THE EFFECTS OF ACCOUNTING AND MARKET INDICATORS TOWARDS STOCK RETURN OF AMMAN STOCK EXCHANGE INDEX CONSTITUENTS

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Abstract

The returns of ASE companies and share trading have significantly weakened. Numerous companies have been liquidated due to bankruptcy. Investors appear to be less able to find desired investments under these critical conditions. In addition, the investors in Amman Stock Exchange face challenges in determining the accounting and market indicators that affect the stock return. Therefore, this study investigates the effect of twelve accounting and market indicators on the stock return. A yearly data of indicators and company stock price are collected from the ASE website. Panel generalised least squares regression analysis (GLS) has been conducted to accomplish the research objective. Out of twelve accounting and market indicators, the study revealed the TOA had the highest significantly positive effect on stock return. ROA, EPS, STR, and PBV also had a significant positive influence on stock return. In addition, DR had a significantly negative impact on stock return, while the effect of BPS was marginally negative. Besides, MC, ROE, NPM, CR, and PER did not affect the stock return. This study could help investors and portfolio managers to identify the indicators that affect stock returns of ASE Index companies. Further studies in other emerging markets will support the results that came out in this study.

Keywords: *Accounting Indicators, Market Indicators, Stock Return, ASE Index, Islamic Finance.*

INTRODUCTION

Financial analysis using accounting and market indicators is an important tool for interpreting the figures in the financial statements. The analysis provides information to help in evaluating the financial position and performance of the companies. It also determines the efficiency of the companies to achieve a high return on the funds and employs this return in achieving investors' objectives (Panagopoulos, Atkin, & Sikora, 2017). The accounting and market indicators of companies provide useful information for the investors, creditors, and other parties to make informed decisions of investments.

It contains information that leads to change investor's behaviors in the market, which will be reflected in the stock price, return, and market index or in changing the

position of the investment portfolios (Patrick, Tavershima, & Eje, 2017). A few years ago, the investigation of the relationship between accounting and market indicators and return becomes an urgent need for all financial users. The accounting indicators reflect the operational activities of companies. Market indicators reflect the performance of companies in the financial market. The investigation of these indicators' effects on stock return will increase the possibility of predicting future situations and judging the companies' policies, investing resources, activities, competition, and reputation.

The stock return performance indicates information obtained result of management, economics, accounting, and marketing activities. These printed features of the company's competitiveness, efficiency, effectiveness, procedural, structural, and administrative (Verboncu & Zalman, 2005). The stock return information is reflected in the accounting and market indicators of companies. Alswalmeh & Dali (2019a) found that many researchers and analysts targeted the accounting and market indicators that affect stock returns. Nowadays, investors in Amman Stock Exchange face challenges in determining indicators that affect the stock return. The accounting and market indicators are the necessary factors verifying their impact on the stock return continuously (Nm, 2016).

Over the past decade, the returns of ASE-listed companies have significantly weakened. Share trading activities have significantly declined, while numerous companies have been liquidated due to bankruptcy. Investors appear to be less able to find desired investments under these critical conditions. While ASE provides a range of information and indicators to help investors make investment decisions, they appear to not meet investors' needs amidst the prevailing uncertainties, fluctuations, and declining share prices.

Testing the effects in a new context that accounts for the impact of accounting and market indicators on the stock return may help investors to choose their desired investments. Therefore, this study intends to investigate a comprehensive identification of twelve accounting and market indicators on the stock return through answering the research question: What are the effects of accounting and market indicators on the stock return?

The remaining part of this study is organized to provide a review of related literature and hypotheses development. Describe the research methodology, sample, and variables' measurement. Present the analysis and findings of the study. The conclusion and implications will be presented in the last sections.

LITERATURE REVIEW

The accounting and Market indicators were addressed in financial analysis techniques to know the company's current financial position and predict future performance. Accounting indicators are the indicators reflect the operational activities of the company. It determines the ability of the company to generate earnings and evaluates its ability to meet obligations. To illustrate, profitability analysis indicators is "the evaluation of a company's return on investment".

