

The impact of company fundamentals on common stock prices: evidence from MENA region

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Abstract

Purpose of the research: The purpose of this paper is to examine the impact of firm-specific factors on the market price of shares (MPS) in the Middle East and North Africa (MENA) region. The paper also controls for the effect of global financial crisis on MPS.

Design/methodology: The paper uses a dataset provided by OSIRIS, covering a sample of 277 firms (1919 firm-year observations) listed in seven MENA countries for the period 2000-2015. The empirical model applied in the study consists of nine variables and the Feasible Generalized Least Squares (FGLS) is employed to estimate the parameters.

Results/findings: The results suggest that firm-specific fundamentals play a vital role in determining the MPS in the MENA region. More specifically, factors such as return on equity, book value per share, dividend per share, earnings per share and price earnings ratio positively influence MPS, while dividend yield and gearing have negative impact on MPS. Finally, the control variable firm size posits a positive and statistically significant relationship with MPS, while the global financial crisis seems to be as an insignificant determinant of MPS.

Practical implications and Conclusions: This paper provides several practical implications. Firstly, the study sheds light on the potential explanatory variables to be considered by investors while structuring their investment portfolio and evaluating stock prices. Secondly, listed companies should focus on improving the figures emerged as significant variables that affect the MPS. Thirdly, on a macroeconomic level, this study will help investors in making rational decisions and allocate resources efficiently and effectively leading to higher economic growth and standard of living.

Introduction

The current geopolitical tensions coinciding with the long standing 2007 global financial crisis has had excruciating repercussions on the economic and financial conditions of the global community especially on stocks, oil and share prices in the first quarter of 2008. Apparently, the emerging markets were not immune from such shocks. It is here that the issue of stock market integration surfaces because a highly integrated stock markets pre-supposes similar prices as well as parity in risk premiums. According to Verrecchia (2001), it is the financial reporting systems that provide firms' vital information to the capital market and when investors generally trade stocks on the basis of aforesaid information, the stock prices converge to their fundamental values. Additionally, such information is considered value relevant if they reflect on stock price movements. However, current realms of uncertainty mandates investors to comprehend some indisputable analytical tools which will aid them in making sound, rational and judicious investment decisions over and above deciphering their relationship with the market price of shares (MPS). That said, a few relevant models embraced by the investing community serve as possible explanations for MPS fluctuations. The most fundamental approach employed is inarguably the Gordon (1962) growth model where investors base stock prices on the discounted present value of future expected dividend payments. Also, Ross's (1976) Arbitrage Pricing Theory offers two dimensions namely macroeconomic forces and internal forces for investors to base their decisions related

to assessing the MPS. While the former relates to changes in governmental regulations, business cycle volatilities, changes in investor's attitude, fluctuating market conditions, natural calamities and contingencies like strikes, lock outs etc., the latter focuses on internal forces in a company such as financial statements, as determinants of MPS.

Needless to say, investor purchasing behaviour is apparently preceded by several supporting theories. To begin with, the efficient market hypothesis propounded by Fama (1991) explicitly assigns a strong connection between accounting information and MPS, as such information seamlessly diffuses into the market (Chambers, 1974) and reflects in the form of demand fluctuations thereby affecting the MPS. However, Debondt (1991) advocates the concept of 'mean reversion' where in stock prices mean reverting in the long run suggests a low stock price being followed by a relatively higher return, thus encouraging groups such as pension funds to invest in equity markets after an apparent stock market slump (see also Vlaar, 2005). This acts as a forerunner to the overreaction hypothesis proposed by De Bondt and Thaler (1985, 1987) that investors tend to overreact to extreme price variations due to the ingrained nature of overweighing current information over prior ones. Alternatively, Spierdijk and Bikker (2012) in their research purports the concept of 'home bias' as postulated by behavioural science experts as a precedent to investors precluding to invest in international markets due to lack of sufficient information associated with foreign markets (see also Barberis and Thaler, 2003). Another seeming rationale for investor purchasing behaviour is the existence of 'investor herds', thereby causing stock price volatiles (Christie and Huang, 1995, p 31). Bikhchandani and Sharma (2001) adds on that investor exhibit this herd culture as they consciously imitate the actions of others.

