The Forecasting Ability of Earnings and Operating Cash Flow

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Abstract
The main objectives of this study, is to deliver evidence to Jordanians, on the content of accrual earnings and cash flow from operating activities. The second is to form a comparison between the predicting ability between cash flow from operations within a company and the two other traditional measures of cash flows, which are working capital from operations and earnings, along with depreciation. This study has been carried out in line with Farshadfar, et. al., (2008) research. (66) companies represent the study sample for the period 2006-2011, the number of observations is (362) company-years measures. The study results indicate that earnings along with depreciation and amortization expense are the greatest predictor of all future cash flows in comparison with net income and reported operating cash flow. In addition, the reported cash flow from operations more revealing than the traditional measures of cash flows, when it comes to predicting future cash flows in large firms. The study include, evidence that reveals that the forecasting ability of all net income and the reported operating cash flow, in large firms, is in fact greater than that in small firms.

Keywords: Cash Flow from Operating activity, Earnings, depreciation, Amman Stock Exchange.

1. Introduction
Accounting accrual earnings have a central position in external users’ minds because they give several indicators about the firm performance and the share valuation. Despite valuing accounting earnings, investors and other external users are also concerned with short-term and long-term predictions of cash flows. We can’t expect accrual earnings to necessarily have all the characteristics of an ideal performance measure.

The consequences of accruals on the time series properties of net income and the forecasting of future operating cash flows is expected to be more promptly apparent for working capital accruals. When it comes to the bulk of firms the operating cash cycle that means cash to cash (i.e. the cycle that starts the outlay of cash for purchases, to the receipt of cash from sales), is
significantly shorter than the investment cash cycle, (i.e. from outlay of cash for the long-term investments like purchasing new investment to the receipt of cash inflows from the investment cycle like selling the investment). The working capital accruals accounts (accounts payable, accounts receivable, and inventory), tend to change operating cash flows across adjacent years. The effect of that is that they are noticeable in the first order serial correlations. They are also noticeable in the one year ahead forecasts. Investment accruals, such as the cost of a factory, are related with cash over lengthier and more variable time interludes (Dechow, et. al, 1998).

Despite the prominence of cash flow in economic models, many external financial accounting users like analysts, investors and creditors are using financial accounting data to predict future net income.

It is significant to give new evidence on the information content of earnings and cash flow measures especially within the financial crises, these crises have drawn attention from accounting external accounting users to the quality and usefulness of accounting measures, particularly those related to firms’ financial performance.

As a result, the chief goal of the research is to deliver Jordanian evidence on the comparative information content of accrual-based accounting earnings along with the operating cash flow. We evaluate between the predicting ability that is found between the operating cash flow and two traditional measures of cash flows, which are working capital from operations and earnings along with depreciation expense.

The rest of the study is organized as follows. The researcher begins with identifying research problem, then reviewing previous studies on the information content of Earnings and cash flows from operating. After the study methodology, the study empirical results and conclusions are reported.

2. Research Problem
The following questions represent the research problem:-
Can current earnings predict future operating cash flows?
Can current earnings plus non-cash expenses predict future cash flows from operating activities?
Can current working capital from operation predict future cash flows from operating activities?
Can current Operating Cash Flow predict future cash flows from operating activities?

3. Literature Review

Bowen et. al, (1986) sampled 1289 firms from 1971-1981, describing empirical relationships between cash flow and accrual earnings. The outcome of this sampling showed that the correlations of alternative measures of cash flow have a low correlation with earnings, whereas traditional measures of cash flows have high correlation with earnings.

Dechow (1994) study of accrual accounting ended up showing the benefits of such accounting. Her study examined how working capital accruals can be predicted in order to increase the ability to earn and to measure how well a firm is doing financially. This showed that working capital accruals ended up counterbalancing negative serial correlation in cash flows changes. This ended up producing differences in earnings that showed that they were serially uncorrelated. Serial correlation accruals in being offset resulted in an increase in earnings association with firm value. The importance of the research was revealing that negative serial correlation in operating cash flows changes, and the time series properties of earnings, operating cash flow and accrual overall.