Profitability means the ability of companies to generate profit from their business activities. It is an indication of the management's efficiency to generate profit using all available resources (Gibson, 2009, p. 297). Harward & Upto (1961) defined profitability as "the ability of a given investment to earn a return from its use" that can either be distributed to shareholders or reinvested into the company to enhance solvency. A company's overall value is a key determinant of its ability to generate profit on the capital invested. Analysts consider profitability as the main focus of financial analysis. Profitability indicators measure the company's efficiency to gain profits, design and implement policies, and make investment decisions under different situations. Profitability is the main subject of interest of investors, creditors, and managers.

Credit (risk) analysis indicators aims to evaluate the ability of a company to meet its obligations (Alta'ani & Dali, 2020a). Robinson et al. (2009, p. 308) defined credit risk as "the risk of loss caused by a counterpart or debtor's failure to make a promised payment". Credit (risk) analysis depends on three major areas: liquidity, capital structure, and solvency. Subramanyam & Wild (2009, pp. 527-528) explained that liquidity reflects "the availability of company resources to meet short-term cash requirements", while solvency refers to "a company's long-run financial viability and its ability to meet long-term obligations".

Capital structure, meanwhile, means the sources of financing of a company. Liquidity analysis indicators intends to evaluate the ability of companies to generate profit and satisfy working capital requirements from their operating activities. The current ratio is an important indicator of liquidity. It measures the availability of current assets to cover current liabilities. Capital structure and solvency analyses, on the other hand, identify the proportion of debt in the capital structure of a company, as well as assessing risk and financial leverage.

Moreover, the analyses can reveal the potential risk-return relation in a company's capital structure and its implications (Gibson, 2009, p. 201; Alta'ani & Dali, 2021). According to Robinson et al. (2009, p. 152), indicators are important measures of a company's profitability. Return on assets and return on equity are the most

commonly used measures of profitability; they should be used to evaluate companies both individually and as a group to identify the drivers of profitability. An important capital structure and solvency indicator is the debt ratio.

Market indicators are the indicators reflect the performance of company in the market. It determines the estimation of intrinsic value of a company stock and product of current share price with the number of shares outstanding. Analysts use a set of methods to evaluate the equity of companies. Valuation analysis, based on valuation indicators, is important to many users of financial statement. A reliable valuation of stocks enables investors to make buy, sell, or hold decisions in relation to investments, credit decisions, business merges, and public stock offerings (Subramanyam & Wild, 2009, p. 40).

A valuation analysis provides understanding on the financial profile of companies. It gives investors the ability to choose the appropriate valuation model upon which they can base their investment decisions. Financial analysis also provides useful information to complete valuation analysis. Fundamental analysis involves the assessment of a company's equity and performance to assess its relative attractiveness as an investment. Ratios should be useful in valuation analysis (Gibson, 2009, p. 464; Alta'ani & Dali, 2020b). Robinson et al. (2009, p. 303) stated that the end product of a valuation analysis is often a valuation and recommendation about investment, while theoretical valuation models are useful in selecting indicators that would be useful in this process.

Furthermore, the positive values of these indicators send out positive signals to all investors, creditors, and interested parties. Market capitalisation "is the sum derived from the current stock price multiplied by the amount of shares outstanding" (Olson, 2005). Woo (1981) argued that because outstanding stocks are transacted in the secondary market, market capitalization could be used as a proxy for the public's valuation of a company's net worth and as a determinant in some stock valuation models.

Capitalisation may be compared to other economic indicators. According to O'Regan (2002), market capitalisation can be an indicator of a company's value, but it is only an ephemeral measure as it is based on the current stock market prices. The true value of the company is represented by its balance sheet, product positioning, and profits. Other variables may not reflect market capitalisation due to information asymmetry. In addition, Ologunde, Elumilade, & Saolu (2006) found that a company may have high profitability but low market capitalisation.

The identification of appropriate indicators will help investors to monitor changes in the market. Stock market indices are the commonly used indicators to monitor market performance and report changes in market capitalisation. Koller, Goedhart, & Wessels (2010, p. 337) defined stock market performance as a measure of returns over a period, in which stock returns are measured based on the portfolio of the manager, usually on a daily, weekly, monthly, and yearly basis. While there are various ways to measure stock market performance, the most common measure is market capitalisation. However, the current study employs the accounting and market indicators to predict the stock return of Amman Stock Exchange Index constituents.

