

## Exploring the Relationship between the Financial Ratios and the Share Price: Evidence from Bahrain Listed Financial Institutions

Arpita Anshu Mehrotra

*Royal University for Women, College of Business & Financial Sciences, Riffa, Kingdom of Bahrain,*  
amehrotra@ruw.edu.bh

Follow this and additional works at: <https://journals.usek.edu.lb/aebj>



Part of the [Business Commons](#), and the [Economics Commons](#)

---

### Recommended Citation

Mehrotra, Arpita Anshu (2022) "Exploring the Relationship between the Financial Ratios and the Share Price: Evidence from Bahrain Listed Financial Institutions," *Arab Economic and Business Journal*: Vol. 14 : Iss. 2 , Article 5.

Available at: <https://doi.org/10.38039/2214-4625.1018>

This Research Article is brought to you for free and open access by Holy Spirit University of Kaslik Journals. It has been accepted for inclusion in Arab Economic and Business Journal by an authorized editor of Holy Spirit University of Kaslik Journals.

## RESEARCH ARTICLE

# Exploring the Relationship between the Financial Ratios and the Share Price: Evidence from Bahrain Listed Financial Institutions

Arpita A. Mehrotra

Royal University for Women, College of Business & Financial Sciences, Riffa, Bahrain

## 1. Introduction

The main objective of financial reporting is to provide information about the financial position and performance of companies. Results and trends in financial reports could affect investor confidence in financial markets. Investors look for opportunities to invest additional resources in the most efficient capital markets and one of the main factors that affect every investor in making his/her decision is to provide special attention to “stock price”. Stocks are regarded as the most common and actively traded securities in financial markets and are seen as a long-term source of funding. However, Investors tend to be risk-return focused and hence seek to mitigate the high risk associated with investing in stocks while maximizing expected returns by maintaining a preferred level of risk. Thus, conducting financial analysis about the performance of the companies they are investing in plays a vital role in realizing their investment objectives and base their decisions accordingly.

Bahrain is an emerging economy, and it is imperative to conduct studies which will benefit the investor to make rational investments (Doblas et al., 2020). There have been very few studies which investigated the main determinants affecting share prices in the Bahrain financial market and the relationship between financial ratios and financial performance of companies in Bahrain. For instance, Adnan et al. (2021) explored the relationship of the financial indicators on the bank's performance in Bahrain where the study aimed at evaluating how far the financial analysis using ratios are useful in measuring the actual

performance. Their results show that the large bank is more efficient in term of the efficiency ratios to generate income by utilizing their full economic resources and give the high efficiency ratio as compared to small bank. Whereas leverage has a negative impact on the bank's performance because it creates a burden on the bank to recover the cost of the capital. The study also found that there is a significant relationship between the bank performance and non-interest income, loan loss provisions and return on equity ratios. In addition, Doblas et al. (2020) conducted a study to determine if price-to-earnings (PE) and price-to-book (PB) ratios can be used as predictors for stock market returns among financial institutions listed in Bahrain Stock Exchange. The findings reveal that PE ratio significantly predicts stock returns among publicly listed financial institutions stocks in Bahrain but the influence of PE ratio to stock return is inversed, which means that buying stocks with lower PE ratio is not supported by the study. The study also concludes that PB ratio significantly predicts stock returns among publicly listed financial institutions stocks in Bahrain and higher PB stocks signifies the company's ability increase its revenue and increase the ability of the company to distribute dividends making it possible to generate greater future returns. While there is evidence to support that loading PE and PB as predictor of stock returns, but this would generate estimate parameters that can only show cross and time fixed effects. Thus, individual time invariant variables or company and industry specific factors do not play a role in the ability of PE and PB ratios in predicting stock returns.

---

Received 3 July 2022; accepted 3 July 2022.  
Available online 12 August 2022  
E-mail address: amehrotra@ruw.edu.bh.

<https://doi.org/10.38039/2214-4625.1018>

2214-4625/© 2022 Holy Spirit University of Kaslik. This is an open access article under the CC-BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Earlier, [Asiri and Hameed \(2014\)](#) have also investigated why companies listed on Bahrain Bourse which operate in the same industry, are of similar size, and report almost the same level of earnings over the same period are viewed by the market differently with respect to future earnings and cash flow potential. Their results concluded that return on assets (ROA), as a profitability measure, provides signals to the investors and explains partially the market to book value and almost all sectors considered ROA as the main factor in explaining the market value. The study also found that financial leverage, total assets and market risk or beta to be significant in explaining the market and that the size of the firm also has a significant effect on its market value. On the other hand, [Najjar \(2013\)](#) conducted a study to understand and analyze the different financial ratios which quantify many aspects of a banking business in Bahrain, by making comparisons between different types and size of banking institutions and comparing different time periods for a bank particular bank. The results indicate that the variables return on equity, book value per share, dividend per share, dividend yield, price earnings, and firm size are significant determinants of share prices in the Bahrain market. This suggests that investors can make optimum investment decisions and be assured fair returns if they consider these determinants which have evolved to be the significant contributors to the market price of shares in Bahrain.

Furthermore, [Sharif et al. \(2015\)](#) have identified the main determinants affecting share prices in the Bahrain financial market. The study analyzed 41 companies listed in the Bahrain stock exchange for the period 2006–2010 and tried to establish a relationship between market price of shares (MPS) and eight other variables namely return on equity (ROE), book value of share (BVS), earnings per share (EPS), dividend per share (DPS), price earnings (PE), dividend yield (DY), debt to total asset (DA) and firm size (Log MCAP). The empirical findings reveal that all these factors except DY have a positive and significant relationship with MPS. Leverage also showed an inverse but insignificant relationship with market price. [Sharif et al. \(2015\)](#) have recommended that investors should monitor the PE ratio, dividend policies (DPS and DY), BVS, Log MCAP and ROE before they expand their portfolio. This therefore opens an arena for further research to encompassing the macro and micro factors for unfolding a comprehensive idea of factors affecting MPS. The same was also concluded by [Adnan et al. \(2021\)](#) who indicated that financial ratios have a direct effect on banks' performance in

Bahrain and as such there should be more research in this area. Therefore, this study contributes to exploring the empirical relationship between the stock prices and financial ratios as the microeconomic fundamentals in Bahrain.

Bahrain Bourse is a self-regulated multi-asset marketplace. It aims to provide the investors, intermediaries, and the issuers of different assets classes with an inclusive exchange-related facility including offering listing, trading, settlement, and depositary services for several financial instruments. The stock exchange consists of 42 listed companies, divided into six different sectors: Commercial Banks, Investment, Insurance, Services, Hotel & Tourism, and Industrial sector. The financial sector represents around 50% of the listed companies with a current total of 21 listed companies within the Commercial Banks, Investment, and Insurance sectors ([Bahrain Bourse, 2021](#)). This paper is one of the primary endeavors in research to explore the empirical relationship between the stock prices and financial ratios as the microeconomic fundamentals in Bahrain Stock Exchange specifically applied on financial institutions listed in Bahrain Bourse. The financial institution companies have been selected due to the growth path in the financial sector in the Kingdom of Bahrain, as the banking assets are growing, and investors are taking note of the favorable and robust regulatory environment. Bahrain's financial sector is well-developed and diversified, as it is the longest established financial center in the Gulf Cooperation Council (GCC). The sector consists of a wide range of conventional and Islamic financial institutions and markets, including retail and wholesale banks, specialized banks, insurance companies, finance companies, investment advisors, money exchangers, insurance brokers, securities brokers, and mutual funds. Therefore, the sector is well-positioned to offer a wide range of financial products and services, making Bahrain the leading financial center in the Gulf region ([Bahrain Association of Banks, 2022](#)). The financial sector is also the largest Bahraini employer in Bahrain, with Bahrainis representing 67% of the workforce. Generally, 17.9% is the sector contribution to Bahrain's Gross Domestic Product (GDP), making it the second largest contributor to the GDP after the oil sector and one of the key drivers of the Kingdom's growth ([Bahrain Economic Development Board, 2022](#)). In addition, the Kingdom of Bahrain is considered as the hub for the Fintech in the MENA region which will further strengthen the Kingdom's position as a regional leader in the financial sector. The sector is regulated and supervised by the Central Bank of Bahrain

(CBB), which is the single regulator and source of governance for the entire financial system since 2002. The CBB's regulatory requirements are contained in the CBB Rulebook, divided into seven volumes, each covering a different segment of the financial system (Central Bank of Bahrain, 2022).

