$$

$$LOG(SR_i) = \alpha + \beta FC_i + \varepsilon$$

H_3 Testing

In order to test the third hypothesis by using the pooling data, we estimate the following regressions:

$$SR_i = \alpha + \beta_1 LOG(GI_i) + \beta_2 OI_i + \beta_3 LOG(IBT_i) + \beta_4 LOG(NI_i) + \varepsilon$$

$$SR_i = \alpha + \beta_1 OC_i + \beta_2 RC_i + \beta_3 TC_i + \beta_4 IC_i + \beta_5 CBF_i + \beta_6 FC_i + \varepsilon$$

In order to test the third hypothesis by using the cross-sectional data, we estimate the following regressions for 2003 to 2005:

2003

$$SR_i = \alpha + \beta_1 GI_i + \beta_2 OI_i + \beta_3 IBT_i + \beta_4 NI_i + \varepsilon$$

$$SR_i = \alpha + \beta_1 OC_i + \beta_2 RC_i + \beta_3 TC_i + \beta_4 IC_i + \beta_5 CBF_i + \beta_6 FC_i + \varepsilon$$

2004

$$SR_i = \alpha + \beta_1 GI_i + \beta_2 OI_i + \beta_3 IBT_i + \beta_4 NI_i + \varepsilon$$

$$SR_i = \alpha + \beta_1 OC_i + \beta_2 RC_i + \beta_3 TC_i + \beta_4 IC_i + \beta_5 CBF_i + \beta_6 FC_i + \varepsilon$$

2005

$$SR_i = \alpha + \beta_1 LOG(GI_i) + \beta_2 OI_i + \beta_3 LOG(IBT_i) + \beta_4 LOG(NI_i) + \varepsilon$$

$$SR_i = \alpha + \beta_1 LOG(OC_i) + \beta_2 RC_i + \beta_3 TC_i + \beta_4 IC_i + \beta_5 CBF_i + \beta_6 FC_i + \varepsilon$$

The Results of Hypotheses Testing

In this section we present the findings of testing research hypotheses. The following

subsections provide the results of hypotheses testing in four situations.

A) First Hypothesis

a) The results of testing by using the pooling data approach

The results of the estimating the models related to this hypothesis are shown in table (2). As shown in the table, the P-values of all T-statistics of all variables are significant. The P-values of all F-statistics for all models are significant too and show that, all models are significant in general. The adjusted R^2 of models are 0.198, 0.290, 0.289 and 0.344 respectively. By comparison of adjusted R^2 of models, it is obvious that Net Income (Loss) variable has a stronger relationship with stock returns.

However, the results of estimating these models do not show that, among components of income statements, operation income (loss) has a stronger relationship with stock returns.

Table 2. The results of H_1 testing by using the pooling data approach.

Variable	\bar{R}^2	F-statistic (Prob)	T-statistic (Prob)	Coefficient	C (Prob)	DW
GI	0.198	48.951 (0.000)	5.280 (0.000)	0.011	18.097 (0.000)	1.980
OI	0.290	80.173 (0.000)	8.198 (0.000)	0.015	20.054 (0.000)	2.004
IBT	0.289	79.794 (0.000)	6.911 (0.000)	0.014	22.090 (0.000)	1.981
NI	0.344	102.551 (0.000)	8.027 (0.000)	0.017	22.437 (0.000)	1.977

b) The results of testing by using the cross-sectional approach

The results of the estimating the models related to this hypothesis for year 2003 are shown in table (3). As shown in the table, except the GI variable, the P-value of all

T-statistics of all variables are significant. The P-values of F-statistics for all models, except the GI variable, are significant too and show that, these models are significant in general. The adjusted R^2 of models are 0.036, 0.153, 0.093 and 0.100 respectively. By comparison of adjusted R^2 of models, it is obvious that Operation Income (Loss) variable has a stronger relationship with stock returns.

However, the results of estimating these models show that, among components of income statements, operation income (loss) has a stronger relationship with stock returns.

Table 3. The results of H_1 testing by using the cross-sectional approach-year 2003

Variable	\bar{R}^2	F-statistic (Prob)	T-statistic (Prob)	Coefficient	C (Prob)	DW
LOG (GI)	0.036	3.307 (0.074)	1.819 (0.074)	25.874	-125.749 (0.225)	1.928
LOG (OI)	0.153	10.965 (0.002)	3.311 (0.002)	44.105	-251.960 (0.009)	2.083
LOG (IBT)	0.093	6.663 (0.013)	2.581 (0.013)	39.460	-146.039 (0.083)	1.873
LOG (NI)	0.100	7.125 (0.010)	2.669 (0.010)	31.405	-147.347 (0.073)	1.854

The results of the estimating the models related to first hypothesis for year 2004 are shown in table (4). As shown in the table, the P-values of all T-statistics of all variables are significant. The P-values of all F-statistics for all models are significant too and show that, these models are significant in general. The adjusted R^2 of models are 0.049, 0.079, 0.164 and 0.172 respectively. By comparison of adjusted R^2 of models, it is obvious that Net Income (Loss) variable has a stronger relationship with stock returns.

