

Effect of Digital Dividend Announcements Under Information Asymmetry Evidence from Iraq Stock Exchange

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Abstract: This research aims to identify the impact of announcing the digital distribution of profits in light of the information asymmetry. The research was applied to a sample of Iraqi-listed companies on the Iraq Stock Exchange. The sample included (8) companies from various sectors; the method of studying the event was used by analyzing the digital data for the years 2020 and 2021 and adopting the forecasting method to identify the future effects of the dividend on investors and adopting digital decisions; the research reached a set of conclusions, the most important of which is that extraordinary returns can be achieved depending on the digital informational content as There is a statistically significant effect of a divider decision in the asymmetry of information. In addition, the study provides empirical evidence on how dividend announcements influence investor expectations and stock price behaviour in an emerging financial market. The findings indicate that dividend distribution announcements act as informative signals that may guide investors when evaluating company performance and future profitability. By examining abnormal returns surrounding the announcement period, the study highlights the importance of transparent financial disclosure in reducing uncertainty and supporting more efficient investment decisions in the Iraq Stock Exchange.

1 INTRODUCTION

The dividend decision is one of the main decisions made by the company's board of directors, along with financing and investment decisions, due to its impact on the company's stock value and shareholders' wealth [1]. The board of directors has two options regarding the realized profits: retain or distribute earnings to shareholders. Both options have different effects on stock prices [2]. Therefore, the company must make decisions that balance these two options. The announcement of dividend distribution itself represents an important decision for the company because it is one of the indicators of profit realization on the one hand, and it affects investors' future expectations towards the company on the other hand.

2 RESEARCH METHODOLOGY

This study uses scientific research framework, which included the research problem, importance of the research, research objectives, hypotheses, spatial boundaries, and method of data collection, as follows:

2.1 Research Problem

The announcement of dividend distribution represents a critical corporate decision, as it reflects the realization of profits on one hand and influences investors' expectations on the other. Investor reactions to dividend announcements in the stock market are often heterogeneous due to differences in behavior, preferences, and expectations regarding corporate financial policies.

Specifically, investors respond differently depending on their investment objectives, whether income-oriented or growth-oriented. Income investors tend to favor dividend-paying firms and may increase demand for such stocks, whereas growth-oriented investors may interpret dividend distribution as a reduction in retained earnings and future investment opportunities, potentially leading to negative market reactions. In both cases, investor behavior is largely driven by available financial information and perceived informational content of dividends.

Given the existence of information asymmetry and its implications for investment decisions, it is necessary to examine the informational content of

dividend announcements and their impact on shareholder behavior and expected returns. Accordingly, the research problem can be formulated through the following questions:

- Does the announcement of dividend distribution contribute to abnormal returns?
- Does the informational content of dividend decisions mislead investors?
- Is there a time lag between dividend announcements and stock price reactions?

2.2 Research Objectives

The study aims to:

- Analyze the impact of information asymmetry on stock prices and its reflection on investment decisions.
- Evaluate actual and expected returns of selected companies in the Iraqi Stock Exchange during the study period, focusing on dividend announcements as key events.
- Measure information asymmetry through abnormal returns for the selected sample of listed companies.

2.3 Research Significance

The significance of this study is highlighted as follows:

- Dividend decisions are crucial for both corporate management and investors in determining investment strategies, including holding or divesting shares.
- Dividend disclosures contribute to reducing information asymmetry between management and shareholders, thereby improving decision quality.
- Dividend announcements provide signals regarding whether a firm is in a distribution phase or a growth phase financed through retained earnings.
- The informational content of earnings enables investors to make more rational decisions by analyzing corporate disclosures.
- Understanding earnings information plays an important role in mitigating the adverse effects of information asymmetry on investors.

2.4 Research Hypotheses

Based on the research problem, the following hypotheses are formulated:

- H1: Abnormal returns can be generated based on the informational content of earnings.
- H2: Dividend per share announcements reduce information asymmetry.
- H3: Dividend decisions have a statistically significant effect on information asymmetry.

Table 1: Financial methods for research sample.

