

Can Impairment Recognition under IAS 36 Be Improved by Financial Performance?

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Received: July 9, 2016

Accepted: September 8, 2016

Online Published: November 20, 2016

doi:10.5539/ijef.v8n12p163

URL: <http://dx.doi.org/10.5539/ijef.v8n12p163>

Abstract

The study seeks first to examine how companies implement impairment test as required by IAS 36. Secondly, to explore and evaluate factors which may explain the effect of specific financial indicators on impairment loss. Quantitative analysis of a panel data sample of (30) companies listed on the Amman Stock Exchange (ASE) over 2005-2008 was carried out. Despite the fact that sample of companies listed on the ASE supposed to implement IAS36; only (41.10%) of the sample recorded an impairment recognition loss (30 out of 73). We find that impairment loss ratio showed fluctuated trends. We also find that probability of an impairment loss is positively affected by company size (SIZE) and operating cash flows (OCF). Research also reported a positive significant relationship between financial leverage (LEV), return on assets (ROA) and return on equity (ROE). This can be explained by most public companies utilize financial leverage heavily to increase (ROA) and (ROE). We confirm insignificant statistical positive relationship between profitability measured by (ROA) and impairment loss recognition (IMP). Other controlling variables such as LEV; has a negatively insignificant relationship with IMP. This paper introduces necessary background and fundamentals to understand current practice of impairment recognition in Jordan. To urge Companies to use high standards of accounting quality in their financial statements according to IASs, this presentation would attract investors' attention and would further reinforce the credibility of their financial statements.

Keywords: Jordan, impairment recognition, IAS 36, value in use

1. Introduction

Impairment accounting is relatively is a new term in Jordanian context. Adoption of International Accounting Standards (IAS) became mandatory for all listed companies in Amman Stock Exchange (ASE) in 1999. IAS (36) requires company accounting for non- current asset write –down determining the recoverable amount on an annual basis. The recoverable amount is a combination of two measurement bases: the higher amount out of fair value less cost to sell and value in use (IAS 36.6). To determine value in use, companies have to apply a common discounted cash flow (DCF) calculation. Two input factors are required to apply a DCF; the estimated future cash flows and discount rate (IAS 36.57). It states: ‘As a starting point in making such an estimate, the entity might take into account the following rates: the entity’s weighted average cost of capital determined using techniques such as the Capital Asset Pricing Model, the entity’s incremental borrowing rate” and “other market borrowing rates”. Usually a company invests in non-current assets with the goal to earn earning and generate positive cash flows. In situations of asset impairment, there is a risk of significant negative changes in future cash flows. The main objective of the current study is to address empirical evidence on how the Jordanian industrial companies measure a value of their non-current asset impairment. For attaining this aim, a thorough analysis of DCF is being applied. Asset Impairment Accounting in Jordan has been introduced by companies since 1999, in which the *implementation of International Accounting standards in Jordan had been commenced according to the Jordanian Association of Certified Public Accountants (JACPA) (Auditor’s Bulletin, 2004). Finally, IAS 36 is a complicated standard, which requires specific knowledge of valuation techniques (Anderson, 2004).*

1.1 Key Terms in Accounting Impairment (IAS, 36)

(1) **Book value** (carrying amount): represents the amount that is recognized for the long- lived asset in the Financial Position Statement after the exclusion of accumulated depreciation, and the loss of its value.

(2) **Fair value (Fair Value)**: represents the price that would be received to sell an asset, or paid to transfer a liability in an orderly transaction between market participants at the measurement date in an active market, this will be relatively straightforward.

(3) **Recoverable amount**: Is the higher of fair value less costs of disposal and value in use. If either of these amounts exceeds the asset's carrying amount, the asset is not impaired and it is not necessary to estimate the other amount. Little explanation was provided for how **recoverable amount** should be determined.

(4) **Decrease in asset value (impairment loss)**: if, the recoverable amount of an asset is less than its carrying amount (book value), the carrying amount of the asset shall be reduced to its recoverable amount.

(5) **Value in Use**: The present value of discounted cash flows within the expected consequences of the use of such an asset.

(6) **Future cash flow**: guidance is provided describing the procedures for estimating future cash flows and discount rates (IAS 36, Para 30).

1.2 Discount Rate (IAS, 36)

The discount rate is defined as rates that can be paid by the company in a deal market are under way to borrow money to buy this, or group of assets. If the discount rate is not available in the market rate of replacement, must be used that reflects the time value of money over the life of the original, taking into account the cost of capital weighted to the company, and the rate of borrowing additional to the company, and any other rates for borrowing (IAS 36, Para 57), and must recognize the loss of the lack of value of the asset when the book value is higher than its recoverable amount (IAS 36, Para 59). To carry out such impairment, non-current assets could have evidence of physical damage, or the performance of the assets its self is less favorable than expected.

