



Article

# The Retained Earnings Effect on the Firm's Market Value: Evidence from Jordan

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**Abstract:** The aim of this study was to investigate the effect of the retention per share compared to the dividend per share by modeling the firm's market value as a function of the retention per share and the dividend per share for all firms in the Jordanian context using unbalanced panel data analysis for a sample of 2281 firm years covering the period from 2010 to 2021. The results of the pooled sample indicated a strong positive significant effect for dividends per share. However, the retention per share indicated a negative significant effect on the firm's market value. The other robustness analysis for the two sub-samples and the financial and non-financial sub-samples indicated the same results, consistent with the pooled sample for the two main explanatory variables.

Keywords: retention per share; dividend per share; emerging markets; Jordan



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# 1. Introduction

Retained earnings are accumulated portions of previous net profits undistributed to the shareholders. Instead, these amounts are retained as required funds to execute future management plans such as the need for growth, new positive investing, expansion, acquisitions, repurchases, raising capital, diversifying products and services, and opening new branches (Harvey 2012; Ball 2013; Masood 2017; Thirumalaisamy and Al Baloushi 2017; Yemi and Akinadewo 2018; Okechukwu and Ekweronu 2020). Retained earnings form a substantial portion of the shareholders' wealth. Shareholders' wealth is defined as "the product of the number of shares owned by the shareholders multiplied by the current share price in the capital market plus the dividends received in the following year" (Botha et al. 1987). Retained earnings also represent an idle internally generated fund and represent the cheapest and easiest option to raise the shareholders' capital compared to the other two available options of raising new equity or resorting to debt (Myers and Majluf 1984; Masood 2017; Thirumalaisamy 2020).

The importance of this study comes from investigating the expected role of the retained earnings as an underlying source of value for the company's common stock because retained earnings provide the company with the required cash flows to pay dividends, and therefore, the company's ability to produce cash flows will affect the market value of its common stocks. Furthermore, the sum of retained earnings has become another indicator to evaluate management effectiveness in bringing about a change in the market value of their firms. That is, shareholders also recognize the degree to which companies use retained earnings as part of their investment parameters and consider this in assessing any added

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value from retained earnings in terms of business growth, net asset value, and capital gain (Yemi and Akinadewo 2018). Hence, this study is expected to clarify to Jordanian researchers, investors, and firm managers what investors prefer and why: retained earnings or dividends so Jordanian firms' management bodies can take into consideration investors' preferences in their financial policies.

The impact of retained earnings on firm value has not been studied as thoroughly by corporate finance researchers as the impact of dividend payouts, which has been studied extensively by academics from around the world for over four decades (Tirmizi and Ahmad 2013). However, the impact of retained earnings on various factors, such as capital gain, cash dividend per share, stock returns, and especially firm value, is still unexplored in emerging markets and requires more research (Yemi and Akinadewo 2018).

To the best of the author's knowledge, exploring the effect of retained earnings on a firm's market value and comparing it with the effect of cash dividends on a firm's market value for all listed firms has not been examined before in Jordan. Accordingly, this study explores the effect of the retention per share ratio compared to the dividend per share ratio by modeling the firm's market value represented by the Tobin Q ratio as a function of the retention per share ratio and the dividend per share ratio for all Jordanian firms listed on the Amman Stock Exchange during the period 2010 to 2021 to become familiar with the findings of this study on the Jordanian environment, and to determine whether these findings agree or differ from those of previous studies by responding to the following two primary questions: (1) To what extent do the retention per share ratio and the dividend per share ratio predict and affect the market value of Jordanian firms at the pooled level?, and (2) Does the retention per share ratio have a greater influence than the dividends per share ratio on the market value of Jordanian firms at the pooled level?

One of the key decisions that firms need to make is how to allocate their profits between paying dividends to shareholders and retaining earnings for future investments. While both options have advantages and disadvantages, the decision ultimately depends on the preferences of the firm's investors (Hartono and Robiyanto 2023). Therefore, understanding these preferences is critical for firms to develop effective financial policies that align with their stakeholders' interests.