Narrowing down the scope to the Middle East and North Africa (MENA) region, consisting of the GCC and 13 other nations, the region is renowned for its progressive economic and political transformations as well as privileged geographic location with access to international markets. However, a stark contrast between MENA stocks and international stock markets is evident due to the former being susceptible to turbulences such as local and international equity market spillovers, regulatory inefficiencies, information asymmetry and illiquidity. On the contrary a number of structural tailwinds such as the countries' ambitious and reformative policy changes in economic and regulatory policies whilst hosting a diversified list of business sectors apart from deregulating the finance and tourism sector have transformed the investment landscape by harnessing incremental global portfolio investor flows specifically to the GCC market.

The GCC in particular is an alliance of six countries including Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and United Arab Emirates (UAE), established on May 25th 1981 whose enduring advantages are rooted in cultural commonalities, strategic positioning, independent Sharia based judiciary system, incessant socio economic reforms and a minimal corporate tax regime. Recent reports by Forbes Middle East reports the top five stock markets in the Arab world where Saudi Stock Exchange (Tadawul) dominates the list with a market capitalization worth \$450.6 billion while UAE stock markets, Abu Dhabi Securities Exchange (ADX) and Dubai Financial Market (DFM) take the second and third places respectively, with a total market capitalization of \$232.7 billion. Although the MSCI Emerging Market index includes only UAE and Qatar equity markets, Saudi Arabia, whose stocks account for more than 50% of the GCC market capitalization is hopeful to make its way into the index by 2018-2019 due to the countries decision to open equity markets to foreign investors, well aware that the index is a pertinent dictator of where equity market money flows. On the other hand, The Amman Stock exchange, a public shareholding company has been playing a phenomenal role in harnessing capital for the growth of the economy thereby posting a market capitalization \$ 24.71 billion as of March 2018, thus constituting to more than 65% of the GDP. That said, MENA stock markets are still in its formative stages and is yet to be integrated with international stock markets. This explains why MENA stocks especially the GCC stocks remains non vulnerable to the volatility spill-over or "contagion" effects (see Paskelian, Nguyen & Jones, 2013), implying that to a certain extent, GCC stocks are shielded from undulations in stock prices, exchange rates and capital flows resulting from diffusion of shocks from international markets.

The motivation for this study mainly arises from the soaring local and international appetite for GCC stocks in comparison to their emerging peers. Khatoun (2017) attests the former statement by enlisting few reasons for a surge in demand for GCC stocks. He reasserts that major fiscal reforms such as

the VAT application across GCC, capital market liberalisations such as Saudi Arabia opening doors for foreign participation in equities, consistency in earnings growth, attractive and guaranteed dividend yields apart from the two global transmission mechanisms namely the ongoing US dollar strength and rising crude oil prices are dovetailing investors interests to MENA's favour. More notably, the relentless efforts by the GCC in reducing their dependence on hydrocarbons by engaging in monumental projects such as the EXPO 2020 (UAE), VISION 2030 (KSA) BAHRAIN VISION 2030 (Bahrain) NEW KUWAIT (2035) OMAN VISION 2040 (Oman) reflects the fervent efforts adopted to raise the region standards to a global investment hub. Therefore, the main aim of the current study is to equip potential investors interested in GCC stocks with knowledge on internal financial matrices which will empower them to outguess market anomalies whilst assuring them reasonable rates of return on investment.