However, the results of estimating these models do not show that, among components of income statement, operation income

(loss) has a stronger relationship with stock returns.

Table 4. The results of H_1 testing by using the cross-sectional approach-year 2004

Variable	\bar{R}^2	F-statistic (Prob)	T-statistic (Prob)	Coefficient	C (Prob)	DW
LOG (GI)	0.049	3.945 (0.051)	2.663 (0.010)	15.646	-68.875 (0.078)	1.818
OI	0.079	6.501 (0.013)	2.550 (0.013)	0.013	25.935 (0.003)	1.810
LOG (IBT)	0.164	10.188 (0.003)	3.463 (0.001)	26.058	-130.114 (0.008)	1.640
LOG (NI)	0.172	10.954 (0.002)	3.511 (0.001)	26.393	-127.840 (0.007)	1.602

The results of the estimating the models related to first hypothesis for year 2005 are shown in table (5). As shown in the table, the P-values of all T-statistics of all variables are significant. The P-values of all F-statistics of all models are significant too and show that, these models are significant in general. The adjusted of R^2 models are 0.123, 0.089, 0.085 and 0.073 respectively. By comparison of adjusted of R^2 models, it is obvious that Gross Income (Loss) variable has a stronger relationship with stock returns.

However, the results of estimating these models do not show that, among components of income statements, operation income (loss) has a stronger relationship with stock returns.

Table 5. The results of H_1 testing by using the cross-sectional approach-year 2005

Variable	\bar{R}^2	F-statistic (Prob)	T-statistic (Prob)	Coefficient	C (Prob)	DW
LOG (GI)	0.123	6.872 (0.012)	-6.583 (0.000)	-0.287	5.865 (0.000)	2.351
LOG (OI)	0.089	5.021 (0.031)	-4.679 (0.000)	-0.265	5.624 (0.000)	2.399
LOG (IBT)	0.085	4.819 (0.034)	-3.740 (0.000)	-0.245	5.454 (0.000)	2.480
LOG (NI)	0.073	4.211 (0.047)	-3.219 (0.003)	-0.236	5.352 (0.000)	2.467

B) Second Hypothesis

a) The results of H_2 testing by using the pooling data approach

The results of the estimating the models related to this hypothesis are shown in table (6). As shown in the table, the P-values of T-statistics of OC, RC and IC variables are significant. The P-values of all F-statistics for all models are significant too and show that, all models are significant in general. The adjusted R^2 of models are 0.104, 0.107, 0.075, 0.149, 0.121 and 0.109 respectively. By comparison of adjusted R^2 of models, it is obvious that cash flows from investing activities (IC) variable have a stronger relationship with stock returns.

However, the results of estimating these models do not show that, among components of statements of cash flows, the cash flows from operating activities have a stronger relationship with stock returns.

Table 6. The results of H_2 testing by using the pooling data approach

Variable	\bar{R}^2	F-statistic (Prob)	T-statistic (Prob)	Coefficient	C (Prob)	DW
OC	0.104	23.424 (0.000)	4.406 (0.000)	0.005	31.049 (0.000)	1.899
RC	0.107	24.357 (0.000)	-2.990 (0.003)	-0.014	27.454 (0.000)	1.876
TC	0.075	16.773 (0.000)	-1.147 (0.253)	-0.007	33.649 (0.000)	1.889
IC	0.149	34.907 (0.000)	-2.647 (0.009)	-0.012	31.114 (0.000)	1.941
CBF	0.121	27.598 (0.000)	-0.908 (0.365)	-0.002	35.718 (0.000)	1.870
FC	0.109	24.742 (0.000)	0.191 (0.849)	0.001	35.898 (0.000)	1.866

b) The results of H_2 testing by using the cross-sectional approach

The results of the estimating the models related to this hypothesis for year 2003 are shown in table (7). As shown in the

table, only the P-value of T-statistic of OC is significant and only the P-value of F-statistic for this model is significant and shows that, only this model is significant in general. The adjusted R^2 of models are 0.189, 0.095, 0.006, 0.070, 0.008 and 0.029 respectively. By comparison of adjusted R^2 of models, it is obvious that cash flows from operating activities variable have a stronger relationship with stock returns.

However, the results of estimating these models show that, among components of cash flow statement, the cash flows from operating activities have a stronger relationship with stock returns.

