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Corporate dividend policy in the time of COVID-19: Evidence from the G-12 countries

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ARTICLE INFO

JEL codes:
G1
G34
G35

Keywords:
COVID-19
Dividends policy
Signaling theory
Agency theory
G-12

ABSTRACT

This paper examines how the COVID-19 pandemic affects corporate dividend policy. Utilizing a sample of 8889 firms listed in the G-12 countries, the findings show that although the proportion of dividend cuts and omissions is significantly higher during the pandemic, yet the majority of firms could either maintain or increase dividends. By doing so, firms might aim to pursue more stable dividend policies and signal their financial prospects during the crisis, as posited by dividend signaling theory. Logit regression findings reveal that firm profitability, earnings prospects, size and leverage appear to be important determinants of dividend policy decisions during the pandemic.

1. Introduction

Since the pandemic was declared in early 2020, the world-wide toll resulting from the COVID-19 pandemic (approximately 194 M infections and 4.5 M deaths in 2021) has not stopped. Moreover, the severe strain from the COVID-19 crisis has impacted the global economy. For example, global stock market volatility increased sharply while the stock prices dropped aggressively amid an unprecedented disruption to the global economic prospects and world trade. As a result, a growing stream of literature has emerged, aiming at analyzing the adverse impact of uncertainty and fear related to the COVID-19 pandemic in different contexts, for example, stock market performances (Baig et al., 2021; Cepoi, 2020; Topcu and Gulal, 2020; Ashraf, 2021; Corbet et al., 2021), commodity and cryptocurrencies markets (Bakas and Triantafyllou, 2020; Conlon and McGee, 2020; Salisu et al., 2020; Amar et al., 2021), and primary equity markets (Baig and Chen, 2021; Mazumder and Saha, 2021).

Extant literature has also well-documented the adverse impact of crises on firms’ performance (e.g., lower profits, higher earnings volatility, and deteriorating stock prices). In this respect, dividend policies may be used by managers as a signal for reducing the information asymmetry via conveying positive information about firms’ long-run growth prospects (Baker and Wurgler, 2016; Hardy, 2021). From a theoretical prospective, asymmetric information and signaling models (e.g., Miller and Rock 1985, John and Williams 1985) suggest that the market perceives dividends as a signal that conveys new information about the firm’s future profitability as dividend increases indicate high long-run growth prospects and financial stability, while dividend cuts and omissions convey a negative signal of poor future profitability and earnings volatility. In related context, agency models of dividend policy imply that managers are particularly reluctant to reduce or cease dividends in response to earnings decline in order to maintain their personal benefits (Lambrecht and Myers, 2012). Consistently, MazurDang and Vo., 2020 find that the vast majority of S&P 1500 firms either maintain or increase dividends during the COVID-19 pandemic. However, empirical findings also show that during times of economic...
turbulence and increased uncertainty, firms could cut or cease dividends to keep extra cash held to enhance their resilience. For example, Hauser (2013) shows that the probability of paying a dividend decreased while the probability of a dividend cut increased during the 2008 financial crisis. Krieger et al. (2020) examine 213 cut dividends and 93 omitted dividends by US firms in the second quarter of 2020 and find that more increased dividend cuts during the COVID-19 pandemic, compared to the 2008 financial crisis. Hardy (2021) investigates the dividend payout restrictions among US banks during the COVID-19 pandemic, and reveals that authorities adopt dividend payout restrictions to enhance bank stability and provide capital for lending activities.

In this study, I argue that despite the adverse impact of the COVID-19 pandemic, firms will be more reluctant to cut or omit dividends to avoid conveying a negative signal about their long-run growth prospects. Rather, firms might tend to increase dividends to pursue more stable dividend policies in response to the crisis, and signal their financial prospects. Therefore, utilizing a sample of 8889 firms listed in the G-12 countries during the period (2015–2020), this paper aims at scrutinizing how the COVID-19 pandemic has affected corporate dividend policy. To do that, I firstly examine whether and how the pandemic has affected corporate dividend behavior. Secondly, I explore the determinants of this behavior via analyzing the characteristics of the different dividend-change groups. Then, I investigate the probability of dividend policy changes during the pandemic, and how firms’ attributes during this period can drive their dividend changes.

