

Impact of Accounting Data on Share Price during different Economic Conditions

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ABSTRACT

Nevertheless, many studies in several countries investigated the Impact of accounting data on share price during the global financial crisis 2007-2009 . However, the findings of these studies revealed mixed results. This study discusses the ability of cash flow accounting data to predict share prices of Saudi Arabia's listed companies. The study covers three different periods of the Saudi economy; before, during, and after the global financial crises. Quarterly data used in this study were collected from the financial statements of non-financial companies listed on the Stock Exchange of Saudi Arabia from 2007 to 2010. The findings indicate that share prices can be predicted by cash flow ratios before, during, and after the economic crises. The results also show that cash flow return on equity (CFROE) and cash flow short term liabilities (CFSTL) cannot predict the changes in the share prices for all the three periods. In contrast, price cash flow per share (PCFPS) and assets efficiency ratio (AER) are found to be good predictors of the variations in the stock price for all three periods.

Kew words: Share price, Cash flow ratios, Saudi Arabia stock exchange, and Global financial crisis.

المستخلص :

بالرغم من أن العديد من الدراسات في العديد من البلدان قد بحثت في تأثير البيانات المحاسبية على أسعار الأسهم خلال الأزمة المالية العالمية 2007-2009. إلا أن، كشفت نتائج هذه الدراسات نتائج مختلطة. تناقش هذه الدراسة قدرة بيانات التدفق النقدي على التنبؤ بأسعار الأسهم للشركات المدرجة في السوق المالي السعودي. تغطي الدراسة ثلاث فترات مختلفة من الاقتصاد السعودي. قبل وأثناء وبعد الأزمة المالية العالمية. تم جمع بيانات الدراسة من التقارير الفصلية (ربع سنوية) للشركات غير المالية المدرجة في البورصة السعودية من 2007 إلى 2010. تشير النتائج إلى أن أسعار الأسهم يمكن التنبؤ بها من خلال نسب التدفق النقدي قبل و أثناء و بعد الأزمة المالية العالمية. كما أظهرت النتائج أيضاً أن نسبة التدفقات النقدية إلى حقوق الملكية (CFROE) و نسبة التدفقات النقدية إلى الالتزامات قصيرة الأجل (CFSTL) لا يمكنها التنبؤ بالتغيرات في أسعار الأسهم لجميع الفترات الثلاث. في المقابل ، كشفت الدراسة على أن نسبة السعر إلى التدفق النقدي للسهم (PCFPS) ونسبة كفاءة الأصول (AER) يمكن استخدامها كتنبؤات جيدة للتغيرات في سعر السهم لجميع الفترات الثلاث.

الكلمات المفتاحية: سعر السهم ، ونسب التدفق النقدي ، والبورصة السعودية ، والأزمة المالية العالمية.

Introduction

Financial Reporting Standard No. 107 on cash flow statements in preparing cash flow statements as an integral part of a company's financial statements has asserted that 'cash flow information is useful in assessing the ability of enterprise to generate cash and cash equivalents...' Based on that assumption, this study investigates the predictive ability of cash flow ratios to explain the variations of share price under three different economic conditions (pre-global financial crisis, during global financial crisis, and after global financial crisis). The study in particular investigates the relationship between cash flow accounting data and stock price in Saudi Arabia's stock exchange before, during, and after the global financial crisis of 2008-2009.

The global financial crisis of 2008-2009 (GFC) started in July 2007 in the United States (US). It is considered as the deepest one since World War II (SESRIC Report, 2009). Nevertheless, the global financial crisis hit the developed economies particularly the US and European countries that are well-integrated financially. However, the effects of the global financial crisis have been more limited-mainly through decreasing oil revenues-as they are financially less integrated with the world economy (SESRIC Report, 2009). Like many emerging markets, the Middle East Capital Markets (MECM) responded sharply to the global financial crisis by 15/SEP/2008, the day Lehman investment bank filed for bankruptcy after failing to find a buyer (Onour I., 2010). The Saudi Arabian stock market in particular fell by 6.5 percent (Casa Arab Report, 2009).

Previous accounting research has focused on cash flow as an absolute value and not as a percentage to some variables or ratios (Siam W. Z. & AL-Khaddash H., 2003). This means that prior studies addressed cash flow without taking into account its resources (cash flow generated from debt fund has a cost, in contrast from sales or equity fund); and this study differs from previous studies because it focuses on cash flow as a percentage to some variables rather than cash flow accounting data. In other words, this study does not address cash flow; but it addresses cash flow ratios (CFRs) which are based on cash flow data from cash flow statements.

