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Investors' Reaction to Managerial Discretion over Accruals: The Case of Jordanian Firms

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ABSTRACT

This paper investigates the difference in the ability of accruals (both discretionary and nondiscretionary), as indicators of earnings quality, and cash flows from operations in measuring firm value. This issue is associated with the motivation of management to record high accruals for either signaling or for opportunistic purposes. The study covers all Jordanian manufacturing firms listed in both the first and the second markets in Amman Stock Exchange for the period 1999-2003. We find that total accruals provide incremental information to investors over cash flows from operations and that Jordanian investors are fixated on net income regardless of firms' cash flows from operations. Furthermore, the relationship between discretionary accruals and return is insignificant. These results might suggest that either discretionary accruals are opportunistic and are negatively priced by the market (evidence of efficiency), or they are informative but negatively priced by the market (evidence of mispricing).

Keywords: Investors, Managerial Discretion, Accruals, Reaction.

1. INTRODUCTION

This paper investigates the difference in the ability of accruals (both discretionary and nondiscretionary), as indicators of earnings quality, and cash flows in measuring firm value. This issue is associated with the motivation of management to record high accruals for either signaling or for opportunistic purposes. If markets are efficient, there will be no information asymmetry between management and investors, and investors will be able to detect managers' motivations. Therefore, investors could price accruals recorded for the different motivations differently. If management uses accruals to signal the impact of an underlying economic event on earnings, then the increase in earnings is expected to signal good information to investors who, consequently, price this information positively (i. e. leads to an increase in security prices). If management, however, use accruals for opportunistic purposes, then the increase in accruals should not be priced, and consequently, the increase in accruals should have no impact on security prices. If the market is inefficient, however, there will be an information asymmetry between managers and investors and any information signaled by the manager about an increase in accruals might be priced negatively since investors cannot differentiate between the two motivations of managers.

Accounting accruals, defined as the difference between a firm's accounting earnings and its underlying cash flows from operations, have recently gained attention, as an important indicator of earnings quality, which is useful for equity valuation. Large positive accruals indicate that earnings are higher than the cash flows from operations generated by the firm. The difference is due mainly to accounting conventions related to the amount and timing of expenses and

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revenues (i.e. revenue recognition and matching principles). Accrual accounting, therefore, plays a superior role in mitigating the timing and matching problems over cash flows from operations and it is, therefore, an attempt to correct for the deficiency of cash basis.

Financial Accounting Standard Board (FASB) discusses this fact clearly and states that "information about enterprise earnings based on accrual accounting generally provides a better indication of enterprise's present and continuing ability to generate cash flows than information limited to the financial aspects of cash receipts and payments" (FASB: SFAC, 1978).

Dechow (1994); Loftus and Sin (1997); Guay and Sidhu (2001) and Shbaitah and Nassar (2005) confirm this fact and provide evidence that accounting accruals reduce the timing and matching problems associated with cash flows and that accruals improve earnings relative to cash flows in measuring firm performance. While cash flows suffer from the timing and matching problems, they therefore, lead to a negative effect on firm performance.

Accounting accruals reliability, however, is subject to criticism. Since, Generally Accepted Accounting Principles (GAAP) give managers the freedom in exercising discretion over accounting accruals, managerial discretion is imperfect and may yield variability in the quality and the quantity of earnings (Wild et al., 2001). Recently, researches investigating managerial discretion have moved from inspecting changes in accounting methods (e.g. change from FIFO to LIFO) to inspecting changes within accounting policies specifically accruals (e.g. delaying revenue recognition, accelerating revenue recognition, extending the life of a certain asset) (Skerratt, 2002). Dechow et al. (1996), for example, report that 55.4% of the firms subject to enforcement actions by the Securities and Exchange Commission (SEC), for alleged violations of (GAAP) during the period 1982-1992, are mainly for overstating revenues and understating expenses. Furthermore, Healy (1985); DeAnglo (1986); Defond and Jiamblavo (1994); Young (1999); and Koch and Wall (2000) suggest that, managers have incentives to choose a less transparent manner to outsiders to manager earnings, which are difficult to detect by auditors, and less expensive.