By doing so, this study contributes to the literature in several ways. First, I provide valuable evidence on how the pandemic affects the dividend policy since there is very little research on this subject. Moreover, these studies only focus on analyzing dividend cuts and omissions during the pandemic. Unlike these studies, I consider all types of dividend changes in the analysis, which provides a more complete picture and so a better understanding of corporate dividend policy decisions during the pandemic. The findings show that despite the severe turmoil triggered by the pandemic, the majority of firms could either maintain or increase dividends, with the aim to pursue a more stable dividend policies in response to the pandemic crisis. Theoretically, these findings are consistent with the view that firms will be more reluctant to decrease or cease dividends to avoid signaling bad news about future earnings, as implied by dividends signaling or to maintain their personal benefits, as proposed by the agency models (e.g., Lambrecht and Myers 2012). This evidence adds not only to the literature on the impact of COVID-19 on corporate policies and practices but also extends the overall literature on financial market crashes and crises. Second, via analyzing how the variations in corporate dividend policy among firms are driven by the variations in their attributes during the pandemic, this study adds to our understanding of the determinants of dividends payout policy, especially during periods of economic turbulence. Third, conducting this study using a large-scale sample of firms from the largest economies worldwide allows for providing out-of-sample tests in different context beyond only the US or a single country setting. The paper proceeds as follows. Section 2 describes the data and methodology. Then, empirical results are presented and discussed in Sections 3, 4 and 5 concludes.

2. Data and research design

The study sample consists of all the firms listed in the G-12 countries. To get more insights into corporate dividend policy over time, I follow Krieger et al. (2020) and select the sample period from 2015 to 2020. The source of data is Thomson Reuters Eikon. An initial sample of 31,866 companies has been identified. 6569 financial companies are eliminated. After cleaning duplicate, incomplete and missing values, a total of 2430 firms was also dropped, resulting in a sample of 22,867 companies, out of which there are 13,978 firms that do not pay dividends. Thus, the final sample is reduced to 8889 firms, which are sorted into 9 industrial groups based on Industry Classification Benchmark (ICB) Industry/DataStream Level 2 classification. As shown in Table 1, consumer discretionary, and industrials (telecommunication and utilities) account for the largest (lowest) proportions while Germany and Japan have the largest number of companies.

1 Note that the G12 group consists of thirteen countries. It initially includes the initial ten members of the International Monetary Fund (IMF), in addition to Australia and Spain. When Switzerland joined the G12 in 1984, the name of the group was not changed.
To examine the dividend changes, following Nissim and Ziv (2001) and Rangvid et al. (2014), I use annual data to account for the presence of potential seasonality in the dividend-growth patterns (Rangvid et al., 2014). Accordingly, at the beginning of each fiscal year \( t \), the dividend change rate is defined as the percentage difference between the dividends in fiscal year \( t \) and the previous fiscal year \( t-1 \) as

\[
\Delta \text{DIV}_{i,t} = \frac{\text{DIV}_{i,t} - \text{DIV}_{i,t-1}}{\text{DIV}_{i,t-1}} \tag{1}
\]

Accordingly, firms will be sorted annually into four groups: dividend omission, dividend decrease, no-change, and dividend increase samples. Similar to MazurDang and Vo., 2020, if the firm suspends dividend payment in 2019 or initiate paying dividend only in 2020, it is omitted from the sample.

To explain dividend policy decisions during the pandemic period, following DeAngelo and DeAngelo (1990) and Hauser (2013), Logit regressions are utilized. The binary dependent variable is a dummy variable indicating a firm’s decision regarding dividend changes. For example, for the dividend decrease versus omission decision, the binary dependent variable is a dummy variable equal to 1 if the firm reduced the dividend, and zero if omitted. Moreover, during periods of economic turbulence, it would be surprising to see firms have sharp dividend increases. Therefore, it would be interesting to gain further insights into the attributes of those firms versus those that have modest increases during the pandemic. To do that, I first compare the difference between the two samples using the t-test, and then I use logit regression to explore what mainly drives this variation.