This paper is of paramount significance and contributes to finance literature in several ways. First, this paper is the first academic cross-country study, to the best of our knowledge, to examine the impact of firm-specific factors on MPS. In light of these facts, the present study attempts to investigate the impact of eight internal variables on the MPS of firms listed in MENA capital markets, namely; Saudi Arabia, UAE, Qatar, Kuwait, Bahrain, Oman, and Jordan over the period 2000 to 2015. Ullusever and Demirer (2017) point out that GCC exchanges are predominated by short term retail investors who have smattering financial knowledge and accede to the actions of fellow traders resulting in 'herd behaviour'. Therefore, the determinants identified will provide knowledge to the potential investors about the key factors affecting share prices and accordingly assist them in optimizing their investment decisions and portfolio diversification structure. Secondly, the study opens a vista for potential comparative empirical research as the paper encompasses a large data set of nonfinancial companies listed in the GCC and Amman stock exchange. Thirdly, the incorporation of a comprehensive set of eight firm specific fundamentals as factors affecting MPS sets managerial implications, as the evidence derived from the paper cautions managers to properly structure and reflect those matrices commonly used as a benchmark for instigating investor decisions. Finally, the paper controls for the global financial crisis (GFC) and examines whether it has any significant impact on MPS in the case of MENA region.

The remaining part of the study highlights evidence from prior literature, elaborates on the methodology and enumerates the key findings. The paper finally concludes by suggesting some policy implications and recommendations for future research.

Literature Review and Research Hypotheses

The observed pattern of the influence of company specific factors as determinants of MPS has evoked mixed responses in prior research. In a pioneering study, Collins (1957) examines the determinants of share price for the US market and he identifies several firm-specific characteristics including dividend, net profit, operating earnings and book value as the prominent factors affecting share prices in the US. Ever since, a significant body of theoretical and empirical literature has evolved that considers the determinants of market price of shares. One of the earliest studies conducted by Patell (1976) on NYSE indicates that disclosures of forecasted EPS are accompanied by significant price adjustments.

More recently, Irfan and Nishat (2002) examine the factors that influence share prices in Karachi Stock Exchange (KSE) for the period from 1981 to 2000. The study employs cross-sectional weighted least square regression and analyzes the impact of six variables, namely; firm size, dividend yield, payout ratio, asset growth, leverage and earning volatility on share prices. Of these, the payout ratio, firm size, leverage and dividend yield emerged as important factors affecting the stock market prices in KSE, once again suggesting the relevance of firm-specific factors as significant determinants of MPS (see also Amidu and Abor, 2006)

Furthermore, three relevant studies from the Indian economic setting by Das and Pattanayak (2009) Nirmala et al. (2011) and Om and Goel (2017) document the contribution of company fundamentals in determining the MPS. Das and Pattanayak (2009) examine 30 shares constituting the Bombay Stock Exchange -Sensitivity Index in order to study the factors affecting stock price movements. The analysis reveals that higher earnings, return on investment, growth possibility and favorable valuation have positive impacts on the market price of shares while higher risk and volatility have inverse impacts on MPS. Similarly, Nirmala et al. (2011) use panel data and examine three sectors namely auto, healthcare

and public-sector undertakings over the period 2000-2009 in order to infer the main factors affecting share prices in India. The study employs the fully modified ordinary least squares method and the results reveal that dividend, price-earnings ratio and leverage are the major determinants of share prices for all the sectors under consideration. Findings by Om and Goel (2017) are in lines with the above studies emphasizing a positive relationship between earning per share, dividend per share, dividend payout ratio, total asset turnover ratio, return on equity and MPS while debt equity ratio and dividend yield exhibiting a negative relationship with MPS.

Other studies including Black and Scholes (1974) and Capstaff, Klaeboe, and Marshall (2004) analyze the relationship between dividend policy and stock return. The results show a positive relationship between the two variables. It could be argued that, investors place more value on dividend-paying firms as every investor prefers a consistent dividend policy. On the other hand, a negative relationship between dividend policy and share price changes have appeared in Baskin's (1989) study. This is mainly attributed to the dividend irrelevant hypothesis and the notion among investors that dividend payments are the outcome of the past performance of the firm rather than a reflection of future performance. Denis and Osobov (2008) and Chen and Dhiansiri (2009) in their study of New Zealand and Nigerian markets, respectively arrived at similar results. A more focused study of the impact of dividends (measured by dividend yield and dividend payout ratio) along with other control variables on share prices were studied by Okafor and Mgbame (2011) in the Nigerian market. The multivariate regression analysis was applied on 10 firms for an eight-year period from 1998 to 2005. Results showed a negative impact of dividend yield on share price changes while dividend payout ratio revealed inconsistent results of positive and negative relationships during the different years studied.