This study will contribute to the enhancement of the investment stance of investors in Bahrain Market by knowing the factors affecting share price, since this issue was discussed and examined deeply and effectively in developed market while only few discussed this matter in emerging market. Investors are always concerned with investing in stocks, as they carry higher risks than other investment (i.e., bonds). However, stocks offer greater potential for higher returns. Thus, it comes the need to know the different factors affecting stock price. Stock investing depends primarily on financial data analysis. Financial and accounting information play a vital role in describing firm's performance, one key indicator of company's condition is to look at financial ratios. The price of the stock can be affected by different factors. Some studies try to identify them. It is possible to determine two categories of variables that can affect stock prices: macroeconomic and microeconomic variables. According to Drummen and Zimmermann (1992), the individual characteristics of companies affect up to 50% of stock prices. This research investigates the dynamic linkages between microeconomic factors and stock market developments. The mentioned concerns necessitated the reason for this study that aims at evaluating the relationship between the financial ratios and share price movements of financial institutions listed in Bahrain stock exchange (Bahrain Bourse), in order to provide investors in emerging markets like (Bahrain) with in-depth analysis of the soundness of the performance of the examined companies in this research and assist in enhancing their investment strategies. The aim is to examine the relationship between the financial ratios and the stock prices of selected financial institutions listed in Bahrain Stock Exchange (Bahrain Bourse). Financial ratios include the earning per share ratio (EPS), the price to earnings ratio (P/E), the return on assets (ROA), the return on equity (ROE), and the debt-to-equity ratio which is the financial leverage ratio. The study acts as a guide to potential investors in Bahrain to focus on the factors discussed above before making investment decisions.

This paper is structured as follows. The literature review on financial ratios and the relationship between the share price and financial ratios is provided in the next section. The sample, variable descriptions and research methodology are

explained in the third section. The fourth section presents and discusses the results obtained. The last section provides the relevant conclusions of the study, implications, and possible recommendations for future research.

## 2. Literature review

Many studies have been initiated and directed to assess the relationships between financial ratios and stock prices or stock returns, mainly on Asia and US stock markets. The presented literature stipulates that a linkage between stock prices and microeconomic fundamentals exists and provides theoretical evidence as well. These theories suggest that stock prices are altered in response to a number of variables including earnings, return on assets ratio, net assets, returns on capital employed, debt to equity ratio, etc (Aayale et al., 2022; Hakim, 2021). Hutabarat and Simanjuntak (2013) reported that stock price is an extremely critical factor in capital market activity that plays a vital role in directing investors' investment decisions. This is mainly because it indicates the achievement of the issuer and provides a reflection of the performance of the issuer simultaneously.

Theoretically speaking, "stock price equals existing value of expected dividend profit that will be received in the future" (Saiedi, 2005). In similar context, stock has been defined as "the residual corporate interest that bears the ultimate risks of loss and receive the benefit of success" (Kieso et al., 2007, p. 127). Other researchers showed successful attempts to develop their own definitions of stock price such as Nurmayanti (2010) who described it as the market price and the selling price of one investor to another. Tandelilin (2010) argued that stock is considered as an asset's ownership proof of the company that issued the stocks. More clearly, Tandelilin (2010) views stocks as securities being traded on the stock market and are issued by listed companies and he believes that stocks owners are regarded as part owners of the company.

Lee and Lee (2008) stated that stock market act as vital source in increasing companies' capital. It is essential and highly important to understand factors affecting it. Nowadays, financial ratios are used to predict future stock price. According to Arkan (2016), financial ratios are considered to be the simplest and oldest tool in measuring firm's performance and are utilized by internal and external users to base their decisions and investment strategies primarily. McLaney and Atrill (2020) asserted that financial ratios provide a quick and comparatively adequate way to assess the financial

performance and soundness of a business. Such ratios typically summarize and give an interpretation of the performance of the company with an indication of significant changes, and hence could be regarded as an essential step in conducting more detailed financial analysis for the purpose of investing in stocks (Aayale et al., 2022; Alswalmeh & Qaqish, 2021; Adnan et al., 2021; Rawan, 2021). In addition, these financial ratios have been alternatively called accounting ratios by Nobes et al (2008) with a justification that they explain the relationship of specific items of financial statements.

### 2.1. Earnings per share and stock price

Earnings per share (EPS) is broadly considered as a profitability ratio used to measure firm performance. The concept itself has been area of concentration of many studies where researchers went through defining and explaining EPS as one of the microeconomic fundamentals of the company (Corporate Finance Institution, 2022). Larson (2001) stated that earnings per share, also named net income per share, refers to the amount of income earned per share of the company's outstanding common stock. This implies that earnings per share can be regarded as “net income per share which is the amount of revenue generated from each of the company stocks that usually deposited by the company”. (Larson, 2001). Jogyanto (2010) reported that EPS could be defined as a way to measure benefits attributed to shareholders in the company. He also believed that EPS is among one of the most important information for investors as well as analysis of securities. It is also consented that EPS demonstrate whether a company is having losses or profits in a period based on the accrual calculation and gages how successful the business activities of the company are. In other words, EPS is a ratio that indicates how much profit (return) per share is obtained by investors or shareholders (Septiari & Nasution, 2017). Niswonger (2000) stressed that profitability of the company in some cases can be identified through earnings per share as it reflects the company's profitability on each share. Obviously, the definition of EPS by various researchers reveals one concept and only differs in wordings. According to Simamora (2000), EPS is expressed as the ratio between firm's generated revenue (net income) and the total number of outstanding stocks.

Researchers had a consensus that EPS metric is one of the most significant factors that determines share's price. In the Gulf region, Al-Tamimi et al. (2011) examined the influence of EPS on UAE stock market using the regression model for 17 companies

from 1990 to 2005. The findings showed strong impact of EPS on share price. Moreover, Ikhatua (2013) conducted a study to ascertain whether accounting information affect stock volatility in the Nigerian capital market or not. Their findings showed that accounting information impacts stock volatility. These results are consistent with what Wang et al. (2013) found from their study which involved 61 listed companies in Shanghai Stock Exchange where they concluded that there is positive association between accounting information especially the effect of EPS on stock price. Furthermore, Menike and Prabath (2014), indicated that EPS has significant impact on share price after testing 100 companies listed in Colombo Stock Exchange from 2008 to 2012 using simple and multiple regression. Likewise, Talamati and Pangemanan (2015) verified the existence of significant positive impact of EPS on share price and recommended paying attention to this variable when investing in stocks. The same conclusion was reached by Ozturk and Karabulut (2020) who studied the relationship between financial ratios and the technology and telecommunication stock returns listed on the Istanbul Stock Exchange. Since technology and telecommunication sector has become an important part of the Turkish economy and is attractive for investors and shareholders, the results play a critical role for all stakeholders. According to their empirical findings, EPS has statistically significant effects on technology and telecommunication companies' stock returns. Higher EPS ratio generates higher returns for the following periods. Accordingly, the first hypothesis to be tested in this study include:

H1. There is significant relationship between EPS and market share price. Null hypothesis “H01”: There is no significant relationship between EPS and market share price.

### 2.2. Price to earnings ratio and stock price

Fernando (2022) and Corporate Finance Institution (2022) defined the Price Earnings Ratio (P/E Ratio) as the relationship between a company's stock market price and EPS. They both confirmed that P/E is a popular valuation ratio used by investors to assess the value of the company. They also stressed that it expresses the market's expectations and reflects the price an investor must pay per unit of current or future earnings. This definition of P/E ratio has been also confirmed by Sangaji (2003) and Tandelilin (2010) who further suggested that “P/E provide a benchmark of the stock so it is easier to make estimates that will be used as input in the

price earnings ratio". Additionally, [Septiari and Nasution \(2017\)](#) argued that P/E shows the market's appreciation towards the company's ability to generate earnings. The latest researcher ascertained that high P/E provides an indication of a significant futuristic achievement and performance of companies. Consequently, high P/E ratio denotes that investor are eager to pay a premium for the company's stock price, which ultimately provides a signal on the impact this ratio draws in affecting stock returns of listed companies.