### Table 2
Description of variables.

| Variable | Definition | Description |
|----------|------------|-------------|
| DOM      | Dividend Omissions | A dummy variable that equals 1 for dividend omissions, and 0 otherwise |
| DDC      | Dividend Decreases  | A dummy variable that equals 1 for dividend decreases, and 0 otherwise |
| DNC      | Dividend No-Changes | A dummy variable that equals 1 for dividend no-changes, and 0 otherwise |
| DIC      | Dividend Increases  | A dummy variable that equals 1 for dividend increases, and 0 otherwise |
| ROA      | Return on Assets   | The ratio of net income to total assets |
| ChE (%)  | Change in Earnings | Change in net income in year \( t \), standardized by book equity in year \( t-1 \) |
| F-EPS Gr (%) | Forecasted EPS Growth Rate | The growth rate in the fiscal-year consensus analysts’ earnings forecasts, provided by the Institutional Brokers Estimate System (IBES) |
| Ast-Tvr  | Asset Turnover    | The ratio of sales to total assets |
| Lev. (%) | Leverage          | The ratio of total long-term debt to total assets |
| Liq.     | Firm’s Liquidity  | The ratio of current assets to current liabilities |
| Mkt-Bk   | Market-to-Book    | The ratio of book value to market value of equity |
| Country  | Country Dummy     | Dummy variable, which takes the value of 1 for each country and 0 otherwise |
| Industry | Industry Dummy    | Dummy variable, which takes the value of 1 for each industry, and 0 otherwise |

The table defines the variables used in the empirical analysis.

### Table 3
Summary statistics by dividend-change group.

#### Panel A: Frequency of Firms by Year

| Year | Div. Omit. | Div. Dec. | Div. No-Chn. | Div. Inc. | Total |
|------|------------|-----------|--------------|-----------|-------|
| 2015 | 617 (7.54%)| 842 (10.28%)| 1771 (21.62%)| 4962 (60.58%)| 8192  |
| 2016 | 521 (6.23%)| 877 (10.49%)| 1828 (21.85%)| 5142 (61.45%)| 8368  |
| 2017 | 383 (4.48%)| 830 (9.7%)  | 2024 (23.65%)| 5323 (62.19%)| 8560  |
| 2018 | 213 (2.45%)| 775 (8.9%)  | 2134 (24.9%) | 5594 (64.19%)| 8716  |
| 2019 | 510 (5.47%)| 1561 (16.74%)| 2207 (23.67%)| 5047 (54.13%)| 9325  |
| 2020 | 715 (8.12%)| 2174 (24.67%)| 2039 (23.14%)| 3887 (44.1%) | 8815  |
| All-Years | 2959 | 7059 | 12003 | 29955 | 51976 |

#### Panel B: Tests of Difference in Means between Pre-Pandemic and during-the-Pandemic Group

| Pre-Pandemic Period (2015-2019) | During-the-Pandemic Period | Difference (2-1) |
|---------------------------------|----------------------------|------------------|
| T-test                          |                            |                  |

#### Panel C: Magnitude of Dividend Increases and Decrease during the Pandemic Period

| Num. of firms with % dividend reduction in specified Range | Total |
|-----------------------------------------------------------|-------|
| <25%                                                      | 50-74.9% | 75%-99.9% | Total |
| 592 (27.23%)                                              | 703 (23.34%) | 291 (13.39%) | 2174 |
| Num. of firms with % dividend increase in specified Range | Total |
| <25%                                                      | 59-74.9% | >75%      | Total |
| 2693 (69.28%)                                             | 220 (5.66%) | 527 (13.56%) | 3887 |

To examine the dividend changes, following Nissim and Ziv (2001) and Rangvid et al. (2014), I use annual data to account for the presence of potential seasonality in the dividend-growth patterns (Rangvid et al., 2014). Accordingly, at the beginning of each fiscal year \( t \), the dividend change rate is defined as the percentage difference between the dividends in fiscal year \( t \) and the previous fiscal year \( t-1 \) as

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\Delta \text{DIV}_{i,t} = \frac{\text{DIV}_{i,t} - \text{DIV}_{i,t-1}}{\text{DIV}_{i,t-1}} \tag{1}
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Accordingly, firms will be sorted annually into four groups: dividend omission, dividend decrease, no-change, and dividend increase samples. Similar to MazurDang and Vo., 2020, if the firm suspends dividend payment in 2019 or initiate paying dividend only in 2020, it is omitted from the sample.