However, this research has a stronger focus on impairment within Jordanian context. Secondly, and related to this, the current research investigates the effect of various financial indicators on impairment loss. The contribution of this study is to add some concerns about the growing body of literature about impairment area. Finally, it is hoped that the benefit of this research will cover various expected stakeholders to comprehend the effect of financial performance impairment in companies. It is hoped that therefore an appropriate moment to conduct an empirical research of the effect of financial performance on impairment. The study focused on historical financial statements. Some measurements included in this group are the size of a company measured by total assets (Size), Debt/Total Assets (LEV), various financial ratios can be used as a proxy for profitability. Among these, could be mentioned Return on Assets (ROA), and Return on Equity (ROE) for the periods over (2005-2008). In order to reach the aim of this study, the main research question is: What are the effects of financial performance on Impairment Loss (IMP)? What are the contributions this paper to seek to the existing body of work in this area. The remainder of this paper is organized as follows. The next part provides a brief review of literature and develops the hypotheses. Part three explores the research methodology. Part four describes analysis of the study with a discussion of implications, and part five combines the conclusion and describes limitations as well as important recommendations for future research.

2. Literature Review and Hypotheses Development

Impairment loss recognition and its influence on firm profit have been widely explored (Joaquim et al., 2016), but few studies have examined the effect of accounting performance and leverage as exploratory variables. A number of researchers separately examine the impairment accounting; studies focused on three pivotal aspects relating to the impairment; first, considers applying impairment as a tool to provide accurate information and increase transparency by increasing the representational faithfulness of reported information (Fitzsimons & McCarthy, 2002; Chambers, 2007; Giannini, 2007; Barth et al., 2008). Second pivot considers the impairment concept as a tool for manipulation (McNichols & Wilson, 1988; Zucca & Campbell, 1992; Adams, 2002; Chen et al., 2004; Jordan & Clark, 2004; Riedl, 2004). The third pivot examines the association between impairment loss and market reaction, or stock price reaction, and performance (Smith, 1994; Francis et al., 1996). This study contributes to the existing literature by providing empirical evidence of the variables that affect impairment loss recognition in a developing country like Jordan. Furthermore, at the present time, the type of this research is completely scanty in the literature concerning the impairment accounting in the Arab World (AW). (Elliott & Shaw, 1988) found that large firms presented significant differences with regard to impairment loss if compared to smaller ones. (Albuquerque et al., 2011) found that companies listed in Portuguese stock exchange for 2008 recognizing impairment 47.6% of the listed companies; this was similar to the number of companies not recognizing impairment 52.4%, they examined debt, profitability and dimension on impairment recognition and concluded that dimension is the factor has the most significant association with impairment recognition. (Zang,

2008) used the financial leverage as a proxy for debt covenant, the impairment loss of goodwill proved to be relatively smaller for more highly leveraged firms.

Most researchers worldwide focused on the usefulness of the new standards as compared to the previous practices. (Olugbengai et al., 2014) enhance more emphasis on disclosing of information on significant impairment of Assets that are set out under the (IFRS); companies should disclose additional information for each significant impairment, and all Nigerian banks disclose the accounting policy for asset impairment, they recognize an impairment loss in the statements of income, cash flows and financial position, 91 percent of these banks disclose the measurement method. (Amir Vanza et al., 2011) suggest that impairment discloses private information to reduce uncertainty about firm value in the period prior to the global financial crisis (GFC). A significant number of firms confronted by unprecedented market volatility, substantial declines in profitability and sustained falls in stock prices, needed to recognize asset impairments. In view of the economic value concept, independently of any legal aspect, companies should periodically assess their asset' impairment (Reistem & Lander, 2004; Kuzmina & Kozlovska, 2012), revealed that company's accounting policy for measuring and valuing non-current assets, may be taken into consideration by investors when developing investment strategies. (Chen et al., 2004) concluded that the new rules of goodwill accounting outperform the previous enactments. On the other hand, (Yanamoto, 2008) pointed out that companies with high impairment ratios are conspicuously likely to select an appraiser's valuation. Appraisers' participation in asset impairment accounting restricts directors' discretionary behavior and suggests the possibility of increasing financial reports' reliability. (Chambers, 2006) mentioned that goodwill accounting under SFAS 142 does not improve financial reporting compared to amortization -based accounting. (Michalak, 2010) conclude that value in use measure is very closely related to the companies' value calculation methodology. This value is based on management system; sufficient information in the field of assets could make non-current operational assets impairment rules a useful tool for earnings management. (Riedl et al., 2004) stated that there is a weaker effect for economic factors on non-current asset write-offs and a higher association with so- called "big bath" reporting behavior. (Qi-Feng et al., 2009) argue that half of companies under study are contrary to the loss of shortage in the value of assets, profits of such companies decreased by (40%). (Ming et al., 2005) argued that economic factors such as inadequate conditions face industry influence loss value of the assets. So far, few studies (Rishani, 2007) in the Arab world , produce evidence to identify the concepts of accountability and lack of value of long-term assets, with the application The study finds that public and private sectors do not apply any of these criteria, such study, therefore ,recommends the application of international accounting standards in Syria. (Ullah Farooq, Niazi, 2010) report that Accounting of impairment was still issuing under discussions and there were no definite rules for amounts, timings, methods of impairment recognition, etc. In Sri Lankan industrial companies' impairment loss amount revealed the ability to predict performance (Sooriyakumaran & Velnampy, 2013). While (Joaquim et al., 2016) examine the recognition of an impairment loss of assets in listed companies in the Lisbon and Madrid Stock Exchange for the years (2007-2011); they conclude that the amount of impairment loss showed an upward trend; this loss is most significant among intangibles. However, Portuguese companies with higher market values have greater probability of recognizing impairment losses. But there is an evidence that asset impairment is associated with firm economic characteristics and performance (Cotter et al., 1998). (Yanamoto, 2008) analyze impairment loss on non -current assets disclosed by 537 entities between 2004-2006, observe that leverage ratio and Return on Assets have a negative association with impairment recognition. (Yanamoto, 2008) conclude that the higher the leverage ratio, the lower impairment recognition.