Therefore, the main issue is, whether managers employ accounting choices for opportunistic reasons or for informative (signaling) reasons (Christie and Zimmerman, 1994; Healy and Wahlen, 1999), and what is the effect of earning management on firm value. Previous literature concerning this subject is inconclusive, while Subramanyam (1996) demonstrates that, managers use discretionary accruals to reflect value-relevant information (performance signaling). Kasanen et al. (1996) provide evidence that, managers employ discretionary accruals to smooth the payments of dividends stream.

This paper is the first attempt to investigate the motivations of Jordanian managers to use accruals to signal certain information to investors: the signaling motive and the opportunistic earning management motive. Specifically, if managements employ discretionary accruals to reflect the economic value of the company and enhance the value relevance of earnings (signaling), and the market correctly prices discretionary accruals, we should expect a positive relationship between stock returns and discretionary accruals. However, if managements employ discretionary accruals for opportunistic motive (to maximize their own wealth at the expense of shareholders' wealth), and the market correctly prices discretionary accruals, we expect no relationship between stock returns and discretionary accruals. If the market is inefficient, however, we should expect a negative relationship between discretionary accruals and returns.

To test our hypotheses, the study covers all Jordanian manufacturing firms listed in both the first and the second markets in Amman Stock Exchange for the period 1999-2003. This paper is unique in the sense that it differentiates between discretionary and non discretionary accruals. In addition, it attempts to differentiate between the two motives of investors in the Jordanian market. Finally, this paper has indirectly implications to market efficiency. We find that the Jordanian market does not

price discretionary accruals, and that total accruals provide incremental information to investors over cash flows from operations. Furthermore, we find that the Jordanian investors are fixated on net income regardless of firms' cash flows.

The remainder of this paper is organized as follows. Section 2 provides a review to the literature on accruals and earning management. Section 3 introduces sample selection, and variables' measurement. Section 4 employs the methodology and research design to examine our main hypothesis. Section 5 provides the results, while the last section summarizes our findings and concludes the paper.

2. LITERATURE REVIEW

Prior studies provide evidence concerning management practices toward accounting choices, managerial opportunism associated with maximizing the manager's wealth, and managerial honest record of accruals (signaling purposes) to better reflect the impacts of underlying economic events on earnings.

Christie and Zimmerman (1994) attempt to explain managerial behavior toward accounting choices in a sample of firms that became a takeover target. They find that efficiency is more apparent than opportunism with respect to accounting choices in their target firms. Contrary to Christie, and Zimmerman (1994) findings, Lamma-Tenant and Rollins (1994) provide evidence about managerial opportunism. They find that firms tend to adopt income-increasing choices to smooth earnings (level and growth of earnings). Dechow et al. (1996) examine the motives and the market response for earning manipulations in a sample of firms that are considered by the Security and Exchange Commission as earning manipulators. Their results suggest that these firms have weak governance structure and that the market imposes substantial cost on alleged firms, when the SEC announced the firm as earnings manipulator.

Additionally, Subramanyam (1996) examines the market assessments of the changes within the accounting policy, specifically, accrual components (discretionary, and non-discretionary accruals) in the USA. He documents that discretionary accruals improve earnings quality (it explains concurrent stock price movements) and predicts future profitability and dividends changes through communicating informative information about current and future earnings. Contrary to Subramanyam (1996) results, Kasanen et al. (1996) show that managers in Finland tend to use abnormal accruals (discretionary accruals) to manage earnings to smooth the payments of dividends stream. Bernard and Skinner (1996) attributed the conflicts between Subramanyam (1996) and Kasanen et al. (1996) findings to the differences in the institutional settings between the USA and Finland.

Consistent with Subramanyam (1996), Haw et al. (2001) find that the relationship between discretionary accruals and concurrent stock prices is significantly positive. This result leads them to conclude that, managers in china use discretionary accruals to signal incremental information that reflects the real value of companies. Chung et al. (2004) also, denote that, managers in Japan employ discretionary accruals to reflect the economic value of the company and to increase the value relevance of earnings.