To explain dividend policy decisions during the pandemic period, following DeAngelo and DeAngelo (1990) and Hauser (2013), Logit regressions are utilized. The binary dependent variable is a dummy variable indicating a firm’s decision regarding dividend changes. For example, for the dividend decrease versus omission decision, the binary dependent variable is a dummy variable equal to 1 if the firm reduced the dividend, and zero if omitted. Moreover, during periods of economic turbulence, it would be surprising to see firms have sharp dividend increases. Therefore, it would be interesting to gain further insights into the attributes of those firms versus those that have modest increases during the pandemic. To do that, I first compare the difference between the two samples using the t-test, and then I use logit regression to explore what mainly drives this variation.
In line with prior literature (e.g., DeAngelo and DeAngelo 1990, Nissim and Ziv 2001, Hauser 2013, Rangvid et al. 2014; Lin et al. 2017, Kilincarslan 2019, Krieger et al. 2020), explanatory variables that potentially affect firms’ dividend payout decisions include profitability, earnings changes, expected earnings growth, asset turnover, leverage, liquidity, firm size, and book-to-market ratio, in addition to controlling for both country and industry effects. Data are collected from Thomson Reuters Eikon. A detailed description of the variables is presented in Table 2. To account for outliers and reduce its influence on the statistical inferences in the regression models, all independent variables in the regressions are winsorized at the 1% level and at the 99%.

3. Empirical findings

To examine whether and how the pandemic has affected corporate dividend behavior, for each firm in the sample, I obtain all annual dividend payments on a fiscal year’s basis between 2015 and 2020. The resulting sample, as shown in Panel A of Table 3, contains 51, 976 firm-year observations: 7059 dividend decreases (14%), 2959 omission observations (6%), 12,003 no-change observations (23%), and 29,955 dividend increases (56%), which is similar to MazurDang and Vo., 2020 who find that the great majority of S&P 1500 firms either maintain or increase dividends during the COVID-19 pandemic. As expected, the noticeable variation in firms’ dividends changes in 2020 indicates the adverse impact that the COVID-19 pandemic exerts on corporate dividend policy. For example, 715 firms in the sample (8%) omit dividends while 2174 firms (approximately 25%) cut dividends. This compares with only 448 (977) firms that on average omit (decrease) dividends during normal times (2015–2019). These findings are also very comparable to those reported for US firms in Krieger et al. (2020) who find that dividend reductions (omissions) account for 17% (7%) of the dividend changes during the second quarter of 2020. As seen, despite the negative influence of the pandemic on firms’ performance and expected cash flow (e.g., lower profits and higher earnings volatility), the omissions - being perceived as more profoundly negative signal - still remain much rarer than dividend reductions, which stands in consistency with the view that firms are not only reluctant to decrease dividends to avoid signaling bad news about future earnings but they are also especially reluctant to cease dividends.

This table reports the firm characteristics by dividend-change group. Variables are defined in Table 2.

| Panel A: Dividend omissions | Mean | SD | 5% | 25% | 50% | 75% | 95% |
|-----------------------------|------|----|----|-----|-----|-----|-----|
| ROA (%)                     | -3.42| 12.36| -22.78| -7.49| -1.34| 2.47| 10.30|
| ChE (%)                     | -16.34| 48.73| -83.70| -30.49| -12.87| -2.51| 41.80|
| F-EPS Gr (%)                | -59.41| 16.59| -210.33| -81.08| -46.85| -19.37| 30.07|
| Ast-Tvr                     | 0.83| 0.63| 0.12| 0.42| 0.72| 1.07| 2.06|
| Lev. (%)                    | 56.84| 20.15| 21.21| 41.85| 59.09| 71.29| 88.89|
| Liq.                        | 1.78| 2.10| 0.41| 0.89| 1.29| 1.85| 4.38|
| Size                        | 5.60| 1.85| 2.55| 4.32| 5.49| 6.88| 8.67|
| Mkt-Bk                      | 2.20| 2.85| 0.32| 0.71| 1.31| 2.54| 6.60|

| Panel B: Dividend Decreases  | Mean | SD | 5% | 25% | 50% | 75% | 95% |
|-------------------------------|------|----|----|-----|-----|-----|-----|
| ROA (%)                       | 1.92| 11.36| -13.32| -0.86| 2.30| 5.00| 13.53|
| ChE (%)                       | -4.25| 36.76| -52.30| -13.92| -5.76| -1.22| 14.16|
| F-EPS Gr (%)                  | -64.04| 33.74| -185.14| -65.63| -35.20| -16.02| 12.75|
| Ast-Tvr                       | 0.85| 1.20| 0.12| 0.42| 0.72| 1.05| 1.94|
| Lev. (%)                      | 52.31| 20.03| 16.08| 38.80| 53.85| 66.81| 83.56|
| Liq.                          | 2.11| 2.17| 0.58| 1.12| 1.59| 2.36| 4.92|
| Size                          | 6.60| 2.01| 3.51| 5.18| 6.50| 8.01| 10.17|
| Mkt-Bk                        | 3.57| 20.53| 0.35| 0.67| 1.16| 2.27| 8.53|