Despite the above literature review, this study provides further insight into the nature of economic performance of an asset; if the performance is worse than expected, asset impairment would be necessary; evidence for this would be actual cash flows and profitability indicators. Accordingly, the objective of the study is to examine first , how companies implement impairment test as required by IAS 36, and secondly, to test variables which may explain the effect of some financial factors like Operating Cash Flows (OCF), Financial Leverage (LEV), Return on Assets (ROA), return on equity (ROE) and Company size (SIZE) on impairment loss .

Recoverable amount was described as the net amount of operating cash flows that is expected to be recovered from disposal of assets. Operating cash flows (OCF) are usually defined as the net amount of cash moving into and out of a firm from operating activities. The existing finding suggests that more operating cash flows will lead to more utilization of noncurrent assets. Write - off firms exhibit worse financial performance relative to non – write off firms, reflected lower mean and median for operating cash flows (Riedel, 2004). (Kuzmina and Ieva Kozlovska, 2012) state that impairment of tangible assets and goodwill are significantly associated with future cash flows. Accordingly, we can lead to the following hypothesis:

H1: Operating Cash Flows (OCF) positively affect (Impairment Loss) IMP.

Financial leverage (LEV) is usually called solvency ratio measured by total liabilities (debt) divided by total assets is used as a proxy of financial leverage. According to (Ross et al., 2006), leverage is intended to address the firm's long-term ability to meet its liabilities. It worth be noticed that expected higher leverage will lead to low impairment. Accordingly, the second hypothesis in alternative form is:

H2: Financial Leverage (LEV) negatively affects IMP.

When firms attain higher profitability; means generating more benefits from utmost utilization of noncurrent assets. In order to capture profitability, various financial ratios can be applied as a proxy. Among these, could be mentioned Return on Assets (ROA), and Return on Equity (ROE). (Sooriyakumaran & Velnampy, 2014) find that impairment of assets has a negative impact on profitability. We therefore state the third and fourth hypotheses in the alternative form as follows:

H3: Return on Assets (ROA) positively affects IMP.

H4: Return on Equity (ROE) positively affects IMP.

Company size can be measured by using total sales, total assets, total revenues, capital Employed, and number of employees, the company's market share and equity. According to (Al-Haj et al., 2011) the company that has big total assets; means that the company has reached maturity stage, moreover, it reflects that the company is relatively more stable and able to generate profits than companies have a small amount of total assets, We measure the company size as the natural log of total assets, apposite relationship between company size and impairment loss is expected because a large companies are able to impair their assets. Accordingly, we state hypothesis H 5 as follows:

H5: A total asset (SIZE) positively affects IMP.

According to variables aforementioned, the empirical model is as follows:

3. Methodology

For conducting the study, one sample consists of (73) Jordanian Industrial Public companies is selected, the survey reviewed information from published annual financial reports for the period over 2005-2008. Quantitative analysis of a panel data only of 30 firms was carried out. These only (30) firms used in the study due to an inability to identify financial data, these companies didn't reveal enough impairment information in their annual reports during the research period. Bearing goals in mind, these data are presented as panel data. We compiled data about the impairment practice of the (30) companies listed on the Amman Stock Exchange (ASE) this means that impairment issues are not deeply yet investigated and explored in this sector. Because the percentage of companies recognizes impairment (41.10%) of total (73) companies, this percentage is not similar to the percentage of those not recognizing impairment (58.90%), these (43) companies never recognized IMP during the study period. However, the industry sector has been chosen at this paper due to its significance in the economic sector in the Kingdom.