Several studies have measured companies' stock returns on a large scale. They have tested the effects of numerous internal and external factors on stock return. It is also among the most important indicators that reflect the efficiency of companies in the financial markets. They are essential for investors to identify high-performing firms and the best investment opportunities. Theoretically, Alswalmeh & Dali (2020c) and Alswalmeh & Dali (2020b) construct a conceptual framework between the accounting and market indicators towards companies' performance included the stock return.

Practically, Alswalmeh & Qaqish (2021) put forward to use of the financial ratio toward the ASE market index. The study found a statistically significant positive relationship between the liquidity ratio, debt ratio, stock turnover ratio, return on total assets ratio, market value to book value ratio with the banking sector index in Amman Stock Exchange. The study also showed a statistically significant negative relationship between, return on equity ratio and the banking sector index in Amman Stock Exchange. Afrino and Masdupi (2019) investigated the influence of ROA, CAR, DER, PER, and Beta on the stock return of Indonesian banks listed in the period 2013-2017.

Using multiple linear regression analysis, the study found that the PER and Beta influential positively and significantly on the stock return. ROA, CAR, and DER did not affect the stock return of the Indonesian banks. Kai & Abdrahman (2018) evaluated the correlations between EPS, ROE, and DPS growth and the stock returns of 31 Malaysian-listed financial companies, covering a sample period of 2011-2016. Following a Pearson's correlation analysis, the research discovered that EPS growth and stock returns were significantly correlated in five firms; ROE growth and stock returns in another five; and DPS growth and stock returns in another six.

Musallam (2018) also attempted to determine the impacts of financial ratios on stock returns, though the sample was 26 Qatari-listed firms from 2009 to 2015. The results of the weighted least squares (WLS) regression showed that EPS, earnings yield ratio, and dividend yield ratio were positive determinants of stock returns, while

market-to-book-value ratio, ROA, ROE, price-to-earnings ratio (P/E), dividends earnings ratio, and net profit margin did not significantly predict stock returns.

In addition, Din (2017) investigated the predictability of stock returns by regressing them on selected financial ratios. The sample was 65 constituents of the PSX 100 Index from 2001 to 2014. Results of the OLS regression revealed that debt ratio, return on sales, firm size, market return, and Tobin's Q were significantly and positively associated with stock returns. But the asset turnover ratio, EPS, inflation, interest rate, and GDP had opposite results.

Allozi and Obeidat (2016) studied the relationship between several financial indicators (profitability& leverage measures) and stock return in the 65 Jordanian manufacturing companies listed in Amman Stock Exchange over the ten years (2001-2011). Correlation analysis, multiple regression, and descriptive statistics have been used for data published in annual reports and the monthly statistical bulletins issued by ASE over the study period.

The results show that (GPM), (ROA), (ROE), and (EPS) have a significant relationship with stock return. And the others (NPM) and leverage measures ((DR), (DER), and (CR)) don't have a significant relationship with stock return. Stefano (2015) investigated whether the effects of financial ratios on the stock returns of the property industry are significant. The data were collected from 18 property companies listed on the Indonesian Stock Exchange. Analysed using multiple linear regression, the result showed that the overall model was significant, but only ROA had a significant impact on stock returns.

Wijaya (2015) analysed the influence of financial ratios on stock returns in Indonesian manufacturing companies. The data in this research was obtained using a judgmental sampling method consisting of 100 samples from 20 major listed Indonesian manufacturing companies during 2008-2013. Using multiple regression analysis, the study revealed that the return on assets, debt to equity, dividend yield, earnings yield, and book to market simultaneously have a significant effect on the stock returns. Partially, return on assets, dividend yield, earnings yield, and book-to-market have significant effects on stock returns. The debt-to-equity ratio does not have a partial significant effect on stock returns.

Alswalmeh and Dali (2019b) predicted the index of the banking sector of ASE using financial ratios. In the same vein, Alswalmeh and Dali, (2020a) predicted the index of the banking sector for Islamic and non-Islamic banks using financial ratios. The current study is looking forward to focus its attention on accounting and market indicators to explain the stock return of Amman Stock Exchange Index constituents.

This investigation will contribute to investors identifying the significant indicators that can affect stock return companies in ASE. Therefore, based on the above discussions, hypothesis *1* was formulated:

H_1: Accounting and market indicators significantly predict stock return.

METHODOLOGY

The accounting and market indicators of 63 Amman Stock Exchange Index constituents for the year 2008 to 2018 are used to predict the stock return of sample companies. The yearly data of indicators were collected from the annual reports of each company as an independent variable. Table 1 shows the accounting and market indicators used in this study.