| Panel C: Dividend No-Changes  | Mean | SD | 5% | 25% | 50% | 75% | 95% |
|-------------------------------|------|----|----|-----|-----|-----|-----|
| ROA (%)                       | 3.45| 5.39| -3.56| 1.40| 3.23| 5.45| 11.87|
| ChE (%)                       | -2.34| 20.35| -21.17| -4.30| -0.92| 1.19| 14.89|
| F-EPS Gr (%)                  | -20.29| 14.12| -81.58| -37.64| -16.87| -0.13| 37.63|
| Ast-Tvr                       | 0.92| 0.59| 0.24| 0.56| 0.79| 1.13| 2.01|
| Lev. (%)                      | 47.33| 19.42| 13.73| 33.61| 47.37| 61.33| 78.71|
| Liq.                          | 2.48| 3.38| 0.71| 1.27| 1.79| 2.62| 5.93|
| Size                          | 6.34| 1.97| 3.48| 4.81| 6.19| 7.67| 9.91|
| Mkt-Bk                        | 1.82| 5.00| 0.35| 0.62| 1.05| 1.84| 5.03|

| Panel D: Dividend Increases   | Mean | SD | 5% | 25% | 50% | 75% | 95% |
|-------------------------------|------|----|----|-----|-----|-----|-----|
| ROA (%)                       | 7.30| 7.40| 0.24| 3.59| 6.00| 9.69| 18.77|
| ChE (%)                       | 2.47| 70.03| -17.63| -2.75| 0.69| 3.95| 18.36|
| F-EPS Gr (%)                  | -6.34| 52.46| -57.69| -22.73| -4.68| 8.24| 40.96|
| Ast-Tvr                       | 0.92| 0.68| 0.19| 0.51| 0.78| 1.18| 2.13|
| Lev. (%)                      | 49.75| 19.26| 17.44| 35.38| 51.11| 64.87| 80.00|
| Liq.                          | 2.17| 2.14| 0.66| 1.19| 1.70| 2.53| 5.03|
| Size                          | 7.49| 2.10| 4.05| 5.95| 7.50| 8.99| 11.00|
| Mkt-Bk                        | 3.61| 7.50| 0.53| 1.06| 1.90| 3.64| 10.73|

This table reports the firm characteristics by dividend-change group. Variables are defined in Table 2.
Table 5
Correlation matrix.

|    | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  |
|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| DOM| 1.00|     |     |     |     |     |     |     |     |     |     |     |
| DDC| -0.15***| 1.00|     |     |     |     |     |     |     |     |     |     |
| DNC| -0.15***| -0.30***| 1.00|     |     |     |     |     |     |     |     |     |
| DIC| -0.25***| -0.52***| -0.51***| 1.00|     |     |     |     |     |     |     |     |
| ROA (%)| -0.24***| -0.17***| -0.05***| 0.31***| 1.00|     |     |     |     |     |     |     |
| ChE (%)| -0.12| -0.08| 0.03| 0.11| 0.45| 1.00|     |     |     |     |     |     |
| F-EPS Gr (%)| -0.03***| -0.13***| 0.02| 0.10***| 0.17***| 0.01| 1.00|     |     |     |     |     |
| Ast-Tvr| -0.01| -0.07***| 0.01| 0.05***| 0.12***| 0.03**| 0.05***| 1.00|     |     |     |     |
| Lev (%)| 0.12***| 0.09***| -0.08***| -0.06***| -0.24***| -0.09***| -0.07***| 0.04**| 1.00|     |     |     |
| Liq.| -0.06***| -0.01| 0.04***| 0.01| 0.22***| 0.07***| 0.03| -0.09***| -0.54***| 1.00|     |     |
| Size| -0.18***| -0.10***| -0.08***| 0.24***| 0.14***| 0.04| 0.03| -0.22***| 0.16***| -0.10***| 1.00|     |
| Mkt-Bk| -0.05*| -0.05*| -0.11***| 0.16***| 0.35***| 0.08**| 0.05*| 0.04| 0.08**| 0.03| 0.20***| 1.00|