In order to examine hypotheses and to implement analysis, the following linear regression model was specified by including the following five variables:

$$IMP_{it} = \alpha + \beta_1 OCF_{it} + \beta_2 LEV_{it} + \beta_3 ROA_{it} + \beta_4 ROE_{it} + \beta_5 SIZE_{it} + \varepsilon \quad (1)$$

In which (i) = 1, 230, (t) = 2005... 2008 and ε : refers to stochastic term

Variables included in this model are:

IMP: Impairment Loss

OCF: Operating Cash Flows

LEV: Leverage = Liabilities/Assets

ROA = Return/Assets

ROE = Return/Equity

Size: Total Assets (Log.)

4. Empirical Results and Analysis

Descriptive data have revealed that the obtained mean of the OCF is (8.56306E6), the values fluctuate between (-2.519E7), (2.525E8) with a standard deviation (3.268588E7), this high standard deviation indicates the absence of a unified approach among companies for operating cash flows. Furthermore, Leverage (LEV) measured by debt to assets showed a mean value of (33.172), this variable has minimum and maximum values of (0.310), (106.172) respectively, with high standard deviation (17.810) due to the major differences in total assets and debts of companies listed (ASE). Further, IMP fluctuates between (4, 206, 70.8) and (2.036E) with a standard deviation of (3.47E+07); this high dispersion indicates the absence of a unified approach among companies for impairment information. Size of company has a high standard deviation due to the major difference in firm sizes of companies enlisted on ASE. Furthermore, this variable has maximum and minimum values of (19.42), (12.99) with a mean value of (15.4748). OCF has maximum and minimum values of (2.52E+08), and (-2.519E7) respectively, with a mean value of (8.56306E6). The reported standard deviation of this variable is (3.268588E7), this shows a significant dispersion from the mean, the companies experienced high growth in size up to 19.42%, it could however, be worthy noted that this growth did really translate to higher ROA as these companies reported high return for the period. The variable ROA has maximum and minimum values of (71.41) and (-279.04) respectively, with a standard deviation of (39.661), this suggests a considerable variation or dispersion from the mean value of (5.09942). Lastly, ROE variable has a mean value of (0.919), maximum and minimum values of (108.490), (-279.920) respectively. There is a large gap between minimum and maximum of variables, this due to the fact that the sample consists of companies of various sizes. The standard deviation of (42.823) shows a significant dispersion from the mean. Jarque-Bera p-value of all variables ($p=0.00<0.05$), this indicates that all data satisfies normality.

Table 1. Descriptive statistics for dependent and explanatory variables

	LEV	ROA	ROE	IMP	OCF	Size
J.B*	28.900	9478.04	5024.15	784.7	5961.99	6.34
Prob.	0.00	0.00	0.00	0.00	0.00	0.04
Min.	0.31	-279.04	-279.92	4,206,70.8	-2.52E+07	12.99
Max.	106.55	71.41	108.49	2.036E	2.53E+08	19.42
Mean	33.17208	5.09942	0.919	1.75E+07	8.56E+06	15.4748
Std. Dev.	17.81	39.661	42.823	3.47E+07	3.27E+07	1.585

*Jarque –Bera Source: Processed Data.

The discount rate the researcher used is equal to (5%) for the impairment loss calculation. One of the difficulties that the researcher faces is the calculation of recoverable amount. For calculating the impairment loss, we have to compare the non-current asset carrying amount value with value in use, if the carrying amount value of such assets is lower than value in use, then the impairment loss will not occur. Accordingly, the difference between the carrying amount value and recoverable value of an asset is impairment loss. The discounted cash flows (DCF) could be calculated by the following two formulas: (1) Cash flows for non-current Assets = {Operating Cash Flows} {non-current Assets ÷ Total Assets}, and (2) Discounted Cash Flows={ Annual Operating Cash Flows for non-current Assets} {Discount Rate}. Capital Assets Pricing Model (CAPM) based on Weighted Average Cost of Capital has been estimated (WACC) at 5% for all enlisted industrial companies, which is shown in the Table 2 for the years between 2005-2008:

Table 2. Discount rates

Fiscal year	2005	2006	2007	2008
Discount rate	-	0.952	0.907	0.864

The study uses data from companies listed on the Amman Stock Exchange covering a period of four years (2005-2008), data collection was from annual reports, this is due to the nature of the research design which requires historical and documented facts as the basis for calculation of impairment. Moreover,

Data sets are summarized in the appendices (A) and (B) which present ratios of impairment from these data. Based on Appendix, the highest ratio has been reported in (19) public companies in 2006, (20) companies in

2007, and 22 companies in 2008 compared with 2005 as a base year. Ideally, these companies have registered more than (50%) of the sample covered in this paper. Moreover, companies show the initial cost of the asset and the accumulated depreciation as a contra account. Similarly, fluctuations of the ratio of impairment loss/assets ratios may raise the following query; does measurement of non-current assets adequate to the current market situation?" Does the carrying amount of non-current assets is overstated or understated?