Dechow and Skinner (2000: 237) suggest that "future earning management studies should focus on capital market incentives since managers have become increasingly sensitive to the level of their firms' stock price and their relation to key accounting numbers such as earnings".

Fudenberg and Tirole (1995) and Weisbach (1988) have shown that for opportunistic earning management purposes, in order to maximize their own wealth and secure their jobs, managers try to record abnormal accruals, such as hiding poor performance or postponing the recognition of good performance.

Park and Park (2004) investigate the relationship between insider trading and earnings management in a sample of firms where insider selling of stocks takes place by top management. They found that managers tend to adopt positive discretionary accruals when selling their securities. Further, they found that stock prices decreased in the subsequent period of accruals manipulation as a result of market adjustments.

Shbaitah and Nassar (2005) investigate the ability of accruals accounting versus cash flows in predicting Jordanian firms' performance. They found that accounting accruals improve the ability of earnings relative to cash flows in measuring firm performance. Contrary to the results of Shbaitah and Nassar (2005), Al-khadash and Al-abbadi (2005) conclude that the cash flow model outperforms the accruals model in predicting stock returns. While Shbaitah and Nassar (2005) decompose earnings into cash flows from operations and total accruals to examine the incremental information in accruals, Al-khadash and Al-abbadi (2005) use only the accounting rate of return.

This paper complements the previous literature on earning management by looking at the motives of managers in managing their earnings for opportunistic or for signaling purposes in the Jordanian market. In addition, it complements the studies done on the Jordanian market by decomposing total accruals into its components (discretionary vs. nondiscretionary accruals) to examine the incremental information contained in them. We follow the steps of Subramanyam (1996) and Haw et al. (2001) and assume that stock returns are function only of net income. Therefore, for comparable reasons we will not control in this study for other variables.

3. SAMPLE SELECTION AND VARIABLES' MEASUREMENT

3.a. Sample Selection

The sample covers all Jordanian manufacturing firms listed in both the first and the second markets in Amman Stock Exchange for the period 1999-2003. We consider only firms listed in the first and the second markets while firms listed in the third market are excluded from the sample since the value traded for these firms is insignificant, therefore, might not reflect the economic value of these firms. Data are gathered from the annual reports for each firm. The following criteria are imposed in the selection of our sample: each firm must, (1) be listed on Amman Stock Exchange for the last five consecutive years, (2) have disclosed the required information at least for the last five consecutive years, (3) have its fiscal year end in December 31st. These criteria result in a sample of 55 firms with 275 firm-year observations.

3.b. Variables' Measurement

Annual stock returns are measured as the difference between stock price at the end of the fiscal year and the beginning of the fiscal year plus the dividend per share, scaled by the price at the beginning of fiscal year.

$$R_{j,t} = [D_{j,t} + (P_{j,t} - P_{j,t-1})] / P_{j,t-1}$$

where $R_{j,t}$ is stock return in year t for firm j; $P_{j,t}$ is stock price at the end of year t for firm j; $P_{j,t-1}$ is stock price at the beginning of year $t-1$ for firm j; $D_{j,t}$ is dividend per share in year t for firm j.

Reported earnings in the income statement are the sum of the cash flow from operations and the total accruals. Accruals are classified into discretionary accruals and non-discretionary accruals. Discretionary accruals are defined as the difference between actual accruals and estimated accruals, while actual accruals can be calculated from the financial statements as the difference between income before extraordinary items and cash flow from operation.

