The Effect of Interim Financial Reports announcement on Stock Returns
(Empirical Study on Jordanian Industrial Companies)

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Abstract:
This paper examined the effect of interim financial reports announcement on stock returns during (five trading days before and five trading days after) the announcement date, and the statistical relationship between trading volume, earnings and stock returns for a sample of (20) industrial public companies listed in Amman Security Exchange during the two years of 2010 and 2011. Data was gathered from 80 interim reports issued in the second and third quarter of the years 2010 and 2011. A multiple regression models were developed for the analysis. The results confirmed the following: First, there is a positive relationship between interim financial reports announcement and stock returns during the announcement date. Second, there is a positive relationship between stock returns and trading volume. Third, there is insignificant relationship between earnings and trading volume.
Keywords: Interim Reports, Stock Returns, Trading Volume, Earnings.

1. Introduction

Many capital market research studies examined the statistical relations between financial information and share prices or between financial information and returns, and these studies found a significant relationship between financial information disclosed in annual reports and share prices or between financial information and returns after the announcement date. That is, it investigates how the disclosure of particular information influences individuals trading activities who participating within capital markets. Previous studies like Shores (1990) and McNichols & Manegold (1983) informed the importance of interim announcement as one of the main sources to obtain information for users, and they argued that interim reporting has

become another important instrument that allows listed companies to communicate with its shareholders.

In Jordan, accounting standards and Jordan Securities Commission (JSC) regulate disclosures in interim reports published by listed companies.

Based on the previous argument, we will attempt in this paper to identify the effect of interim financial reports announcement on stock returns during the announcement date, identify the impact of trading volume on stock returns during the announcement date, and to examine the statistical relations between some accounting indicators related to financial information disclosed in interim reports like (EPS), (ROE), (ROA) and stock returns.

2. Interim reporting a background:

Recently, interim reports become an important source of information's that provide users with timely information to make decisions, in 1998 the International Accounting Standards Committee (IASC) issued the International Accounting Standard 34 (IAS 34) "Interim Financial Reporting "which defined interim financial report as a financial report containing either a complete set of financial statements or a set of condensed financial statements for an interim period. Interim report could be issued quarterly, half yearly or for any other period depending on the regulations of the country concerned.

The main objective of IAS 34 is to prescribe the minimum content of an interim financial report and to prescribe the principles for recognition and measurement in financial statements presented for an interim period, and to encourage publicly-traded entities to provide interim financial reports that conform to the recognition, measurement, and disclosure principles.

IAS 34 specified the minimum components for an interim financial report are:

1- A condensed balance sheet (statement of financial position)
2- Either (a) a condensed statement of comprehensive income or (b) a condensed statement of comprehensive income and a condensed income statement
3- A condensed statement of changes in equity
4- A condensed statement of cash flows
5- Selected explanatory notes

Also IAS 34 specified the periods to be covered by the interim financial statements are as follows:

1- (Statement of financial position) as of the end of the current interim period and a comparative balance sheet as of the end of the immediately preceding financial year

2- Statement of comprehensive income (and income statement, if presented) for the current interim period and cumulatively for the current financial year to date, with comparative statements for the comparable interim periods (current and year-to-date) of the immediately preceding financial year

3-Statement of changes in equity cumulatively for the current financial year to date, with a comparative statement for the comparable year-to-date period of the immediately preceding financial year

4-Statement of cash flows cumulatively for the current financial year to date, with a comparative statement for the comparable year-to-date period of the immediately preceding financial year

5-The explanatory notes required are designed to provide an explanation of events and transactions that are significant to an understanding of the changes in financial position and performance of the entity since the last annual reporting date. Below an examples of note disclosures in interim reports

- Accounting policy changes
- Seasonality or cyclicality of operations
- Unusual and significant items
- Changes in estimates
- Issuances, repurchases, and repayments of debt and equity securities
- dividends paid
- A few items of segment information (for those entities required by IFRS 8 to report segment information annually)
- Significant events after the end of the interim period
- Business combinations
- Long-term investments
- Restructurings and reversals of restructuring provisions
- Discontinued operations
- Changes in contingent liabilities and contingent assets
- Corrections of prior period errors
- Write-down of inventory to net realizable value
- Impairment loss on property, plant, and equipment; intangibles; or other assets, and reversal of such impairment loss
- Litigation settlements
- Any debt default or any breach of a debt covenant that has not been corrected subsequently
- Related party transactions
- Acquisitions and disposals of property, plant, and equipment
- Commitments to purchase property, plant, and equipment.

