The Effects of Earning Management Techniques, Net Income and Cash Flow on Stock Price

Thomas Arkan

Abstract: The purpose of this paper is to examine empirically and detect the extent of practicing Earning management (EM) in Kuwaiti manufacturing companies and to discover the relationship and effects of using earning management practices and declared net income and cash flow in financial statements on stock price in financial markets. The practitioner experience accountant can provide different forms and types of earning and profit in financial statements to users by manipulating with numbers and records and to make benefits out of the flexibility of accounting standards, policies, disclosures and the interference in accounting measurement without violating rules and principles, this paper will focus on analysing the concept of earning management, motivations that stand behind it, methods and techniques that are used to practice it and discussing the different models used to detect these practices, that may give many explanations to the behaviours of managers and accountants, the sample chosen in this study consists of 7 Kuwaiti manufacturing firms listed on the financial market. The modified Jones model (1995) which represents the most favourite model by the researcher was used to estimate the discretionary accruals in order to detect the earnings management practices and to explore the effects of some variable and factors on earning management practices and stock price, a regression model was designed and a statistical analysis was used by (SPSS) to analyse this phenomenon. The results of testing these models on the samples selected showed that the Kuwaiti firms are involved in earning management practices as they exercised the discretionary accruals in a negative way. The tests showed also the negative effect of net income and cash flow that was created from EM practice on stock price.

Keywords: earning management (EM), net income, cash flow, stock price, and the modified Jones model

Introduction

The financial statements and accounting numbers play the main role in decision making and evaluating the performance and financial position of companies through communicating this data and information to a variety type of users, the financial reports should provide useful information to current and potential future investors and creditors to assess them in decision making. The accounting rules, policies and regulation permits the accountants and managers to use their judgments and make certain choices in their financial reports. Theoretically, companies should select accounting methods and procedures to make estimations which reflect in the best neutral way the financial performance position of a company. But practically the opportunistic behaviour of the management may lead either to reducing their profits in order to have a tax reduction and evasion or increases in order to push up their

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incentives or modify their financial position in the financial market, this means that managers are able to choose methods and make estimations that do not reflect the true financial position of the company but provide a more positive image (Healy, Wahlen, 1999). Since companies’ managers and accountants have a strong interest in accounting policies and methods which are generated from the set of Generally Accepted Accounting Principles and it is expected to use these policies to maximize their own interests or for company performance position. This is called earnings management. There are different opinions about earnings management and ways to pursue it. Professionals say that it is a phenomenon that is problematic which permeates in the industry, while theorists argue that it does not exist. Thus there are differences regarding earnings management (Dechow et al. 1995).

1. Earning management: Concepts, motivations and techniques

In the finance and accounting literature there are several definitions of earnings management, and as has been defined in many different ways, the differences in definition between researcher and academics reflect their own point of view and hypotheses to explain the phenomenon, and motivations stand behind, as well as their own perceptions regarding the extent of such behaviour. However, I will display the most known definitions between research and try to discuss them. According to schipper (Schipper 1989) the definition for earnings management is: “disclosure management in the sense of a purposeful Intervention in the external financial reporting process, with the extent of obtaining some private gain for shareholders or managers, as opposed to merely facilitating the neutral operation of the process.” This definition focuses mainly on misleading a stockholder. Healy and Wahlen Wahlen (1999) give the following definition of earnings management: “Earnings management occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports either to mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers.” This definition also emphasizes the opportunistic perspective behaviours of earnings management, which misleads financial information users. The definition proposes two main objectives of earnings management:

- firstly, to mislead stakeholders about the economic performance of the company,
- secondly, to influence contractual outcomes that depends on reported accounting figures.

D. Fields, Z. Lys, and Vincent (2001) state that “earnings management occurs when managers exercise their discretion over accounting numbers with or without restrictions. Such discretion can be either firm value maximizing or opportunistic”. However, these perspectives can be differentiated through management intent, where management intent is unobservable. Ronen and Yaari (Ronen, Yaari 008) offer an alternative definition of earnings management: “Earnings management is a collection of managerial decisions that result in not reporting the true short-term, value-maximizing earning as known to management”.
Earnings management can be:
- Beneficial: it signals long-term value
- Pernicious: it conceals short- or long-term value
- Neutral: it reveals the short-term true performance

Ronenene and yaar also go further by classifying the earning management to:
- white; Earnings management is taking advantage of the flexibility in the choice of accounting treatment to signal the managers’ private information on future cash flow,
- grey; Earnings management is choosing an accounting treatment that is either opportu-

nistic (maximizing the utility of management only) or economically efficient,
- black. Earnings management is the practice of using tricks to misrepresent or reduce the transparency of financial reports.