Past literature shows that there is a lack of studies that examined cash flow ratios in predicting future share prices. Previous research on cash flow has mainly focused on three main areas. Firstly, many studies conducted in the USA, the UK and Australia investigated the ability of accrual earnings and cash flows in predicting security prices. The second group of studies is related to the role of cash flow information in predicting business failures. The third group of studies examined the comparative ability of accrual earnings and cash flow from operations (Tho Lai Mooi, 2007). Therefore, there is a lack of research on the relationship of

cash flow ratios and share price in general, and no study has been conducted on Saudi Arabia stock exchange.

There are a few studies conducted on Saudi stock exchange about the relationship between accounting data and stock price. However, none of them addressed cash flows ratios (CFRs). Kotb A. S., (2004) confirmed in his study conducted on GCC countries stock exchange the necessity of conducting studies that address cash flow effect on stock prices in GCC countries. Since then, few studies were carried out on Saudi stock market such as (Al-Sehali, 2006) and (Al-Sehali & Spear, 2004). There is however a number of studies on this issue; but nothing on cash flow accounting data in Saudi stock exchange.

Thus, this study attempts to cover this gap in the literature in different economic conditions; before, during, and after the global financial crisis 2008- 2009. The main objective of this study is then to examine the relationship between Saudi stock price and cash flows accounting data taking into account, the moderating effect of the company size that might moderate this relationship before the global financial crisis, during the global financial crisis, and after the global financial crisis.

Literature Review

Cash flow accounting information which can be derived from cash flow statement is very important in predicting share price. Some previous studies such as Bernard & Stober (1989) proved that there is a very strong reaction in the stock prices as a response to a company's public cash flow statements. Although there are many studies on the relationship of cash flow ratios and share price, however, these studies only studied a few cash flow ratios. Most of them focused on net cash flow in predicting share prices and also cash flow operations to estimate the stock price.

Findings of previous studies about the relationship of cash flow and stock price revealed in general existence of a significant positive influence on share price. Some studies especially in Jordan contradicted these results and found that cash flow was insignificantly associated with share price (Al Khalayla, 1998). In mature markets a study by Board & Day (1989) found that cash flows had a significant relationship with stock price. In emerging markets same results were revealed, where some studies found that cash flows explained some of the abnormal returns in the short window and the investors value shares based on earnings and cash flows (Cheng & Shamsher, 2008).

Lehn, et al., (1989), concluded that there is a significant relationship between undistributed cash flows and share price. Brooks (1981) found that cash flow can predict

future cash flows of stock prices, and the study, however, did not find a general improvement in the ability to forecast cash flows when earnings information were added. Cheng, Liu and Schaefer, as quoted by Hermawan and Nuranto H. (2002), stated that cash flow had a significant impact on profit.

Chotkunakitti, (2005) found that past earnings, cash flows, cash flow and accrual component of earnings can be used to predict future cash flows of Thai listed companies, and concluded that cash flows have better predictive power than past earnings. Andikaputri (2008) examined the ability of cash flows component from operating activity to predict the future cash flows of manufacturing in Indonesia. The results indicate that current year cash flow has the ability to predict future cash flows.

Prior research also examined the relationship of cash flow operations and stock price, and reported mixed findings. Some studies concluded that cash flow operations had no effect on share price such as Ohlson (1995) and Haddad F. (2003). Other studies found that cash flows had a non-significant weak effect on share price (Daniati & Suhairi (2006); sparta & Februwaty (2005); and Manurung (1998). Some studies revealed that cash flow operations can forecast share price such as Wilson (1986) who found that cash flow operations explained 20.9% of the share price changes. Also, Muhammad (2009) found that cash flow operations explained 9% of the variations in share price. Jordan et al. (2007) concluded that cash flow operations can predict share price. Rayburn (1986) and Meythi (2006) found that cash flow operations had a significant relationship with share price.

Daniati & Suhairi (2006) examined the relationship between cash flow and stock price and found significant relationship. Manurung (1998) on the other hand found non-significant weak relationship. In addition, Haddad F. (2001) found no relationship between cash flow and stock price.