Various studies concluded with evidence that a relationship exists between stock returns and P/E ratio. Cases revealed companies with low P/E ratio outperforms those with high P/E ratio. This reservation is suggested because stocks investors would likely bid the prices too high for stocks with high P/E ratios representing growth stocks. [Sharif et al. \(2015\)](#) who investigated the relationship between P/E ratio and share price in Bahrain stock exchange, discovered that there is a positive relationship between P/E ratio and share price. Similarly, a study by [Arkan \(2016\)](#) of Kuwait financial market included 12 ratios where 4 of them passed the test and considered to have an impact on share price, and one of these ratios is P/E ratio. In addition, [Doblas et al. \(2020\)](#) conducted a study to determine if P/E and price-to-book (P/B) ratios can be used as predictors for stock market returns among financial institutions listed in Bahrain Stock Exchange. The findings reveal that P/E ratio significantly predicts stock returns among publicly listed financial institutions stocks in Bahrain but the influence of P/E ratio to stock return is inversed, which means that buying stocks with lower P/E ratio is not supported by the study. Accordingly, the second hypothesis to be tested in this study include:

H2. Price to earnings ratio has significant impact on market price of share. Null hypothesis "H02": Price to earnings ratio has insignificant impact on market price of share.

### 2.3. Return on assets and stock price

Return on assets (ROA) has been defined by [Hargrave \(2022\)](#) as a profitability ratio indicating how profitable a company is in relation to its total assets. In other words, ROA shows the efficiency of company in utilizing its assets to generate earnings ([Arkan, 2016](#)). [Corporate Finance Institution \(2022\)](#) defines ROA as a figure to gage the success and effectiveness of the company in converting its invested money into net income. It also suggests the higher the ROA number, the better, because the

company is earning more money on less investment.

The impact of ROA volatility has been an area of concentration by many researchers with different perspectives. Different methods have also been applied in measuring its effects on stock volatility. A study by [Hakim \(2021\)](#) investigated the effect of ROA on share prices in banking companies listed on the Indonesia stock exchange for the period 2012–2016. The results show that partially there is a significant effect of ROA on stock prices. In addition, the study by [Alswalmeh and Qaqish \(2021\)](#) aims to test the ability of the financial ratios to predict the index of the banking sector in Amman Stock Exchange using yearly data during the period between 2000 and 2014. The findings revealed that the financial ratios can predict the index of the banking sector in Amman stock exchange and dictate a statistically significant positive relationship between ROA with the banking sector index in Amman Stock Exchange. This was also confirmed in the study by [Arkan \(2016\)](#) who examined the effect of financial ratios (i.e., ROA) in Kuwait financial market. His findings clearly reported that ROA works effectively in determining share price. Furthermore, [Aayale et al. \(2022\)](#) have run a multiple linear regression in a panel data analysis using the financial data of commercial banks listed on the Casablanca Stock Exchange from 2011 to 2020. The results show that the level of profitability of banks, measured by ROA, is strongly linked to the operating coefficient, and with indicators of asset quality and liquidity. These results raise an often-asked question about the efficiency of the Moroccan Stock market. Accordingly, the third hypothesis to be tested in this study include:

H3. Return on assets ratio has significant impact on the market share price. Null hypothesis "H03": Return on assets ratio has insignificant impact on market price of share.

### 2.4. Return on equity and stock price

According to [Sugiyanto et al. \(2021\)](#), return on equity (ROE) is considered to be a profitability ratio that is planned to measure the level of effectiveness of management in term of the company's activities which is reflected in returns for the investment. In other words, ROE measures the company's overall performance and efficiency in the management of liabilities and capital. Simultaneously, [Kabajeh et al. \(2012\)](#) reported that ROE as a profitability ratio is a way to show the explanation regarding how effective the management of the company has been in

generating profits. This ratio also acts as a measure of whether the owner or shareholder can obtain a sensible rate of return on their investment.

Otekurin et al. (2019) has reported a positive relation between ROE and the stock price developments. The same was also confirmed by Kabajeh et al. (2012). These studies concluded that ROE is considered to be highly useful for both shareholders and for potential shareholders as well as for management since the ratio is an important indicator of shareholder's value creation, meaning, the higher the ratio, the higher the value of the company, it is certainly an attraction for investor to invest in the company. On the other hand, and as mentioned earlier, Alswalmeh and Qaqish (2021) tested the ability of the financial ratios (ownership ratio, liquidity ratio, debt ratio, stock turnover ratio, return on equity ratio, return on total assets ratio, and market value to book value ratio) to predict the index of the banking sector in Amman Stock Exchange. The findings of the study showed a statistically significant negative relationship between, return on equity ratio and the banking sector index in Amman Stock Exchange. Furthermore, Accordingly, the fourth hypothesis to be tested in this study include:

**H4.** Return on equity ratio has significant impact on the market share price. *Null hypothesis "H04": Return on equity ratio has insignificant impact on market price of share*

#### 2.5. Liability to equity and stock price (financial leverage)

Financial leverage ratio mainly aims to measure the extent to which the company uses debt. According to Corporate Finance Institute (2022), there are several different leverage ratios that may be considered by market analysts, investors, or lenders. Some accounts that are considered to have significant comparability to debt are total assets, total equity, operating expenses, and incomes. This ratio can also be referred to as the solvency ratio, which measures the ability of the company to meet its financial obligations (Kamar, 2017). Although theories suggest the presence of a relationship between financial leverage and share prices, empirical studies showed conflicting results regarding the nature of this relationship which makes it far from agreed upon. For instance, Chowdhury and Chowdhury (2010) conducted a study on 77 non-financial firms in Bangladesh during period the of 1999–2003 using time series regression model. They believe that long-

term debt to total asset has positive but insignificant impact on the share price. Furthermore, a study done by Hussainey et al. (2011) examined UK public companies for 10 years and the results showed strong positive relationship between debt and share price volatility reflecting the fact the higher the debt the higher the volatility in stock price. These results are in line with what Kohansal et al. (2013) who analyzed companies listed in Iran stock exchange for food industry from 1992 to 2010. Their results indicated strong positive relationship between debt and share price. This opinion was also supported by Karimi (2020) conducted a study to investigate the effect of financial leverage on the stock price volatility trend in listed companies in Tehran stock exchange for the period 2011–2018 using systematic elimination method. The results of data analysis showed that financial leverage capital has significant effect on the trend of stock price volatility in listed companies in Tehran stock exchange.

On the other hand, some researchers believe that investors are risk averse and are not willing to invest in risky companies which will therefore affect share price negatively. For instance, Barakat (2014) examined the impact of financial leverage on market value of share price from 2009 to 2012 on Saudi industrial companies. He observed that leverage which used as a proxy for debt ratio has insignificant and weak negative relationship with share price. The author further argues that long-term liabilities to total asset have statistical significance in the determination of share price in Saudi industrial companies. The same results were also obtained by Sharif et al. (2015) who found negative relationship between debt-to-equity ratio and share price. These results are consistent with Iqbal et al. (2016) who examined the impact of different leverage measures on the share price of cement sector in Pakistan stock exchange. The results indicate that debt ratio and degree of financial leverage is negatively determining the share price. The results also show an insignificant relation between leverage and stock returns of the firms listed in Amman stock exchange. This is also confirmed by Mustafa et al. (2017) who investigated that there is no statistically significant influence of financial leverage on stock returns of the non-financial sector listed companies in the emerging markets. Accordingly, the fifth hypothesis to be tested in this study include:

**H5.** Financial leverage ratio has insignificant impact on market price of share. *Null hypothesis "H05": Financial leverage ratio has no significant impact on market price of share.*

## 2.6. Firm size and stock price (total assets)

The size of the firm is another variable considered to be relevant to the share price. It is measured by companies' total assets. Firm size can be measured by the total of assets it owns. If the company has a large number of assets, then the company can be categorized as a large company. [Sugiyanto et al. \(2021\)](#) indicate that companies with large total assets will get more attention from investors, creditors, and other users of financial information. In addition, management will be more flexible in using existing assets to increase company value. The study by [Allahawiah and Al Amro \(2012\)](#) in Amman stock exchange found a positive relation between the firm size and share price, i.e., the greater the size the higher the stock price. This also was confirmed in a study by [Vedd and Yassinski \(2015\)](#) involving 700 companies traded in Latin America for 10 years. Similarly, [Iqbal et al. \(2016\)](#) examined the impact of different leverage measures on the share price of cement sector in Pakistan stock exchange during the period of 2005–2015. The results of the study indicate that firm size has significant positive impact on the share price.