Dechow, et. al, (1998) produces a simple model of earnings, cash flows and accruals. This was done by doing a random walk sales process, variable and fixed costs, accounts receivable and payable, inventory along with applying the accounting process. This model shows that earnings is more efficient in forecasting operating cash flow in the future then the models that currently exist. This model is also used to forecast serial and cross correlations of the firm’s series. In order to predict future cash flows it is better to use current earnings to do so, instead of current earnings as foreseen by the model. The model also foresees any alterations in the capacity of the present earnings and present cash flows to figure out future cash flows, that is a positive cash function of the company’s predicted operating cash flow.

Charitou, et. al, (2001) decided to study the decisive information related to the earnings and cash flow in firms in the United Kingdom. The outcome of this study was that it highlighted the significance of the earnings, as a variable for security returns that went beyond the cash flow. This was important because it showed that the explanatory power would in fact increase
by modeling the effects of earning performance growth, along with the firm size on the earnings coefficient.

The examination of the relative forecasting ability of earnings, operating cash flow and the traditional measurements of cash flow was done in by Farshdaifar, et. al, (2008) of 323 Australian companies that were listed on the Australian Stock Exchange during 1992-2004. The results of this examination were that the cash flow from operations was a better way to predict future cash flow earnings in comparison to traditional cash flow measures. The ability of either to predict the earnings and cash flow from operations, jumped when it came to the firm size. It should be noted that the dominance of cash flow from operations to earnings to later on predict the future cash flows in either small, medium or large firms was more than robust.

Habib (2008) studied the role of accruals and cash flows were used to explain stock returns during 1994-2004 in New Zealand companies. His inquiry was made up of 705 firm-years observations and the results of this inquiry revealed that the earnings and the cash flow were extremely important information for indicating future stock returns. It was also shown that earnings were also extremely important information content in comparison with cash flow.

Daraghma (2010) studied the forecasting ability of operating cash flows and earnings. This was done for 23 Palestinian firms, during the period of 2004-2008. The model independent variables in the study were the cash flows and earnings, and the stock returns were used as dependent variables. The outcome of the study showed that earnings have incremental information content than operating cash flow.

Lev et. al., (2010) investigated the contribution of accounting ability to predict enterprise cash flows and earnings within a business. The investigation looked at 41,124 firm year observations during the time period between 1988 until 2004. The results brought to light that the accounting estimates beyond those in working capital items, subtracting inventory, did not improve the prediction of operating cash flows. They did show that estimates helped predict the year to come earnings but not the year after that. The conclusion of this study was that the usefulness of accounting estimates to investors is in fact limited and it leads to the idea that other ways should be found to improve the usefulness of estimates.
Pouraghajan, et. al., (2012) were responsible for assessing the relative and incremental information content of operating cash flows and earnings and for 475 firms, during 2006-2010 that were listed on the Tehran Stock Exchange. The assessment revealed that the accrual earnings had incremental information content in comparison to the operating cash flows in explaining stock returns. The assessment also revealed that the earnings had positive effect and lost had negative on earnings information content and operating cash flows. Most importantly the earnings model was the favored when it came to explaining stock returns in comparison to operating cash flow models.

Mostafa and Rob, (2013) asserted that studies done previously on UK firms did not support the incremental information content of operating cash flow beyond earnings. Their study took a look at the incremental information content of earnings and cash flow from operations in the UK. Their study also revealed that both cash flow from operations and earnings had incremental information content that went beyond the other.

4. Research Method

4.1 Study Sample

Industrial companies listed on Amman Stock Exchange represent the study sample during the period 2006-2011. Required information for two consecutive years should be available at least. After applying this criterion, (66) companies represent the study sample, the number of observations is (362) company-years measures after deleting the outliers observations.

4.2 Study Hypotheses

H₀₁: Current earnings cannot predict future operating cash flows.
H₀₂: Current earnings plus depreciation expense cannot predict future operating cash flows.
H₀₃: Current working capital from operation cannot predict future operating cash flows.
H₀₄: Current Operating Cash Flow cannot predict future operating cash flows.