Moreover, the relationship of share price and some cash flow ratios such as cash flow return on assets, cash flow return on equity, cash flow short term liabilities, and cash flow long term liabilities was examined by a number of studies. Hashish (2003) found that cash flow return on assets was correlated with stock price, while Siam W. Z. & Alkhaddash H. (2003) found non-significant weak relationship. Both Kryosh H. A. (2003) and Siam W. Z. & Alkhaddash H. (2003) examined the relationship of stock price and cash flow return on equity, cash flow short term liabilities, and cash flow long term liabilities and found weak relationship and non-significant results.

Methodology

The objective of this study is to examine the relationship between cash flow accounting data and stock price before, during, and after the global financial crisis. All cash flow accounting data including cash flow return on equity (CFROE), cash flow short term liabilities (CFSTL), price cash flow per share (PCFPS) and assets efficiency ratio (AER) represent the independent variables in this study.

Prior research did not study price cash flow per share and assets efficiency ratios. Therefore, this study is deemed as a first study that explores them. Price cash flow per share provides more information to the investors for decision-making compared to price to earnings ratio. The profit and loss statement (or income statement as it is more commonly known) does not always equal the cash flow statement. It's theoretically possible for a company to report huge profits and be unable to pay its bills due to liquidity problems. So, this variable needs to be investigated to highlight its importance in financial markets.

Research Model

The research model is formulated according to other similar studies such as (Ball & Brown, 1968; Atiase, 1985; Freeman, 1987; Collins et al., 1987). In this study, the multiple linear regression model (Hierarchal Regression Model) examines the relationship between the set of independent variables (cash flows accounting data) and the dependent variable (stock price).

A multi-regression model is used to evaluate the relationship between a set of independent variables and the dependent variable, controlling for or taking into account the impact of a different set of independent variables on the dependent variable. In hierarchical regression, the independent variables are entered into the analysis in a sequence of blocks, or groups that may contain one or more variables. In this study, cash flow return on equity (CFROE), cash flow short term liabilities (CFSTL), price cash flow per share (PCFPS) and assets efficiency ratio (AER) were regressed against the dependent variable – Stock price.

In this study the following model is used to test the direct effect of the independent variable (Cash Flows Accounting Data- CFAD) on the dependent variable (Stock Price). It is formulated as follows:

$$SP = a_0 + a_1 CFROE + a_2 CFSTL + a_3 PCFPS + a_4 AER + e$$

- CFROE** Cash flow return on equity
CFSTL Cash flow short-term liabilities
PCFPS Price cash flow per share
AER Assets efficiency ratio
SP Stock Price (DV)
e Error term

Stock Price is the dependent variable in this study. It reflects the performance of the company, and means the weighted average (weighted mean) for the share price in the trading market. The study uses the closing share price data from quarterly reports.

Cash Flow Return on Equity (CFROE)

This ratio indicates the return on equity, resulting from cash flows from operating, the high value for this ratio indicates a positive indicator on the company efficiency, and this is similar to the return on equity rate with the exception of the use of cash flows rather than net profit use (Obadat, 2006).

It is calculated as follows: $CFROE = \frac{\text{Cash Flows}}{\text{Equity}} = \frac{CF}{E}$

Cash Flows Short-Term Liabilities (CFSTL)

This ratio shows the entity ability to pay its short-term liabilities through the net cash flows from operating activities. The high value for this ratio indicates the level of risk decrease relating to liquidity, which means that the facility can pay all or a portion from its short-term liabilities through internally generated cash. Cash Flow will be calculated as a percentage from Short-term Liabilities for each company understudy for the study period, where Short-term Liabilities include all liabilities which its duration less than a year (Siam W. Z. & Alkhaddash H., 2003).

It is calculated as follows: $CFSTL = \frac{\text{Cash Flows}}{\text{Short Term Liabilities}} = \frac{CF}{STL}$

Price Cash Flow per Share (PCFPS)

Price cash flow per share is a measure of the market's expectations of a firm's future financial health. Because this measure deals with cash flow, the effects of depreciation and other non-cash factors are removed. Similar to the price-earnings ratio, this measure provides an indication of relative value. Because accounting laws on depreciation vary across jurisdictions, the price-to-cash-flow ratio can allow investors to assess foreign companies from the same industry with a bit more ease (Investopedia webpage, 19.2.2011). It is calculated as follows:

$$PCFPS = \frac{\text{Stock's Price}}{\text{Cash Flow per Shar}} = \frac{SP}{CFPS}$$