We will measure discretionary accruals by the cross sectional version of the modified Jones model since it has been shown that the modified Jones model is subject to fewer measurement errors and is more powerful in detecting earnings' management than other models used in the literature (see Dechow et al., 1995). Before measuring discretionary accruals, we first measure total accruals. Total accruals are measured as follows:

$$TA_{j,t} / A_{j,t-1} = \alpha (1/ A_{j,t-1}) + \alpha_1(\Delta REV_{j,t} / A_{j,t-1}) + \alpha_2 (PPE_{j,t} / A_{j,t-1}) + \varepsilon_{j,t}. \quad (1)$$

where $TA_{j,t}$ is total accruals in year t for firm j; $\Delta REV_{j,t}$ is revenues in year t less revenues in year $t-1$ for firm j; $PPE_{j,t}$ is gross property, plant, and equipment in year t for firm j; $A_{j,t-1}$ is total assets in year $t-1$ for firm j; α, α_1, and α_2 are firm specific parameters; and $\varepsilon_{j,t}$ is the error term in year t and firm j.

The estimates of firm specific parameters α, α_1, and α_2 are obtained by using ordinary least squares for each year of all firms in the industry. We include the changes

in revenue to control for non-discretionary change in working capital. To control for non-discretionary depreciation expenses, we include the level of PPE.

Second, firms' specific parameters are used to calculate non-discretionary accruals as follows:

$$NDA_{j,t} = = \alpha (1/ A_{j,t-1}) + \alpha_1 (\Delta REV_{j,t}/ A_{j,t-1} - \Delta REC_{j,t} / A_{j,t-1}) + \alpha_2 (PPE_{j,t} / A_{j,t-1}) \quad (2)$$

Where $NDA_{j,t}$ is nondiscretionary accruals in year t for firm j scaled by total assets in year *t-1;* and the remaining symbols as in equation (1).

Finally, discretionary accruals are measured as the difference between total accruals (equation 1) and nondiscretionary accruals (equation 2):

$$DA_{j,t} = TA_{j,t}/A_{t-1} - \alpha (1/ A_{j,t-1}) + \alpha_1 (\Delta REV_{j,t} / A_{j,t-1} - \Delta REC_{j,t} / A_{t-1}) + \alpha_2 (PPE_{j,t} / A_{j,t-1}) \quad (3)$$

Where DA is discretionary accruals in year t for firm j scaled by total assets in year *t-1*.

4. METHODOLOGY AND RESEARCH DESIGN

The primary focus of this study is to investigate investor reaction to managerial discretion over accrual. First, total accruals for each firm-year are determined as the difference between net income and cash flows from operations. Second, total accruals are decomposed into their components; discretionary accruals and nondiscretionary accruals according to modified Jones model. Finally, discretionary accruals are regressed on stock returns to find out how the market evaluates discretionary accruals.

To test our hypotheses, several tests, similar to Subramanyam (1996), are run to determine the explanatory power of accruals' components. The main models that will be tested are:

Model 1: Stock returns $= \alpha_1 + \beta_1 CFO + \varepsilon_1$. (4)

Model 2: Stock returns $= \alpha_2 + \beta_1 NNI + \varepsilon_2$. (5)

Model 3: Stock returns $= \alpha_3 + \beta_1 NI + \varepsilon_3$. (6)

Model 4: Stock returns $= \alpha_4 + \beta_1 CFO + \beta_2 NDA + \varepsilon_4$. (7)

Model 5: Stock returns $= \alpha_5 + \beta_1 CFO + \beta_2 NDA + \beta_3 DA + \varepsilon_5$. (8)

Model 6: Stock returns $= \alpha_6 + \beta_1 CFO + \beta_2 TACC + \varepsilon_6$. (9)

Where CFO is the cash flow from operations obtained from the cash flow statements; NNI is nondiscretionary income, measured as the sum of net income and nondiscretionary accruals; NDA is nondiscretionary accruals; DA is discretionary accruals; TACC is total accruals, measured as the difference between net income and cash flow from operations; and ε's are error terms.

All explanatory variables are scaled by lagged total asset. Any observations that are more than three standard deviations from the means of cash flows from operations, nondiscretionary income, and discretionary accruals are excluded.

5. RESULTS

Table (1) presents the estimates of the parameters for each year separately through running simple linear regression between total accruals and the change in revenues and gross property, plant, and equipment (correspond to equation 1).