4.3 Research Models and Variables

The following four models were used to predict the relationship between earnings and operating cash flows measures.

The relationship between future operating cash flow and current earnings is examined using model 1. It’s used to test the first hypothesis.

\[ CFO_{it} = \alpha_0 + \alpha_1 EARN_{it-1} + \epsilon_{it} \]  (1)

Where:
- \( \alpha_0, \alpha_1 \): Coefficients;
- i: firm;
- t: year;
EARNs: earnings is defined as net income after tax;  
CFO: operating cash flow;  
e = Error term.  
The relationship between the first traditional measure of cash flow (earnings plus depreciation expense) and future operating cash flow is examined using model 2. It’s used to test the second hypothesis.  

\[ CFO_{it} = \gamma_0 + \gamma_1 EDPR_{it-1} + e_{it} \]  

Where:  
\( \gamma_0, \gamma_1 \): Coefficients  
EDPR: current earnings (net income) plus depreciation expense  

Model 3 examines the relationship between future cash flow from operations and current working capital from operation. It’s used to test the third hypothesis.  

\[ CFO_{it} = \beta_0 + \beta_1 WCFO_{it-1} + e_{it} \]  

Where:  
\( \beta_0, \beta_1 \): Coefficients  
WCFO: working capital from operation  
Working capital from operation is calculated using the following formula (Bowen et al., 1986):  

\[ WCFO = \text{operating cash flow} - \text{the change in current liabilities other than short term debt} + \text{the current assets other than cash} \]  

Model 4 examines the relationship between future operating cash flow and current operating cash flow. It’s used to test the fourth hypothesis.  

\[ CFO_{it} = \lambda_0 + \lambda_1 CFO_{it-1} + e_{it} \]  

Where:  
\( \lambda_0, \lambda_1 \): Coefficients  
All the variables in the accrual expectation model were scaled by average total assets, in order to reduce heteroscedasticity. In order to obtain a weighted least squares approach, in relation to estimating a regression equation with a heteroscedasticity disturbance term (an un-scaled regression equation) (Kmenta, 1986).  

Table (1) displays the illustrative measures of the key variables. Upon observation the table shows that the WCFO, CFO and EDPR (0.026, 0.029 and 0.036, respectively) are all higher than the mean value of EARNs (0.007). This decrease found in accrual earnings is due to non-cash accruals the likes of, depreciation, amortization expense and deferred taxes, though it should be noted that cash flow measures are not. In the case of the WCFO the mean is
higher than the earnings because we add depreciation. In the case of all the variables the mean value of all those variables are positive.

Furthermore, the standard deviation of other variables, such as CFO (0.112) is higher the standard deviation of EARNS (0.094). This is agree with accruals smoothing out cash flow changes. The outcome of this study match the results with previous studies, done in the U.S., which have concluded that EARNS is averagely positive, and the standard deviation of EARNS is moreover lower than that of CFO or is equal to it (e.g. Dechow et al., (1998) and Barth et al., (2001)). Moreover, the results of this study disagree with Farshdfar, et. al.,(2008). The cause of this variation could be because of the difference in the criteria for sample selection. It could also be because Australian companies reported losses that were high(Farshadfar, et. al., 2008).

Table (1): Descriptive Measures
(66 Industrial companies listed on ASE, 2006-2011, 362 company-year observations)