Firm size has also been found to have a negative impact on stock returns, given that high risks are more likely to be experienced by large firms than small firms. Thus, the larger the size of a firm, the higher possible risks a firm may experience, which leads to a decrease in stock returns. This has been confirmed by [Berggren and Bergqvist \(2015\)](#) who conducted a study on 50 Swedish firms from 2009 to 2013. These findings are also consistent with the study by [Al-Manaseer \(2020\)](#) who analyzed the relationship between capital structure and stock returns of Jordanian banks listed on the Amman Stock Exchange from 2009 to 2018. This study has found that liquidity and firm size have a negative impact on stock returns. Accordingly, the sixth hypothesis to be tested in this study include:

**H6.** There is significant relationship between firm's total assets and market share price. *Null hypothesis "H06": There is insignificant relationship between firm's total assets and market share price.*

## 3. Methodology

This paper uses a secondary data to empirically examine the relationship between the financial ratios and stock price movement in emerging markets to be applied in Bahrain. A sample of 19 financial institutions out of 23 listed financial institutions. The set data is collected for 7 years for a period starting

2012 to 2018 obtained from the companies' websites beside yearly share price (yearend share price, 31 December) obtained from Bahrain Bourse website. Data after 2018 would have been affected by Covid-19 and as such were not considered for the purpose of this study. The sample includes 19 financial institutions listed in Bahrain Bourse representing the financial sector. Financial institutions been chosen for this study because the financial sector represents the majority of listed companies in Bahrain Bourse, and it is the most volatile contributing to its activeness. Bahrain's position as a regional financial center has been essential to the development of its economy where the financial sector has come to play a significant role in economic activity and employment creation. The financial sector is currently the largest non-oil contributor to GDP representing 17.7% of real GDP in Q4 of 2021 showing an increase from the 16.1% in 2019 and 16.9% in 2018. Bahrain is also considered the GCC's longest established financial center with 40 years of experience. Accordingly, a study on how this sector behaves in the financial market is vital in understanding the characteristics of a unique type of financial market in terms of regulation and market conditions. In addition, this study aims to have sufficient knowledge about the impact of financial ratios on share price and to guide investors in Bahrain in taking better decisions concerning the factors affecting stock price. The firm's stocks have been traded from 2012 to 2018. This research used secondary data from annual reports, specifically financial statements (i.e., balance sheet and income statement) for 7 years period starting 2012 until 2018, obtained from the companies' websites beside yearly share price (year-end share price, 31 December) obtained from Bahrain Bourse website.

Financial ratios were observed to be indicators of stock price in many studies. Based on the discussion provided in the literature review, 5 financial ratios beside the firm's size are selected as independent variables to serve the research objectives and are discussed below:

*Share price (dependent variable):* is the price of an individual share in a company, it is determined by forces of supply and demand, and it is always fluctuating ([Menaje, 2012](#)). For the purpose of the study, share price refer to the closing price of a share as of 31 December.

*Earnings per share (independent variable):* it is a measurement tool that brings both income and equity together. It measures firm's profitability and performance and must be disclosed in the face of income statement for public listed companies ([Menaje, 2012](#)). [Herdinata et. al \(2013\)](#) added that



EPS is the net profit ready to be distributed to shareholders and [Ozturk and Karabulut \(2020\)](#) has confirmed that the higher the EPS the more income for investors, i.e., the higher the stock returns.

*Price to earnings ratio (independent variable):* it is a valuation ratio, measured by dividing share price by EPS. Various studies have concluded with evidence that a relationship exists between stock returns and P/E ratio ([Arkan, 2016](#); [Doblas et al., 2020](#)).

*Return on assets (independent variable):* it is considered as determinant of firm's profitability; it shows how the company manages to use its assets in efficient way to generate profit. The findings of several studies clearly reported that ROA works effectively in determining share price ([Aayale et al., 2022](#); [Arkan, 2016](#); [Hakim, 2021](#)).

*Return on Equity (independent variable):* it is a financial ratio that measures the company's effectiveness in managing its liabilities and capital. Some studies have already reported a positive relation between ROE and the stock price developments ([Alswalmeh & Qaqish, 2021](#); [Otekunrin et al., 2019](#); [Kabajeh et al., 2012](#)).

*Liability to equity ratio (independent variable):* it is a measure of financial leverage; it is calculated by dividing total liability by total shareholders' equity. It also measures the ability of the company to meet its financial obligations ([Kamar, 2017](#)). Empirical studies have showed conflicting results regarding the nature of relationship between financial leverage and share prices with some studies concluding that financial leverage capital has significant effect on the trend of stock price volatility ([Hussainey et al., 2011](#); [Karimi, 2020](#); [Kohansal et al., 2013](#)). Other studies have observed that leverage has insignificant and weak negative relationship with share price ([Iqbal et al., 2016](#); [Mustafa et al., 2017](#)).

*Firm's size (independent variable):* There are lots of measures for firm size, but in this paper a company's total assets is used to measure it ([Sugiyanto et al., 2021](#)). Several studies have found that firm size has a significant impact on the share price, where the effect is either positive ([Iqbal et al., 2016](#); [Vedd & Yassiniski, 2015](#)), or negative ([Al-Manaseer, 2020](#); [Berggren and Bergqvist, 2015](#)).

In order to examine the relationship between dependent and independent variables, descriptive statistics method, multiple regression and Pearson's correlation methods were used in line with previous studies. The general model intended to be employed in this study to test the hypothesis is as follows:

$$Y (\text{share price}) = \beta_0 + \beta_1 (\text{EPS}) + \beta_2 (\text{P/E}) + \beta_3 (\text{ROA}) + \beta_4 (\text{ROE}) + \beta_5 (\text{Lever}) + \beta_5 (\text{Size}) + \epsilon$$

Where:

Y = share price.

EPS = Earnings per share.

P/E = Share price/Earnings per share.

ROA = Return on assets.

ROE = Return on Equities.

Lever = Total liability/Total Shareholder's Equity, (Financial leverage).

Size = Total assets

$\epsilon$  = Error term.

The validity of the research describes the extent to of reliability of the findings from any research efforts and if the findings accurately represent the situation under investigation ([Saunders et al., 2009](#)). Hence and in order to achieve credible results and ensure no personal bias creeping into it, the data of this research is gathered from reliable sources. Mainly from annual reports and financial statements available on the websites of the financial institutions listed in Bahrain stock exchange (Bahrain Bourse) as the sample of this study as well as from Bahrain Bourse website.

## 4. Results and discussion

This section presents the results of the empirical study using different analysis and tests. Several tests are applied using SPSS to investigate the relationship between selected financial ratios and share price, starting with descriptive statistics method, then Pearson's correlation methods to discover the level of relationship between the variables and finally multiple regressions.

### 4.1. Descriptive statistics

**Table 1** below shows the summary of the research hypothesis and variables and **Table 2** provides a

*Table 1. Summary of research hypothesis and variables.*

Variables	Definition	Expected Sign
Dependent variable:		
Stock Price	Closing share price as at 31st December for the years studied	
Independent variables:		
EPS	Net Income/Number of shares outstanding	+
P/E	Share price/EPS	+
ROA	Net income/Total assets	+
ROE	Net income/Total shareholders' equity	+
Financial Leverage	Total Liability/Total shareholders' equity	-
Firm's Size	Total assets	+

Table 2. Descriptive statistics.

Financial Ratio	N	Minimum	Maximum	Mean	Std. Deviation
Share Price	133	0.03196	0.825	0.252018571	0.201428027
EPS	133	-0.10152	0.45	0.025327221	0.048231656
P/E	133	-88.94230769	501.9607843	21.3083975	54.59438084
ROA	133	-0.194463748	0.092775815	0.014197555	0.030387566
ROE	133	-0.518828032	0.439264874	0.055593825	0.113067526
Financial leverage	133	0.181914467	23.90187506	3.745919925	3.879480479
Total Assets in BD	133	26,167,239	13,386,356,529	2,203,168,906	3,325,403,220

summary of the descriptive statistics. The data covers 19 companies listed in Bahrain Bourse, tested for 7 years' period giving 133 total observations. As shown in Table 2 above, share prices, share prices are ranging from 0.03196 to 0.825 with 0.20142 in standard deviation indicating medium level of fluctuating and differences among companies. The standard deviation of return on assets is the lowest among the variables, which shows that managers are utilizing their assets in similar efficiency. However, earning per share also reported low standard deviation, which indicates insignificant differences

and greater similarities in the level of earning distributed to shareholders by companies. Moreover, it can be noticed that there is a wide variation in the minimum and maximum values of total assets; this implies that selected companies differ to some extent in terms of their size. In addition, financial leverage reported 3.8794 in standard deviation, which is regarded to be medium, and this indicates moderate difference in the level of debt used by companies.