Jordan have started adopting IAS 34 in 2007 and the Jordan Securities Commission issued the Instructions on the Accounting Principles and Standards Pertaining to the Preparation of Annual and interim Financial Statements for the year 2007, These instructions apply to all issuing companies that fall under the supervision of the Jordan Securities Commission , this instructions required from Jordanian companies listed in Amman Stock Exchange to issued quarterly interim reports that comply with international accounting standard (IAS 34) and Jordan Securities Commission requirements

3. Literature review and hypotheses development:

Many studies examined the relation between financial information and stock returns, and in this part we will summarize the most related studies classified as follows:

3.1   Interim financial reports announcement

Some previous studies examined the relationship between interim financial reports announcement and stock returns around the announcement date. In the U.S Foster et al.,

(1984) and Bernard & Thomas, (1989) mentioned that abnormal returns occur gradually within the period of 60 sessions in the pre-announcement period, but the highest abnormal returns arise directly a few days prior to the publication.

Another study in Poland by Szyszka (2001) indicated that the significant post-announcement drift of negative abnormal returns in a group of companies that unexpectedly reported highly disappointing quarterly earnings. Also, Wilde (2007) indicated that, voluntary interim reporters face significant negative abnormal returns around earnings announcement, when they report a profit, which fails to meet expectations.

In Jordan Matar (2003) found that there is a statically significant abnormal return pre and post announcement date and price don't adjusted rapidly to the new information. We, therefore, hypothesis the following:

H1: There is significant relationship between interim financial reports announcement and stock returns around the announcement date.

3.2   Trading volume

Different literature has examined the empirical relationship between trading volume and stock returns. Some of these studies have investigated the relationship between trading volume and price changes, mainly using index prices (Hiemstra; Jones, 1994; Brailsford, 1996; Lee; Rui, 2002). The results of these studies are different, although a positive relationship is mainly reported.

Other studies found that there are an empirical relationship between stock returns, return volatility and trading volume on the Austrian stock market (Mestel; et al, 2003). The authors find only weak support for a contemporaneous and dynamic relationship between stock returns and trading volume. Recently studies like Pvini (2000) and Omran & Mckenzie (2000) used time series models to explore this relationship between trading volume and stock returns. These studies mostly conclude that there is evidence for a strong relationship (contemporaneous as well as dynamic) between return volatility and trading volume. We, therefore, hypothesis the following:

H2: There is significant relationship between interim financial reports announcement and trading volume of the shares around the announcement date.

3.3   Earning

Recent literature has documented a negative relation between contemporaneous aggregate earnings news and stock market returns. Cready and Gurun (2010), also Subasi (2011) indicated that, the stock market reaction to aggregate earnings surprises becomes insignificant when earnings data for the 2008-2009 period are included in the analysis. This suggests that the most recent economic crisis has distorted the aggregate earnings-market return relation which has generally been found to be negative in the prior literature. Subasi (2011) also found that there is no relationship between dispersion in earnings surprises and stock market returns using monthly and quarterly time series of seasonally differenced earnings and dispersion in these differences. This relation depends on the magnitude of the earnings change, in contrast Jorgensen, Li, and Sadka (2009) who found a positive relationship between dispersion in earnings surprises and stock market returns.

Shores (1990), examines the association between the level of interim information and the stock returns around the annual announcement of the firm. He defines the level of interim information not as the reporting frequency, but as 'information that alters investors' beliefs about attributes that cause securities to be of value and that is publicly available prior to the announcement of annual earnings". He documents, that interim reports preempt information content of annual earnings. Moreover, McNichols & Manegold (1983) who examine the impact of interim reporting on the return variability around annual announcement dates,

conclude that interim reporting preempt information of annual reports. We, therefore, hypothesis the following:

H3: There is a statistically significant relationship between earnings (measured by some indicators disclosed in interim reports like EPS, ROE, and ROA) and stock returns after the announcement date.

4. Study Methodology:
4.1 Research method

The researchers will use two different methods to accumulate data and information: First, a descriptive method. Second an analytical method. The second method (analytical method) depends on developing a regression model contain dependent and independent variables to determine the most important factor that affecting on stock returns.

4.2 Research model

To test the first hypothesis, we compared between the stock returns for 5 trading days before interim financial reports announcement date with the stock returns for 5 trading days after interim financial reports announcement date.

The following general multivariate regression models are used to test the second and third hypotheses:

$$SKRN = a + b1\ TDVO_{it} + b2\ EPS_{it} + b3\ ROE_{it} + b4\ ROA_{it} + e_{it} \qquad (1)$$

Where:

SKRN: Measured by taking the average change in stock returns for 5 trading days before and 5 trading days after interim financial reports announcement date. (Stock returns Measured by p1-p0).

4.2.1 Independent variables:

TDVO: Measured as the average change in trading volume for 5 trading days before and 5 trading days after interim financial reports announcement date.

*EPS***:** Calculated as the earnings before interest and taxation (EBIT) dividing by the number of shares outstanding.

ROE: Calculated as dividing earnings before interest and taxation (EBIT) by common stock equity.

ROA: Calculated by dividing net income on total assets.