The equation	Summary
$DPS = \frac{D}{N}$	Dividend Per Share (DPS) Distributable Income (D) Number of Shares (N)
$DPR = \frac{DPS}{EPS}$	(DPR) Dividend Payout Ratio (EPS) Earnings Per Share (DPS) Dividend Per Share
$EPS = \frac{NI}{N}$	Earnings Per Share (EPS) Net Income (NI) Number of Shares (N)
$AR_{jt} = R_{jt} - ER_{jt}$	Abnormal stock return (AR _{jt}) Actual stock return (R _{jt}) Expected stock return (ER _{jt})
$R_{jt} = \frac{P_1 - P_0}{P_0}$	Actual return on stock returns (R _{jt}) Closing price for the day (P ₁) Closing price for the previous day (P ₀)
$R_{jt} = a_j + B_j R_{mt} + \epsilon_{jet}$	Expected return on the stock (R _{jt}) Market return (R _{mt}) Market model constants (a _j B _j) Random error (ε _{jet})
$CAR = \sum AR_{jt}$	(Cumulative Abnormal Return) CAR (Abnormal Return) AR _{jt}

2.5 Research Limitations

This study is subject to specific spatial and temporal boundaries that define the scope of analysis and ensure the consistency of the research data.

- Spatial limitation: The study population is the Iraqi Stock Exchange, while the sample consists of six companies across five sectors, including industry, telecommunications, and banking, ensuring sectoral diversity.
- Temporal limitation: The study covers the period 2020–2021.

2.6 Financial and Statistical Method

The study employs a set of appropriate financial and statistical techniques for data analysis, as summarized in Table 1.

3 THEORETICAL ASPECTS

3.1 The Concept of Profits

Profits represent a measure of the effectiveness of the company's operational, financial, and investment policies, as well as the decisions related to these policies. They are one of the critical variables in evaluating common stocks and company value in financial markets. The prices of common stocks in the financial market reflect the market's evaluation of expected profits over time and the risk associated with those future profits [3]. Economists indicate that profit represents the difference between revenues and total costs and distributive expenses incurred by the establishment when producing its goods [4]. The investor who wants to profit must consider saving and risk-taking, two essential elements of economic development. Finally, profitability forms a measure by which business people can gauge their achievements and justify their compensation claims. Given all these fundamental economic functions, one might assume that users of financial data have long established a globally agreed-upon definition of profit [5]. This is the case only at the primitive level: Profit = Revenue - Costs. Accounting profits are divided into two main types [6]:

- Permanent profits. Permanent profits, also known as Sustainable Earnings, Core Earnings, or Operation Earnings, represent the profits generated from regular activities after deducting all expenses and charges related to the company's everyday operations from the company's revenues.

- Temporary profits. Temporary profits refer to profits realized from non-routine activities of a business enterprise which are not directly related to the core and daily operations of the establishment. Instead, they are associated with temporary administrative, legal, or economic factors that are unexpected or difficult to predict.

3.2 Dividend Distribution and Dividend Declaration

The cash payments received by shareholders are called dividends. It refers to the funds paid to company shareholders from realized profits, not other revenue sources. This portion of profits is distributed to shareholders according to each investor's contribution to the company's capital. It is the tangible return shareholders receive on their investments in their company shares. These distributed profits represent a current income many shareholders expect and anticipate spending on their consumption of goods and services. It also represents a percentage of realized profits that the company's management distributes to shareholders [7].

Declaring dividend distribution is considered one of the most anticipated corporate actions. However, it is characterized by difficulty in decision-making due to its direct impact on investors seeking to achieve high profits from the distribution process. This requires working to create a balance between distributed and retained earnings [8]. The announcement of dividend distribution is considered one of the most critical financial decisions affecting the level of financial performance or comes into importance after investment and financing. It is considered an administrative option for the board of directors based on the company's financial policy. The dividend distribution policy also signals current and potential investors about the company's position and performance [9]. Investors have high sensitivity regarding profits and related information and use it as a tool to evaluate the company's performance. This significantly affects stock prices across various sectors, influencing trading based on stock prices. Investors' inefficient market conditions react significantly and quickly to dividend distribution announcements. The increase in trading of companies that perform stronger than others at a given moment and have better prospects may increase investor interest, potentially raising the company's stock price [10].