This study aims to investigate the effect of retained earnings on the market value of Jordanian firms. Specifically, this study can inform the financial policies of Jordanian firms and help them make informed decisions about how to allocate their profits. To achieve our research objective, we conduct a panel data analysis of listed companies in Jordan over a period of twelve years. We collect data on firms' financial statements to examine the relationship between retained earnings and market value.

Overall, this study will contribute to the existing literature on the effect of retained earnings on firm value, particularly in the context of Jordan. Additionally, our findings have practical implications for Jordanian firms' financial policies. The remainder of this paper is organized as follows. The Section 2 reviews the related prior studies and develops the study hypotheses. Section 3 illustrates the study methodology. Section 4 presents the study results. Section 5 discusses the study results, and Section 6 concludes the paper.

# 2. Literature Review and Development of Hypotheses

Retained earnings are mainly used for two purposes. One is for dividend payments to be stabilized and the other is for company expansion. Both goals are beneficial for the company's long-term interests as well as its expansion. The wisely reinvested earnings in any future opportunities by the company's management are more useful to investors in the long run compared to the dividends, and this will lead to an increase in the value of the company's stocks (Harkavy 1953; Droms 1990; Thirumalaisamy and Al Baloushi 2017).

Ross et al. (2008) indicated that a firm's dividend policy determines the dividend amounts to be paid to shareholders and amounts to be retained in the firm to be invested in any profitable projects or kept for future needs. Common stock investors prefer capital gains over dividends because taxes on capital gains can be postponed into the future and

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are taxed at a comparatively lower rate, while dividend taxes have to be charged as soon as they are issued and are taxed at a higher rate. Shareholders will encourage their companies to maintain and reinvest profits if there is a rise in the personal income tax rate. Retained earnings, therefore, constitute a critical source of financing for these companies (Miller and Modigliani 1961; Thirumalaisamy and Al Baloushi 2017; Okechukwu and Ekweronu 2020).

The theoretical literature on corporate dividend policy is classified by researchers from three different points of view; the first group states that the corporate dividend policy increases firm value, and the second group indicated that the corporate dividend policy decreases firm value. However, the third group argues that corporate dividend policy has no impact on firm value. The first group stated that any dividend payments lead to an increase in the firm's share prices, and this will raise the firm's value; the second group argued that any dividend payments reduce the firm's share prices, and this will reduce the firm's value. However, the third group indicated that the corporate dividend policy neither has an impact on the firm share prices nor on its value (Manos 2001).

Previous studies on dividend policies vary in their focus. Some of these studies investigated the effect of dividends on stock prices, and others investigated the effect of retained earnings on stock prices. At the same time, it can be noted that few studies have investigated the effect of retained earnings on firm value. For example, Harkavy (1953) explored the relationship between retained earnings and stock prices and found that stock prices tend to vary in a straight line with the ratio of distributed earnings at any given point in time. The results also revealed that the price of a firm's stock with a high retained earnings ratio has risen more than the price of a firm's stock that has a low retained earnings ratio. Friend and Puckett (1964) explored the impact of dividends and retained earnings on stock prices. Their results showed that the effect of dividends on stock prices is much greater than the retained earnings effect in three sectors, which is in contrast to Harkavy (1953). Friend and Puckett (1964) found that earnings retention is more critical than dividends for growth industries, and accordingly, they argued that business executives should raise dividend payments to improve stock values and allow existing investors to retain their investments or attract new investors.

In an Indian study, Ojha (1976) tested the effect of earnings, retained earnings, and dividends on the share prices of 14 large-sized cotton textile companies over the period 1960–1961. The findings showed that dividends were the most affected variable on share prices, and any increase in earnings joined with a decrease in dividends will reduce share prices, and any decrease in earnings associated with or maintained with an increase in dividends will increase share prices. Further, the results indicated that retained earnings do not increase share prices. Nishat (1992) investigated the effect of retained earnings and dividends on stock prices for all the Pakistani companies in ten major industrial companies listed on the Karachi Stock Market over the period 1981–1986. The results indicated a positive significant effect for retained earnings and dividends on stock prices for all cases. However, it is noticeable that the dividend effect is higher than the retained earnings effect.