All the explanatory variables are significant at 1% level. The predicted sign for the change in revenue is positive, as expected, except in the year 2003. In this respect, Jones (1991) indicates that the negative sign of change in revenues is referred to their effect on accounts payable.

The coefficients of gross property, plant, and equipment are negative, as well, since depreciation expenses represent income decreasing choice. The adjusted R^2 ranges between 65% and 85% which indicates the ability of the modified Jones model in predicting total accruals.

Descriptive Statistics

Table (2) presents the descriptive statistics of the variables. On average, stock returns, net income and cash flow from operations are positive.

Total accruals are negative and close to those documented by Subramanyam (1996) on USA (-.035). The mean of discretionary accruals is negative and higher than what is found in USA studies (e.g. -.004 in Subramanyam (1996).

The volatility of net income is lower than the volatility of total accruals and cash flows from operations. This is due to the negative correlation between total accruals and cash flows from operations which are consistent with the income smoothing strategy.

Table 1.: Regression Results of Total Accruals on Change in Revenue and Gross property, Plant, and Equipment.

$$TA_{j,t} / A_{j,t-1} = \alpha (1/ A_{j,t-1}) + \alpha_1(\Delta REV_{j,t} / A_{j,t-1}) + \alpha_2 (PPE_{j,t} / A_{j,t-1}) + \varepsilon_{j,t}$$

YEAR		B	t	Sig.	R^2	Adjusted R^2
1999	(Constant)	527391.9	1.059	0.295	0.736	0.72
	Δ REV	0.364	5.17	0		
	PPE	-0.131	-11.043	0		
2000	(Constant)	1857896	0.965	0.339	0.668	0.65
	Δ REV	0.808	4.335	0		
	PPE	-0.494	-9.28	0		
2001	(Constant)	644302.7	0.995	0.324	0.767	0.75
	Δ REV	0.875	8.852	0		
	PPE	-0.208	-10.835	0		
2002	(Constant)	553831.7	1.325	0.191	0.862	0.85
	Δ REV	0.634	15.762	0		
	PPE	-0.206	-14.67	0		
2003	(Constant)	2678693	1.947	0.057	0.741	0.73
	Δ REV	-0.266	-2.748	0.008		
	PPE	-0.48	-10.1	0		

Where ΔREV is revenues in year t less revenues in year t-1 firm j; PPE is gross property, plant, and equipment in year t firm j. Both scaled by total assets (TA).

Table 2.: Descriptive Statistics.

Variables	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
RETURN	-0.92	6.16	0.2439	0.7032	4.206	26.838
NI	-0.32	0.35	0.03	0.0854	-0.173	1.889
CFO	-0.46	0.53	0.0629	0.1101	-0.328	3.267
TACC	-0.4	0.37	-0.0329	0.1076	-0.028	2.546
DA	-2.11	1.01	-0.0837	0.3023	-2.406	11.303
NDA	-1.1	2.16	0.0508	0.2973	2.692	14.238

Where RETURN is stock return measured as the difference between stock price at the end of the fiscal year and the beginning of the fiscal year plus the dividend per share; NI is net income; CFO is cash flow from operation; TACC is total accruals calculated as the difference between net income and cash flow fro operation; DA and NDA are discretionary accruals and nondiscretionary accruals obtained from the modified Jones model, respectively. All variables are scaled by lagged total asset.

Table 3.: Pearson Correlation Coefficients of Net Income Components Variables.

Variables	TACC	DA	NDA
CFO	-.693**	-.144*	-.104
TACC		.225**	.134*
DA			-.936**

Where ** Correlation is significant at the 0.01 level (2-tailed); * Correlation is significant at the 0.05 level (2-tailed); NI is net income; CFO is cash flows from operations; TACC is total accruals calculated as the difference between net income and cash flows from operations; DA and NDA are discretionary accruals and nondiscretionary accruals obtained from the modified Jones model, respectively. All variables are scaled by lagged total asset.