3.3 Information Asymmetry

3.3.1 Concept of Information Asymmetry

The lack of equal information availability between investors and company management makes investors' decisions more susceptible to improper allocation of economic resources. It also leads to the realization of interests for some parties, especially insiders, at the expense of other stakeholders through their early knowledge of information about company performance, which negatively impacts other stakeholders. Additionally, external parties cannot evaluate the company's performance and whether it has achieved its objectives, thus creating a gap between company management and external parties [11]. In general, studies indicate that there is no complete agreement on a unified definition of information asymmetry [12], [13]. Despite the widespread occurrence of information asymmetry in practical reality, the review of the concept lacks systematic evaluation and a specific level of knowledge about information asymmetry as a managerial concept. Instead, understanding information asymmetry relies on isolated subfields and different theories, and the interpretation and application of the concept are subject to contradictions [14]. Although the availability of information can improve decision-making, this information may be ineffective in the case of asymmetry [15]. In addition, it impacts producers' behaviour, how they deal with information, and administrative reasons [16].

3.3.2 Measures of Information Asymmetry

The topic of measuring information asymmetry revolves around measuring a company's value, profits, and returns on its securities [17], [18]. The basis for measuring information asymmetry goes back to Bagehot's (1971) idea, which states that "adverse selection causes the existence of better-informed traders in the financial market, leading to their influence on the company's stock price". The measures of information asymmetry are multiple and varied, including those based on the accuracy of financial analysts' predictions, measures based on available investment opportunities, and market-based measures, as detailed in the following:

- Measure of the accuracy of financial analysts' predictions. These measures indicate an inverse relationship between the accuracy of financial analysts' predictions and the degree of information asymmetry. Financial analysts

make less accurate predictions in cases of increased information asymmetry, resulting in errors in the estimation process [19], [20].

- Volume Metrics. There is an inverse relationship between trading volume and information asymmetry. Trading volume indicates the level of demand in the financial market for buying and selling securities [21].
- Bid and Ask Spread Measures. This measure refers to the difference between the highest price for stocks when buying and the lowest price when selling. The more significant the difference between the highest and lowest price, the more it indicates the presence of information asymmetry. In practice, the price range takes one of the following two forms [22]: Absolute price range (highest bid - lowest ask) and Relative price range $[(\text{highest bid} - \text{lowest ask}) / (\text{highest bid} + \text{lowest ask}) / 2]$.

Measures of profitability of inbound trading is positively related to information asymmetry. Information asymmetry leads to significant profits for internal parties as long as stocks are the primary commodity traded in the stock market, representing the following paper that gives the right to participate in income and assets. Therefore, investors seek companies with good investment reputations characterized by transparency and maximizing returns. They search for the optimal time to acquire them and predict their prices in light of information asymmetry [23].

4 PRACTICAL ASPECT

This section will present the analysis results for all companies within the study sample for the event period (+20, -20) and the period (2020-2021). Regression analysis and T-test were used to identify the impact and difference in abnormal and cumulative return values starting from the event day and for every 5 days, selecting the periods (-20, -15, -10, -5, +5, +10, +15, +20).

4.1 Iraqi Company for Carpets and Furnishings

Table 2 presents the average abnormal return and cumulative average abnormal return for the shares of the Iraqi Company for Carpets and Furnishings during the event window (-20, +20) days from the date of the dividend distribution announcement for the year 2020, the results show that the dividend

announcement was negative at the beginning of the period in returns before the event for the period (-20, -15) and positive in the period (-10, -5). This is also evident from the value of the average abnormal return on the announcement day, which appeared hostile and reached (-0.03784), in addition to the cumulative average return being negative with a value of (-0.06071). After the event, the average abnormal return was positive for the periods (+5, +10, +15, +20). The effect of the dividend announcement was statistically significant for the periods (-5, +10), as the significance level value was less than (0.05), indicating the significance of the effect. Regarding the year 2021, the results show that the dividend announcement was positive at the beginning of the period before the event in returns for the period (-20, -15, -10, -5). Also, the value of the average abnormal return on the announcement day appeared hostile and reached (-0.04651), in addition to the cumulative average return being negative with a value of (-0.02134). The average abnormal return was negative after the event (+5, +10) and positive in the period (+15, +20). The effect of the dividend announcement was not statistically significant as the significance level value was greater than (0.05).