A correlation measures how well are the variables related to each other; a Pearson's correlation is one

Table 3. Pearson's correlation test. \*\*. Correlation is significant at the 0.01 level (2-tailed).

		Sahre Price in BD
Sahre Price in BD	Pearson Correlation	1
	Sig. (2-tailed)	
	N	133
Earnings Per Share	Pearson Correlation	.531 **
	Sig. (2-tailed)	.000
	N	133
Price to Earnings	Pearson Correlation	-.061
	Sig. (2-tailed)	.483
	N	133
Returns on Assets	Pearson Correlation	.418 **
	Sig. (2-tailed)	.000
	N	133
Returns on Equity	Pearson Correlation	.416 **
	Sig. (2-tailed)	.000
	N	133
Financial Leverage (Debt to Equity Ratio)	Pearson Correlation	-.015
	Sig. (2-tailed)	.863
	N	133
Firm's Size (Total Assets)	Pearson Correlation	-.002
	Sig. (2-tailed)	.979
	N	133

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

Table 4. Summary of correlation test.

Explanatory Variables	Expected Sign	Sign Obtained from the model
EPS	+	+
P/E	+	-
ROA	+	+
ROE	+	+
Financial Leverage	-	-
Size (Total Assets)	+	No relation

of the most common correlation tests. This test measures the linear correlation between the variables, which are share price, and financial ratios in this case. The value should be between  $-1$  and  $1$ . If the value was  $1$  it is total positive linear correlation,  $0$  implies that there is no linear correlation and if the value is equal to  $-1$  then it shows a total negative linear correlation.

Table 4 summarizes the relationship between dependent and independent variables which resulted from the Pearson's correlation test shown in Table 3. The relationship between the share price and the financial ratios is explained as follows:

*Association between share price and EPS:* it can be concluded from the above table that there is a positive relationship between the two variables. This means that the variables move in the same direction in strong way. In other words, when EPS increases, the share price rises too and vice versa. This result is consistent with the studies mentioned in the literatures review as researchers had a consensus on the existence of positive correlation between EPS and share price, which includes the study of Ozturk and Karabulut (2020), Talamati and Panagemanan (2015), Menike and Prabath (2014), and Wang et al. (2013).

*Association between share price and P/E ratio:* the Pearson's correlation indicates a negative relationship between the two variables, which means that they move in opposite directions as higher P/E ratio leads to lower share price. This result matches the findings of Doblus et al. (2020), Keim (1990), and Down and Bauman (1986) who suggested the existence of a slightly negative relationship between the two variables where cases revealed companies with low P/E ratio outperforms those with high P/R ratio. This been justified as higher P/E ratio implies higher volatility and entails more risk and the share prices will suffer if the expected growth in the earnings does not occur. This is inconsistent with the findings of other studies which revealed that there is a positive relationship between P/E ratio and share price (Arkan, 2016; Sharif et al., 2015).

*Association between share price and ROA:* The correlation figure of  $0.418$  between the two examined variables is interpreted as moderately positive correlation. This means that the share price deems to move in the same direction of ROA. This is confirmed by studies conducted in stock exchanges in different countries where the findings revealed the existence of positive relationship between ROA and share price, e.g., Aayale et al. (2022) in Casablanca stock exchange and Hakim (2021) in Indonesia stock exchange.

*Association between share price and ROE:* the test shows a moderately positive relationship between share price and ROE where the share price moves in the same direction and manner of ROE. This is consistent with the study of Otekurin et al. (2019) and Kabajeh et al. (2012). On the other hand, the findings of the study by Alswalmeh and Qaqish (2021) has shown a negative relationship between return on equity ratio and the banking sector index in Amman stock exchange.

*Association between share price and financial leverage:* as expected the test revealed negative correlation between share price and debt to equity ratio, which means the higher the leverage the lower the share price and vice versa. This result tallies with the findings of Iqbal et al. (2016) and Sharif et al. (2015). This is inconsistent with the findings of some studies which have shown positive relationship between debt and share price volatility reflecting the fact the higher the debt the higher the volatility in stock price (Hussainey et al., 2011; Kohansal et al., 2013).

*Association between share price and size:* the Pearson's correlation indicates that there is no relation between total assets and share price. In other words, this mean that the firm size in terms of assets does not affect the share price. This result was not excepted as the literature review for this financial ratio consisted of two views, where some researchers agreed on a positive correlation (e.g., Iqbal et al., 2016; Vedd & Yassinski, 2015), and others suggested a negative correlation (e.g., Al-Manaseer, 2020; Berggren and Bergqvist, 2015).

Table 5. Model summary. A. Predictor: (constant), firms' size (total assets), return on assets, returns on equity, return on price to earnings, earnings per share, financial leverage (debt to equity ratio).

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.588 <sup>a</sup>	.346	.315	.16671

#### 4.2. Regression analysis

Finally, data regression analysis was prepared (which is our general model), in order to examine the relationship between dependent and independent variables and the strength of such relationships. Results were carried at 1% significance level. The results of the regression model are shown below.

As Table 5 shows, R Square equals to 0.346 which means that 35% of the variation in stock price in Bahrain is explained by the variables mentioned in this study.

Table 6 below shows that F value equals to 11.116 with significance of 0.000. The P-value (i.e., sig) is less than 0.01, which provides evidence that the model is well fit and there is significant difference between the means of the variables.

The relationship between dependent and independent variables developed from the regression analysis is explained as follows (See Table 7 and 8):

**Association between share price and EPS:** The results as displayed in the above table shows positive significant relationship between the variables, indicating that these variables move in the same manner. The P-value is equal to 0.000 which is less than  $\alpha$  (0.01) and so there is a significant relationship between the variables which means to *reject* the null hypothesis “H01: There is no significant relationship between EPS and market share price”. This is consistent with what have been found in the study by Ozturk and Karabulut (2020), Talamati and Panagemanan (2015), and Menike and Prabath (2014).

**Association between share price and P/E ratio:** Results show a negative relationship between share price and P/E ratio. The P-value is equal to 0.913 which is higher than  $\alpha$  (0.01), so there is a weak (insignificant) negative relationship between the variables. Hence, to *accept* the null hypothesis “H02: Price to earnings ratio has insignificant impact on market price of share” and *reject* the alternative hypothesis “H2: Price to earnings ratio has significant impact on market price of share”. This result differs from the literature review as most of the researchers had a consensus on a significant relationship between the two variables (e.g., Arkan, 2016; Doblus et al., 2020).

**Association between share price and ROA:** The above table shows positive relationship between share price and ROA. The P-value is equal to 0.459 which is more than  $\alpha$  (0.01), so there is an insignificant positive relationship between the variables. Hence, to *accept* the null hypothesis “H03: Return on assets ratio has insignificant impact on market price of share”. This result was also reached by Asiri and Hameed (2014) who examined listed firms in Bahrain stock exchange. On the other hand, the findings of this study are inconsistent with the findings of Aayale et al. (2022), Alswalmeh and Qaqish (2021), Hakim (2021) and Arkan (2016) who confirmed that there is a strong significant relationship between share price and ROA.

**Association between share price and ROE:** The results show a positive relationship between the variables, and the P-value is equal to 0.098 which is greater than  $\alpha$  (0.01), so there is an insignificant negative relationship. This means to *accept* the null

Table 6. Analysis of variation (ANOVA). A. Dependent Variable: Share Price in BD. B. Predictors: (Constant), Firm's Size (Total Assets), Returns on Assets, Price to Earnings, Earnings Per Share, Financial Leverage (Debt to Equity Ratio), Returns on Equities. (see Tables and 7 and 8).

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.854	6	.309	11.116	.000 <sup>b</sup>
	Residual	3.502	126	.028		
	Total	5.355	132			

Table 7. Coefficients.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.199	.024		8.381	.000
	Earnings Per Share	1.769	.342	.424	5.174	.000
	Price to Earnings	-2.948E-5	.000	-.008	-.109	.913
	Returns on Assets	.578	.779	.087	.743	.459
	Returns on Equity	.358	.215	.201	1.665	.098
	Financial Leverage (Debt to Equity Ratio)	-.001	.004	-.019	-.222	.825
	Firm's Size (Total Assets)	-6.867E-12	.000	-.113	-1.298	.197

Table 8. Summary of regression model.