Marsh and Power (1999) examined the relationship between stock prices and dividends for a panel sample of 56 large UK companies from January 1968 to December 1996, and their findings show that share prices and dividends are co-integrating. With a sample of 3890 observations from 1988 to 1993, Conroy et al. (2000) tested the pricing effects of instantaneous earnings and dividend announcements in the Japanese market. They indicated the effect of earnings on dividends and showed that earnings announcements can provide the markets with enough information to make the dividends appear as an additional indicator. They also revealed that dividend expectations provide additional information about future earnings. In Malaysia, factors influencing dividend policies and payout ratios are being investigated. The smoothness of present and potential earnings, and past dividend routine, according to Al-Twaijry (2007), are the most relevant factors in dividend policy. According to a cross-sectional study of 300 publicly traded Malaysian companies, old companies pay higher dividends than new companies.

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The payout ratio and dividend policy affect the future value of a company. The payout ratio of a company is negatively correlated with future earnings growth. They also discovered that a firm's dividend and net earnings had a distorted relationship. On selected samples from the Dhaka Stock Exchange, Misir and Huq (2007) investigated the significance of retained earnings and dividends. Their results indicated that dividends explain stock price variation better than retained earnings. A negative relationship between firm size and the dividend was found by Ahmed and Javid (2008). They clarified that when a company's size grows, so does its investment in assets, and as a result, dividends decrease. They discovered no connection between a company's growth and its dividend payout. Ahmed and Javid (2008) argued also that when companies decrease their dividend payouts, it creates a liquidity problem. According to Khan (2012), the stock dividend has a major positive relationship with stock market prices, and it also explains the variations in the stock prices of Pakistan's chemical and pharmaceutical sectors. However, the Retention Ratio and Return on Equity have a negative and insignificant relationship with stock prices.

In their study in the Jordanian context, AlTroudi and Milhem (2013) tested the effect of cash dividends and retained earnings on stock prices and used earnings per share and financial leverage as control variables. The study included all the Jordanian industrial firms listed on the Amman Stock Exchange for the period from 2005 to 2010 using unbalanced panel data. According to the findings, the stock price was significantly and positively affected by cash dividends, retained earnings, and earnings per share. However, the stock price was insignificantly affected by financial leverage. Hunjra et al. (2014) tested the effects of dividend yield, dividend payout ratio, return on equity, earnings per share, and profit after tax on Pakistani stock prices for a sample of 63 non-financial companies listed on the Karachi Stock Exchange over the years 2006–2011. According to the findings, the dividend yield is negatively related to stock price, while the dividend payout ratio is positively related to stock prices, contradicting the dividend irrelevance hypothesis.

Other independent variables that have a substantial positive effect on stock prices include profit after tax and earnings per share, as well as return on equity, which has a positive but negligible impact on the stock price. By looking into the factors that influence dividend payouts of Pakistani companies listed on the financial sector of the Karachi Stock Exchange, Saeed et al. (2014) discovered a negative relationship between dividend payouts and the size of the company. If a company grows in size, the payout decreases. They discovered a positive but negligible correlation between a company's liquidity and its payout ratio. If a company's earnings rise, so does its ability to pay. If a company's earnings grow, so does its ability to pay dividends. They also discovered a connection between a company's cash flow and dividend payouts.

Chowdhury and Jannatunnesa (2017) found that firm size has a significant negative relationship with dividend payout and that last year's dividend has a significant positive relationship with dividend payout in an analysis of pharmaceuticals and chemical companies listed on the Dhaka Stock Exchange. Dividend payout, on the other hand, is unaffected by a company's rise, liquidity, profitability, or P/E ratio. The findings may have significant consequences for improving investor attitudes, which could help them make better investment decisions in the industries studied. In a recent Nigerian study, Yemi and Akinadewo (2018) tested the retained earnings per share effect and the dividend per share effect on the firm value represented by the Tobin Q ratio and market-to-book ratio using earnings per share, leverage, size, age, return on assets, liquidity, and tangibility as control variables for a sample of 75 non-financial Nigerian listed firms over the period 2003–2014 by employing two firm value models using unbalanced panel data. The findings showed that the Tobin Q ratio and market-to-book ratio were affected positively and significantly by retained earnings, dividend per share, earnings per share, age, return on assets and liquidity. However, size, tangibility, and leverage indicated a negative significant effect on the Tobin Q ratio and market-to-book ratio.