As it can be seen, the formula includes cash flow instead of net income. This is preferred by many financial experts since in the cash flow of the company depreciation and amortization are added back. Since amortization and depreciation don't represent an expense that deprives the company of money, the reported cash of the company is artificially reduced (Stock Market Investor webpage, 19.2.2011). Cash flow per share is calculated as follows:

$$CFPS = \frac{\text{Cash Flow}}{\text{Number of outstanding shares}} = \frac{CF}{SN}$$

Assets Efficiency Ratio (AER)

The asset efficiency ratio provides an indication of how well the assets of a company are utilized to generate a cash flow return. This ratio indicates the amount of cash a company can generate in relation to its size. Namely, it relates to a company's ability to generate cash compared to its size of its assets. A ratio of 0.30 is considered good, but when the ratio declines below 10% then there may be some cause for concern (Investopedia webpage, 19.2.2011). The cash flow on total assets ratio is defined as follows:

$$\frac{\text{Cash Flow Operations}}{\text{Total Assets}} = \frac{CFO}{A}$$

AER =

Hypothesis Development

The following hypotheses are developed and tested in this study:

Hypothesis H_{1a}: Cash flow return on equity is able to explain the variation of Saudi stock price before the global financial crisis.

Hypothesis H_{1b}: Cash flow return on equity is able to explain the variation of Saudi stock price during the global financial crisis.

Hypothesis H_{1c}: Cash flow return on equity is able to explain the variation of Saudi stock price after the global financial crisis.

Hypothesis H_{2a}: Cash flow short term liability is able to explain the variation of Saudi stock price before the global financial crisis.

Hypothesis H_{2b}: Cash flow short term liability is able to explain the variation of Saudi stock price during the global financial crisis.

Hypothesis H_{2c}: Cash flow short term liability is able to explain the variation of Saudi stock price after the global financial crisis.

Hypothesis H_{3a}: Price cash flow per share is able to explain the variation of Saudi stock price before the global financial crisis.

Hypothesis H_{3b}: Price cash flow per share is able to explain the variation of Saudi stock price during the global financial crisis.

Hypothesis H_{3c}: Price cash flow per share is able to explain the variation of Saudi stock price after the global financial crisis.

Hypothesis H_{4a}: Assets efficiency ratio is able to explain the variation of Saudi stock price before the global financial crisis.

Hypothesis H_{4b}: Assets efficiency ratio is able to explain the variation of Saudi stock price during the global financial crisis.

Hypothesis H_{4c}: Assets efficiency ratio is able to explain the variation of Saudi stock price after the global financial crisis.

Hypothesis H_{5a}: Cash flow ratios (such as cash flow return on equity, cash flow short term liabilities, price cash flow per share, and assets efficiency ratio) are able to explain the variation of Saudi stock price before the global financial crisis.

Hypothesis H_{5b}: Cash flow ratios (such as cash flow return on equity, cash flow short term liabilities, price cash flow per share, and assets efficiency ratio) are able to explain the variation of Saudi stock price during the global financial crisis.

Hypothesis H_{5c}: Cash flow ratios (such as cash flow return on equity, cash flow short term liabilities, price cash flow per share, and assets efficiency ratio) are able to explain the variation of Saudi stock price after the global financial crisis.

Data

The study utilizes quarterly data from 2007-2010. The choice of this period is due to availability of data, and also because this period covers the global financial crisis 2008-2009. The study made use of secondary quarterly data gathered from quarterly financial reports published on Saudi stock exchange website. The stock prices data consists of the quarterly closing share price, and they were gathered from the Quarterly Reports of Saudi Stock Exchange published on Gulf Base Website.

The global financial crisis in GCC countries started from 15.09.2008, the day when Lehman investment bank announced its bankruptcy. The period from Lehman fall to March/2009 was the crisis period across the global financial markets, including GCC markets. Although most developed and emerging markets started to recover from the crisis by the end of first quarter of 2009, the spill-over of the crisis on GCC markets, continued till the end of 2009 (Onour I., 2010). On this basis, we considered in this study this date as a distinctive date between the pre-crisis and post-crisis epochs.

For this reason, the study uses quarterly data rather than annual data. Using annual data will lead to ignoring the fourth quarterly report of 2008 which is affected by the global crisis. In contrast, the first, the second, and the third quarterly report of the year 2008 are not influenced by the global crisis. Therefore, using quarterly data will capture the pre-crisis, during crisis and post crisis periods.