Arthur Levitt (1998) chairman in SEC argues that the accounting needs to be flexible, nevertheless; Levitt also believes that the flexibility of accounting has a reverse side since it gives rise to difficulties regarding the business. Levitt argues that earnings management can be summarized into five different variants.

1. “Big Bath”: means that companies exaggerate their restructuring charges when companies are undergoing a structural change. The reason is that analysts tend to focus their estimates of future cash flow and do not react to a firm’s restricting charges as negative for the stock price since the cost is considered as a disposable item. Companies can subsequently transform the exaggerating costs to revenue.

2. “Creative acquisition accounting”: arises when a business acquires as well as consoli-
dation by the acquisition method. Consequently will the acquisition get lower future earnings, which they acquire is difficult to accept? The company can avoid the negative earnings trend by describing an unfair share of the acquisition price as research and development, which is in an initial phase.

3. “Cookie jar reserves” arises when companies exceed market expectations which permit the scope for the company to make excessive provisions. Therefore, firms may make unrealistic projections of future liabilities, and this creates an opportunity for businesses to hide the reserves that can be used when earnings are lower than expected.

4. “Immaterial misapplications of accounting principles”: occurs when companies de-
liberately make systematic errors in the reporting on items that are considered ir-
relevant, because firms can always defend themselves by saying that the amount was wrong and has no effect on the financial report in its entirety. However, will this af-
flect an investor’s decision in a negative way.

5. “Premature recognition of revenue”: it means that this situation occurs when compa-
ries report earnings before the sale actually took place or is completed.

A lot of researcher mixing between different types of earning management like (con-
servative accounting, neutral accounting, aggressive accounting and fraudulent account-
ing). Dechow and Skinner (2000), states that there is no clear definition of earnings man-
agement. Nevertheless, they make a demarcation between fraud and earnings management.
As we see most of the definitions used in empirical research describe earnings management as a negative phenomenon. Although all previous definitions could make an important difference, they highlight the common features of earnings manipulation practices:

- The first feature they underline is the fact that earnings management behaviour refers to purposeful and deliberate actions taken by management with the ultimate goal to alter reported earnings. Thus, earnings management is different from unintentional errors, such as an accountant mistakenly entering incorrect numbers.

- The second feature shows that earnings management can be achieved through the accounting system or business transactions of the company.

The former is known as accounting-based earnings management. As a matter of fact, when managers adopt this method, the reported earnings are artificially affected. This involves using estimates or judgments allowed by accounting regulation, such as expected lives and salvaging the values of long-term assets, obligations for pension benefits and other post-employment benefits, deferred taxes, and losses from bad debt and asset impairments. Moreover, it can also be achieved by making changes between acceptable accounting methods, such as the opportunity to affect changes from the LIFO to FIFO, or weighted-average for inventory value.

The study of Watts and Zimmerman (Watts et al. 1986) which is based on the Healy and Wahlen study showed there are three primary hypotheses regarding earnings management motivations:

<table>
<thead>
<tr>
<th>Accounting Choices Within GAAP</th>
<th>&quot;Real&quot; Cash Flow Choices</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Conservative&quot; Accounting</td>
<td>&quot;Real&quot; Cash Flow Choices</td>
</tr>
<tr>
<td>Overly aggressive recognition of provisions or reserves</td>
<td>Delaying sales</td>
</tr>
<tr>
<td>Overvaluation of acquired in-process R&amp;D in purchase acquisitions</td>
<td>Accelerating R&amp;D or advertising expenditure</td>
</tr>
<tr>
<td>Overstatement of restructuring charges and asset write-offs</td>
<td>Postponing R&amp;D or advertising expenditure</td>
</tr>
<tr>
<td>&quot;Neutral&quot; Earnings</td>
<td>Earnings that result from a neutral operation of the process</td>
</tr>
<tr>
<td>Understatement of the provision for bad debt</td>
<td>Postponing R&amp;D or advertising expenditure</td>
</tr>
<tr>
<td>&quot;Aggressive&quot; Accounting</td>
<td>Drawing down provisions or reserves in an overly aggressive manner</td>
</tr>
<tr>
<td>&quot;Fraudulent&quot; Accounting</td>
<td>Recording sales before they are &quot;realizable&quot;</td>
</tr>
<tr>
<td>Violates GAAP</td>
<td>Recording fictitious sales</td>
</tr>
<tr>
<td></td>
<td>Backdating sales invoices</td>
</tr>
<tr>
<td></td>
<td>Overstating inventory by recording fictitious inventory</td>
</tr>
</tbody>
</table>
1. The bonus plan hypothesis. Or (capital market expectations and valuation). Where investors and analysts value shares by discounting the future cash flows of companies. Accounting information, including financial statements are used to determine the price of shares. This creates an incentive for management to manipulate earnings, when trying to influence short-term share price performance.