Table 4.: Regression of Stock Returns on Net Income and Net Income Components

Model 1	**Unstandardized Coefficients**	**t**	**Sig.**	**R^2**	**Adjusted R^2**	**Durbin - Watson**
(Constant)	0.292	6.006*	0	0.014	0.011	2.141
CFO	-0.763	-1.988*	0.048			
Model 2	**Unstandardized Coefficients**	**t**	**Sig.**	**R^2**	**Adjusted R^2**	**Durbin - Watson**
(Constant)	0.221	4.89*	0	0.008	0.004	2.161
NNI	0.203	1.465	0.144			
Model 3	**Unstandardized Coefficients**	**t**	**Sig.**	**R^2**	**Adjusted R^2**	**Durbin - Watson**
(Constant)	0.216	4.825	0	0.013	0.009	2.152
NI	0.933	1.884**	0.061			

Where CFO is cash flows from operations; NI is net income; NNI is nondiscretionary income measured as cash flows from operations plus nondiscretionary accruals. * significant at 5% level, ** significant at 10% level

Table (3) presents the correlations among the various components of net income. Net income is positively correlated with all of its components and significant at 1% level with cash flows from operations and total accruals. Consistent with the findings of previous studies, the correlation between cash flow from operations and total accruals is negative -0.693 (significant at 1% level). This result might be related to either the normal use of accruals or to the smoothing of income (see Haw et al., 2001). Furthermore, Dechow (1993) and Dechow et al. (1995) suggest that the negative correlation between total accruals and cash flows from operations is due to two possibilities. First, the matching principles, since some transactions tend to increase total accruals and reduce cash flows (i. e. for normal use of accruals).

Second, the opportunistic use of accruals in order to reduce the volatility in net income since this volatility project is a bad signal about firm performance to investors.

Cash flow from operations also is negatively correlated with discretionary accruals (significant at 1% level) but insignificantly correlated with nondiscretionary accruals. This implies, for a certain firm, as the cash flow from operations decreases, its performance becomes

subject to suspicion. This result is consistent with the income smoothing strategy. The correlation between total accruals and their components are positive (significant at 5%) but the coefficient of discretionary accruals is more than that of nondiscretionary accruals. That is, the discretionary behavior of accruals explains the larger portion of total accruals than nondiscretionary accruals**.** Overall, these results suggest that whenever the difference between (CFO) and net income becomes larger, the firms' aptitude to engage in earnings management becomes more, and thus, the quality of earnings becomes more subject to doubts (see Dechow, and Skinner, 2000; Yoon, and Miller, 2002).

Regression Results of Net Income Components on Stock Returns

Table (4) summarizes the results of regressing net income components on stock returns.[1] In model 1 (corresponds to equation 4), the coefficient of cash flows from operations is negative - 0.763 and significant at 5% level which is inconsistent with the findings from previous studies (0.08 in Subramanyam, 1996) and (0.14 in Haw et al., 2001. To investigate the reason for this result, we run the Pearson correlation between net income, total accruals, and cash flows from operations before scaling these variables by lagged total asset. The results show that the correlation between cash flows from operations and total accruals is negative -0.733 and significant at 1% level, the correlation between cash flows from operations and net income is 0.033 (insignificant), and the correlation between total accruals and net income is significant 0.656 (see to table 5). This implies that, as cash flows from operations increase, total accruals decrease and as total accruals decrease the net income decreases by a significant amount since net income is not affected by the increase in cash flow from operations. Sloan (1996) indicates that when investors do not differentiate between earnings which consist mostly of accruals and earnings which consist mostly of cash, they fixate on earnings. That is, Jordanian investors are more interested in the quantity of earnings rather than quality of earnings, and they are fooled by the use of different accounting techniques.

The second model (Table 4) presents the regression results of nondiscretionary income on stock returns (equation 4). Notice that the adjusted R^2 decreased to 0.4% in the second model compared to 1.1% in the first model. The coefficient on the nondiscretionary income is insignificant (t=1.465). These results imply that the market attaches little value on pre-managed earnings (nondiscretionary income).