4.2 Ready-Made Garments Production Company

Table 3, which shows the average abnormal return and cumulative average abnormal return for the

shares of the Ready-made Garments Production Company during the event window (-20, +20) days from the date of the dividend distribution announcement for the year 2020, the results show that the dividend announcement was positive at the beginning of the period in returns before the event for the period (-20, -15) and negative in the periods (-10, -5). It also appears hostile in the value of the average abnormal return on the announcement day, reaching (-0.04957), and the cumulative average return was also negative (-0.02279). After the event, the average abnormal return was negative for the periods (+5, +10, +15) and optimistic after the event (+20). The impact of the dividend announcement was statistically significant for the periods (-15, -10), as the significance level value was less than (0.05), indicating the significance of the impact. As for the year 2021, the results show that the dividend announcement was positive at the beginning of the period before the event in returns for the period (-20, -15, -10) and negative in the period (-5). Also, the value of the average abnormal return on the announcement day appeared hostile, reaching (-0.24001), and the cumulative average return was negative, reaching (-0.10072). After the event, the average abnormal return reached positive values for the period (+5, +10, +15, +20), and the impact of the dividend announcement was statistically significant in the period (+20), as the significance level value was less than (0.05), indicating the significance of the impact.

Table 2: Average abnormal return and cumulative for shares of iraqi company for tufted carpets and covering (+20, -20) daily period (2020-2021).

2020						
Today	Abnormal Return	Cumulative Return	SD	T	P	Significance
-20	-0.0011	-0.0409	0.039	1.37	.265	Not significant
-15	-0.0017	-0.0443	0.032	1.49	.175	Not significant
-10	0.0004	-0.0587	0.0379	1.36	.198	Not significant
-5	0.0124	-0.0722	0.046	2.26	.037	Significant
0	-0.0378	-0.0607				
5	0.0008	-0.0456	0.0219	2.12	.125	Not significant
10	0.0024	-0.0388	0.0191	2.32	.049	Significant
15	0.0043	-0.0286	0.0167	1.78	.098	Not significant
20	0.0031	-0.0201	0.0146	1.05	.307	Not significant
2021						
-20	0.0013	-0.0842	0.0488	2.34	.101	Not significant
-15	0.0144	-0.0785	0.0489	-1.46	.184	Not significant
-10	0.02358	-0.0016	0.0398	.733	.476	Not significant
-5	0.0013	0.0382	0.0259	1.03	.317	Not significant
0	-0.0465	-0.0213				
5	-0.0430	-0.1587	0.0082	-1.97	.143	Not significant
10	-0.0046	-0.1280	0.0495	.817	.438	Not significant
15	0.0036	-0.0906	0.0434	1.59	.135	Not significant
20	0.001	-0.064	0.0390	1.15	.264	Not significant

Table 3: Average abnormal return and cumulative for ready-made clothes (+20, -20) daily (2020-2021).

2020						
Today	Abnormal Return	Cumulative Return	SD	T	P	Significance
-20	0.001	0.043	0.038	2.642	.078	Not significant
-15	0.008	0.064	0.04	2.639	.030	Significant
-10	-0.008	0.07534	0.04715	2.450	.029	Significant
-5	-0.013	0.04879	0.04699	1.661	.114	Not significant
0	-0.049	-0.023				
5	-0.024	-0.119	0.027	-1.067	.364	Not significant
10	-0.017	-0.155	0.02834	-0.832	.430	Not significant
15	-0.01	-0.166	0.033	-0.233	.819	Not significant
20	0.001	-0.143	0.037	1.746	.098	Not significant
2021						
-20	0.007	0.052	0.04	1.207	.314	Not significant
-15	0.011	0.076	0.05	-0.838	.426	Not significant
-10	0.021	0.142	0.05	.657	.523	Not significant
-5	-0.012	0.165	0.0197	.979	.340	Not significant
0	-0.240	-0.101				
5	0.030	0.003	0.10	1.342	.272	Not significant
10	0.017	0.0299	0.07	1.407	.197	Not significant
15	0.009	0.03457	0.06146	1.673	.118	Not significant
20	0.005	0.027	0.05	2.119	.048	Significant