<table>
<thead>
<tr>
<th>Variable</th>
<th>$CFO_{it}$</th>
<th>$EARN_{it-1}$</th>
<th>$EDPR_{it-1}$</th>
<th>$WCFO_{it-1}$</th>
<th>Total Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>0.029</td>
<td>0.007</td>
<td>0.036</td>
<td>0.026</td>
<td>49,440,359</td>
</tr>
<tr>
<td>Median</td>
<td>0.032</td>
<td>0.022</td>
<td>0.048</td>
<td>0.026</td>
<td>13,731,674</td>
</tr>
<tr>
<td>SD</td>
<td>0.112</td>
<td>0.094</td>
<td>0.098</td>
<td>0.165</td>
<td>126,969,241</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>1.141</td>
<td>3.452</td>
<td>2.867</td>
<td>0.311</td>
<td>31,045</td>
</tr>
<tr>
<td>Minimum</td>
<td>-0.344</td>
<td>-0.438</td>
<td>-0.420</td>
<td>-0.479</td>
<td>589,265</td>
</tr>
<tr>
<td>Maximum</td>
<td>0.375</td>
<td>0.219</td>
<td>0.269</td>
<td>0.519</td>
<td>1,115,654,000</td>
</tr>
</tbody>
</table>

Notes:
The study main variables descriptive statistics after deleting outliers defined as the bottom and top 1% of the observations on each of the study variables.
Variable definitions: CFO is cash flow from operating activities, EARNS is net income. EDPR is net income plus depreciation. WCFO is working capital from operations; i is firm, t is year. All variables are scaled by average total assets.

5. Analysis and results
5.1 Correlation Analysis
Looking at the Pearson correlations coefficients matrix among the study measures in table (2) we find a significant positive relationship between $CFO_{it-1}$ in one hand and $EARN_{it-1}$, $EDPR_{it-1}$, and $WCFO_{it-1}$ on the other hand. As expected, the strongest correlation coefficient is between $EDPR_{it-1}$ and $EARN_{it-1}$, then between $CFO_{it-1}$ and $WCFO_{it-1}$. There is no relationship between $CFO_{it}$ and $WCFO_{it-1}$. 
It is reasonable to assume that there would be a positive relationship between the variables in the study, since earnings are the first line in cash flow statement. After that one can add or deduct the non-cash items to reach cash flow from operating, this is the process that is used to convert accrual earnings to cash earnings.

Table (2): Correlation matrix

<table>
<thead>
<tr>
<th>Variable</th>
<th>CFO_{it}</th>
<th>EARNS_{it-1}</th>
<th>EDPR_{it-1}</th>
<th>WCFO_{it-1}</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFO_{it-1}</td>
<td>(0.268)**</td>
<td>(0.370)**</td>
<td>(0.417)**</td>
<td>(0.705)**</td>
</tr>
<tr>
<td>CFO_{it}</td>
<td>(0.295)**</td>
<td>(0.339)**</td>
<td>-0.015</td>
<td></td>
</tr>
<tr>
<td>EARNS_{it-1}</td>
<td></td>
<td>(0.974)**</td>
<td>(0.356)**</td>
<td></td>
</tr>
<tr>
<td>EDPR_{it-1}</td>
<td></td>
<td></td>
<td>(0.390)**</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
The study main variables Pearson correlation coefficients after deleting outliers defined as the bottom and top 1% of the observations on each of the study variables. Variable definitions: CFO is cash flow from operating activities, EARNS is net income. EDPR is net income plus depreciation. WCFO is working capital from operations; i is firm, t is year. All variables are scaled by average total assets.

** Correlation is significant at the 0.01 level (2-tailed).

5.2 Regression analysis

The results of the four regression models results are reported in Table (3). Model 1 aims to examining the relationship between future operating cash flow and current earnings. The results show that coefficient on EARNS is 0.340 and is statistically significant at the 0.01 level. The adjusted $R^2$ of this model is 8.4%.

Model 2 examines the relationship between future operating cash flow and current earnings plus depreciation expense. The results show that coefficient on EDPR is 0.373 and is statistically significant at the 0.01 level. The adjusted $R^2$ of this model is 11.2%.

The relationship between future operating cash flow and current working capital from operations is examined in Model 3. The results show that coefficient on WCFO is -0.010 and isn’t statistically significant at the 0.01 level. The adjusted $R^2$ of this model is -0.3%.

Lastly the relationship between future operating cash flow and current operating cash flow is tested in Model 4. The results show that coefficient on CFO_{it-1} is 0.259 and is statistically significant at the 0.01 level. The adjusted $R^2$ of this model is 6.9%.