One of the most fundamental decisions that firms need to make is how to allocate their profits between paying dividends to shareholders and retaining earnings for future

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investments (Zimon et al. 2021; Hartono and Robiyanto 2023). Several studies have investigated the relationship between dividend policy and firm value, with mixed results. For example, some studies suggest that paying dividends increases firm value by signaling positive future prospects to investors and reducing agency costs between managers and shareholders (Yusra et al. 2019; Ananzeh et al. 2022; Abu Suileek and Alshurafat 2023). Other studies, however, argue that retaining earnings can be more beneficial for firms in the long run by enabling them to invest in profitable projects and increasing their financial flexibility (Wahjudi 2020; Ananzeh et al. 2021; Dahmash et al. 2021; Alshurafat et al. 2022).

According to a review of the previous literature, it is noted that most of the prior studies investigated the effect of dividend per share and other dividend payout ratios on share prices, and this included either one industry sample or more compared to a lower number of prior studies that investigated the effect of earnings retention ratios on share prices (Nishat 1992; Marsh and Power 1999; Al-Twaijry 2007; Misir and Huq 2007; Ahmed and Javid 2008; AlTroudi and Milhem 2013; Hunjra et al. 2014; Saeed et al. 2014; Chowdhury and Jannatunnesa 2017). Even though the literature has clarified the important role of retained earnings, there are still few studies that have investigated the impact of the retention per share ratio compared with the dividend per share ratio on the firm value, which is still unexplored in emerging markets and requires more research (Yemi and Akinadewo 2018).

Accordingly, this study examines and compares the effect of retention per share and the dividend per share ratio on the firm market value that have been adopted from other previous studies (Harkavy 1953; Friend and Puckett 1964; Ojha 1976; Nishat 1992; Misir and Huq 2007; AlTroudi and Milhem 2013; Yemi and Akinadewo 2018). In this study, all sectors are covered using recent data from Jordan. The aim is to explore this context more deeply and to establish whether these results agree or disagree with the findings of previous studies, especially those on emerging markets.

This study aims to examine and compare the effect of the retention per share ratio and dividend per share ratio by modeling the firm market value represented by the Tobin Q ratio as a function of the retention per share ratio and dividend per share ratio for all the Jordanian firms listed on the Amman Stock Exchange during the period 2010 to 2021. So, the following hypotheses will be formulated to achieve the goal of this study:

**H01.** There is no significant statistical effect of a firm's retention per share ratio on the Tobin Q ratio for Jordanian firms.

**H02.** There is no significant statistical effect of a firm's dividend per share ratio on the Tobin Q ratio for Jordanian firms.

## 3. Methodology

All firms listed on the Amman Stock Exchange from 2010 to 2021 were covered in this study. The number of firms during the twelve years varied from year to year because firms can enter and exit during the study period. The initial sampling started with 2670 observations and ended with 2281, selected according to the following process (Table 1).

**Table 1.** The selected sample.

Years	2010–2021
The initial number of company years	2670
Less	
companies with delisted, unavailable, or missing data	294
Top and bottom 2%	95
Sample company years	2281

This study investigates the effect of retention per share ratio and dividend per share ratio on Tobin Q. These factors and their measurements are presented in Table 2.

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**Table 2.** Study variables and their measurement.

Variable	Measurement
Tobin Q RPS DPS	The market value of equity + book value of debt divided by book value of total assets  The ratio of retained earnings divided by number of shares outstanding  The ratio of cash dividends divided by number of shares outstanding

The firm market value is modeled as a function of the retained earnings per share and cash dividends per share.