Explanatory Variables	Expected Sign	Sign Obtained from the model
EPS	+	+
P/E	+	-
ROA	+	+
ROE	+	+
Financial Leverage	-	-
Size (Total Assets)	+	-

hypothesis “H04: Return on equity ratio has insignificant impact on market price of share” and reject the alternative hypothesis H4: Return on equity ratio has significant impact on market price of share. This means when ROE increase, share price will decrease. This result is inconsistent with the findings reached by Alswalmeh and Qaqish (2021) who confirmed the existence of a significant negative relationship between the variables.

*Association between share price and financial leverage:* The results show a negative relationship between the variables, and the P-value is equal to 0.825 which is greater than  $\alpha$  (0.01), so there is an insignificant negative relationship. This means to accept the null hypothesis “H05: Financial leverage ratio has no significant impact on market price of share” and reject the alternative hypothesis H5: Financial leverage ratio has significant impact on market price of share. The same results were reached by Mustafa et al. (2017), Iqbal et al. (2016) and Barakat (2014) who found an insignificant relationship between leverage and share price. On the other hand, some studies have shown significant positive relationship between debt and share price volatility reflecting the fact the higher the debt the higher the volatility in stock

price (Hussainey et al., 2011; Karimi, 2020; Kohansal et al., 2013).

*Association between share price and firm size (total assets):* The above table shows negative relationship between the variables and since the p-value is 0.197 which is greater than  $\alpha$  (0.01), then there is an existence of an insignificant relationship. This means to accept the null hypothesis “H06: There is insignificant relationship between firm's total assets and market share price” and reject the alternative hypothesis “H6: There is significant relationship between firm's total assets and market share price”. The results are consistent with the findings of the studies by Al-Manaseer (2020) and Berggren and Bergqvist (2015). However, these findings are inconsistent with the results revealed in the study by Iqbal et al. (2016) where they confirmed that firm size has a significant positive impact on the share price.

Therefore, from the results it can be seen that the regression model obtained is:

$$Y = 0.199 + 1.769 \text{ EPS} - 2.948\text{E-}5 \text{ PE} + 0.578 \text{ ROA} + 0.358 \text{ ROE} - 0.001 \text{ Lever} - 6.867\text{E-}12 \text{ Size} + \epsilon$$

The graphs below demonstrate the research findings of the relationship between the share price and each selected financial ratio:

According to the data analysis, it is found that earning per share is considered to be a ratio that determines the share price of the selected companies. In both methods, the findings show significant positive relationship with stock price, as earning per share increase share price increases and vice versa (Fig. 1). If EPS increases by 1% the share price will increase by 1.769%. Investors focus primarily in analyzing firm's profitability especially

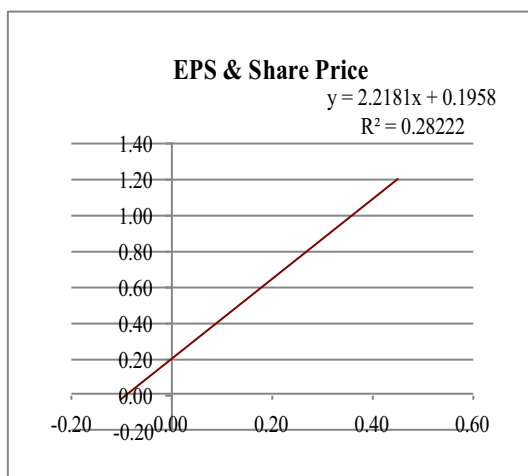


Fig. 1. The relationship between earnings per share (EPS) and share price.

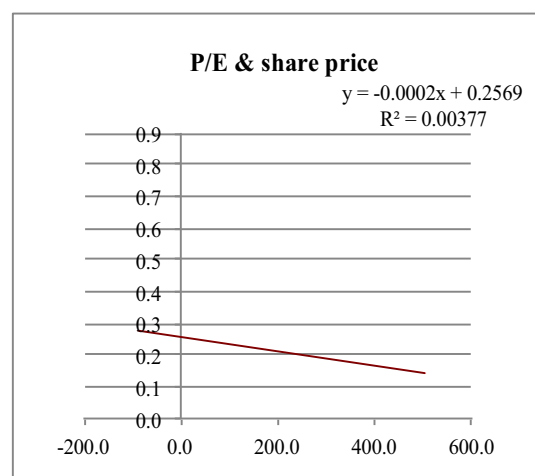


Fig. 2. The relationship between price/earnings ratio (P/E) and share price.

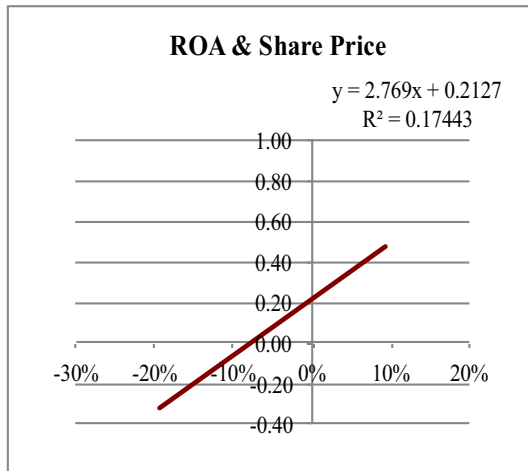


Fig. 3. The relationship between return on assets (ROA) and share price.

earnings whether past or future, company having high EPS provides higher opportunity to gain income for investors and hence higher dividends because it depends highly on firm profit. Therefore, investors should consider the earnings of the company before investing, additionally they should keep up with all earnings announcement to know the performance and profitability of a firm and to be able to compare current and historical earnings and simultaneously forecast future earnings.

When it comes to financial leverage ratio, it must be considered by investors, as it showed negative effect on share price in both methods. When debts increase, share price seems to decrease and vice versa (Fig. 5). If leverage increases by 1% the share price will decrease by 0.001%. Companies carrying more debts are risky companies and rationally investors are not willing to take risk and invest in a

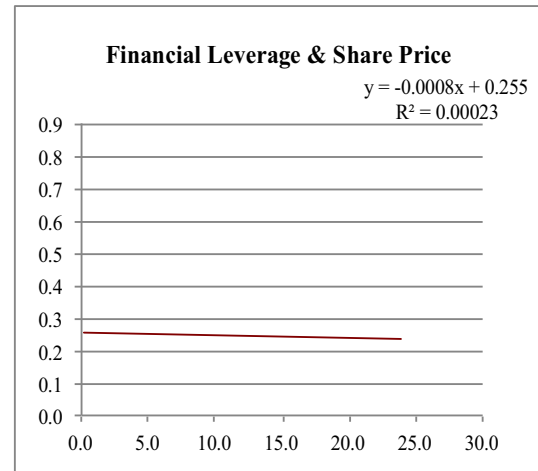


Fig. 5. The relationship between financial leverage and share price.

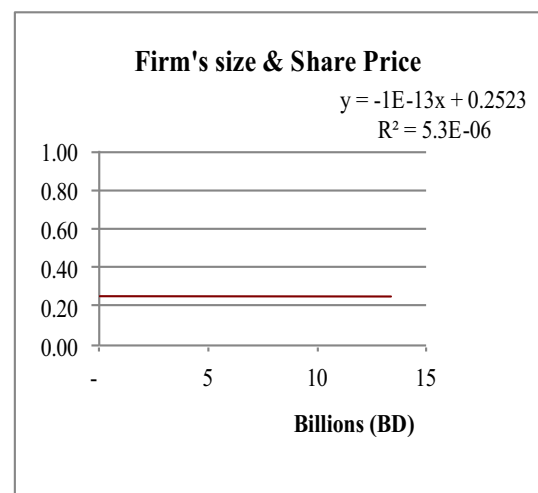


Fig. 6. The relationship between firm's size and share price.