Table 7. The results of H_2 testing by using the cross-sectional approach-year 2003

Variable	\bar{R}^2	F-statistic (Prob)	T-statistic (Prob)	Coefficient	C (Prob)	DW
Log (OC)	0.189	11.951 (0.001)	3.457 (0.001)	50.539	-292.149 (0.006)	1.919
Log (RC)	0.095	1.824 (0.217)	1.357 (0.217)	15.857	-12.494 (0.848)	2.079
TC	0.006	0.346 (0.559)	-0.588 (0.559)	-0.021	58.677 (0.002)	1.778
Log (IC)	0.070	2.423 (0.137)	1.557 (0.137)	23.081	-83.278 (0.356)	0.756
CBF	0.008	1.490 (0.227)	-1.221 (0.227)	-0.015	56.161 (0.001)	1.765
FC	0.029	2.886 (0.094)	1.699 (0.094)	0.022	50.239 (0.006)	1.780

The results of the estimating the models related to second hypothesis for year 2004 are shown in table (8). As shown in the table, only the P-value of T-statistic of OC is significant and only the P-value of F-statistic for this model is significant and shows that, only this model is significant in general. The adjusted R^2 of models are 0.107, 0.009, 0.006, 0.009, 0.011 and 0.005 respectively. By comparison of adjusted R^2 of models, it is obvious that cash flows from

operating activities variable have a stronger relationship with stock returns.

However, the results of estimating these models show that, among components of cash flow statement, the cash flows from operating activities have a stronger relationship with stock returns.

Table 8. The results of H_2 testing by using the cross-sectional approach-year 2004

Variable	\bar{R}^2	F-statistic (Prob)	T-statistic (Prob)	Coefficient	C (Prob)	DW
OC	0.107	8.709 (0.004)	2.721 (0.008)	0.016	23.868 (0.000)	1.848
RC	0.009	0.948 (0.334)	-0.980 (0.331)	-0.011	30.990 (0.001)	1.696
TC	0.006	0.637 (0.428)	-1.045 (0.300)	-0.019	33.466 (0.000)	1.675
IC	0.009	0.227 (0.636)	-0.478 (0.434)	-0.003	36.395 (0.000)	1.671
CBF	0.011	1.705 (0.196)	1.774 (0.081)	0.006	41.404 (0.000)	1.755
FC	0.005	1.351 (0.249)	-1.705 (0.093)	-0.005	40.915 (0.000)	1.738

The results of the estimating the models related to second hypothesis for year 2005 are shown in table (9). As shown in the table, only the P-value of T-statistic of CBF is significant and only the P-value of F-statistic for this model is significant and shows that, only this model is significant in general. The adjusted R^2 of models are 0.064, 0.009, 0.009, 0.729, 0.498 and 0.010 respectively. By comparison of adjusted R^2 of models, it is obvious that cash flows from investing activities variable have a stronger relationship with stock returns.

However, the results of estimating these models do not show that, among components of cash flow statement, the cash flows from operating activities have a stronger relationship with stock returns.

Table 9. The results of H_2 testing by using the cross-sectional approach-year 2005

Variable	\bar{R}^2	F-statistic. (Prob)	T-statistic (Prob)	Coefficient	C (Prob)	DW
Log (OC)	0.064	3.672 (0.063)	-1.916 (0.063)	-0.194	5.081 (0.000)	2.398
RC	0.009	1.384 (0.246)	1.176 (0.246)	0.001	3.999 (0.001)	2.366
TC	0.009	1.373 (0.248)	1.522 (0.135)	0.001	3.938 (0.000)	2.326
Log (IC)	0.729	9.058 (0.095)	-4.131 (0.054)	-0.752	7.790 (0.000)	0.435
Log (CBF)	0.498	14.878 (0.002)	-4.531 (0.001)	-0.419	6.307 (0.000)	1.205
FC	0.010	0.561 (0.458)	0.811 (0.422)	0.001	3.701 (0.000)	2.266

C) Third Hypothesis

In order to test this hypothesis we estimate two regression models. The first model is related to components of income statements and second is related to components of cash flow statement.

a) The results of testing by using the pooling data approach

The results of estimating the models related to this hypothesis are shown in first pair-columns in table (10). As shown in table, in first model, the P-values of T-statistics of all coefficients are significant. In second model, except β_6 , the P-values of T-statistics of all coefficients are significant too. The F-statistics related to both models show that the models are significant in general. The adjusted R^2 of models are 0.759 and 0.192 respectively. However, this result shows that, relative to components of cash flow statement, there is a stronger association between stock returns and components of income statements.

The results of estimating the models related to this hypothesis for year 2003 are shown in second pair-columns in table (10). As shown in table(10), in first model,

the P-values of T-statistics of β_3 and β_4 are significant. In second model, the P-values of T-statistics of all coefficients are not significant. The F-statistics related to both models show that the models are not significant in general. The adjusted R^2 of models are 0.077 and 0.024 respectively. However, this result shows that, relative to components of cash flow statements, there is a stronger association between stock returns and components of income statements.