4.3 Research population and sample:

The research population contains all Jordanian public industrial companies listed in Amman Stock Exchange between years 2010 to 2011. We employed Amman Stock Exchange web site (www.exchange.jo) to select our random sample which was equal to 20 public industrial companies from the total population and this represents a percentage of 21.3 % of the total (94 public industrial companies) population of the study. Interim reports issued in the second and third quarter between the years 2010 to 2011 were selected, and the number of these reports was equal to 80 reports.

5. Statistical tests and results

Test of hypothesis (1):

There is significant relationship between interim financial reports announcement and stock returns around the announcement date.

We tested the first hypothesis by comparing between the stock returns for 5 trading days before interim financial reports announcement date with the stock returns for 5 trading days after interim financial reports announcement date. Table (1), shown the main results for the group statistics and independent sample test.

Table (1)
Test of hypothesis (1)
Group statistics

Sample		N	Mean	Std. Deviation
Qua2	Pre- *announcement*	200	-.0028	.0227
	Post- announcement	200	.0045	.0436
Qua3	Pre- *announcement*	200	-.0043	.0226
	Post- announcement	200	.0025	.0374

Table (1), showed that the mean of stock return in the second quarter increased after announcement date, and the mean was equal to (-.0028) Pre- announcement of interim report. However, the mean value became 0.0045 after announcement date. The same result appeared in the third quarter.

Also similar results are shown when applying the independent sample test (t-test for equality of means). The t-sig for the second quarter was t-sig equal to 0.038 and the t-sig was equal to 0.027 for the third quarter. This indicates that there is significant relationship between interim financial reports announcement and stock returns around the announcement date. Hence, we accept the first hypothesis (H1), and this result is consistent with the previous studies of Foster et al., (1984), Bernard and Thomas, (1989).

Multiple regression results:

The results of the regression analysis for testing second and third hypothesis are shown in the following Table (2) and Table (3).

The following Table (2) and Table (3) shows the regression results for the variables of the model after interim financial reports announcement date.

Table (2)
Test of hypothesis (2 and 3)
Regression results post- announcement

F- calculated	F Sig	R square	Adj R square
2.726	.034	.113	.071

Table (2) indicated that calculated F= 2.726 is significant at 0.034, and this result means that there is significant relationship between dependent variable (stock returns) and the other independent variables especially the trading volume which sig are less than 5%. These results are summarized in the following Table (3) as follows:

Table (3)
Test of hypothesis (2 and 3)
Regression results post- announcement

Variable	Coeff	Beta	t- calculated	t Sig
Constant	-0.002		-1.654*	0.10
TDVO	0.004	0.313	3.077**	.oo3
EPS	0.012	0.108	1.062	0.291
ROE	-0.001	-0.098	-0.617	0.539
ROA	7.59E-05	0.003	0.019	0.985

Note: ***,**,* Significant at 1 percent, 5, and 10 percent respectively.

As Table (3) shows, trading volume (TDVO) has a significant relationship with stock returns. The coefficient is equal to 0.004 and the sig-t is equal to 0.003. However, the other variables of (EPS), (ROE) and are not significantly related to stock returns.

Table (4) shows the regression results between trading volume and stock returns before announcement date.

Table (4)
Test of hypothesis (2)
Regression results pre- announcement

F- calculated	F Sig	T	Sig
4.395	0.040	2.088	0.040

According to table (4) we found that calculated F= 4.395 is significant at 0.040, and that means there is significant relationship between dependent variable (stock returns) and trading volume which sig are less than 5%. The other independent variables are removed because they are not identified before announcement date.

In term of the above regression results, we can accept the second hypothesis which says that there is a significant relationship between trading volume and stock returns around the announcement date. This result is also consistent with previous studies of Mestel; et al,(2003) and Omran & Mckenzie (2000). However, we can reject the third hypothesis which says that there is a statistically significant relationship between earnings (measured by some indicators disclosed in interim reports like EPS, ROE, and ROA) and stock returns after the announcement date because there is no statistically significant relationship between earnings and stock returns after the announcement date, and this results is found consistent with the previous study of Subasi (2011).

6. Conclusions:

This study examined the effect of interim financial reports announcement on stock returns during (five trading days before and five trading days after) the announcement date, and the statistical relationship between trading volume, earnings and stock returns for a random sample of (20) industrial public companies listed in Amman Security Exchange during the period between 2010 and 2011. A multiple regression models were developed to analyze the variables of the study. Based on the results of the study, the following conclusions can be made:

First, there is a significant positive relationship between interim financial reports announcement and stock returns around the announcement date, and this result was consistent similar previous studies of Foster et al., (1984) and Bernard & Thomas, (1989).

Second, there is a significant positive relationship between trading volume and stock returns around the announcement date, and also this result was consistent similar previous studies of Mestel; et al,(2003) and Omran & Mckenzie (2000).

Third and finally, it was found that there is no statistically significant relationship between earnings measured by EPS, ROE, and ROA and stock returns after the announcement date, and this result is found consistent with the previous the study of Subasi (2011).

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