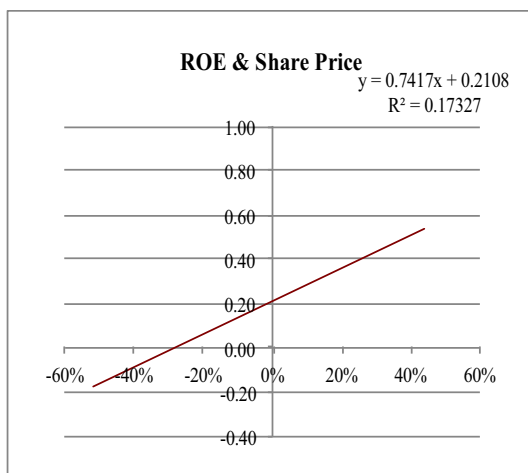


Fig. 4. The relationship between return on equity (ROE) and share price.

company with high level of debts. Thus, investors seeking to invest in Bahrain stock exchange should consider low leverage companies. In term of returns on assets and return on equity, correlation, and regression models both gave positive findings (Figs. 3 and 4). The findings showed moderately positive relationship with share price as ROA and ROE are profitability ratios and have a direct effect on firm's performance and hence, they have an impact on the share price. Finally, price earnings have negative and insignificant impact on share price (Fig. 2), while the firm size showed no correlation with the stock price but negative regression findings (Fig. 6). Therefore, investors should take into consideration that the effect of these two variables will not contribute positively to the share price.

## 5. Conclusions

As the investment mentality has been growing recently by investing in stock markets, many studies have put efforts and pay huge attention to investigate the factors that affect the share price; especially in the developed capital markets in order to assist investors in their investment decisions. This research has been developed to gauge whether the selected financial ratios can provide any explanation or any relation to the variation in the firm's value (i.e., share price) in developing countries such as Kingdom of Bahrain. This will help the potential investors in Bahrain stock exchange by highlighting the variables that affect stock prices successfully as it is an ultimate quest for all investors to generate higher returns on their investments.

The research examined 19 companies from the financial institution sector listed in Bahrain Bourse for a time frame of seven years commencing from 2012 till 2018. SPSS technique was used, and six hypotheses were developed and tested. The main result of this study provided that EPS as a profitability ratio has the most impact on share price as it has significant positive relationship with it and can be used as predictor to explain the variation on share price and hence it should be considered by both investors and companies. Financial leverage as well found to be a good indicator of share price to some extent as results showed insignificant negative relationship between financial leverage and share price. Initially, this was expected as companies with higher leverage are considered to be risky companies by investors who are not willing to invest in risky investments. Moreover, results regarding ROA and ROE revealed similar pattern in terms of correlation and regression analysis. Finally, price earnings and firm's size gave no significant signal in explaining variation in share price. To end up with, the R-square obtained from the model is 35%, which means that the variables mentioned in this study can explain 35% of the variation in share price. So, 65% of the variation is not explained by internal fundamental factors like firm performance, so other factors and ratios may be considered by further research.

Major constraints faced throughout the data collection process of this study include the fact that the sample had to be reduced from 23 financial institutions listed in Bahrain stock exchange (Bahrain Bourse) to 19 institutions. This restriction was made due to three main reasons. First, 2 financial institutions have been excluded as they suspended within the investment sector; these companies are Bahrain Middle East Bank (BMB)

and Taib Bank B.S.C. (TAIB). Second, United Gulf Holdings Company B.S.C (UGH) has been excluded due to data limitation as the company been listed in 2017 which does not match the time frame of the study. Third, Investcorp Bank B.S.C. (INVCORP) has been excluded due to unclear data. In addition, the number of units of the analysis that is used in our research is considered to be relatively small, which it will be difficult to find significant relationships from the data, as statistical tests normally require a larger sample size to ensure a representative distribution of the population. However, this brings the attention to the nature of the stock exchange in Bahrain, as there are few companies listed in the exchange, and that is due to the fact that Bahrain is a developing country that is reflected on the number of listed companies.

Accordingly, the following can be considered as *limitations* of this study and as such it is *recommended* for investors, companies and interested parties:

*Use EPS as predictor of share price in Bahrain stock exchange.* Investors are recommended to take care of this variable and watch out earnings announcement to know the performance and profitability of a firm and to take forecasted EPS into account as well. Companies are recommended to use strategies that enhance firm's profitability and EPS to attract more investors.

*Pay attention to financial leverage.* Investors in Bahrain should not consider high leverage companies in their investing decision as they provide lower share price. Companies are recommended to reduce level of risk and debt and not to use aggressive debt strategies to attract more investors favoring stable low risk companies.

*Consider other macro-economic factors like inflation, GDP, business cycles, interest rates etc.* by investors and conduct in-depth research before investing.

*Use quarterly data analysis instead of annual data* by further research and investors to get better dependable results.

Furthermore, based on the above-mentioned limitations, the study *recommends* the following for *future research*:

Although this study has selected a specific industry which is the financial sector, however this should be broadened further in future research by expanding the sample and examining the relation between the share price and different financial ratios for the entire listed companies in Bahrain stock exchange.

This study has shed light on the key financial ratios, however it is important to expand the selection of the different financial ratios in future studies, as

there are many important financial ratios available which are crucial for making investment decisions. This would not only assist in understanding how a company is performing but also helps the investors in identifying and comparing the best companies within the same industry.

This research has focused on a 7-years period starting 2012 until 2018. However, it would also be interesting to extend the period to include the years during and post COVID-19. This can lead to a better understanding of the effect of COVID-19 on the relationship between the financial ratios and the stock price of companies listed in Bahrain stock exchanges.

### Conflict of interest

The author has no relevant financial or non-financial interests to disclose.