This model is tested by using panel data characterized by controlling unobservable variables, control variables changed over time, and reducing any possible collinearity between independent variables (Alasfour and Dahmash 2019).

The estimated regression equation of this study is as follows:

Tobin Q it = 
$$\beta_0$$
 it +  $\beta_1$ RPS it +  $\beta_2$ DPS it +  $\varepsilon$  it, (1)

where Tobin Q—Tobin Q ratio, RPS—retained earnings per share, DPS—dividends per share,  $\beta_0$ —constant, — $^{\varepsilon}$ —error term, and  $\beta_2$ —slopes.

#### 4. Results

Table 3 presents the summary statistics of the main pooled sample variables of this study.

**Table 3.** Summary statistics.

Variable	Mean	Std Dev	Min	Max
Tobin Q	1.054	0.707	0.021	7.605
RPS	0.242	0.979	-2.652	9.042
DPS	0.054	0.155	0	2.200
7/ (2010 2021) 3.T	2201			

Years (2010–2021), N = 2281.

Table 3 reveals a moderated mean Tobin Q of 1.054 and a moderate standard deviation of 0.707. Retained earnings per share have a low mean value of 0.242 and moderated standard deviation of 0.979. The mean value of dividends per share is the lowest and equal to 0.054, with a low standard deviation of 0.155.

The multicollinearity analysis between the two independent variables of retained earnings per share and dividends per share is performed using the variance inflation factor (VIF) method (see Table 4).

Table 4. Multicollinearity analysis.

Variables	Variance Inflation Factor (VIF)
RPS and DPS	1.362

According to Myers (1990), there is no multicollinearity problem between the independent variables for any VIF value less than 10.

Table 4 shows that all VIF values are less than 10. This indicates that there is no existence of the multicollinearity problem.

This study used panel data and adopted Hausman's test to choose whether the fixed effect estimator model or the random effect estimator model is more appropriate to test the model presented in Equation (1) (Hausman 1978). Table 5 summarizes the results of this test.

Table 5. Hausman's test results.

Chi-Square Value	Chi-Square d.f.	<b>Probability Value</b>
44.025	2	0.000

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These results show a probability value of 0.000. As this value is less than the cutoff of 0.05, the fixed effect estimator model is selected as a more appropriate estimation method.

# Results of the Model

Table 6 presents the regression analysis results of the adopted model from Equation (1) for the pooled sample and the other two sub-samples. To overcome any heteroscedasticity problem, this study used an unbalanced panel regression analysis (White 1980).

Table 6. Determinants of firms' market value: pooled data and the other two sub-samples.

Sample	Main Pooled	First Sub-	Second Sub-
	Sample	Sample	Sample
Years	(2010–2021)	(2010–2015)	(2016–2021)
Number of observations	2281	1156	1125
Constant C (M)	0.946 *	0.990 *	0.946 *
t-statistic (Ho: 0)	(32.625)	(20.530)	(28.481)
<i>p</i> -value	0.000	0.000	0.000
RPS	-0.075 *	-0.039 *	-0.081 *
t-statistic (Ho: 0)	(-4.055)	(-2.178)	(-2.768)
<i>p</i> -value	0.000	0.030	0.006
DPS	2.361 *	1.701 *	2.072 *
t-statistic (Ho: 0)	(4.237)	(2.144)	(2.941)
<i>p</i> -value	0.000	0.032	0.003
Adjusted R Square	0.621	0.667	0.694
F-Statistic	0	0	0
Akaike information criterion	1.256	0.912	1.353

<sup>\*</sup> Indicated a significant effect at 0.05 level.

Table 7 shows that the results of the second analysis of the new financial and non-financial sub-samples are also similar and consistent with the main pooled sample results.

**Table 7.** Determinants of firms' market value: financial firms sample, non-financial firms sample, and M/B pooled sample.

