The relationship between dividends and stock prices: a case study of the Saudi Stock Exchange (Tadawul)

Mohammed Faisal Hassan1*
Abdalla Mohammed Mohammedzain Ahmed2

1*Associate Professor of Accounting- King Faisal University- KSA. mfmohammed@kfu.edu.sa
2Assistant Professor of Statistics- King Faisal University- KSA. amohammedzain@kfu.edu.sa

*Corresponding Author: Mohammed Faisal Hassan
*Associate Professor of Accounting- King Faisal University- KSA. mfmohammed@kfu.edu.sa

Abstract
This study aimed to examine the relationship between dividends and share prices of the firms listed in Saudi Stock Exchange. For this purpose, a sample consisted of 172 firms (out of 207 listed firms) was selected. To identify the impact of dividends on share prices, the correlation analysis and the linear regression been applied for a period of ten years from 2010 to 2019. The findings of the study showed that dividends (as independent variable) explain the variations in the share prices (as dependent variable). Furthermore, the findings indicated that dividends have a positive effect on the share prices. However, the study attempted to interpret its findings based on the hypothesis (Bird-in-the-hand). Finally, the study recommends that firms should give high priority to investments that give high Net Present Values, thereby making huge earnings, which used to yield high benefits to the owners.

Key words: Dividends, Share Prices, Bird-in - hand, Saudi Stock Exchange.

Introduction:
Many financial analysts, investors and other stakeholders are very concerned about the movements of share prices and they attempt to identify the factors behind these movements, due to their implications on the firm's value. Sometimes, the share prices may exceed their minor value. Other times, these prices may reach only a fraction of their nominal value. However, many factors considered as determinant of share prices. These factors include: the financial position of the firm, the monetary situation of the sector in which the firm operates, the expected return on investment, opportunities and the decisions related to the dividend and profit retention policy, the supply and demand forces and other decisions impacting the share prices.

Financial theories focused on the impact of financing and investment decisions on the firm. These theories assumed that mentioned decisions have an important effect on the firm's value. Therefore, studies related to financial theory try to understand the magnitude of this effect on the firm's value. In this context, dividend decision considered one of the most important financial decisions because is created in the light of many other factors, which include the cost of the agency, fees, availability of sufficient fluidity to cover the dividends and other factors. The multiplicity of considerations affecting the dividend decision led to the emergence of number of assumptions and experimental research projects that try to examine the impact of these considerations on this decision.

Dividends and share price researched widely, at least since Modigliani and Miller's (M & M) seminal work. Miller and Modigliani (1961) advised that under certain presumptions, dividend decisions would not affect the firm value. They argued that the dividend decisions of the firm would not damage its value, due to other factors such as expected earnings. A similar argument adopted by other researchers, predicted a positive a result of dividend decisions on the firm value. This mainly because investors would prefer the cash dividend on the account of the future capital gains (Lintner, 1962; Walter, 1963; Gordon, 1963; Bhattacharyya, 1979). While other
research contributions predicted a reverse impact on dividend decisions on the firm value. Mainly because arguing that the effect and treatment of taxation might have an effect on dividend payout, a drop in dividends will increase the market value (Poterba and Summers, 1984; Kalay and Michaely, 2000).

Because the empirical studies in this field in the developing countries are very scarce, the present study would add to the existing literature the results of the firms listed in Saudi Stock Exchange during the period (2010-2019). The originality and value of this study is that policymakers in the Saudi Stock Exchange need to stimulate and encourage organizations to pay more focus on the impact of many factors and determinants on share prices, especially the dividend paid to the shareholders, who seek to maximize their interests.

Previous Studies:
Recently, many empirical studies been conducted to examine the relationship between dividend and share prices. In fact, these empirical studies came out with different findings. While some studies suggest a positive relationship between cash distributions and share prices, the findings of other studies support a negative relationship in this respect. Consequently, the debate around this issue still goes on. In the following, a review of some of these empirical studies.

Louziri and Oubal (2022) look to the determinants of dividends in the state of Morocco, during (2003–2018). The results of the study confirmed the existence of three important determinants of the profit distribution policy, which are the size, age of the company and growth opportunities. The study explained the inverse relationship between the size of the company and the age of the company with the dividend policy through the signal theory. The inverse relationship between growth opportunities and distributions can explained by different theories.

Rahayu and Wardana (2021) were purpose to determine the effect of dividend policy and financial performance on the abnormal return of the shares of companies in the Jakarta Islamic Index. Used a sample of firms listed on The Jakarta Islamic Index during 2009-2018. The study concluded that the rest of the variables had no effect on the abnormal cumulative return of the companies' shares.

Margono and Gantino (2021) aims to examine effect many of variables on stock price; one of these variables was dividend policy. Study used a sample of firms listed on the Indonesia Stock Exchange during 2008-2010. The results showed a positive Correlation between dividend policy and stock price.