The main purpose of Multicollinearity test is to examine whether the regression has a correlation among its independent variables or not, to detect the existence or absence of Multicollinearity, Variance inflation factor can be calculated (VIF) for each independent variable. Based on Table 3 below, the result of Multicollinearity test shows that value of inflation factor of each independent variable is less than (10). So, it can be concluded that there is no Multicollinearity.

Table 3. Multicollinearity test result

	DER	ROA	ROE	OCF	LNTAS
Tolerance	0.907	0.282	0.284	0.726	0.71
VIF	1.102	3.547	3.517	1.377	1.408

The correlation coefficients for the variables are presented in Table 4 to explore the correlation that might exist among these variables. Results report that there are negative and positive relationships between IMP and three of the independent variables, that is, the three measures of variables LEV, ROA and ROE which ranges -0.052, 0.104 and 0.045 respectively. However, it is positively correlated with the size and ROE of the companies at 0.777 and 0.045 respectively. These results imply that the only leverage (LEV) has a negative influence correlation on the impairment loss. The correlation between IMP and the other explanatory variables were significant with OCF and Size which stood at 0.000. This implies that all public companies have the opportunity for growth in application of impairment.

Table 4. Correlation matrix of the variables over 2005-2008

		LEV	ROA	ROE	IMP	OCF	Size
LEV	Correlation	1					
	Sig. (2-tailed)						
ROA	Correlation	.276**	1				
	Sig. (2-tailed)	.002					
ROE	Correlation	.281**	.844**	1			
	Sig. (2-tailed)	.002	.000				
IMP	Correlation	-.052	.104	.045	1		
	Sig. (2-tailed)	.576	.257	.628			
OCF	Correlation	-.027	.061	.034	.751**	1	
	Sig. (2-tailed)	.770	.509	.714	.000		
Size	Correlation	-.060	.132	.089	.777**	.523**	1
	Sig. (2-tailed)	.516	.151	.333	.000	.000	

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

Method of Panel data is used for statistical analysis purpose; Hausman test was used to compare both estimation methods of fixed with random effects. So, the pooled method based on the regression model was fitted. Hausman test Results for hypotheses model was given in Table 4. The statistical result showed acceptance of the hypothesis in its null form (H0). Based on this analysis, it is suggested to use fixed effects for fitness of the regression model. Accordingly, hypothesis test regression model, based on the panel data, namely, fixed effects are fitted. Two Statistical hypotheses related to Hausman test are as follows:

H0 (null): If regression is based on fixed effect; there is no relationship between individual effect and description variables.

H1 (alternative): If regression is based on random effect; there is a relationship between individual effect and description variables.

Table 5. Estimation results of independent variables on IMP

Variables	*REM	**FEM	Pooled OLS
Constant	-1.65E+08 (0.000)	-1.57E+08 (0.000)	-1.65E+08 (0.000)
LEV	-10,394.37 (0.912)	-75,920.36 (0.474)	-10,394.37 (0.910)
SIZE	11,510.98 (0.000)	11,199,094 (0.000)	11,510,982 (0.000)
OCF	0.502 (0.000)	0.409 (0.000)	0.502 (0.000)
ROA	0.237 (0.382)	126,793.1 (0.274)	66,345.20 (0.371)
ROE	66,345.200 (0.350)	-101,385.6 (0.000)	-65,436.550 (0.339)
Adjusted R ⁽²⁾	(0.760)	(0.749)	(0.760)
F-statistic	76.343	11.450	76.343
Prob. (F-statistic)	(0.000)	(0.000)	(0.000)
D-Watson (D.W)	2.325	2.725	2.325
Hadri Z-stat			3.162
Hadri stat Prob.			0.001
Hausman ^(x2) test			13.457
Hausman P .value(x2)			0.02
Number of observations	120	120	120

*REM Random Effect Model ** FEM Fixed Random Model.