Table 1. Independent Variable

#	Variables	Category	Measurement	Reference
1	Return on Asset (ROA)	Accounting	Net Profit / Average Asset	(Narayan & Reddy, 2018)
2	Return on Equity (ROE)	Accounting	Net Income / Average Shareholders' Equity	(Brealry et al. 2011, p. 712)
3	Net Profit Margin (NPM)	Accounting	Net Income / Total Income	(Whitehurst, 2003, p. 102)
4	Current Ratio (CR)	Accounting	Current Asset / Current Liabilities	(Allozi & Obeidat, 2016)
5	Debt Ratio (DR)	Accounting	Total Liabilities / Shareholders Equity	(Robinson et al., 2009)
6	Total Assets Turnover (TOA)	Accounting	Total Revenue / Average Asset	(Subramanyam & Wild, 2009, p. 37)
7	Market Capitalisation (MC)	Market	Price * Number of Shares	(O'Regan, 2002)
8	Stock Turnover Ratio (STR)	Market	Shares Traded / Number of Shares Outstanding	(Brealry et al. 2011, p. 712)
9	Earnings Per Share (EPS)	Market	Net income / Average Common Shares	(Allozi & Obeidat, 2016)
10	Book Value Per Share (BPS)	Market	Reported Book Value	(Gibson, 2009, p. 222)
11	Price Earnings Ratio (PER)	Market	Share Market Price / Earnings Per Share	(Subramanyam & Wild, 2009, p. 37)
12	Price-to-book Value (PBV)	Market	Share Market Price / Book Value Per Share	(Subramanyam & Wild 2009, p. 37)

The dependent variable is the annual stock return of the company of Amman Stock Exchange Index constituents. The data are collected from the website of the ASE based on the company stock price. The following formula is used to calculate the stock return:

$$R_{i,t} = (P_{i,t} - P_{i,t-1}) / P_{i,t-1}$$

Where P_i,t is the annual stock price of company *i* in period *t* and P_{it-1} is the annual stock price of company *i* in period *t-1*.

The analysis has been conducted using panel generalised least squares regression analysis (GLS) to accomplish the research objective. The following section presents the results and discussion on analysis.

RESULTS AND DISCUSSION

1. Descriptive Statistics

The descriptive statistics covered a sample of 63 ASE Index companies from 2008 to 2018. A total of 693 observations were recorded for each variable. Table 2 reports the most important descriptive statistics for the variables: mean, standard deviation, minimum, and maximum.

Table 2. Descriptive Statistics

No.	Variables	Obs.	Mean	Std. Dev.	Min	Max
1	**R**	693	-0.038597	0.3475136	-0.6875	4.3077
2	**ROA**	693	2.398505	7.298348	-40.4075	43.9401
3	**ROE**	693	7.560404	74.13015	-122.725	1924.733
4	**NPM**	693	-22.11017	658.4569	-16005.03	3865.838
5	**CR**	693	4.233959	9.909549	0.0138	146.0319
6	**DR**	693	38.40584	29.69169	0.3813	98.3078
7	**TOA**	693	1.198375	1.659003	-0.3074	6.0433
8	**MC**	693	31.78376	95.73868	0.1441	1369.802
9	**STR**	693	86.1015	228.9376	0.1009	2454.68
10	**EPS**	693	0.1490179	0.3809469	-1.0766	3.7374
11	**BPS**	693	1.825573	1.704362	-0.0307	12.1843
12	**PER**	693	11.81	194.5274	-2680.18	1793.59
13	**PBV**	693	1.401107	4.87881	-20.2281	88.4854

The average stock return of the sample was -0.038 percent, with a standard deviation of 0.35 percent. The minimum return was -0.69 percent, while the maximum was 4.31 percent. These showed that some companies were able to generate high returns, while others did not. The profitability indicators were satisfactory though a bit low, as there were companies with negative net profit margin (NPM). However, the ROA and ROE were satisfactory. Their respective means were 2.39 and 7.56.

There were two solvency indicators, current ratio (CR) and debt ratio (DR). The CR was more than 1, indicating that the overall liquidity of the companies was good. In addition, the DR was satisfactory (*M = 38.41*). Total assets turnover (TOA) is the most common indicator published in the annual report of the companies; it indicates the overall efficiency of an organisation. The overall TOA was 1.19. While above 1, the value was still a bit low. Nonetheless, the overall solvency indicators were satisfactory.