Sample	Financial Firms	Non-Financial Firms	M/B Pooled
Sumple	Sample	Sample	Sample
Years	(2010–2021)	(2010–2021)	(2010–2021)
Number of observations	1118	1163	2198
Constant C (M)	0.897 *	1.101 *	0.993 *
t-statistic (Ho: 0)	(42.103)	(46.624)	(19.277)
<i>p</i> -value	0.000	0.000	0.000
RPS	-0.060 *	-0.123 *	-0.118*
t-statistic (Ho: 0)	(-1.921)	(-4.608)	(-3.869)
<i>p</i> -value	0.055	0.000	0.000
DPS	1.305 *	1.499 *	3.146 *
t-statistic (Ho: 0)	(3.176)	(7.406)	(3.422)
<i>p</i> -value	0.002	0.000	0.000
Adjusted R Square	0.244	0.128	0.521
F-Statistic	0	0	0
Akaike information criterion	1.728	2.238	2.447

<sup>\*</sup> Indicated a significant effect at 0.05 level.

## 5. Discussion

Table 6 indicates a significant low negative statistical effect of a firm's retention per share ratio on Tobin Q. This result looks interesting but it is still approximately similar to the results of some previous studies in other countries (e.g., Ojha 1976; Khan et al. 2011; Khan 2012), which indicated a negative or insignificant relationship between retention per

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share with stock prices, and which argued that the retained earnings have an insignificant negative effect on share prices, and any increase in earnings joined with a decrease in dividends will reduce firm's share prices, and any decrease in earnings associated with an increase in dividends will increase firm's share prices. Further, this weak negative relation indicated that Jordanian investors either prefer cash dividends as a short-run strategy rather than any risky future capital gains from retained earnings or perhaps they believe that there are few profitable opportunities in the firm, and accordingly they prefer to look for other investment opportunities outside the firm (Khan 2012).

However, this result is contrary to some previous results that argued that investors believe that any wisely reinvested earnings in any future opportunities by the company's management are more useful to them in the long run compared to dividends, and this will lead to an increase in the value of the company's stocks (Harkavy 1953; Droms 1990; Thirumalaisamy and Al Baloushi 2017). In addition, the results of other previous studies indicated a significant positive effect of retention per share on share prices (e.g., Harkavy 1953; Friend and Puckett 1964; Nishat 1992; Misir and Huq 2007; AlTroudi and Milhem 2013). Similarly, Yemi and Akinadewo (2018), who tested the effect of retention per share on a firm's Tobin Q ratio, found a significant positive effect of retention per share on a firm's Tobin Q ratio. Accordingly, the first null hypothesis (H01) is rejected because there is a negative significant effect of a firm's retention per share ratio on the Tobin Q ratio for Jordanian firms. The regression analysis results show that 62.1% of the variability in the market value of the Jordanian firms can be explained by the two explanatory variables of the model. This adjusted R-square value is approximately similar to studies that indicated an adjusted R-square value of 46% (Yemi and Akinadewo 2018).

Table 6 indicates a positive significant effect of dividend per share on a firm's Tobin Q ratio. This result is consistent with many previous studies which tested the effect of dividend per share on a firm's share prices (e.g., Harkavy 1953; Friend and Puckett 1964; Ojha 1976; Nishat 1992; Misir and Huq 2007; AlTroudi and Milhem 2013; Hunjra et al. 2014). The previous result is also consistent with Friend and Puckett (1964), who argued that a firm's management should raise dividends to improve stock values. Similarly, Yemi and Akinadewo (2018), who tested the effect of dividends per share on a firm's Tobin Q ratio, found a significant positive effect of dividends per share ratio on a firm's Tobin Q ratio. This positive effect of the dividend per share on a firm's Tobin Q ratio is also consistent with the theoretical literature on corporate dividend policy, which stated that any dividend payments lead to an increase in the firm's share prices, and this will raise the firm's value (Manos 2001). The existence of a good opportunity for firms to invest will encourage their managements to reduce dividends in order to increase cash flows to fulfill these investments, and this action might be considered bad news for investors, whereas on the contrary, paying specific dividends is mostly considered as good news for investors in that there are good earnings in the present, and this will minimize any agency problems and raise the value of the firms (Besley and Brigham 2008). The previously noted positive effect of dividend per share also indicates that investors prefer cash dividends as a short-term strategy rather than any risky future capital gains from retained earnings as a long-term strategy, and there are many Jordanian firms that regularly raise dividend payments in spite of their low net income to meet the expectations of their investors and improve stock values, and this behavior will positively affect the market value of the firm (Friend and Puckett 1964).