Therefore, as shown in the previous literature, share price changes are associated with changes in company fundamental variables that are relevant for share valuation such as book value per share, dividend coverage ratio, dividend per share, earnings per share, dividend payout ratio, price-earnings ratio, return on equity, market capitalization, cash flow-price ratio, cash from operating activities per share, dividend-price ratio, net asset value per share, and firm size (Wilcox, 1984; Rappaport, 1986; Downs, 1991; ; Ferson, 2008; Somoye et al., 2009; Al-Shubiri, 2010; Aveh and Awunyo-Vitor, 2017 and Mousavii and Karshenasan, 2017; Avdalovic and Milenkovic, 2017)

In more recent literature, Bhattarai (2014) and Gautam (2017) analyze data from the Nepal Stock Market and arrived at conflicting results. Developing a multiple regression model, Bhattarai (2014) examines nine Nepalese commercial banks over the period 2006-2014. His results show that earning per share and price-earnings ratio are significantly positively correlated with share price while dividend yield exhibits an inverse relationship with share price. On the other hand, Gautam (2017) investigates 20 commercial banks over the period 2008/09 to 2015/16, reaching a conclusion that leverage, market capitalization, dividend payout and dividend yield are positively associated with stock return and book to market, growth of assets, and earnings-price ratio are negatively associated with stock returns, thus warranting further investigation.

In the context of MENA region, Midani (1991) studied 19 listed Kuwaiti companies and found that earnings per share is an important determinant of share price (see also Al Tamimi et al. 2011 for the UAE market). Sharing similar views, Obeidat (2009) stressed the importance of earnings per share and book value per share as vital contributors to MPS in his study of 38 companies listed in the Abu Dhabi Stock Exchange. Meanwhile, Sharif et al (2015) analyze a panel data set of 41 companies listed in the Bahrain stock exchange for the period 2006-2010 employing pooled OLS regression with robust standard errors as the estimation technique. 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. Recent attempts to investigate the Jordanian market has also evoked similar results at par with market price literature. Empirical findings by Almumani (2014) prove that there is a positive relationship between price earnings ratio, book value per share, earnings per share and MPS, with dividend related variables projecting an insignificant relationship with MP. Similar views are echoed by AL Qaisi et al. (2016) in their study of twenty insurance companies listed in Amman stock exchange during the period 2011 to 2015 by employing multiple regression as the estimation technique. Findings

indicate that return on assets, Debt Ratio, the company's age and Size significantly affect MPS. These findings reassert a perceptual commonality embedded in MENA investors while ascertaining MPS.

On the other hand, another stream of empirical studies have developed recognizing the qualitative internal factors in addition to the quantitative factors (i.e. fundamentals) as share price determinants. A study carried out by Lee (2006) over the period 1920 to 1999 on NYSE testing both; fundamental and non-fundamental information impact on share prices conclude that investors overreact to non-fundamental information but underreact initially to fundamental information such as book value, earnings, and dividends. Additionally, a study conducted by Sloan (2012) using quarterly data on 30 companies constructed the index (i.e. DJIA) from different sectors except the financial services as they are best represent the NYSE capital market. The study model includes wide range of financial (i.e. quantitative) as well as non-financial (i.e. qualitative) indicators to investigate stock returns determinants. Conspicuously, the examples of financial determinants which primarily affected MPS were dividends, current assets, total assets, current liabilities, total liabilities, total equity, earnings, earning per share, net income, and cash flow.