AlAli et al (2019) aims to study the effect of dividends on the market value of shares of insurance firms listed on the Kuwait stock exchange during 2009-2017. The share prices used as dependent variable and the independent variables was dividend payout ratio, dividend yield, book value per share, market price to book value ratio and earnings per share. The study revealed for conflicting results, as shown market price to book value ratio, book value per share and share prices had a positive effect on the share price, while the dividend payout ratio and dividend yield had a negative effect on the share prices. The results interpreted in light of dividend irrelevance theory (Miller and Modigliani (1961)).

Pandya and Marvadi (2016) focused on identifying the factors affecting share prices in the Indian market. Data for 30 companies has used during 2010-2014. The findings of the study reveal that the factors affecting share prices in the Indian stock market include the changing leverage, price-to-profit ratio and profitability to debt. The study also concluded that there is an inverse relationship between leverage and share prices. This relationship indicates that an increase in the use of debt by a company would lead to higher interest payments, which would reduce the dividend.

De Cesari and Huang (2015) investigated the impact of the previous payouts on the current fair market value of the shares. His research on US stock markets indicated a positive relationship between the previous returns and the current the true market value of the shares. This finding enhances the impact of dividend information and returns on the value of firms. Therefore, professionals should take into account this fact, when distribution decisions made.
Sharif and Pillai (2015) attempted to identify how share prices in Bahrain Stock market being determined (during the period 2006-2010). For this purpose, they analyze data of firms listed in market. It is worth mentioning that eight variables used to uncover their effect on the market price. These variables include the book value per share, dividend allocation; dividend yield,
profits and corporate size. The findings indicated that these variables are significant
determinants of share prices in the Bahrain market.
Aalmumani (2014) sought to distinguish quantitative factors affecting share prices of the banking
companies listed on the ASE during the period 2005-2011. The ratios, relationship analysis, and
multi-linear regression models been applied to measure the effects of many independent
variables on share prices. The outcomes of this study showed a positive correlation between
dividends, earnings per share, book value per share, share price ratio and share prices.
Hussainey, Oscar and Chijoke (2011) tried to explore the relationship between the policy of
dividend syndication and changes in the market value of shares in the UK financial market. They
employed the multiple regression analysis and concluded that, there is an inverse relation
between the distribution of profits and the change in the industry value of shares. The study also
concluded that the changes in growth rates and the level of debt are responsible for changes in
the market value of the shares.

Although the previous studies provide findings regarding dividends and their impact on share
prices, this study is an attempt to deepen these findings through the relationship between
dividends and share price in Saudi Stock Exchange (Tadawul).

Theoretical framework
The seminal work of Modigliani and Miller (1961) titled “Dividend Irrelevance Hypothesis”
considered as a pioneer theoretical contribution regarding the relationship between dividend
policy and the share prices. Later on, number of theories developed different and contrary
interpretations of this relationship. The following paragraphs show concise review of these
theories:

Irrelevance Hypothesis
This theory argues that the firm's value will depend on how best to use the resources available
to the firm, not how to deal with profits. For that reason, the dividend policy will not affect the
share price, and does not affect the price tag on finance in the firm. The value of the enterprise
is therefore, affected by the capacity of the firm to gain profit and which is motivated by business
risks. This kind of theory based on a set of the following presumptions:
- There is no personal taxes or taxes on the firm's income.
- There are no registration costs or transaction costs.
- The leverage does indeed not affect the expense of loans.
- The capital budget policy of the firm is independent on its distribution policy.

Miller and Modigliani (1961) assume that under certain presumptions, the dividend policy used
by the firm is not going to affect share prices, as well as the value of the company is determined
by its basic ability to make profits. Many authors criticized this notion because in the real life we
have imperfect market conditions such as taxes and agency costs (Allen and Michele, 2002;

Bird-in-hand Hypothesis:
This theory criticized the idea of the neutrality of profit distribution. Lintner (1962) believes that
buyers prefer current dividends (bird-in-the-hand) against future dividends (bird-on-the-tree).
According to this theory, the dividends reduce uncertainties about future flows. Although many
researchers have challenged this notion, it has received support from studies by (Lintner, 1962;

Tax Preference Hypothesis:
This theory assumes that an investor prefers to hold profits, because of tax preference since
capital gains undergone to a reduced tax rate than those that dividends are subject. Based on
the tax desire theory, organizations must make dividends at the cheapest level if they wish to
maximize the value of the shares (Poterba and Summers, 1984; Kalay and Michaely, 2000).

Agency Cost Hypothesis:
The principle of splitting up of ownership and management created the agency theory. The most
important condition of the agency's agreement is that the administration should perform its
functions in order to achieve and maximize the interests of the owners. While in many cases,
professionals are likely to behave in a way that may not be in the best interests of the shareholders. Therefore, it is inevitable for the owners pay some kind of cost to ensure that their interests are strengthened (Jensen, 1986). Costs may be spent on providing appropriate incentives, such as performance bonuses and stock options, for aligning the interests of different parties. According to the proponents of this theory, the management uses a profit capture to ensure a sustainable and low-cost source to finance growth and expansion, while shareholders may prefer payouts. Studies conducted by (Jensen, 1986; Jensen, Solberg and Zern, 1992 and Al-Malkawi, 2007) were steady with this hypothesis.