The average market capitalisation (MC) of the sample companies was JOD 31.78 million. The current stock price and number of outstanding stocks differed from a company to another, as reflected by the standard deviation (*SD = JOD 95.74 million*). This is quite normal for the ASE Index, as it comprises large- and small-cap companies, whose stock prices constantly fluctuate over time.

The overall valuation indicators were satisfactory. The average stock turnover ratio (STR) was 86.10, indicating that the shares of the companies were liquid. The book value per share (BPS) and price-to-book value (PBV) had respective means of 1.83 and 1.40. The price-earnings ratio (PER) reflects the current share price relative to its per-share earnings; the figure here was satisfactory (*M = 11.81*). The average earnings per share (EPS) was JOD 0.15, which was rather low. This indicates that the companies gained low profits throughout the study period.

2. Multicollinearity Test

The variance inflation factor (VIF) and tolerance (1/VIF) are typically used to identify multicollinearity problems. VIF measures the degree to which each independent variable is explained by other independent variables. A VIF score of more than 10 and 1/VIF value of higher than one signal the presence of multicollinearity (Gujarati, 2004). The results of the tests are summarised in Table 3.

Table 3. Multicollinearity Test

Variables	VIF	1/VIF
Return on Assets (ROA)	2.22	0.450858
Return on Equity (ROE)	1.06	0.946985
Net Profit Margin (NPM)	1.06	0.946221
Current Ratio (CR)	1.30	0.766888
Debt Ratio (DR)	4.01	0.249119
Total Assets Turnover (TOA)	3.42	0.292320
Market Capitalisation (MC)	1.31	0.764215
Stock Turnover Ratio (STR)	1.27	0.787424
Earnings Per Share (EPS)	3.50	0.285533
Book Value Per Share (BPS)	1.98	0.505336
Price Earnings Ratio (PER)	1.01	0.994618
Price-to-book Value (PBV)	1.09	0.919916
Mean	**1.94**	**0.66**

The mean VIF for all variables was 1.94, ranging between 1.01 and 4.01. In addition, the tolerance values ranged between 0.25 and 0.99, and their mean was 0.66. These results suggested the absence of multicollinearity.

3. Validity Test

The validity of the dataset was evaluated using Pearson's correlation. Table 4 describes in detail the correlations between all explanatory variables. The variables should be minimally correlated with each other. The table shows that the correlations between the independent variables were weak.

Table 4. Pearson's Correlation Results

Var.	ROA	ROE	NPM	CR	DR	TOA	MC	STR	EPS	BPS	PER	PBV
ROA	1.00											
Sig.												
ROE	0.02	1.00										
Sig.	0.59											
NPM	0.15	0.02	1.00									
Sig.	0.01	0.62										
CR	-0.01	-0.03	-0.17	1.00								
Sig.	0.02	0.41	0.05									
DR	-0.08	0.11	0.06	-0.37	1.00							
Sig.	0.04	0.05	0.11	0.00								
TOA	0.03	0.03	0.05	-0.22	0.82	1.00						
Sig.	0.51	0.41	0.20	0.30	0.00							
MC	0.14	0.01	0.01	-0.07	0.12	0.77	1.00					
Sig.	0.02	0.77	0.71	0.08	0.01	0.01						
STR	-0.09	-0.04	0.00	0.05	-0.21	-0.19	0.31	1.00				
Sig.	0.01	0.36	0.94	0.89	0.00	0.00	0.00					
EPS	0.68	0.04	0.05	-0.07	0.10	0.19	0.29	-0.12	1.00			
Sig.	0.00	0.36	0.17	0.07	0.01	0.00	0.00	0.09				
BPS	0.33	0.01	0.04	-0.07	0.12	0.21	0.19	-0.12	0.67	1.00		
Sig.	0.00	0.77	0.26	0.06	0.01	0.00	0.00	0.07	0.00			
PER	0.04	0.01	0.01	-0.04	0.03	0.02	-0.00	-0.04	0.01	0.01	1.00	
Sig.	0.32	0.82	0.85	0.34	0.37	0.62	0.93	0.36	0.73	0.79		
PBV	0.12	-0.15	0.03	0.13	-0.01	-0.02	0.08	0.09	0.09	0.03	-0.02	1.00
Sig.	0.01	0.01	0.40	0.05	0.77	0.64	0.33	0.20	0.09	0.40	0.63	

ROA positively correlated with ROE, but it was not statistically significant. ROA was positively and significantly correlated with NPM, which itself was positively but non-significantly correlated with ROE. In addition, CR was negatively and significantly correlated with DR and TOA. DR was positively and significantly correlated with TOA, whereas TOA correlated negatively non-significantly with CR.