An overview of prior literature deciphers a commonality attached to the past empirical work and attests the premise that firm specific matrices (internal data) are inevitable components affecting MPS in any economic setting thus forming a baseline for investment decisions. Ironically, the proliferation of studies leave the relationship between firm specific factors and MPS equivocal, presumably due to the fact that MPS is a joint outcome of both micro and macro variables factors. A severe void is also noticed with respect to the economical settings studied leaving a lacuna in the MENA setting, as most of the studies concentrate on mature markets. In this case further insight into the issue is valuable as emerging markets like MENA region are partially segmented from global factors thus compelling the local factors to be a reason for fluctuating returns (see also Bilson et al 2001).

This paper will therefore contribute to the ongoing debate by conducting a comprehensive study of eight firm-specific factors, namely; return on equity (ROE), earnings per share (EPS), dividend yield (DYIELD), dividend per share (DPS), book value per share (BVPS), total debt to total assets (DEBT), price earnings ratio (PER) and firm size (SIZE) to determine their extent of impact on the share prices for listed companies in all the GCC countries and Jordan, thus forming a reliable sample from the MENA region.

Accordingly, guided by relevant models and theories such as the Gordon's growth model, Ross's Arbitration theory and Famas's efficient market hypothesis, all offering a conceptual foundation to proceed with the study, along with supporting prior literature by Black and Scholes (1974), Wilcox (1984), Baskin (1989), Lee (2006), Das and Pattanayak (2009), Bhattarai (2014), Al Qaisi et al. (2016), Om and Goel (2017) and Mousavii and Karshenasan (2017), amongst others, that firm specific factors have a significant impact on MPS, the following testable research hypotheses are formulated:

- H₁: Ceteris paribus, there is a positive association between return on equity and MPS.
- H₂: Ceteris paribus, there is a positive association between book value per share and MPS.
- H₃: Ceteris paribus, there is a positive association between dividend per share and MPS.
- H₄: Ceteris paribus, there is a positive association between earnings per share and MPS.
- H₅: Ceteris paribus, there is a negative association between dividend yield and MPS.
- H₆: Ceteris paribus, there is a positive association between price earnings ratio and MPS.
- H₇: Ceteris paribus, there is a negative association between total debt ratio and MPS.
- H₈: Ceteris paribus, there is a positive association between firm size and MPS.
- H₉: Ceteris paribus, there is a negative association between global financial crisis and MPS.

4 Data, Empirical model and Estimation method

4.1 Data

The data for the present study is derived from OSARIS database of public companies listed in the MENA capital markets, namely Saudi Arabia, UAE, Qatar, Kuwait, Bahrain, Oman, and Jordan. The database provides firm-level financial data on public listed companies. Initially, data was collected for 979 companies covering the period 2000-2015. However, 702 companies are dropped due to missing data, resulting in a final sample of 277 companies distributed as follows: Saudi Arabia (47), UAE (21), Qatar (15), Kuwait (13), Bahrain (3), Oman (8), and Jordan (170).

In order to gain maximum possible observations, pooled cross-section and time-series data is used. In this case, the total number of observations should be 4432 firm-year observations (277×16). However, negative values for price earnings and other missing figures reduces the number of observations to 1919 firm-year observations. As the number of observations for each company is not identical, this results in an unbalanced panel. Panel data is used because of advantages over cross sectional data. For example, panel data gives “more informative data, more variability, less co-linearity among the variables, more degrees of freedom and more efficiency” (Baltagi, 2001, p.6)

4.2 Empirical Model

Considering the research hypotheses formulated above and following the standard literature on the relationship between company fundamentals and common stock prices, the following empirical model to be estimated, for firm i in period t , can be written as:

$$MPS = \phi_0 + \phi_1 ROE + \phi_2 BVPS + \phi_3 DPS + \phi_4 EPS + \phi_5 DYIELD + \phi_6 PER + \phi_7 DEBT + \phi_8 SIZE + \phi_9 CRISIS + \varepsilon \quad (1)$$

where the variables are defined in Table 1 below and the expected signs of the coefficients are $\phi_1, \phi_2, \phi_3, \phi_4, \phi_6, \phi_8 > 0$ and $\phi_5, \phi_7, \phi_9 < 0$.