In contrast, the results of some other previous studies revealed an insignificant effect of dividend per share on a firm's share prices (e.g., Khan et al. 2011).

Hence, the second null hypothesis (H02) is rejected since there is a significant positive statistical effect of the dividend per share ratio on the Tobin Q ratio for Jordanian firms.

Another three analyses were performed for the sake of robustness. The first analysis was performed by dividing the main pooled sample into two equal periods sub-samples. The first sub-sample covers the period 2010–2015 and the second sub-sample covers the period 2016–2021. The second analysis was performed by dividing the main pooled sample

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into another two sub-samples covering the twelve-year period. The first new sub-sample was for financial firms and the second new sub-sample was for non-financial firms. The third analysis entailed analyzing the effect of the same two explanatory variables on the market-to-book ratio as a proxy for the firm value. The final number of observations for the new pooled sample was 2198 after excluding missing and unavailable data. Table 6 shows that the analysis results for the retention per share ratio and the dividends per share ratio for the two equal sub-samples of the first analysis are still similar and consistent with the main pooled sample results, and this includes the adjusted R-square value of the models.

The analysis of the new third sub-sample indicated similar and consistent results for the effect of the retention per share ratio and the dividends per share ratio on the market-to-book ratio as a proxy for the firm value.

### 6. Conclusions

The aim of this study was to investigate the effect of the retention per share ratio compared to the dividend per share ratio by modeling the firm's market value represented by the Tobin Q ratio as a function of retention per share ratio and dividend per share ratio for an integrated sample of firms listed on the Amman Stock Exchange from 2010 to 2021. An extended analysis for further robustness was undertaken by dividing the main pooled sample into two equal sub-samples and also by dividing the main pooled sample into two other two sub-samples for the financial and the non-financial firms.

The pooled sample showed a low negative statistical effect of a firm's retention per share on Tobin Q. However, Tobin Q was significantly and positively affected by dividends per share. The other extended sub-samples had similar results and were consistent with the main pooled sample results. These results indicated that in spite of the vitally important role of retained earnings for investors, Jordanian investors either prefer cash dividends as a short-run strategy or perhaps they believe that there are few profitable opportunities in the firm, and accordingly they prefer to look for other investment opportunities outside the firm.

There are several limitations in this study, including that these results are specific to the Jordanian context, so it might not be possible to generalize them to consider other emerging market contexts. Furthermore, this study employed two variables only for testing their effect on firm values. Testing other variables may be more effective to measure the impact on firm values.

Based on the results of this study, several recommendations emerge. Corporate management should consider the most positive effects of dividends per share on the firm value basically by managing their dividend policies through paying specific dividends regularly and smoothly even if they retain part of their earnings. Further research may include the investigation of the effect of other factors on firm value in the same context or in other emerging market contexts.

The importance of this study comes from investigating the expected role of the retained earnings as an underlying source of value for the company's common stock because retained earnings provide the company with the required cash flows to pay dividends, and therefore, the company's ability to produce cash flows will affect the market value of its common stocks. Furthermore, the sum of retained earnings has become another indicator to evaluate management effectiveness in bringing about change in the market value of their firms. That is, shareholders also recognize the degree to which companies use retained earnings as part of their investment parameters and consider this in assessing any added value contributed by retained earnings in terms of business growth, net asset value, and capital gains (Yemi and Akinadewo 2018). Hence, this study is expected to clarify to Jordanian researchers, investors, and firm managers whether investors prefer retained earnings or dividends and the reasons for this preference, so that Jordanian firms' management teams can take into consideration investors' preferences in their financial policies.

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