MC was significantly and positively correlated with STR and EPS. STR was negatively but non-significantly correlated with EPS and BPS. EPS was positively and significantly correlated with BPS. The non-significant correlations reflected the overlap of indicators that guide investors. Determining the contribution of each variable in predicting company performance is important to guide their decisions.

The correlations between explanatory variables were low, as they should be. Positive and significant relationships have been detected between some explanatory variables. These are normal since they were computed using the same figures. Therefore, the data of the study is valid to use in the multivariate analysis.

4. Empirical Results

The results of the panel data analysis GLS were conducted to accomplish the study objective. Mainly, fixed and random effects generalised least squares (GLS). The most appropriate model to test the hypothesis was also identified using Hausman test. The Breuch-Pagan test was carried out to detect heteroskedasticity.

A. Fixed Effects Regression

Table 5 presents the results of the fixed effects GLS model.

Table 5. Fixed Effects Estimation Results

$R_{i,t} = \alpha_{i,t} + \beta 1 ROA_{i,t} + \beta 2 ROE_{i,t} + \beta 3 NPM_{i,t} + \beta 4\ CR_{i,t} + \beta 5\ DR_{i,t} + \beta 6\ TOA_{i,t} + \beta 7\ MC_{i,t} + \beta 8\ STR_{i,t} + \beta 9\ EPS_{i,t} + \beta 10\ BPS_{i,t} + \beta 11\ PER_{i,t} + \beta 12\ PBV_{i,t} + \varepsilon_{i,t}$				
Var. Reg. Return (R)	**Coefficient**	**Std. Err.**	**T-Test**	**P> |T-Test|**
ROA	0.0073966	0.0025105	2.95	0.003***
ROE	-0.0000776	0.00017	-0.00	0.996
NPM	-0.0000107	0.0000191	-0.56	0.576
CR	-0.0007117	0.0014146	-0.50	0.615
DR	-0.0011782	0.0008242	-1.43	0.153
TOA	0.0187005	0.0136263	1.37	0.170
MC	0.000429	0.000151	2.84	0.085*
STR	0.0000618	0.0000604	1.02	0.017**
EPS	0.0771896	0.0602393	1.28	0.041**
BPS	-0.0331227	0.0101128	-3.28	0.001***
PER	-0.0000698	0.0000635	-1.10	0.273
PBV	0.0047969	0.0026469	1.81	0.070*
_Cons	-0.0065912	0.0327866	-0.20	0.841
Model				
Number of observations = 693			**Number of Variables = 12**	
F (12, 680) = 4.83			**Prob > F = 0.0000**	
R-squared = 0.0497				
***** Significantly different from zero at the 1% level. ** Significantly different from zero at the 5% level. * Marginally significant at the 10% level.**				

According to the findings reported in Table 5, ROA, STR, EPS, and BPS had a statistically significant impact on stock price. MC and PBV had a marginally significant impact on stock return. The results also show that ROE, NPM, CR, DR, TOA, and PER did not have any statistically significant impact on stock return.

B. Random Effects Regression

Table 6 presents the random effects GLS estimation results. The findings were also rather different to the fixed effects model. According to the findings reported in Table 6, ROA, DR, TOA, STR, EPS, and PBV had a statistically significant impact on stock price. BPS had a marginally significant impact on stock return. The results also show that ROE, NPM, CR, MC, and PER did not have any statistically significant impact on stock return.

The findings of GLS showed that the estimations of fixed effects had little difference from the random effects. However, to differentiate between the random and fixed effects, the current study conducts Hausman's test to select the appropriate model. The finding of Hausman's test presented as follow.