**Signaling Hypothesis:**
According to this theory, businesses send signals to current and future investors through dividend payouts. The greater dividend payout will give investors a sign that the company expects to increase its future profits. Quite simply, if investors expect dividend a low ratio of profits the talk about price will rise, and vice versa (Pettit, 1977; Nissim and Ziv, 2001 and Bali, 2003) These studies found similar evidence.

**Methodology**
In an attempt to research, the impact of dividends on the share prices of firms in the Saudi Stock Exchange secondary data used. The data obtained from audited financial statements of respective firms for the period from 2010 to 2019. The study population consisted of 207 firms listed in the Saudi Stock Exchange at the beginning of 2019. A sample of 172 firms, which distributed among 15 sectors purposeful selected. While the insurance sector was omitted due to the availability of data on dividends through the whole study period.

**Variables:**
For the purpose of this study, dividends considered as the independent variable (X) while share prices would be the dependent variable (Y).
The average of the share prices and dividends in the Saudi Stock Exchange was calculated sector wise, using one of the measures of central tendency; the arithmetic mean.

**Hypotheses:**
The study determined two hypotheses to be tested:
H1: There is a statistically significant relationship between dividends and share prices of firms listed in Saudi Stock Exchange.
H2: Dividends have a positive effect on share prices of firms listed in Saudi Stock Exchange.

**Statistical Tools:**
To analyze the relationship between dividends and share prices of firms listed in the Saudi Stock Exchange during the suggested period, the researcher followed the following steps:
- Using correlation analysis to test the first hypothesis.
- Using linear regression to test the second hypothesis.

**Results and Discussion**
The research used Pearson's Relationship analysis to examine the relationship between the dividends and share prices. Table (1) depicts how variables related to one another.

<table>
<thead>
<tr>
<th>Dividend Payout</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
<th>Share Prices</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dividend Payout</td>
<td></td>
<td>1</td>
<td>14</td>
<td></td>
<td>.345**</td>
<td>0.000</td>
<td>14</td>
</tr>
<tr>
<td>Share Prices</td>
<td></td>
<td>.345**</td>
<td>0.01</td>
<td></td>
<td>1</td>
<td>1</td>
<td>14</td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed).**
From table (1), it is evident that there is a significant correlation between dividends as the independent variable and share prices as the dependent variable and signs and symptoms of the relevant correlation rapport are required, and make clear the relationship involving the factors. This finding confirms the validity of the first hypothesis; "There is a statistically significant relationship between dividends and share prices of firms listed in Saudi Stock Exchange". 

Table (2): Regression between Dividends and Share Prices in Saudi Stock Exchange

<table>
<thead>
<tr>
<th>Variables</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>252.623</td>
<td>23.808</td>
</tr>
<tr>
<td>share prices</td>
<td>5.696</td>
<td>666</td>
</tr>
</tbody>
</table>

R Square: 720

Adjusted R Square: 696

Table (2) shows the result of regression analysis pertaining dividends and the share prices. The logic behind this regression analysis is to find out to which extent dividends have effect on the share prices. In this regard, the adjusted R2 of the model accounted for 69.6% and the value for R2 in the model is 0.720, which indicates that the study model explains 72% of the variation in the study variable.

This finding confirms the validity of the second hypothesis; "Dividends have a positive effect on share prices of the firms listed in the Saudi Stock Exchange".

Since, the test of both hypotheses showed that dividends has significant impact on share prices in the Saudi stock exchange (Tadawul), this would reinforce the argument that increased dividend payouts have positive effects on share price. That means in the existence of market imperfections, dividends are valued differently from capital gains. Therefore, investors would like the cash dividends for future capital gains. This finding supports the argument of (Lintner, 1962; Walter, 1963; Gordon, 1963; Bhattacharya, 1979; Miller and Rock, 1985; Al-Kuwari, 2009; Afzal and Mirza, 2011; Gul, Sajid, Razzaq, Iqbia, and Khan, 2012; Adediran and Alade, 2013; Oyinlola, Oyinlola and Adeniran, 2014). Furthermore, this finding is consistent with the hypothesis (Bird-in-the-hand) which state that distribution of dividends to shareholders affect the market price of the shares as well as the business positively; because investors like instant dividends.

Conclusion

Dividend is an important area of financial management and it performs a crucial role in the organization financial decisions. The objective of this study was to examine the relationship between dividends and share prices for firms listed in Saudi Stock Exchange (Tadawul). Since the impact of the dividend on share prices is varying from country to another, the findings of this study cannot generalize. This research found out, that there is significant impact of dividends on share prices. More precisely, there is positive relationship between dividends as an independent variable and share price as a dependent variable for firms listed on the Saudi Stock Exchange (Tadawul).

The research recommends management of firms should invest in activates that give positive Net Present Values, thereby making huge earnings, which can used to yield high benefits to their owners.

To be able to improve this study, attempts should made in the future to raise the time horizon (say for at least twenty years). The findings of the research should construe keeping because the design size of the research. Even more research can conducted on the same theme with
additional companies and expanded many samples. Besides, the scope of research can extend with the introduction of short-term investment securities for even more research.

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References