2. The debt covenant hypothesis. Or (contract written in terms of accounting numbers): The contracting motives are largely based on the Positive Accounting Theory. A company can be seen as a group of different contracts. The company has contracts with management, employees, consumers, lenders and suppliers. One of the objectives of the company is to minimize the various contracting costs. In this theory accounting numbers are used to monitor and regulate the contractual regulations between management and different stakeholders.

3. The political cost hypothesis. Or (anti-trust or other government regulation): Anti-trust or other government regulation is another incentive, which is based on the Political cost hypothesis, involves the phenomenon of the social relevance of companies and these firms can be subject to the political agenda. Companies may have an interest in influencing the earnings in order to be more or less visible in politics and the media. However the current research of earnings management has, shifted its focus away from the positive theory of accounting and back again to capital market motivations as interpretations of the opportunistic behaviour of managers. A lot of literature has displayed different evidence from investigating various aspects of managers’ motivations to manipulate and practice earnings management. Academics and researchers provide different motivations for manipulation which are grouped into five categories:

   1. Capital market motivations: concerns the investor’s expectations regarding the risk and return related to a firm’s performance. The use of financial information in affecting stock prices inspired a number of studies to argue that affecting stock prices may be one reason for manipulating earnings that can be opportunistic behaviour.

   2. Management compensation contract motivations: when an agent attempts to transfer wealth from the principal to their own benefit; thus, a compensation contract between principal and agent, may motivate managers to manipulate earnings. In other words, managers are motivated to employ earnings management in order to enhance or increase their own compensation or bonus plan which is often associated with a firm’s performance.

   3. Lending contract motivations: it is related to a debt covenant hypothesis in that restrictions are often imposed by creditors regarding the payment of dividends, share buybacks and the issuing of additional debt in respect of the reported accounting numbers and ratios, in order to ensure the repayment of the firm’s borrowings.

   4. Regulatory motivations: the listed companies are usually monitored for compliance with regulations, and at the same time are subjected to numerous regulations linked to accounting figures and ratios. This creates pressure for managers to manipulate
earnings to show their compliance with regulations. Actually Some industries, in particular in the banking, insurance and utility industries are monitored for compliance with regulations linked to accounting. Banks and insurance firms are often subject to requirements that they have enough capital or assets to meet their liabilities.

5. Political cost motivations: companies may also manage earnings to show less profit in order to diminish political risk. In other words, the political cost that is proposed by Watts and Zimmerman predicts that incentives for firms to manage earnings result from political pressure to decrease prices or face the penalties that may arise from the investigation of firms which are suspected of breaching anti-trust rules or otherwise taking advantage of the general public. Watts and Zimmerman propose the political cost motivation which is also similar to the antitrust and other regulatory motivations propounded by Healy and Wahlen.

Accountants and managers have a wide range of methods and techniques of manipulating with numbers, records and statements through the flexibility of accounting rules and policies. The technique of earnings management can be defined as a method or a way of selecting or violating accounting standards in order to affect financial events. Earnings management techniques could take two forms (Ronen, Yaari 2008):

1. Accounting choices.
2. Accruals choices: which divided into two types:
   A. Normal or expected accruals (referred as non-discretionary). This type arises from transactions made in the current period that are normal for the firm given its performance level and business strategy, industry conventions, and macro-economic events.
   B. Abnormal or unexpected accruals (referred as discretionary). These arise from transactions made or accounting treatments chosen in order to manage earnings. The main area of the problem is to identify the discretionary component of accruals to assess earnings management activities. It needs to examine how managing discretionary accruals could affect the earnings. And how managers also develop operational and non-operational activities to manipulate earnings.