Table 6. Random Effects Estimation Results

$R_{i,t} = \alpha_{i,t} + \beta 1 ROA_{i,t} + \beta 2 ROE_{i,t} + \beta 3 NPM_{i,t} + \beta 4\ CR_{i,t} + \beta 5\ DR_{i,t} + \beta 6\ TOA_{i,t} + \beta 7\ MC_{i,t} + \beta 8\ STR_{i,t} + \beta 9\ EPS_{i,t} + \beta 10\ BPS_{i,t} + \beta 11\ PER_{i,t} + \beta 12\ PBV_{i,t} + \varepsilon_{i,t}$

Var. Reg. Return (R)	Coefficient	Std. Err.	T-Test	P> |T-Test|
ROA	0.0095771	0.0019948	4.80	0.000***
ROE	-0.0000859	0.0000991	-0.09	0.931
NPM	0.00000214	0.0000187	0.11	0.909
CR	-0.0007418	0.0011876	-0.62	0.532
DR	-0.0012723	0.0006519	-1.95	0.049**
TOA	0.0280723	0.0108825	2.58	0.010***
MC	0.0000548	0.0000141	0.39	0.697
STR	0.0000427	0.000056	0.76	0.000***
EPS	0.009389	0.0467066	0.20	0.000***
BPS	-0.0144505	0.0081866	-1.77	0.078*
PER	-0.0000145	0.000047	-0.03	0.975
PBV	0.0053986	0.002536	2.13	0.033**
_Cons	-0.0564096	0.0261008	-2.16	0.031
Model				
Number of observations = 693			**Number of Variables = 12**	
Wald chi2 (12) = 306.89			**Prob > chi2 = 0.0000**	
R-squared = 0.0565				
***** Significantly different from zero at the 1% level. ** Significantly different from zero at the 5% level. * Marginally significant (10%) level.**				

5.

Hausman Test

The findings of the Hausman test for the robustness of stock return model are presented in Table 7.

Table 7. Hausman Test Results

Variables	Coefficients		Difference
	Fixed (b)	Random (B)	(b-B)
Return on Asset (ROA)	0.0073966	0.0095771	-0.0021805
Return on Equity (ROE)	-0.0000776	-0.0000859	0.0000083
Net Profit Margin (NPM)	-0.0000107	0.00000214	-0.00001284
Current Ratio (CR)	-0.0007117	-0.0007418	0.0000301
Debt Ratio (DR)	-0.0011782	-0.0012723	0.0000941

Total Asset Turnover (TOA)	0.0187005	0.0280723	-0.0093718
Market Capitalisation (MC)	0.000429	0.0000548	0.0003742
Stock Turnover Ratio (STR)	0.0000618	0.0000427	0.0000191
Earnings Per Share (EPS)	0.0771896	0.009389	0.0678006
Book Value Per Share (BPS)	-0.0331227	-0.0144505	-0.0186722
Price Earnings Ratio (PER)	-0.0000698	-0.0000145	-0.0000553
Price-to-book Value (PBV)	0.0047969	0.0053986	-0.0006017
Chi2 = 37.16			
Prob > chi2 = 1.0000			

Since the probability was more than 5 percent, the null hypothesis was accepted. This means that the random effects model was more appropriate. The model was then tested for heteroskedasticity.

6. Heteroskedasticity Test

The findings are presented in Table 8. The Breuch-Pagan test indicated the absence of heteroskedasticity since $\chi 2 = 3.74$, $p > 0.05$. The test was not significant and the null hypothesis cannot be rejected, indicating that the variance of the residuals was homogeneous.

Table 8. Breuch-Pagan Test

H_0: Constant variance **Variables: R - ROA, ROE, NPM, CR, DR, TOA, MC, STR, EPS, BPS, PER, PBV**		
R - Model	**Chi2 (12)**	**Prob > Chi2**
R	3.74	0.530

As a result reported in Table 8, the random effects GLS model was deemed the most appropriate estimator of stock return. Accordingly, the hypothesis, that accounting and market indicators significantly predict stock stock return, was also interpreted according to it.

7. Hypothesis Testing

According to the findings reported in Table 6 (Random Effects Estimation Results), TOA had the highest positive coefficient on stock return, B = 0.028, thus an increase in TOA leads to an increase in stock return. Investors prefer investments with a high TOA. The result supports the fact that investors focus on a company's revenues more than its assets. Additionally, ROA had a statistically significant and positive effect on stock return, B = 0.0095. The results are consistent with economic theory. This result is consistent with the findings of Kai and Abdrahman (2018) and Musallam (2018). Additionally, EPS had a statistically significant and positive impact on stock return, *B = 0.009*. Higher EPS is preferable for investors.