The pooled ordinary least squares (Pooled OLS) results, for the regression model using return on equity (ROE), (ROA), (LEV) were not significant. The results make these three indicators not useful measures of impairment in the Jordanian public companies' case. Therefore, the discussion of results is more likely concentrated only on the measures that are related to SIZE and OCF. Similarly, result shows that the joint effect of the five determinants accounted for, is 74.91% of the value of the public companies listed. This means that 74.91% of the value of these, while 25.09% is accounted for by other determinants. Accordingly, H₀ would be rejected for hypotheses; namely, (1) and (5). It is notable that (R²) is zero for each one of these hypotheses (2), (3) and (4) on IMP. The empirical results are summarized in Table 5. (Hadri, 2003) test examines a null hypothesis. The result suggests that the H₀ hypothesis of non-stationarity is strongly rejected at 5%. In this study, investigating relations between exploratory variables is used for Pooled data.

In order to test the model proposed; two estimations were employed, results of the pooled least squares; Random Effect Model (REM) and a Fixed Random Model (FEM) for each of the exploratory variables and for the full sample of observations during the period 2005- 2008 as displayed in Table 5. Results suggest the insignificance of leverage (LEV), and significance of (Size), Operating Cash Flow (OCF), Return on Assets (ROA) and Return on Equity (ROE) ratios as determinants on Impairment (IMP). Additionally, Hausman test is performed to select which variation can be appropriate in each model, Hausman test statistic is 13.457 with 0.020 probability value, suggesting that fixed random effect model is preferred, Table 4 reports results for FEM and REM. *According to FEM results, the relationship between IMP and LEV is negatively and statistically not significant. Companies with a higher leverage ratio might not tend to be affected, the negative or positive correlation with IMP suggests that growth ratio will not lead to any effect on IMP. We conclude that the significant effect means the causal relationship between explanatory variables; LEV, SIZE, OCF, ROE and IMP may exist, but the relationship is insignificant with ROA.* For the evaluation of explanatory variables; FEM estimation shows an adjusted R⁽²⁾ for all the explanatory variables in the study 0.7491 suggests a 74.91% explanatory ability of the model for the systematic variations in the dependent variable (IMP). This means 74.9% of variation in IMP variable is explained by the independent variables. More specifically, results of OLS regression can be summarized below; F- statistic value is 11.4503 with P-value 0.000 indicates that the hypothesis of the insignificant linear relationship between the dependent and independent variables can be accepted at the 5% level. Durbin -Watson (D.W) statistics ranges (2.3252) to (2.7252); this indicates the absence of serial correlation of the residuals in the model. The P- value of the required coefficients is not smaller than 5% for all variables to predict future impairment loss. Therefore, the coefficients of Size and OCF are significant; We conclude that these two variables can be used to predict IMP in the period (2005-2008). Similarly, the coefficient value for each of LEV, ROE, and ROA are more than 5%; these variables should be excluded from the regression model to predict IMP.

We observe that Pooled OLS Regression result has an adjusted value $R^{(2)}$ of 0.760 or 76.0%, (Table 5) which suggests an explanatory ability of the model for the systematic variations in IMP. F-stat is (76.343) with p-value (0.00). The result indicates that the hypothesis has an insignificant relationship between the dependent and independent variables that is rejected at the 5% level. For the effect of explanatory variables on (IMP), We examine coefficient slope; (LEV.) appeared to be negative (-10,394.37) and insignificant at 5% (p.value =0.91). (SIZE) appeared to be positive (11,510,982) and significant at 5% (p.value =0.00). (OCF) also appeared to be positive (0.502) and significant at 5% (p.value =0.00). (ROA) appeared to be positive (66,345.20) and insignificant at 5% (p.value =0.37) and (ROE) appeared to be negative (-65,436.55) and has no statistical significance whatsoever at 5% (p.value =0. 0.339). D. W. Statistic is (2.325) which indicates the absence of serial correlation of the residuals in this model.

In Table 5, we start our evaluation of $R^{(2)}$ value, it is considerable (0.760), which explains (76.00)% of the systematic variations in IMP. F-stat stood at (76.3433) with p-value (0.000) indicating that null hypothesis is dropped for the favor of alternative hypotheses for the linear relationship between the IMP and independent exploratory. Evaluating the effects of the explanatory variables (LEV), (SIZ), (OCF), (ROA), and (ROE) coefficients were examined. LEV appeared insignificant and negative (-10,394.37) with p value of (0.912); SIZE appeared significant and Positive (11,510,982) at 5% with value =0.000. OCF showed a positive effect (0.5023), this effect is significant at 5% to a value of 0.000. ROA has a positive coefficient (0.2371) but statistically insignificant at 5%, probability value is (0.382); ROE has a negative coefficient (66,345.200) with statistically insignificant p. value of (0.350). Durbin - Watson statistics scored (2.325) which indicates the absence of a serial correlation of the residuals in the Pooled ordinary least squares (Random effect) model.