The techniques of earnings management can be categorized into different groups, such as income smoothing, creative accounting, fraudulent accounting, big bath, financial slack, change GAAP, amortization, depreciation, sale, asset exchange, operating versus non-operating income, reservations, provisions and allocations, retirement of debt and uses of derivatives. Jones (1991) describes three different methods of earnings management.

- the first way is through the use of accruals. The use of total accruals as a proxy for earnings management is too simple. According to Mohan ram the existence of high accruals will be in companies with growing sales by increasing receivable accounts,
- a second way of earnings management according to Jones (1991) is the voluntary change of the accounting method for a better look at financial reporting (in the short term),
thirdly describes Jones (1991) as the possibility for earnings management by a change in Capital structure.

Scott (2009) distinguishes four different strategies that managers use for earnings Management. The strategies are:

3. Taking a bath: this can occur during periods of organizational problems or reorganiza-
tion of a business. If a company reports a loss then this could encourage the management to report an even bigger loss. After all, there is still little to „win” for management. A company can do this by, for example, additional depreciation on assets or a large provision for expected future costs. There are also contractual reasons why managers’ report a bigger loss. This is the case if losses under the lowest border of the bonus plan of managers. A larger loss will increase the profitability of future bonuses. Lee (Lee et al. 1999) found that companies which are financially heavily supported the management to choose for earning declining methods to have more financial flexibility in the future.

4. Income minimization: this method corresponds to the first method but is less ex-
treme. A company can, for example, accelerate the assets depreciation.

5. Income maximization: A reason for earnings maximization will be when managers want to achieve the upper limit of their bonus plan.

6. Income smoothing: managers have reasons to smoothen the earnings so that the bo-

The implications of earnings management techniques may lead to negative effects on companies in short and long terms, directly and indirectly in different levels presents three levels of effects:

1. The level of economic unity administration: the influence will appear in the follow-
ing aspects:
   - Influence on the administration,
   - Impact on the value of equity and maintenance of capital,
   - Influence the applicable incentive system,
   - Damaging the economic efficiency of the facility.

2. The level of transactions in the capital markets: where it has been proven by a lot of applied research that there is a direct relationship between information from variables and accounting policies and prices, the volume of transactions in the capital markets, the affects by these variables can be seen through multiple ways, the most important results are:
   - What results from this policy of disclosure of new information?
   - What results from this policy from the effects of direct cash?
   - The impact of the accounting policy on borrowing costs and the cost of capital
– The impact of the accounting policy on what is known as the political costs
– Hide operational management problems, the administration resorts to exercise earn-
ings management in order to obtain additional benefits and to win promotions and
avoid criticism leads to keeping the errors as they do not correct the problems or
deportation for long periods of time.

3. The level of social impact: It is clear with the impact on the transfer of wealth and
money to another party because of misleading financial information

2. Earning management models and empirical test

Despite being difficult to detect the use of earnings management, there are a number of
empirical methods by which earnings management can be detected and measured. Various
researchers have developed models trying to detect earnings management, the most com-
on of these is the discretionary accruals method. It assumes that managers rely on their
ability to use discretion regarding certain accruals and thus requires discretionary and non-
discretionary components of accruals to be separated, so that the discretionary accruals can
be used as a proxy to test for earnings management through literature one can find many
attempts by academics to explore the relationship between earning management practicing
from one side and the behavioural trend of accounts from another side. The most known at-
ttempts of detecting earning management practice are the following:
– The Healy model (1985),
– The De Angelo model (1986),
– The Jones model (1991),
– The Modified Jones model (1995),
– The Margin model (2000),
– The Performance- matching the Jones accrual model (2005),

In our study I will discuss the most popular model (the modified Jones model (1995))
briefly in order to go through the empirical test to the sample:

**The modified Jones model (1995):** In the research about earnings management the most
frequently used model is the modified Jones model, first introduced by Dechow (Dechow
et al. 1995) as a modification of the original Jones model. The original Jones model cannot
detect earnings management through sales. Dechow, Sloan and Sweeney (1995) proposed
a modification to the standard Jones model in an attempt to capture sales-based manipula-
tions. This model measures the unexpected accruals. At first, the total accruals are calcu-
lated as either the difference between net income and cash flow from operations or working
capital accruals minus depreciation. A limitation of the modified Jones model is that the
unexpected accruals have to be Calculated and estimated. There is a risk of estimation er-
rors and potentially biased results. Another limitation of the modified Jones model is that
it only measures the effect of earnings management through the change in accruals, while
earnings management can also be applied through the manipulation of the cash flow component (Healy, Wahlen 1999). Young (1999) states that the modified Jones model suffers from a systematic measurement error when depreciation is included in the measurement of accruals, resulting into a biased measurement of the unexpected accrual. The critique of Kothari (Kothari et al. 2005) is about the link between a company’s performance and the proxies chosen to measure nondiscretionary accruals. They compared traditional discretionary accrual measures (e.g. the Jones and modified Jones model) and performance-matched discretionary accruals. Their results suggest that a performance-matched model enhances the reliability of earnings management research. Although they state that a performance based measure is not always the best measure in every setting. Dechow states that one of the limitations of the modified Jones model is its inability to detect less pronounced forms of earnings management.

The result indicates that the Jones modified model is the most powerful model when it comes to explaining earnings management, which also is consistent with earlier studies. I adopted to test the practicing of earning management by a sample I chose with the modified Jones model which will be calculated according to the following steps (Dechow, Skinner 2000):

1. Calculating the total accruals by equation:

   \[ TAC_{i,t} = NI_{i,t} - CFO_{i,t}, \]

   where:
   \( TAC_{i,t} \) – total accruals to company \( i \) in year \( t \),
   \( NI_{i,t} \) – net income to company \( i \) in year \( t \),
   \( CFO_{i,t} \) – operation cash flow to company \( i \) in year \( t \).

2. Calculating non-discretionary accruals, I estimated the parameters of the modified Jones model through the linear regression model to the sample of selected companies for each year separately according to the modified Jones model below:

   \[
   \frac{TAC_{i,t}}{A_{i,t-1}} = \alpha_0 + \alpha_1 \left( \frac{1}{A_{i,t-1}} \right) + \alpha_2 \left( \frac{\Delta REV_{i,t} - \Delta REC_{i,t}}{A_{i,t-1}} \right) + \alpha_3 \left( \frac{PPE_{i,t}}{A_{i,t-1}} \right) + \epsilon_{i,t},
   \]

   where:
   \( TAC_{i,t} \) – total accruals,
   \( A_{i,t-1} \) – the book value of total assets for company \( i \) in year \( t-1 \),
   \( \Delta REV_{i,t} \) – the change in revenue for company \( i \) between year \( t \) and year \( t-1 \),
   \( \Delta REC_{i,t} \) – the change in accounting receivables for company \( i \) between year \( t \) and year \( t-1 \),
   \( PPE_{i,t} \) – the total property, plant and equipment of company \( i \) in year \( t \),
   \( \alpha_{0,1,2,3} \) – the total parameter,
   \( \epsilon_{i,t} \) – the residuals.
And by applying the testing model above on more than 80 multiple regression equations for each year of the study (2007–2010) using SPSS, I estimated the non-discretionary accruals to the sample of the study through the equation:

\[
\frac{NDAC_{it}}{A_{it}} = \hat{\alpha}_1 \left( \frac{1}{A_{it-1}} \right) + \hat{\alpha}_2 \left( \frac{\Delta REV_{it} - \Delta REC_{it}}{A_{it-1}} \right) + \hat{\alpha}_3 \left( \frac{PPE_{it}}{A_{it-1}} \right),
\]

where:

\[
\frac{NDAC_{it}}{A_{it}} \quad \text{– the non-discretionary accruals to gross assets for company}_i \text{ in year}_t.
\]

3. Calculating the discretionary accruals by the equation:

\[
\frac{DAC_{it}}{A_{it}} = \frac{TAC_{it}}{A_{it}} - \frac{NDAC_{it}}{A_{it}},
\]

where:

\[
\frac{DAC_{it}}{A_{it}} \quad \text{– the discretionary accruals to gross assets of company}_i \text{ in year}_t.
\]

The sample of the study contains 7 manufacturing companies listed on the Kuwaiti financial market and I took into consideration the availability of a detailed financial statement and reports that support our calculations, according to the modified Jones model I calculated the absolute value of discretionary accruals for each company within the period of study (2007–2011) and then I calculated the average for each year for all of the companies, if the absolute value of discretionary accruals for a company is bigger than the average of all the others, that is meant that a company was practiced and applied earning management in that year, and if the absolute value for discretionary accruals in a certain year less than the average that is meant a that a company was not involved in the earning management practice. A summary of the detailed results of the study after applying all of the last steps can be seen in Table 1.