The result is consistent with the findings of Wijaya (2015), Din (2017), and Allozi and Obeidat (2016) .STR had a statistically significant and positive impact on stock

return, *B = 0.000043*, meaning that investors are interested in the companies' movement of inventories. As a result, it is reflected in the companies' returns. The results suggest that an increase in EPS and STR leads to an increase in stock return. Meanwhile, PBV had a statistically significant and positive impact on stock return, *B = 0.005*. The indicator is reflected in the stock returns of the sample companies.

The results also showed that DR had a significantly negative impact on stock return, B = -0.001. Investors typically prefer low debt firms. DR may also indicate new investments of a company. Based on the investor's mentality, DR could correlate either positively or negatively to stock returns. This result is opposite to the finding of Allozi and Obeidat (2016). In this study, DR was found to correlate negatively with stock return, supporting economic theory. BPS had a marginally significant and negative impact on stock return, B = -0.014. This result is consistent with the findings of Wijaya (2015).

Surprisingly, MC did not affect stock return, though it positively predicted stock price. Similarly, ROE, NPM, CR, and PER did not predict stock return. These may be due to the nature of the weak and volatile Jordan economy, exacerbated by crises in the neighbouring countries. This result is consistent with the findings of Allozi and Obeidat (2016) and Afrino and Masdupi (2019). Nonetheless, the model explained only a small portion of variance in stock return (R^2 = 6%), three out of 6 accounting indicators and four out of 6 market indicators significantly predicted stock return.

The findings of the stock return model have extended the examination of how the return reacts to the changes in the accounting and market indicators. The analysis has identified the most important accounting and market indicators whose information is readily available to investors. There is also evidence that the indicators affecting stock return depend on the measure of performance itself. Not all accounting and market indicators that significantly predicted. Even though the effects of overlapping indicators also differ in direction and magnitude, H_1 was accepted, the research question was answered, and the research objective was achieved.

CONCLUSION

The returns of ASE companies and share trading have significantly weakened. Numerous companies have been liquidated due to bankruptcy. Investors appear to be less able to find desired investments under these critical conditions. In addition, the investors in Amman Stock Exchange face challenges in determining the accounting and market indicators that affect the stock return. Therefore, this study investigates the effect of twelve accounting and market indicators on the stock return. A yearly data of indicators and company stock price are collected from the ASE website.

Panel generalised least squares regression analysis (GLS) has been conducted to accomplish the research objective. Out of twelve accounting and market indicators, the study revealed the TOA had the highest significantly positive effect on stock return. ROA, EPS, STR, and PBV also had a significant positive impact on stock return. In addition, DR had a significantly negative effect on stock return, while the impact ofBPS was marginally negative. On the other hand, MC, ROE, NPM, CR, and PER did not affect the stock return.

The model fit was significant, explaining 5.65 percent of variance in stock return. Accordingly, the study concludes the weak validity and applicability of the financial indicators on ASE Index companies over the sample period. However, investors could still use this model to predict stock return in Jordan. These results are consistent with Allozi and Obeidat (2016), Afrino and Masdupi (2019), Kai and Abdrahman (2018), Musallam (2018), Din (2017), Stefano (2015), who suggested that the variance in stock return can be explained by accounting and market indicators and financial ratios.

The investigations of the effects of accounting and market indicators could help investors and portfolio managers to identify the indicators that affect stock returns of ASE Index companies. Investors may consider the significantly positive accounting and market indicators as factors that influence the companies' stock returns. Therefore, in making investment decisions in the ASE, investors could refer to those accounting and market indicators.

Such action may reduce their risk exposure and maximise the capital gain from the investment. As the vision of most listed companies is to maximise shareholder wealth, and that stock returns correlate with accounting and market indicators, managers should design and review strategies to improve their company's financial performance to produce better financial indicators. Better financial indicators will ultimately lead to better stock returns, which will in turn create value for shareholders. Therefore, the correlation between accounting and market indicators and stock returns will serve as a reference to assist financial market regulators to audit price transparency. Regulators may review those companies whose stock returns have risen or fallen greater than the movements of accounting and market indicators to assess the sustainability of their operations.

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