Table 1: Summary of variables used in the analysis

Variable	Definition	Symbol
Market Price Per Share	Year-end share price	MPS
Return on equity	Net Income/ Shareholders equity	ROE
Book value per share	Total shareholders' equity/Number of shares outstanding	BVPS
Dividend per share	Dividends paid/Number of shares outstanding	DPS
Earnings per share	Net Income/Number of shares outstanding	EPS
Dividend yield	Dividend per share/Price per share	DYIELD
Price earnings ratio	Stock price/EPS	PER
Debt to total assets	Total debt/Total assets	DEBT
Firm Size	Natural log of market capitalization	SIZE
Global financial crisis	Dummy variable equals 1 for the crisis period 2007/2008 and 0 otherwise.	CRISIS

4.3 Estimation Method

The purpose of this study is to examine the impact of company fundamentals on market price of shares for selected MENA countries. The paper also control for the global financial crisis and investigates its effect on MPS. The previous section showed the empirical model to be tested, which consists of nine testable hypotheses with their proxy variables. In order to estimate Equation (1), we first run a standard pooled OLS regression. Next, we performed OLS assumptions tests namely heteroscedasticity and autocorrelation. The results of Breusch-Pagan/Cook-Weisberg test for heteroscedasticity (test-statistic=2455.88, p -value=0.000) and Wooldridge test for autocorrelation (test-statistic=19.717, p -value=0.000) suggest that the null hypotheses of constant variance and no first-order autocorrelation, respectively, have been rejected. In this case, OLS produces biased and inefficient estimates. Therefore, to account for both problems and obtain more efficient estimates of the regression parameters, Equation (1) will be estimated using Feasible Generalized Least Squares (FGLS) estimator (see, for example, Greene, 2003).

5. Empirical Results

Table 2 below reports the descriptive statistics such as mean, standard deviation, minimum, maximum and coefficient of variation values for the variables employed in the analysis. The minimum and maximum values for the variables ROE (Min= -8.33; Max = 2.98) and EPS (Min=-2.40; Max=8.28) show a wide spread, indicating major fluctuations in earnings pattern which is attributed to geopolitical issues engulfing the region. This also evident by the high values of the coefficient of variation for both variables, 4.60 and 2.69 respectively. Similarly, the dividend policies of companies measured by DPS and DYIELD show a wide variation among companies listed in the MENA capital markets. The small value of

CV of PER implies low degree of variation, suggesting, in general, similar growth rates among the sampled companies. Similarly, the low value of CV of SIZE variable, measured by log market capitalization, suggests a small variation in the size among the companies studied.

Table 2: Descriptive Statistics of the Dependent and Explanatory Variables

Variable	Mean	Std. Dev.	Min.	Max.	CV
MPS	5.350	7.941	0.056	70.775	1.484
ROE	.0687	0.316	-8.331	2.989	4.600
BVPS	2.018	2.900	-1.105	40.522	1.437
EPS	0.216	0.582	-2.406	8.285	2.694
DPS	0.122	0.371	0.000	14.104	3.041
DYIELD	0.027	0.079	0.000	3.571	2.926
PER	1.257	0.417	-0.474	4.454	0.332
DEBT	0.125	0.170	-0.122	1.361	1.360
SIZE	5.044	1.078	2.788	8.232	0.214
CRISIS	0.875	0.3308	0.000	1.000	0.378

Notes: Variables are defined in Table 1. CV is the coefficient of variation (Std. dev. / Mean).

Table 3 below shows the correlation matrix and VIF test to detect possible multicollinearity issue. As can be seen from Table 3, the intercorrelations among variables and the VIF values are low, (below 10, the rule of thumb) indicating the absence of multicollinearity problem.