**Table 1**

<table>
<thead>
<tr>
<th>Year</th>
<th>AV DAcc/A</th>
<th>Max DAcc/A</th>
<th>Min DAcc/A</th>
<th>Average NI</th>
<th>Average NCF</th>
<th>AV SP</th>
<th>EM</th>
<th>NON-EM</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>–0.0257</td>
<td>0.0141</td>
<td>–0.1055</td>
<td>2,210,540</td>
<td>3,421,256</td>
<td>5.2</td>
<td>0</td>
<td>7 or 100%</td>
</tr>
<tr>
<td>2008</td>
<td>0.658</td>
<td>0.0525</td>
<td>0.4819</td>
<td>3,875,640</td>
<td>3,010,500</td>
<td>7.3</td>
<td>7 or 100%</td>
<td>0</td>
</tr>
<tr>
<td>2009</td>
<td>0.549</td>
<td>0.0489</td>
<td>0.4103</td>
<td>3,220,870</td>
<td>2,989,500</td>
<td>6.2</td>
<td>5 or 71.4%</td>
<td>2 or 28.5%</td>
</tr>
<tr>
<td>2010</td>
<td>0.387</td>
<td>0.0267</td>
<td>0.3264</td>
<td>3,004,200</td>
<td>2,725,366</td>
<td>5.9</td>
<td>3 or 43%</td>
<td>4 or 57%</td>
</tr>
<tr>
<td>2011</td>
<td>0.1002</td>
<td>0.0148</td>
<td>0.0572</td>
<td>1,731,145</td>
<td>2,001,365</td>
<td>4.9</td>
<td>0</td>
<td>7 or 100%</td>
</tr>
<tr>
<td>AV 2007–2011</td>
<td>0.3337</td>
<td>0.0314</td>
<td>0.2340</td>
<td>2,808,479</td>
<td>2,829,597</td>
<td>5.9</td>
<td>15 or 42.8%</td>
<td>20 or 57.2%</td>
</tr>
</tbody>
</table>

Source: own tables analysis.
From Table 1 we can discover that companies in 2008, 2009, and 2010 practiced earning management with the average of (7–5–3) through using the discretionary accruals in a positive way, the average of the discretionary accruals was 0.3337 in the interval of the test with a standard deviation of (0.0671) the increasing use of earning management practice in 2008 related to the high extent of the financial crises and the desire of companies to make a hidden reserve and provision that they may use it in the future to organize their cash flow which would support their operational activities, this also could be related the goals of increasing the incentives and bonuses in top management. Also this practice may came from the desire of a company to attract new investors, Table 2 shows the statistical significance of earnings management practices after using the described statistics showed the existence of such practices. The binomial test was used to test this relationship degree so we could test the range of differences in the data concerning earning management which is presented by the two Dummy variable s (0,1) and around an average equal to (0.5) with confidence 95%, the results are shown below in Table 2:

**Table 2**

<table>
<thead>
<tr>
<th>Category</th>
<th>N</th>
<th>Observed Prop.</th>
<th>Test Prop.</th>
<th>Exact Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>20.00</td>
<td>0.57</td>
<td>0.50</td>
<td>0.500</td>
</tr>
<tr>
<td>Group 2</td>
<td>15.00</td>
<td>0.43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>35</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: own tables from SPSS Program analysis.

The high value of the statistical significance can be observed from the table above where it is (0.5) and bigger than the level of test confidence (α = 0.05), this gives extra and real evidence with statistical indicators that companies exercised earning management practice during the years of this study. To test the relation between the study variables we have to examine the normality of each variable and factor and assure that it follows the normal distribution. Table 3 shows the test of normality for net income, cash flow and stock prices tested with the SPSS software.

**Table 3**

<table>
<thead>
<tr>
<th>Tests of Normality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kolmogorov-Smirnov*</td>
</tr>
<tr>
<td>statistic</td>
</tr>
<tr>
<td>EM</td>
</tr>
<tr>
<td>NI</td>
</tr>
<tr>
<td>NCF</td>
</tr>
<tr>
<td>SP</td>
</tr>
</tbody>
</table>

* Lilliefors Significance Correction; ** This is a lower bound of the true significance.