The lowest adjusted $R^2$ is model 3, then model 1 making model 2 the highest adjusted $R^2$. Findings of Vuong’s test for model selection have revealed the supremacy of the EDPR to that year’s EARNS. The prior year’s CFO and WCFO highlight the variations of the current year’s CFO is very significant at the 0.01 level. That is then followed by significantly higher explanatory power in terms of EARNS, than both the prior year’s CFO and WCFO at the 0.01
level, although the explanatory power of the prior year’s CFO is significantly higher than the WCFO at the 0.01 level.

According to model 3, WCFO is not significant, and there is no explanatory power for this variable, therefore there is no, relation between WFCO and CFO.

It is safe to conclude from the results that EDPR has a better ability to predict future cash flows in comparison to EARNS prior year’s CFO and WCFO. Furthermore, the certainty of the prior year’s CFO is considered lower than EARNS, however it should be noted that it is higher than WCFO.

Table (3): Regression analysis Results

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>EARNS(_{it-1})</td>
<td>0.340**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(5.805)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDPR(_{it-1})</td>
<td></td>
<td>0.373**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(6.781)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WCFO(_{it-1})</td>
<td></td>
<td>-0.010</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(-0.274)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CFO(_{it-1})</td>
<td></td>
<td></td>
<td></td>
<td>0.259**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(5.242)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.026**</td>
<td>0.015*</td>
<td>0.030**</td>
<td>0.023**</td>
</tr>
<tr>
<td></td>
<td>(4.678)</td>
<td>(2.545)</td>
<td>(4.977)</td>
<td>(3.889)</td>
</tr>
<tr>
<td>Adjusted R(^2)</td>
<td>8.4%</td>
<td>11.2%</td>
<td>-0.3%</td>
<td>6.9%</td>
</tr>
<tr>
<td>Vuong Z-statistic</td>
<td>Model 1 vs Model 4: 10.62**</td>
<td>Model 2 vs Model 4: 10.21**</td>
<td>Model 1 vs Model 2: 5.67*</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
Variable definitions: CFO is cash flow from operating activities, EARNS is net income. EDPR is net income plus depreciation. WCFO is working capital from operations; i is firm, t is year. All variables are scaled by average total assets. Model 1: \( CFO_{it} = a_0 + a_1EARN_{it-1} + e_{it} \); Model 2: \( CFO_{it} = \gamma_0 + \gamma_1EDPR_{it-1} + e_{it} \); Model 3: \( CFO_{it} = \beta_0 + \beta_1WCFO_{it-1} + e_{it} \); Model 4: \( CFO_{it} = \lambda_0 + \lambda_1CFO_{it-1} + e_{it} \).

** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).
5.3 Effect of firm size

**Table (4): Regression analysis Results**

<table>
<thead>
<tr>
<th>a. Small Companies</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>EARNSt-1</td>
<td>0.278**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(4.366)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDPRt-1</td>
<td></td>
<td>0.312**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(5.232)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WCFOt-1</td>
<td></td>
<td></td>
<td>-0.089*</td>
<td>-2.836</td>
</tr>
<tr>
<td>CFOt-1</td>
<td></td>
<td></td>
<td></td>
<td>0.169**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(3.013)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.021**</td>
<td>0.012*</td>
<td>0.020**</td>
<td>0.017**</td>
</tr>
<tr>
<td></td>
<td>(3.510)</td>
<td>(1.995)</td>
<td>3.234</td>
<td>(2.622)</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>5.9%</td>
<td>8.4%</td>
<td>1.6%</td>
<td>2.7%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>b. Large Companies</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>EARNSt-1</td>
<td>0.594**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(3.066)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDPRt-1</td>
<td></td>
<td>0.682**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(3.790)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WCFOt-1</td>
<td></td>
<td></td>
<td>0.316**</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(3.502)</td>
<td></td>
</tr>
<tr>
<td>CFOt-1</td>
<td></td>
<td></td>
<td></td>
<td>0.481**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(4.702)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.028</td>
<td>0.004</td>
<td>0.051**</td>
<td>0.040**</td>
</tr>
<tr>
<td></td>
<td>(1.606)</td>
<td>(0.198)</td>
<td>3.478</td>
<td>2.859</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>11.4%</td>
<td>17.1%</td>
<td>14.4%</td>
<td>23.7%</td>
</tr>
</tbody>
</table>