In Table 5 attention is directed to Hausman test result, fixed effects is conducted. Results indicate a significantly higher proportion of systematic variations in (IMP). This suggests that the causal- relationship between SIZE, OCF and IMP is influenced by cross-section specific effects. An evaluation of the effects of the explanatory variables, FEM estimation shows $R^{(2)}$ value of is (0.7491) which suggests a (74.91%) explanatory ability of the model for the systematic variations in IMP. F-stat (11.450) with p-value (0.000), this indicates the rejection of hypothesis, no significant linear relationship between IMP and the other independent variables at 5% level of significance. Effect of explanatory variables on IMP shows coefficients for LEV is appeared to be negative (-75920.36) with insignificant at 5% (p. value =0.474). Size appeared positive (11,199,094) with significant at 5% (value =0.000). OCF appeared positive (0.409) and significant at 5% (p. value=0.000). ROA appeared positive (126,793.1) and statistically insignificant at 5% (p=0.274). The effect of ROE appeared negative (-101,385.6), statistically significant at 5% (value =0. 0.000). D. W. Statistics stood at (2.725) indicates the absence of serial correlation of the residuals in the model. Both , Fixed and Random Effect results suggest the significance of SIZE, and OCF as determinants of IMP with an expected positive sign. The other independent variables have no joint significant values as indicators affecting IMP. Moreover, Hausman test was performed to select the most appropriate model. Chi-Sq. Statistic (Hausman χ^2 test) is (13.457276) with p-value=0.0195, suggesting that the fixed effects model is preferred. According to fixed effect results, the relationship between IMP and LEV is negative and statistically insignificant. Companies with a higher LEV may not tend to be affected. This result is consistent with pecking order hypothesis which stated that there is a hierarchy in financing sources, and low-risk debt. Regarding positive correlation with Size, the result suggests that the growth of the company expressed by total assets might lead to more impairment loss, or huge SIZE will positively lead to higher IMP. It's also notable that company's profitability, measured as ROA, ROE and CF are poorer for small companies, but the median values of ROA, ROE and cash flows for the larger companies indicates that the majority of the larger companies is still suffering poor profitability. Further, while there is evidence of more asset impairment is being recognized by larger companies; concerns about lack of recognition of asset impairment firmly continued for all companies. Table 6 summaries Hypotheses testing results.

Table 6. Hypotheses testing results summary*

Hypotheses		Status of (Ha) Alternative		
		Random Effect Model	Fixed Effect Model	Pooled OLS
H1	OCF	Supported (+)	Supported(+)	Supported(+)
H2	LEV	Rejected(-)	Rejected(-)	Rejected(-)
H3	ROA	Rejected(+)	Rejected(+)	Rejected(+)
H4	ROE	Rejected(+)	Supported(-)	Rejected(-)
H5	SIZE	Supported(+)	Supported(+)	Supported(+)

* expected signs (+), (-).

5. Findings, Limitations and Future Researches

The purpose of the current research is to explore whether impairment recognition under IAS 36 Improved by Financial Performance and company size, i.e., OCF, ROA, ROE, LEV and SIZE. We categorize companies into two groups; companies recognize impairment (41.10%) of the sample and companies don't recognize an impairment loss (58.90%) over the period (2005-2008). We identify the impact of five exploratory variables on IMP for companies being listed on ASE during the period and disclosed impairment recognition. The empirical results support two hypotheses used to examine the effect; Companies with larger size (SIZE) measured by logarithm of total assets and larger portion of operating cash flows (OCF) are more likely recognize impairment. However, this relationship is positive and statistically significant, suggesting IMP recognition depends on company size and its operating cash flows.

For the remaining three other variables; LEV, ROA and ROE, this relationship is negatively and statistically insignificant between IMP recognition and leverage (LEV) reflecting the behavior that expected the decrease in a function of IMP. LEV effect on IMP is not clear. However, We conclude that it could the higher level of equity (denominator) decrease the cost of capital, leading companies disclose impairment. An increase in equity could decrease cost of capital; similarly the higher level of debt (numerator) would increase the cost of debt. However, leading companies never disclose impairment. It is possible to conclude that the bigger leverage ratio, the lower the impairment probability recognition by companies, because the leverage ratio (LEV) is negatively correlated with impairment recognition Tables (4), (5), this result is similar to (Yanamoto, 2008).

This study also confirms insignificant statistical positive relationship between profitability measured by (ROA) and impairment loss recognition probability, suggesting that this variable is an indicator for the expected investors who evaluate the inherent risk of companies. We conclude that higher impairment recognition is related to better profit. The study confirms statistically negative significant relationship between ROE and impairment by using Fixed Effect Model, this result can be explained by various suspicious regarding companies that recognize impairment, these firms may indicate a declining on their ability to generate less future performance, and then the company can avoid such recognition because it contributes for less performance. This relationship is statistically positive insignificant by both Random Effect Model and Pooled OLS. The correlation between LEV and ROA, ROE is positively significant, this can be explained by most public companies utilize financial leverage heavily to increase ROA and ROE (Table 4).