Table 4: Average abnormal return and cumulative for pepsi baghdad (+20, -20) daily (2020-2021).

2020						
Today	Abnormal Return	Cumulative Return	SD	T	P	Significance
-20	0.0017	-0.002	0.02692	2.845	.065	Not significant
-15	0.0072	0.01328	0.02878	1.703	.127	Not significant
-10	0.0001	0.020	0.0286	.790	.444	Not significant
-5	0.006	0.009	0.01577	1.69	.108	Not significant
0	-0.0177	0.018				
5	0.0074	0.045	0.04	.978	.400	Not significant
10	0.0040	0.044	0.029	1.658	.136	Not significant
15	0.0014	0.045	0.02	1.98	.069	Not significant
20	-0.0009	0.037	0.02	2.39	.028	Significant
2021						
-20	0.0048	0.053	0.02677	1.165	.328	Not significant
-15	0.006	0.075	0.029	1.19	.268	Not significant
-10	0.0049	0.084	0.029	1.036	.319	Not significant
-5	0.009	0.112	0.039	1.149	.266	Not significant
0	-0.0043	0.091				
5	0.007	0.146	0.026	.184	.866	Not significant
10	-0.0009	0.116	0.024	1.246	.248	Not significant
15	-0.0029	0.101	0.026	1.845	.088	Not significant
20	-0.005	0.081	0.02	1.85	.081	Not significant

4.3 Baghdad Soft Drinks Company

From reviewing Table 4, which presents the average abnormal return and the cumulative average abnormal return for Baghdad Soft Drinks Company shares during the event window (-20, +20) days from the dividend announcement date for the year 2020, the results show that the dividend announcement was positive at the beginning of the period in returns

before the event for the period (-20, -15, -10, -5). The average abnormal return value on the announcement day appeared hostile, reaching (-0.01771) with a positive cumulative return (0.01803). After the event, the average abnormal return was positive for the period (+5, +10, +15) and negative for the period (+20). The impact of the dividend announcement was statistically significant for the period (+20), as the

significance level value was less than (0.05), indicating the significance of the impact.

As for the year 2021, the results show that the dividend announcement was positive at the beginning of the period before the event in returns for the period (-20, -15, -10, -5). Similarly, the average abnormal return value on the announcement day appeared hostile, reaching (-0.00433), and the cumulative average return was positive, reaching (0.09147). Additionally, the average abnormal return was upbeat after the event (+5) and negative in the period (+10, +15, +20). The impact of the dividend announcement was not statistically significant, as the significance level value was greater than (0.05).

5 CONCLUSIONS

Dividend payouts can motivate investors to continue investing in companies, as they reduce information asymmetry and improve the accuracy of information available. This can lead to improved investment decisions for investors and increased company value. Dividend payouts can be used as a signal of the company's financial performance. Information represents an advantage for its owner and can be used to achieve positive results, such as acquiring opportunities or achieving abnormal returns. The results proved a statistically significant effect of the dividend decision on information asymmetry. The results showed statistically significant differences in the company's abnormal returns before and after the dividend. Furthermore, the results highlight the importance of improving disclosure practices and transparency within the Iraq Stock Exchange. Providing timely and clear information about dividend policies can help investors better evaluate company performance and reduce uncertainty in investment decisions. Strengthening regulatory frameworks related to financial disclosure may also contribute to minimizing information asymmetry, enhancing market efficiency, and supporting a more stable and attractive investment environment for both local and international investors.

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