**Notes:**

Variable definitions: CFO is cash flow from operating activities, EARNS is net income. EDPR is net income plus depreciation. WCFO is working capital from operations; i is firm, t is year. All variables are scaled by average total assets. Model 1: \( CFO_i = \alpha_0 + \alpha_1 EARN_S_{i,t-1} + \epsilon_{i,t} \); Model 2: \( CFO_i = \gamma_0 + \gamma_1 EDPR_{i,t-1} + \epsilon_{i,t} \); Model 3: \( CFO_i = \beta_0 + \beta_1 WCFO_{i,t-1} + \epsilon_{i,t} \); Model 4: \( CFO_i = \lambda_0 + \lambda_1 CFO_{i,t-1} + \epsilon_{i,t} \).

**Correlation is significant at the 0.01 level (2-tailed).**

In table 4 sums up the regression results of the report. The report consisted of four models, after categorizing firms by size. Each firm size was based upon the average of total assets in large and small companies. Considering model 1, on the conventional level, EARNS form a positive correlation with current cash flow from operations in both small and large companies (0.278 and 0.594 respectively). Conversely, the rise in constants at the large firms, in relation to the small firms, are reinforced by the increase in adjusted \( R^2 \) from 5.9% to 11.4%.

The findings of this study show the explanatory power of model 1, increases considerably from small companies to large companies. The results of Vuong’s test verify the variances...
between the adjusted $R^2$s are statistically sizable at the 0.01 level. Consequently, comparable to the results we have concluded from the overall sample, CFO is more efficient in explaining future cash flows from EARNS, in accordance to its size.

In model 2, EDPR is positively and substantially related, on the conventional level, to the current cash flow from operations in both small and large companies (0.312 and 0.682 respectively). Conversely, the rise in coefficients at large companies in comparison to small companies are supported by the increase in adjusted $R^2$ from 8.4% to 17.1%. These findings show that the explicatory influence of model 2, increases considerably from small companies to large companies. Findings of Vuong’s test validate those differences between the adjusted $R^2$s are statistically significant at the 0.01 level. Furthermore, EDPR helps to better clarify cash flows through the CFO, in accordance to the size of the company.

Alternatively model 3 findings vary, when companies were grouped according to small and large. On the conventional level, WCFO is now significantly related to current cash flow from operations from both small and large companies (-0.089 and 0.316 respectively). Conversely, the increase in coefficients at large companies, in comparison to smaller companies, are supported by the increase adjusted $R^2$ from 1.6% to 14.4%. The findings show that the explicatory supremacy of model 3 increases considerable from small companies to large companies. The findings of Vuong’s test, testify that the differences found between the adjusted $R^2$s are statistically significant at the 0.01 level.

Finally, in model 4, in terms of convention, the findings are the same after grouping, prior operating cash flow; it correlates significantly to the current cash flow, from operations from both small and large firms (0.169 and 0.481 respectively). Conversely, the increase in coefficients at large firms in comparison to small ones are maintained by the increase adjusted $R^2$ from 2.7% to 23.7%. The findings of this model, similar to the other three models, show that the explanatory power of model 4 increases considerable, from small firms to large firms. The findings of Vuong’s test indorse that the differences between the adjusted $R^2$s are statistically significant at the 0.01 level.

To summarize, the findings reveal that the explanatory power of the models in the study, increase considerably from small firms to large firms. These results are in step with the high probability that larger companies can decrease a very large part of the unexplained variation in the cash flow predication models.