Population and Study Sample

Study population includes all companies listed on Saudi stock exchange; total number of listed companies is 128 companies. The sample comprise of companies with fiscal year ending December 31 for the period of 2007-2010. The firms were selected based on the following criteria:

1. The firms that have necessary financial statement data.
2. Stock prices data are available for the company understudy during the sample period.
3. Shares of the companies must also be actively traded in the Saudi stock exchange.
4. Mergers and acquisitions were left out in the sample. This is to ensure that shares of the companies have been traded continuously without any takeovers.

Based on the above criteria, 150 samples were selected for the years 2007-2010.

Data Analysis

Multiple Regressions Analyses were used to determine the direct effect of the independent variable (cash flow accounting data) on the dependent variable (stock price. Multicollinearity Test carried out to assess the degree of correlation among the independent variables show no strong correlation between the independent variables. Since there were no strong correlations among the independent variables, all the independent variables were retained in the model.

Results and Discussion

Table 2 presents the results of the regression analysis for the three different time periods (Pre-global financial crisis, during global financial crisis, and post-global financial crisis). The results exhibited in Table 2, panel E, show that the constant (a_0) was 37.323 before the crisis and decreased by about 28.7% during the crisis to become 26.625 and after the crisis continued decreasing by about 47.7% to become 13.919. All these constants are significant at 1% level.

Panel A in Table 1 shows that cash flow return on equity (CFROE) had a positive effect on share price but not significant before the crisis, and during the crisis CFROE had also a positive effect on share price but significant ($P < .05$). Namely, CFROE explained 16.1% of the price change during the crisis. After the crisis, CFROE had also a significant positive effect on share price (it explained 32.5% of the price variations). The coefficient of CFROE was 10.531 before the crisis, during the crisis doubled about three times to become 36.431 and after the crisis increased about ten times to become 101.197. This result supports hypothesis H_{1b} and H_{1c} but it does not support H_{1a} .

Panel B in Table 1 reports that cash flow short term liabilities (CFSTL) had only a significant impact on the share price before the crisis but after that, it became insignificant. In addition, the coefficient is negative during the crisis, but positive after the crisis and non-significant. Therefore, according to this result H_{2a} is supported but H_{2b} and H_{2c} are not supported.

Panel C in Table 1 presents that price cash flow per share (PCFPS) had a significant positive impact on the stock price before, during, and after the crisis. Whereby, it explained 48.7% of the price changes before the crisis, 62.9% of the price changes during the crisis, and 58.4% of the price changes after the crisis. This result supports H_{3a} , H_{3b} and H_{3c} .

Panel D in Table 1 shows that assets efficiency ratio (AER) was positively significant with share price throughout the three periods but; before the crisis, it had a significant impact at 10% level ($P < 0.1$), but during and after the crisis, it had a significant effect at the 0.01 level

($P < .01$). AER explained 13.1% of the price variations before the crisis. The explanatory power of AER increased during the crisis to be 22.9% and continued increasing after the crisis to become 27.9%. This result supports H_{4a} , H_{4b} and H_{4c} .

Panel E in Table 1 shows the value of R^2 which explains the variations in the stock prices for the three periods. R^2 was 0.301 before the crisis and went up during the crisis to 0.493 and then shot up to 0.537 after the crisis. This means that cash flow ratios together are able to provide more information and changes in the stock price. Based on the findings, H_{5a} , H_{5b} , and H_{5c} are all supported.

Table 1: Findings of stock price before, during, and after the crisis

Panel A: A comparative discussion for CFROE before, during, and after the crisis												
Variables	Pre-global Crisis			During Global Crisis			Post-global Crisis					
	a_1	Beta	Sig.	a_1	Beta	Sig.	a_1	Beta	Sig.			
CFROE	10.531	.058	.420	36.431	.161	.013	101.197	.325	.000			
Panel B: A comparative discussion for CFSTL before, during, and after the crisis												
CFSTL	Pre-global Crisis			During Global Crisis			Post-global Crisis					
	a_2	Beta	Sig.	a_2	Beta	Sig.	a_2	Beta	Sig.			
	10.361	.285	.000	-.037	-.082	.168	.440	.035	.587			
Panel C: A comparative discussion for PCFPS before, during, and after the crisis												
PCFPS	Pre-global Crisis			During Global Crisis			Post-global Crisis					
	a_3	Beta	Sig.	a_3	Beta	Sig.	a_3	Beta	Sig.			
	.0004	.487	.000	.0005	.629	.000	.001	.584	.000			
Panel D: A comparative discussion for AER before, during, and after the crisis												
AER	Pre-global Crisis			During Global Crisis			Post-global Crisis					
	a_4	Beta	Sig.	a_4	Beta	Sig.	a_4	Beta	Sig.			
	27.643	.131	.066	64.716	.229	.000	158.290	.279	.000			
Panel E: A comparative discussion for R^2, F, Sig, a_0 before, during, and after the crisis												
a_0	Pre-global Crisis			During Global Crisis			Post-global Crisis					
	R^2	F	Sig.	a_0	R^2	F	Sig.	a_0	R^2	F	Sig.	
	37.323	.301	15.802	.000	26.625	.493	35.257	.000	13.919	.537	33.347	.000