The third model in Table (4) (corresponds to equation 5) reports the regression results of net income on stock returns. The adjusted R^2 increased to 0.9% from 0.4% in model 2 and the coefficient became significant at 10% level with a t value of 1.884.

To find out how the market prices discretionary accruals, Table (6) displays the multiple regression results of total accruals components on stock returns. We will use Model 1 as a benchmark for comparison between the different models. Since the correlation between both discretionary accruals and nondiscretionary accruals is almost perfect and negative, the inclusion of both in the same regression will be problematic, therefore, we do not include them in the same equation.

Model 4 reports the regression of CFO and NDA on stock returns. The coefficients of CFO (-.68) and NDA (.294) are significant at 5% level. The adjusted R^2 increases from 1.1 to 2.2 (about 100%) as compared to that of model 1.

To know the effect of discretionary accruals on stock return, model 5 reports the regression results of CFO and DA on stock returns.

The coefficients of DA is negative -0.177 but insignificant. The adjusted R^2 increased by 0.2% from 1.1% to 1.3% in comparison with model 1. That is, the market tends to negatively price discretionary accruals.

(1) We examined the variance inflation factors (VIFs) and condition indices to assess the significance of multicollinearity for all the models. The highest value of VIF and condition index among the models is 1.99, and 2.895 respectively. This suggests that the correlations among the independent variables are weak and didn't represent a problem.

Table 5.: Pearson Correlation Coefficients of Net Income, Cash Flows from Operations, and Net Income before Scaling these Variables by Lagged Total Asset

Variables	CFO	TACC
NI	.033	.656**
CFO		-.733**

Where ** Correlation is significant at the 0.01 level (2-tailed); NI is net income; CFO is cash flow from operations; TACC is total accruals calculated as the difference between net income and cash flows from operations.

Table 6.: Regression of Net Income and Net Income Components on Stock Returns

Model 1	**Unstandardized Coefficients**	**t**	**Sig.**	**R^2**	**Adjusted R^2**	**Durbin - Watson**
(Constant)	0.292	6.006*	0	0.014	0.011	2.141
CFO	-0.763	-1.988*	0.048			
Model 4	**Unstandardized Coefficients**	**t**	**Sig.**	**R^2**	**Adjusted R^2**	**Durbin - Watson**
(Constant)	0.272	5.515*	0	0.03	0.022	2.128
CFO	-0.68	-1.774**	0.077			
NDA	0.294	2.066*	0.04			
Model 5	**Unstandardized Coefficients**	**t**	**Sig.**	**R^2**	**Adjusted R^2**	**Durbin - Watson**
(Constant)	0.281	5.714*	0	0.02	0.013	2.131
CFO	-0.833	-2.151*	0.032			
DA	-0.177	-1.257	0.21			
Model 6	**Unstandardized Coefficients**	**t**	**Sig.**	**R^2**	**Adjusted R^2**	**Durbin - Watson**
(Constant)	0.276	5.733*	0	0.046	0.039	2.136
CFO	0.337	0.643	0.521			
TACC	1.625	3.029*	0.003			

CFO is cash flows from operations; TACC is total accruals calculated as the difference between net income and cash flows from operations; DA and NDA are discretionary accruals and nondiscretionary accruals obtained from the modified Jones model, respectively. All variables are scaled by lagged total asset.

When comparing model 4 with model 5 the results indicate that NDA adds additional information to investors to DA. The adjusted R^2 in model 4 is 2.2% while in model 5 it is 1.3%, the coefficients of NDA are positive 0.294 (t value of 2.066) and significant at 5% level, while the coefficient on DA is negative -0.177 (t value of -1.257) and insignificant. All these results demonstrate that NDA have incremental information over DA, and the market perceives discretionary accruals as a negative signal. Two alternative explanations are

suggested by Dechow (1994); and Subramanyam (1996). First, discretionary accruals are opportunistic and negatively priced by the market (evidence of efficiency). Second, discretionary accruals are informative but negatively priced by the market (evidence of mispricing).