Source: own tables from SPSS Program analysis.
Thomas Arkan

The results refer to all variables and relations following the normal distribution where all of the results of the SIG values are bigger than $\alpha = 0.05$. In Table 4 we can find a lot of indicators and evidence about the effects and relations between net income, cash flow and the average stock price of the companies within the period of this study and through practicing earning management policies which reflected on the numbers of net income and the Pearson correlation test tested the relationship and direction between three variables separately. The relation between net income and stock price showed a very strong positive relation with a 0.978 positive degree which reflects the effects of earning management practice on net income first and consequently on stock price, the degree of effectiveness is less with relations between cash flow and stock price where it is 0.362 this is a positive and good relation but not like NI. This reflects also that the cash flow statements may represent a more clearer reality of the financial position of companies during the periods of earning management practice and may be used as a strong tool to evaluate the company internally and externally.

**Table 4**

Correlations between NI-NCF-SP

<table>
<thead>
<tr>
<th></th>
<th>EM</th>
<th>NI</th>
<th>NCF</th>
<th>SP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EM</strong></td>
<td></td>
<td></td>
<td></td>
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* Correlation is significant at the 0.01 level (2-tailed).

Source: own tables from SPSS Program analysis.

**Conclusions**

1. Earnings management considered as a form of accounting manipulation, practiced without a breach of the laws or accounting standards, where the professional accountants exploit their experience and flexibility given to him/her the accounting standards to make an incorrect impression about the company return by using different methods and techniques like amplification or the deliberated reduction of the profit or deport current accruals to following periods, or manipulated in provisions and reserves.
2. There are statistically significant indicators that companies chose as a sample to test the modified Jones model and had practiced earning management techniques during the period of study.

3. The statistical test showed also the positive high correlation between the net income and stock price of the listed companies during the period of study, while the correlation between Net cash flow and stock prices show a less positive relationship between them.

4. The management of the companies have to realize the risks arising from the exercising of earnings management operations.

5. The operations of earnings management significantly affect the credibility of the financial statements and provide a misleading stock price in markets, the objectivity and credibility of the properties and also affects the decisions of different users especially investors and creditors.

References


Mulford C.W., Comiskey E.E. (2002), The Financial Numbers Game Detecting Creative Accounting Practices, John Wiley and Sons. INC., USA.


Wpływ technik zarządzania zyskami, dochodu netto oraz przepływów pieniężnych na cenę giełdową

Streszczenie: Celem tej pracy jest doświadczalne zbadanie i określenie zakresu zarządzania zarobkami (ang. earnings management, EM) w kuwejckich przedsiębiorstwach produkcyjnych, jak również odkrycie zależności i wpływu zastosowania praktyk zarządzania zyskami i zadeklarowanego w sprawozdaniu finansowym dochodu netto oraz przepływów pieniężnych na ceny akcji na rynku finansowym. Księgowy z doświadczeniem praktycznym jest w stanie wymienić różne formy i typy zysków i dochodów w sprawozdaniach finansowych poprzez manipulowanie liczbami i zapisami, a także wykorzystać elastyczność norm rachunkowości, zasady, oświadczenia o ujawnieniu danych oraz ingerencję w pomiar rachunkowy bez naruszania zasad i regul. Niniejsza praca skoncentruje się na analizie koncepcji zarządzania zyskami, motywami, które za nimi stoją, metodami i technikami stosowanymi w praktyce, a także omówić różne modele wykorzystywane do wykrywania takich działań, które mogą wiele wyjaśnić co do zachowań menedżerów i księgowych. Niniejsze badanie opiera się na próbie 7 kuwejckich firm produkcyjnych notowanych na rynku finansowym. Do oszacowania swobody w metodzie memoriałowej w celu wykrycia praktyk związanych z zarządzaniem zyskami zastosowano zmodyfikowany model Jonesa (1995), który należy do najbardziej ulubionych modeli badawczych. Do zbadania pewnych zmiennych oraz czynników wpływających na praktyki zarządzania zyskami i cenę akcji utworzono model regresyjny i zastosowano analizę statystyczną przez (SPSS) do analizy tego zjawiska. Wyniki testów przeprowadzonych według tego modelu na próbie badanej wykazały, że kuwejckie firmy stosują praktyki zarządzania zyskami wykorzystując w negatywny sposób swobodną metodę memoriałową. Testy wykazały także negatywny wpływ dochodu netto i przepływów pieniężnych wytworzonych w ramach praktyk zarządzania zyskami na cenę akcji.

Słowa kluczowe: zarządzanie zyskami (ZZ), dochód netto, przepływy pieniężne, cena akcji, zmodyfikowany model Jonesa

Citation