The four models power, when it comes to large companies, results differ, since the highest adjusted $R^2$ is for model 4 then model 2, model 3 and model 1. The results of Vuong’s test
for the model selections, reveal the superiority of the prior year’s CFO that year’s EDPR, WCFO and EARNS in explaining the variations of the current year’s CFO is significant at the 0.01 level.

Overall, the results reveal that the prior year’s CFO has the premier ability to predict future cash flow. I have approximately the same results when compare with Farshadfar, et. al., (2008) models results for total companies, the adjusted $R^2$ for previous year’s CFO in that study was 35.2% and for EDPR was 22.1%, the unique difference was that adjusted $R^2$ for EARNS was higher than adjusted $R^2$ for WCFO (20.2% and 17.2% respectively)

6. Conclusion and Recommendations

The main point that is concluded from this investigation is that decision makers like investors and creditors consider accounting accrual earnings, the most important element in the investment and financial decisions in the stock exchange markets. This is in contrast to cash flow.

This study has been carried out in line with Farshadfar, et. al., (2008) research. The main objectives of this study, is to deliver evidence to Jordanians, on the content of accrual-based accounting earnings. The second is to form a comparison between the predicting ability between cash flow from operations within a company and the two other traditional measures of cash flows, which are working capital from operations and earnings, along with depreciation expense.

This report, made use of statistical techniques, those techniques include the following: Pearson correlation, Vuong’s test was used to choose the superior models and clarify operating cash flow variations and adjusted $R^2$. This report, made use of statistical techniques, those techniques include the following: Pearson correlation, Vuong’s test was used to choose the superior models and clarify operating cash flow variations and adjusted $R^2$.

The research assesses the information content of the earnings and cash flow data in predicting the future cash flows. This was carried out using a sample of 362 firm-years, from Jordanian companies listed on the Amman Stock Exchange, during the time period of 2006-2011.

The study, hopes to determine in the Jordanian capital market, if accrual-based earnings, or reported cash flow from operations is a more accurate forecaster of the future cash flows. Also considered in this study, is the relative likelihood, of the stated cash flow, from operations and traditional measures of cash flow. The traditional measures of cash flow includeworking capital from operations and earnings plus depreciation. Also taken into account, is the degree
in which the forecasting ability of earnings and reported cash flow, from operations, is in fact reliant on firm size.

The data was analyzed by four OLS regression models were designed. The study brings forth evidence that earnings along with depreciation and amortization expense is in fact the greatest predictor of all future cash flows in comparison with earnings and reported cash flow operations. In addition, the reported cash flow from operations is in fact more revealing than the traditional measures of cash flows, when it comes to predicting future cash flows in large firms. The study include, evidence that reveals that the predictability of all earnings and the reported cash flow from operations, in large firms, is in fact greater than that in small firms.

The results that were obtained in the study, when it came to large companies were reliable with the results that were conducted by Farshadfar, et.al.,(2008)

The results of this study are also reliable in relation to research done in the U.S. and U.K. (e.g. Barth et al., 2001; Al-Attar and Hussain, 2004). This brings to light the place of accounting standard setters, in specific the FASB, the accrual-based earnings is superior to cash flows in forecasting future cash flows. The findings of this study have failed to verify the empirical evidence that was provided by previous studies (e.g. Bowen et al., 1986; Percy and Stokes, 1992) in that traditional measures of cash flows are more relevant than cash flow from operations in firms. This observation supports the AASB’s policy decision to dictate the cash flow statement reporting, as an alternative to funds statement. This all indirectly supported the results of previous research (e.g. Austin and Bradbury, 1995) that funds-based measures of cash flows, are a poor proxy for actual cash flow operations. The results, in terms of the firm size, infer that users of accounting information must be careful, when it comes to assessing the utility of earnings and cash flow measures in predicting future cash flows, when the firm size decreases.

Based on the results of the research, the following recommendations have been concluding: firstly only one legged variable were used to forecast current cash flows, so more research can expand forecast horizon. Then, concentration should be stressed in the fact that Jordanian investors have to emphasis the importance, on cash flow from operations, in comparison to traditional earnings, when making investment decisions.
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