Impairment loss to total assets ratios were fluctuated over the study period (2005-2008); consequently, stakeholders draw a lot of queries concerning impairment literature; what is the method used for reporting the impaired assets, discount rate, recoverable amount, the reason for impairment, and future cash flows. In the same line, the academicians and professionals don't comprehend all research performed in the area of impairment loss recognition. How companies can disclose adequate information regarding impairment in the annual reports? We recommend the regulatory bodies in Jordan to supervise the activation of IAS (36) for all listed companies because the impairment assessment is not an easy way for the firms. The study findings generate general implications for the stakeholders of the listed companies. The findings of this research in Jordan context are expected to be generalized to other developing countries.

This paper introduces necessary background and fundamentals to understand current practice of impairment recognition. To urge Companies to use high standards of accounting quality in their financial statements according to IASs, this presentation would attract investors' attention and would further reinforce the credibility of their financial statements.

The following areas would be interesting for further research: To accomplish similar researches in conjunction with intangible assets. This study relies on all industrial companies, regardless the type of industry for four years. Another future study is to investigate a similar study focusing on other types of industry for a long period with other quantitative and qualitative exploratory indicators; in order to compare various sectors, like printing and Packaging, Food and Beverages, Pharmaceutical and Medical industries, Mining and Extraction Industries, Chemical industries, Paper and Cardboard Industries, Textile, Leathers and Clothing, Glass and Ceramic Industries.

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Appendix

Impairment compared to assets ratio*

	2008	2007	2006	2008	2007	2006	2005
1	-97.8%	-91.7%	-89.2%	97.6%	91.5%	89.0%	99.8%
2	98.5%	98.0%	99.2%	96.4%	95.9%	97.1%	97.9%
3	105.9%	111.7%	99.5%	104.1%	109.8%	97.8%	98.4%
4	113.3%	112.1%	110.8%	108.5%	107.4%	106.2%	95.8%
5	104.5%	98.9%	97.2%	100.0%	94.6%	93.0%	95.7%
6	114.9%	108.8%	109.8%	106.1%	100.6%	101.4%	92.4%
7	121.8%	112.3%	111.6%	106.2%	97.8%	97.3%	87.2%
8	95.0%	100.2%	98.4%	88.2%	93.0%	91.3%	92.8%
9	-88.4%	-87.5%	-91.7%	95.3%	94.3%	98.8%	107.8%
10	-87.3%	-90.7%	-94.7%	98.8%	102.8%	107.2%	113.3%
11	106.1%	103.6%	-86.2%	103.7%	101.4%	84.3%	97.8%

12	113.4%	107.7%	105.2%	99.3%	94.3%	92.2%	87.6%
13	121.8%	112.3%	111.6%	106.2%	97.8%	97.3%	87.2%
14	-97.2%	-95.0%	104.7%	98.1%	95.8%	105.7%	100.9%
15	107.1%	112.9%	-90.2%	102.9%	108.4%	86.7%	96.1%
16	-103.3%	-87.6%	-84.7%	110.9%	94.1%	90.9%	107.3%
17	115.2%	127.6%	134.6%	101.3%	112.2%	118.4%	87.9%
18	87.8%	105.9%	105.5%	75.0%	90.5%	90.2%	85.5%
19	125.0%	107.7%	103.1%	86.4%	74.4%	71.3%	69.1%
20	-72.6%	-86.4%	-93.2%	69.5%	82.7%	89.3%	95.8%
21	117.4%	115.5%	126.5%	96.3%	94.7%	103.8%	82.0%
22	108.8%	116.5%	101.7%	95.5%	102.3%	89.2%	87.8%
23	99.7%	99.3%	105.5%	96.1%	95.7%	101.7%	96.4%
24	-93.5%	-97.7%	-96.4%	98.6%	103.1%	101.6%	105.5%
25	-76.2%	-86.7%	-90.9%	83.9%	95.5%	100.1%	110.1%
26	-97.7%	-85.7%	-98.7%	102.1%	89.5%	103.1%	104.4%
27	-106.5%	-85.2%	-83.5%	114.9%	92.0%	90.0%	107.9%
28	113.2%	117.8%	118.3%	98.5%	102.5%	103.0%	87.0%
29	110.5%	-94.4%	-105.2%	117.6%	100.5%	111.9%	106.4%
30	105.8%	96.8%	103.4%	101.8%	93.2%	99.5%	96.3%

* 2005 as a Base Year.

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