As we move to model 6, the adjusted R^2 becomes better and increases to 3.9% the best among the other alternative models and outperforms the other models. The coefficients on CFO are insignificant (t=0.337), while that on TACC is significant at 1% level (t=1.625).[2] These results are consistent with the rules of accruals in reducing the matching and timing problems (Dechow, 1993) and better predicting future performance.

6. SUMMARY AND CONCLUSIONS

Several interesting results are found in this paper: First, results suggest that NDA, DA, and TACC have incremental information over that provided by CFO. The Jordanian market prices DA and NDA differently. In addition, the market attaches value to NDA more than that attached to DA. Specifically, we find no relationship between discretionary accruals and stock returns. This result might have an implication for market efficiency. It might imply that Amman Stock Exchange is a semi-strong efficient in reflecting the information signaled by discretionary accruals through managers into security prices. These results might also give an evidence of mispricing**,** especially since we found that investors are fixated on net income.

Second, contrary to previous studies, we find a negative relationship between cash flow from operations and stock returns. This result indicates that Jordanian investors are fixated on earnings. The implication of this finding suggests that investments which are based on earnings may only lead to negative consequences. Investors should put more emphasis on the quality rather than on the quantity of earnings. One indication about the quality of earnings is the difference between earnings and cash flow. The more the difference between earnings and cash flow, the worse the quality of earnings.

Third, with respect to accruals' structure, we find that discretionary accruals explain larger portion of total accruals than nondiscretionary accruals. This result justifies why most of the literature related to earnings' quality employ accruals or discretionary accruals as proxy for earnings' quality (e.g. DeAnglo, 1986; Dechow, 1994; Haw et al., 2001)**.** Even though accruals' accounting reliability is subject to criticism and may yield a variability in the quality of earnings, we find that accruals' accounting provide incremental information over cash flow from operations and predict firms' performance better than cash flows from operations which is consistent with the role of accruals' accounting in mitigating the timing and matching problems. Fourth, the Jordanian market tends to attach value to nondiscretionary accruals more than to discretionary accruals which is consistent with the results of Haw et al. (2001), but contradicts the results of studies done on mature markets (e.g. Subramanyam, 1996). Finally, we find some evidence on income smoothing since the variability of cash flows from operations and total accruals are less than the variability of net income.

(2) Noteworthy, it seems that the explanatory powers of the underlying models even for the sixth model are low. Nevertheless, our results are close to what is found in the literature (e.g. while the explanatory power for the same model in subramanyam (1996) was 6.48%, 5.7% in Haw et al. (2001).

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ردة فعل المستثمرين للمستحقات الادارية الاختيارية

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ملخص

تبحث هذه الورقة الاختلاف في قدرة كل من المستحقات المحاسبية (الاختيارية واللااختيارية) التي تعكس نوعية العوائد، والتدفقات النقدية التشغيلية على قيمة الشركات. يرتبط هذا الموضوع مع دوافع الادارة لاظهار مستحقات عالية بهدف اما اعطاء اشارة معينة أو بهدف الحصول على فائدة شخصية. تغطي الدراسة جميع الشركات الصناعية الاردنية المدرجة في سوق عمان المالي خلال الفترة الواقعة بين 1999 و2003. وجدت الدراسة أن اجمالي المستحقات يزود المستثمر بمعلومات اضافية على المعلومات التي تزوده بها التدفقات النقدية التشغيلية، وأن المستثمر الاردني يهتم كثيراً بالدخل الصافي بغض النظر عن التدفقات النقدية التشغيلية للشركة. بالاضافة الى ذلك، لم تجد الدراسة علاقة ذات دلالة احصائية بين المستحقات والعائد. فإما ان تعكس هذه النتيجة ان المستحقات الاختيارية تعكس انتهازية الادارة وبذلك تسعر سلبا من قبل المساهمين او انها تعكس تسعيراً غير ملائم من قبل السوق.

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