### References

- Aayale, J., Seffar, M., & Koutene, J. (2022). Financial indicators, stock prices and returns: Evidence from banks listed on the stock exchange of an emerging market. *International Journal of Accounting, Finance, Auditing, Management and Economics*, 3(2–2), 533–551.
- Adnan, M., Pasha, A. T., Mehmood, R., Sadiq, M., Waris, M., & Naveed, R. T. (2021). Impact of the financial indicators on bank performance and a comparison of small and large banks-evidence from the Bahrain. *International Journal of Innovation, Creativity and Change*, 15(5), 772–796.
- Al-Manaseer, S. R. (2020). Relationship between capital structure and stock returns of Jordanian commercial banks. *International Business Research*, 13(2), 100.
- Al-Tamimi, H. A. H., Alwan, A. A., & Abdel Rahman, A. A. (2011). Factors affecting stock prices in the UAE financial markets. *Journal of transnational management*, 16(1), 3–19.
- Allahawiah, S., & Al Amro, S. (2012). Factors affecting stock market prices in amman stock exchange: A survey study. *European Journal of Business and Management*, 4(8), 236–245.
- Alswalmeh, A., & Qaqish, M. (2021). The ability of financial ratios to predict the index of banking sector in Amman stock exchange: An empirical study. *International Journal of Business Ethics and Governance*, 4(1), 86–105. <https://doi.org/10.51325/ijbeg.v4i1.55>
- Arkan, T. (2016). The importance of financial ratios in predicting stock price trends: A case study in emerging markets. *Finanse, Rynki Finansowe, Ubezpieczenia*, (79), 13–26.
- Asiri, B. K., & Hameed, S. A. (2014). Financial ratios and firm's value in the Bahrain Bourse. *Research Journal of Finance and Accounting*, 5(7), 1–9.
- Bahrain Association of Banks. (2022). *Financial and banking sector in Bahrain*. Retrieved from <http://www.banksbahrain.org/banking-in-bahrain/>.
- Bahrain Economic Development Board. (2022). *Financial services in Bahrain*. Retrieved from <https://www.bahrainedb.com/business-opportunities/financial-services>.
- Barakat, A. (2014). The impact of financial structure, financial leverage and profitability on industrial companies shares value (applied study on a sample of Saudi industrial companies). *Research Journal of Finance and Accounting*, 5(1), 55–66.
- Berggren, S., & Bergqvist, A. (2015). *Capital Structure and Stock Returns-A study of the Swedish large cap companies*. Bahrain Bourse.(2021). Retrieved from <https://www.bahrainbourse.com/company>.
- Central Bank of Bahrain. (2022). *About CBB*. Retrieved from <https://www.cbb.gov.bh/about-cbb/>.
- Chowdhury, A., & Chowdhury, S. P. (2010). Impact of capital structure on firm's value: Evidence from Bangladesh. *Business and Economic Horizons (BEH)*, 3(1232–2016-101116), 111–122.
- Corporate Finance Institution. (2022). *Earnings per share formula (ESP)*. Retrieved from <https://corporatfinanceinstitute.com/resources/knowledge/finance/earnings-per-share-eps-formula/>.
- Doblas, M., Lagaras, M., & Enriquez, J. (2020). Price to earnings and price to book ratios as determinants of stock return: The case of financial institutions listed in Bahrain Bourse. *Journal of Applied Economic Sciences*, XV, 535–539. [https://doi.org/10.14505/jaes.v15.3\(69\).02](https://doi.org/10.14505/jaes.v15.3(69).02)
- Down, R. J., & Bauman, W. S. (1986). A fundamental multifactor asset pricing model. *Financial Analysts Journal*, 42(4), 45–51.
- Drummen, M., & Zimmermann, H. (1992). The structure of European stock returns. *Financial Analysts Journal*, 48(4), 15–26.
- Fernando, J. (2022). How to value a company?. Price-to-Earnings (P/E) Ratio. *Investopedia*. Retrieved from <https://www.investopedia.com/terms/p/price-earningsratio.asp>.
- Hakim, H. M. Z. (2021). Analysis of financial ratios to stock prices: (Case studies in banking on the Indonesian stock exchange). *International Journal Accounting Tax and Business*, 2(1), 1–13.
- Hargrave, M. (2022). *Return on assets (ROA)*. *Investopedia*. Retrieved from <https://www.investopedia.com/terms/r/returnonassets.asp#:~:text=Return%20on%20assets%20is%20a,income%20by%20its%20total%20assets>.
- Herdinata, C., Tandelilin, E., & Hermeindito, H. (2013). Control mechanism and value of firm: Empirical evidence from Indonesia Capital Market. *International Research Journal of Business Studies*, 6(1), 45–62. <https://doi.org/10.21632/irjbs.6.1>
- Hussainey, K., Mgbame, C. O., & Chijoke-Mgbame, A. M. (2011). Dividend policy and share price volatility: UK evidence. *The Journal of risk finance*.
- Hutabarat, F. M., & Simanjuntak, D. (2013). The relationship between financial ratios and stock prices of telecommunication companies of Indonesian stock exchange telecommunication sub sector indices. *Jurnal Ekonomi Universitas Esa Unggul*, 4(2), Article 17917.
- Ikhatua, O. J. (2013). Accounting information and stock volatility in the Nigerian capital market: A garch analysis approach. *International Review of Management and Business Research*, 2(1), 265.
- Iqbal, A., Raza, H., Aslam, M. F., & Mubeen, M. (2016). Impact of leverages on share price: Evidence from cement sector of Pakistan. *Industrial Engineering Letters*, 6(6), 44–48.
- Jogiyanto, H. (2010). *Portfolio theory and investment analysis*. 7th Edition. Yogyakarta: BPFE Yogyakarta.
- Kabajeh, M. A. M., Al Nu'aimat, S. M. A., & Dahmash, F. N. (2012). The relationship between the ROA, ROE and ROI ratios with Jordanian insurance public companies market share prices. *International Journal of Humanities and Social Science*, 2(11), 115–120.
- Kamar, K. (2017). Analysis of the effect of return on equity (ROE) and debt to equity ratio (DER) on stock price on cement industry listed in Indonesia stock exchange (IDX) in the year of 2011-2015. *IOSR Journal of Business and Management*, 19(5), 66–76.
- Karimi, G. (2020). Effect of financial leverage on the trend of stock pricing fluctuations in companies listed in Tehran stock exchange. *Propósitos y representaciones*, 8(2), 61.
- Keim, D. B. (1990). A new look at the effects of firm size and E/P ratio on stock returns. *Financial Analysts Journal*, 46(2), 56–67.
- Kieso, D. E., Weygant, J. J., & Warfield, T. D. (2007). *Intermediate accounting* (12th ed.). New York: John Wiley and Sons.
- Kohansal, M. R., Dadrasmoghadam, A., Mahjori Karmozdi, K., & Mohseni, A. (2013). *Relationship between financial ratios and stock prices for the food industry firms in stock exchange of Iran* (Vol. 3). World Applied Programming.
- Larson, K. (2001). *Hart's E&P* (Vol. 74). Michigan: Hart Publications.



- Lee, C., & Lee, W. H. (2008). Can financial ratios predict the Malaysian stock return? *Integration & Dissemination*, 2, 7–8.
- McLaney, E., & Atrill, P. (2020). *Accounting and finance*. Limited: Pearson Education.
- Menaje, P. M. (2012). Impact of selected financial variables on share price of publicly listed firms in the Philippines. *American international journal of Contemporary Research*, 2(9), 98–104.
- Menike, M. G. P. D., & Prabath, U. S. (2014). The impact of accounting variables on stock price: Evidence from the Colombo stock exchange, Sri Lanka. *International Journal of Business and Management*, 9(5), 125.
- Mustafa, S., Saeed, A., & Zafar, A. (2017). The effect of financial leverage and market size on stock returns on the Karachi stock exchange: Evidence from selected stocks in the non-financial sector of Pakistan. *The International Journal of Business & Management*, 5(10).
- Najjar, N. (2013). Can financial ratios reliably measure the performance of banks in Bahrain? *International Journal of Economics and Finance*, 5(3), 152–163. <https://doi.org/10.5539/ijef.v5n3p152>
- Niswonger, W. (2000). *Principles of accounting* (Ninth Edition ed.) (Ninth Edition ed., *Second Volume*. Jakarta: Erland.
- Nobes, C., Parker, R. B., & Parker, R. H. (2008). *Comparative international accounting*. Pearson Education.
- Nurmayanti, P. (2010). *Fundamentals of investment and portfolio analysis*. Palembang: Citrabooks Indonesia.
- Otekinrin, A. O., Asamu, F. F., Oye, O. O., & Olowookere, J. K. (2019). Current market price of share capital and profitability of selected firms on Nigerian stock exchange. *International Journal of Civil Engineering and Technology*, 10(1), 1274–1287.
- Ozturk, H., & Karabulut, T. A. (2020). Impact of financial ratios on technology and telecommunication stock returns: Evidence from an emerging market. *Investment Management and Financial Innovations*, 17(2), 76–87.
- Rawan, A. (2021). Evaluating banks financial performance using financial ratios: A case study of Kuwait local commercial banks. *Oradea Journal of Business and Economics*, 4, 56–68.
- Saiedi, P. (2005). *Financial theory (dividend policy)*. Aliabad Katoul branch: Islamic Azad University.
- Sangaji, J. (2003). Factors affecting stock prices: Case study PT Kimia Farma. *Journal of Economics and Business Indonesia*, 10(2), 145–159.
- Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students*. England: Financial Times Prentice Hall.
- Septiari, D., & Nasution, A. H. (2017). Analysis of the influence of financial leverage on financial performance at mining, oil and gas companies listed on Indonesia stock exchange. *Journal of Applied Accounting and Taxation*, 2(1), 37–41.
- Sharif, T., Purohit, H., & Pillai, R. (2015). Analysis of factors affecting share prices: The case of Bahrain stock exchange. *International Journal of Economics and Finance*, 7(3), 207–216.
- Simamora, H. (2000). *Accounting base for business decision making*. Jakarta: Salemba Empat. Sugiono dan Untung (2016). *Panduan Praktis Analisa Laporan Keuangan*. Jakarta: PT. Grasindo.
- Sugiyanto, E., Trisnawati, R., & Kusumawati, E. (2021). Corporate social responsibility and firm value with profitability, firm size, managerial ownership, and board of commissioners as moderating variables. *Riset Akuntansi Dan Keuangan Indonesia*, 6(1), 18–26.
- Talamati, M. R., & Pangemanan, S. S. (2015). The effect of earnings per share (eps) & return on equity (roe) on stock price of banking company listed in Indonesia stock exchange (idx) 2010-2014. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, 3(2).
- Tandelilin, E. (2010). *Portfolio and investment: Theory and applications*. Yogyakarta: Kanisius.
- Vedd, R., & Yassinski, N. (2015). The effect of financial ratios, firm size & operating cash flows on stock price: Evidence from the Latin america industrial sector. *Journal of Business and Accounting*, 8(1), 15.
- Wang, J., Fu, G., & Luo, C. (2013). Accounting information and stock price reaction of listed companies—empirical evidence from 60 listed companies in Shanghai stock exchange. *Journal of Business & Management*, 2(2), 11–21.