Table 3: Correlation Matrix and Variance Inflation Factors (VIF) for the Explanatory Variables

	ROE	BVPS	DPS	EPS	DYIELD	PER	DEBT	SIZE	CRISIS
ROE	1.000								
BVPS	0.117	1.000							
DPS	0.325	0.501	1.000						
EPS	0.567	0.719	0.605	1.000					
DYIELD	0.093	0.038	0.695	0.073	1.000				
PER	-0.484	-0.121	-0.153	0.297	-0.158	1.000			
DEBT	0.088	0.128	0.038	0.098	-0.017	-0.023	1.000		
SIZE	0.391	0.382	0.288	0.426	0.015	-0.130	0.431	1.000	
CRISIS	-0.051	0.046	-0.007	0.018	-0.037	0.014	-0.002	-0.007	1.000
VIF	2.63	3.16	5.51	5.19	3.52	1.44	1.25	1.69	1.01
Mean VIF	2.81								

Note: Variables are defined in Table 1.

Table 4 below presents the estimation results of FGLS regression. As stated earlier, the FGLS estimator is chosen after performing pre-estimation tests on our panel data model. The Wald test statistics reject the null hypothesis that the slope coefficients are jointly equal to zero (p-value=0.000).

Table 4: FGLS estimation results

Variable	Dependent variable: MPS			
	Coefficient	Std. error	Z-stat.	Expected Sign
ROE	9.892	1.169	8.44*	+
BVPS	0.486	0.043	11.37*	+
DPS	8.396	0.405	20.71*	+
EPS	3.781	0.283	13.35*	+
DYIELD	-34.682	1.875	-18.50*	-
PER	3.842	0.255	15.04*	+
DEBT	-3.159	0.626	-5.05*	-
SIZE	1.217	0.108	11.28*	+
CRISIS	-.040	0.242	-0.17	-
Intercept	-9.840	0.655	-15.06*	
No. of obs.	1919			
Wald test (p-value)	0.000			

Notes: Variables defined in Table 1. * indicates significance at $P < 0.001$

As can be seen from Table 4, the results show that all the estimated coefficients are statistically significant and possess the expected signs, with the exception of CRISIS which is statistically not different

from zero. As anticipated, the coefficients of ROE, BVPS, DPS, EPS and PER are positive and statistically significant at less than 1% level (z -stats = 8.44; 11.37; 20.71; 13.35 and 15.04 respectively). This suggests that these company fundamentals positively influence share prices in the MENA region. This result is consistent with the findings of Sharif et al. (2015); Almunani (2016) and Om and Goel (2017) amongst others. Needless to say, this indicates that all the former factors reflect a direct relationship between investment perceptions in companies with positive development and earnings potential that act as a force to an increase in MPS. The former justification is specifically attributed to the results received for ROE, EPS and DPS, all which stand parallel to MPS. Similar arguments hold well for PER. A high PER indicates that investors expect positive and high earnings from the company thus signaling the trust attached to the companies operating fundamentals. This acts as a reason to further push the MPS. As for BVPS, the metric is employed by investors to scrutinize variations in stock price valuation. Investors view high BVPS stocks as more valuable thus leading to an increase in stock price of shares. This can be justified with the rationale that BVPS is a major representation of owners' funds and signals the amount shareholders would receive during cases of dissolution, thus suggesting a higher BVPS to affect the stock prices in a positive way.

In line with previous findings by Om and Goel (2017); Okafor and Mgbame (2011) and Bhattarai (2014), the variable DYIELD exhibits a negative and statistically significant relationship (z -stat= -18.50) with MPS. The theory of clientele effects offer a justification for this result whereby dividend policies impact various investors in different ways. While a certain group base their investment decision on dividend policies in order to get quick returns on investment, the other skeptical group prefers to avoid tax on dividends thus targeting capital gains. Investors in the MENA region studied presumably fall in the latter category. Invariably, DEBT shows a negative and statistically significant relationship with MPS (z -stat: -5.05) implying that investors use this metric to gauge the extent of debt employed in financing projects. The results are in line with several studies reviewed in prior literature (see Sharif et al., 2015; Om and Goel, 2017 and Al Qaisi et al., 2016). Investors in the MENA region fear that aggressive leverage practices are directly associated with volatile earnings and increased risk levels due to the burden of interest expenses. Increased cost of debt therefore acts as a deterrent to increasing the MPS due to these investors vacillating between investing in low debt or high debt companies. As evident from Table 4 the variable SIZE exhibits a positive and statistically significant relationship with MPS (z -stat=11.28) with MPS denoting that MENA investing community perceives size as a vital indicator of accompanies risk aversion, operational and performance capability which later on becomes a precursor to high MPS. Not surprisingly, the control variable CRISIS shows a negative relationship with MPS, however the estimated coefficient is not statistically different from zero. This implies that investors in the MENA region are less vulnerable to the spillovers of the financial crisis. A possible explanation for that the majority of the markets in the MENA region are not co-integrated with world's stock markets (see Neaime, 2016 and Paskelian, Nguyen & Jones, 2013)