As shown in Table 1 above, cash flow short term liabilities had a significant positive effect on share price before the crisis, but during the crisis, it had only a weak negative and not significant effect on share price, and after the crisis it had also a very weak non-significant but positive effect. This could be due to two reasons. Firstly, companies prefer to stack all the needed cash during the crisis. Secondly, decline of share price during the crisis seriously affected the short term liabilities cash flow.

In other words, during the crisis cash flow rises up to its highest value. Companies needed more cash since loans are more difficult to be obtained. In contrast, share prices declined drastically to their lowest values. This means that the positive relationship between cash and share price has been reversed by the crisis effect. And this caused to make the relationship between cash flow short term liabilities and share price negative during the crisis. The accumulation of cash during the crisis period refers to deferment and abolishment of many projects during the crisis which led to accumulations of cash.

Saudi Arabia Economic Report (2011) confirms the above situation. Where, the report mentioned that the Saudi Arabia economy during the crisis decelerated quickly at the end of 2008 and through 2009 due to a number of factors, including the drop of oil price and global oil demand, and the cancellation or postponement of tens of billions of dollars in expansion projects. Saudi Arabia's share price too gradually went down during the crisis. According to Casa Arabe Report (2009) the Saudi Arabian stock market fell by 6.5 %. In addition, Council of Saudi Chambers (2008) indicated that price index lost 2184 points in the last week of Jan 2008.

After the crisis, the relationship between cash flow share price and stock price improved slightly to become positive rather than negative during the crisis; but it is still insignificant after the crisis in comparison with the period before the crisis because the economy started gradually recovering but the rate of growth is still lags pre-financial crisis levels, and therefore, we find that the relationship between cash flow share price and stock price is still insignificant after the crisis.

The above findings are consistent with that of Wilson (1986); Board & Day (1989); Cheng & Shamsher (2008); Abo-Hashish (2003); Lehn et al (1989); Muhammad H. F. (2009); Brooks (1981); Jordan et al. (2007); Andikaputri (2008); Rayburn (1986); Bernard & Stober (1989); Hermwan & Nuranto H. (2002); Chotkunakitti (2005); Daniati & Suhair (2006); Mubarak (1997); Al-Min (1999) and Al-Sehali & Spear (2004).

Conclusion and Recommendation

The main purpose of this study is to investigate the value relevance of cash flow ratios (cash flow return on equity, cash flow short term liabilities, price cash flow per share, and assets efficiency ratios) in predicting the variations of the Saudi Arabia stock price before the global financial crisis, during the global financial crisis, and after the global financial crisis.

The study before the global financial crisis, found that cash flow ratios explained 30.4% of the variations in the stock price, and during the global financial crisis cash flow ratios explained 49.3% of the price change. After the global crisis, the study found that cash flow ratios explained 53.7% of the price changes.

Besides that, the study concluded that cash flow return on equity (CFROE) and cash flow short term liabilities (CFSTL) might not be always good predictors of the changes in the share prices. In contrast, price cash flow per share (PCFPS) and assets efficiency ratio (AER) are found to be good predictors of the variations in the stock price. Whereby, cash flow return on equity is found to have a significant positive influence on share price during and after the global crisis; but before the global crisis, it is found to have an insignificant positive influence on share price.

On the other hand, cash flow short term liabilities is only found to have a significant positive influence on share price before the crisis; but during the crisis period, it is found to have a very weak negative and insignificant influence. After the crisis period, it is found to be insignificant and positive influence on share price. Whereas, price cash flow per share and assets efficiency ratios are found to have a significant positive influence on share price during the three periods, which means that these variables are good predictors to explain the changes in stock price.

Future studies should study other GCC countries and compare these results with them. The findings may also be useful for other countries. The results show that cash flow alone may not be a good predictor of stock prices, but cash flow ratios are a better predictor of stock prices.

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