The results of estimating the models related to third hypothesis for year 2004 are shown in third pair-columns in table (10). As shown in table, in first model, only the P-value of T-statistic of β_1 is significant. In second model, the P-values of T-statistics of all coefficients are not significant. The F-statistics related to both models show that only the first model is significant in general. The adjusted R^2 of models are 0.123 and 0.100 respectively. However, this result shows that, Relative to components of cash flow statement, there is a stronger association between stock returns and components of income statements.

The results of estimating the models related to third hypothesis for year 2005 are shown in fourth pair-columns in table (10). As shown in table, in first model, the P-values of T-statistics of β_1 and β_2 are significant. In second model, only the P-value of T-statistic of β_1 is significant. The F-statistics related to both models show that only the first model is significant in general. The adjusted R^2 of models are 0.156 and 0.067 respectively. However, this result shows that, relative to components of statements of cash flows, there is a stronger association between stock returns and components of income statements.

Table 10. The results of H_3 testing

	Pooling Data		Cross-sectional 2003		Cross-sectional 2004		Cross-sectional 2005	
	1st model	2nd model	1st model	2nd model	1st model	2nd model	1st model	2nd model
\bar{R}^2	0.759	0.192	0.077	0.024	0.123	0.100	0.156	0.067
F-statistic (Prob)	125.448 (0.000)	8.661 (0.000)	2.340 (0.065)	1.267 (0.287)	3.241 (0.018)	2.179 (0.058)	3.497 (0.014)	1.604 (0.103)
β_1 T-statistic (Prob)	-48.713 -10.571 (0.000)	-894.68 -2.497 (0.013)	0.035 1.214 (0.230)	-956.22 -0.412 (0.682)	-0.020 -0.237 (0.029)	-1036.6 -0.863 (0.392)	-42.302 -2.812 (0.007)	-36.386 -2.562 (0.014)
β_2 T-statistic (Prob)	0.032 18.798 (0.000)	-894.69 -2.497 (0.013)	-0.080 -1.359 (0.179)	-956.27 -0.412 (0.682)	0.005 0.204 (0.839)	-1036.6 -0.863 (0.392)	0.032 3.368 (0.001)	0.028 0.765 (0.448)
β_3 T-statistic (Prob)	-97.539 -4.741 (0.000)	-894.66 -2.497 (0.013)	0.241 2.349 (0.022)	-956.20 -0.412 (0.682)	-0.013 -0.195 (0.846)	-1036.6 -0.863 (0.392)	-311.83 -1.875 (0.067)	-0.069 -1.236 (0.223)
β_4 T-statistic (Prob)	111.510 5.312 (0.000)	-894.69 -2.497 (0.013)	-0.217 -0.162 (0.035)	-956.23 -0.412 (0.682)	0.044 0.684 (0.497)	-1036.7 -0.863 (0.392)	316.603 1.918 (0.061)	-0.024 -0.918 (0.363)
β_5 T-statistic (Prob)	-	894.672 2.497 (0.013)	-	956.26 0.412 (0.682)	-	1036.7 0.863 (0.391)	-	0.004 0.235 (0.815)
β_6 T-statistic (Prob)	-	-0.007 -0.962 (0.337)	-	0.059 1.519 (0.134)	-	0.033 1.416 (0.162)	-	-0.002 -0.048 (0.962)
C (Prob)	276.320 (0.000)	26.354 (0.000)	30.005 (0.155)	22.042 (0.352)	43.007 (0.000)	29.681 (0.001)	334.49 (0.000)	288.72 (0.001)
DW	2.082	1.890	1.975	1.758	1.847	1.984	1.822	2.285

Conclusions

In this paper, the association between components of income statements and components of cash flow statement and stock returns has been investigated.

Income statements provide information about gross income (loss), operation income (loss), income (loss) before tax and net income (loss). The results of testing first hypothesis show that, investors and other users of financial statements concentrate more on net income (loss).

Cash flow statement provide information about cash flows from various activities. The results of testing second hypothesis show that, investors and other users of financial statements have more interest to information related to cash flows from investing activities. In other hand, when they use information in cash flow statement, they concentrate more on investing activities.

The results of testing third hypothesis show that, components of income statements have a stronger association with stock returns. This result is compatible with those of Watson and Wells (2005), Haw et al. (2001), Rayburn (1986), Bown et al.

(1986), Wilson (1986), Ball and Brown (1968), Beaver and Dukes (1972), Livnat and Zarowin (1990) and incompatible with Livnat and Santicchia (2006) and Sharma and Iselin (2003).

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