6. Concluding remarks

Over the past decade, the MENA region especially the GCC countries have been at the epicenter as far as momentous capital market reforms are concerned, thanks to the geopolitical stability, persistent rise in GDP and persistent progressive economic and social policies. This fundamental restructuring in the form of deregulation and other regulatory reforms in the capital markets are all indicators of a surge in both an equity culture as well as increased financial intermediation through unconventional channels in the MENA region. As a result, this obviates the role of traditional banks and lays emphasis on enhancing the ability of capital markets in channelizing funds for the overall development of the economy. This further urges the regulators to encourage secondary trading whilst harnessing and broadening a vibrant investor base by ensuring them an efficient and transparent capital market.

The current study investigates the impact of eight company specific factors namely ROE, EPS, DYIELD, DPS, BVPS, PER, DEBT and SIZE on the MPS of 277 listed companies in the MENA region. The FGLS is employed to estimate the parameters and results suggest that firm specific factors play a vital role in determining the MPS. More specifically variables such as ROE, BVPS, DPS, EPS and PER exhibit a positive and statistically significant relationship with MPS, while DYIELD and DEBT appears negative

and statistically significant association with MPS. Finally, the control variable SIZE posits a positive and statistically significant relationship with MPS, while CRISIS emerges as an insignificant determinant of

MPS. These findings clearly indicate the relevance of firm specific factors in basing investment decisions thus mandating companies to incorporate sound corporate governance principles such as accounting audits and financial disclosures to remove inherent information asymmetries between management and shareholders, thus ensuring timely dissemination of material facts to potential investors. Ensuring transparency in financial disclosures and avoiding accounting opacities can aid in increased MPS of respective companies thus channelizing investments towards it. The inherent herding behavior prevalent among MENA investors is another issue to consider. Evidently, the impact of herding on price volatility is a result of change in investor confidence and not the herding factor in particular. Herding following a low investor confidence leads to increased price volatilities and vice versa. It is the need of the hour to transform such behaviors into more informed ones. Increasing investors' awareness by organizing frequent investment decision making workshops is further recommended to avoid judgment errors related to assessing a firms' worth.

Furthermore, several implications surface from the results obtained in this empirical study. Firstly, the study sheds light on potential explanatory variables need to be considered by investors while structuring their investments portfolio and evaluating stock prices. Secondly, listed companies should focus on improving the figures emerged as significant variables that affect the market price of shares. Thirdly, on a macroeconomic level, this study will help investors in making rational decisions and allocate resources efficiently and effectively leading to higher economic growth and standard of living.

Yet, the paper is also not free from limitations. The elimination of several companies due to non-availability of data poses as a hurdle in providing clarity to the firm specific factors affecting MPS. Moreover, the non-inclusion of macro factors affecting MPS eclipses a comprehensive perspective to the determinants of MPS. That said, impending studies can focus on a more inclusive approach of including both micro and macro factors affecting MPS. Future studies can further expand the scope of research by incorporating other competitive markets such as Egypt, Morocco and Algeria. Nevertheless, MENA markets burgeoning investment ecosystem along with its robust investment dynamics demonstrates the region potential to usher in a new investment paradigm for investors to diversify their portfolio and access new markets. For this, the sagacious use of specialized and customized indexes and metrics are most likely to play the dominant role in assisting investors to actively manage their portfolio and to navigate through uncertainties in order to reap fair and positive returns on investment.

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