Variables are defined in Table 2. The asterisks ***, **, and * indicate significance at 1%, 5%, and 10%, respectively.
announcements in total. The differences between the two groups are tested using the reports the findings on the magnitude of dividend increases and decrease in 2020. Interestingly, more than two-thirds of the specific characteristics across the groups during the pandemic. Overall, dividend-increasing firms the number of firms that maintain dividends; Div. Inc. is the number of firms that increase dividend; Total is the number of dividend (Panel C). Div. Omit is the number of firms that omit dividends. Div. Dec. is the number of firms that decrease dividends; No change is sharp dividend increase by more than 75%. The dividend decrease samples exhibits less dispersion; 27% of the sample cut dividends by

| Model | Panel A: Decrease vs. No-Change Dividends | Panel B: Omit vs. Decrease Dividends | Panel C: Omit vs. No-Change Dividends | Panel D: Increase vs. No-Change Dividends | Panel E: Increase vs. Decrease Dividends |
|-------|------------------------------------------|-------------------------------------|---------------------------------------|-----------------------------------------|----------------------------------------|
|       | Model I                                   | Model II                            | Model III                              | Model IV                                 | Model V                                 |
| ROA   | -0.019*** (-2.17)                        | -0.086*** (-6.29)                   | -0.125*** (-6.51)                      | 0.100*** (8.04)                          | 0.082*** (7.21)                        |
| ChE   | -0.944*** (-3.11)                        | -1.487*** (-3.56)                   | -2.877*** (-4.79)                      | 0.189* (1.94)                            | 1.285*** (6.77)                        |
| F-EPS Growth | -0.150** (-2.01)                        | -0.148* (-2.10)                     | 0.128* (0.99)                          | -0.059 (1.01)                            | 0.005 (0.81)                           |
| Ast-Tvr | -0.253*** (-2.10)                        | -0.265*** (-2.10)                   | 0.015 (0.81)                          | -0.163 (-0.81)                           | 0.016 (-0.99)                          |
| Lev.  | 1.831*** (4.49)                          | 1.891*** (4.67)                     | 1.138* (1.93)                          | 1.244** (2.17)                           | 3.536*** (4.61)                        |
| Liq.  | 0.131*** (3.18)                          | 0.125*** (3.07)                     | -0.011 (-0.22)                         | -0.053 (-0.96)                           | 0.037 (0.49)                           |
| Size  | 0.007 (-0.18)                            | -0.001 (-0.00)                      | -0.242*** (-4.28)                     | -0.284*** (-5.02)                        | -0.315*** (-4.01)                     |
| Mkt-Bk | 0.009 (-0.51)                            | 0.004 (-0.25)                       | -0.007 (-0.39)                         | -0.032 (-1.03)                           | -0.005 (-0.08)                        |
| Country Effects | Yes * Yes                             | Yes * Yes                           | Yes * Yes                              | Yes * Yes                                | Yes * Yes                              |
| Constant | -2.551*** (-4.36)                        | -2.594*** (-4.43)                   | 2.445*** (2.21)                        | 1.858* (1.72)                            | -3.468*** (-2.81)                     |
| Pseudo R² | 17%                                     | 16%                                | 25%                                   | 21%                                     | 12%                                    |

This table shows the results of Logit regressions. Variables are defined in Table 2. The asterisks ***, **, and * indicate significance at 1%, 5%, and 10%, respectively.

(DeAngelo et al., 1992). The findings reported in Panel B also show that the proportion of dividends cuts and omissions is significantly higher during the pandemic. Consistently, the year of 2020 exhibits a significant reduction in the number of dividend-increase announcements as the proportion of the dividend-increasing firms is only 44%, compared to typically 54-64% during the prior years; in contrast, the proportion of firms that have dividend no-change remains almost the same during the pandemic. Panel C of Table 3 reports the findings on the number of dividend increases and decrease in 2020. Interestingly, more than two-thirds of the dividend-increasing firms increase their dividends by less than 25%, compared to only approximately 14% of firms that experience a sharp dividend increase by more than 75%. The dividend decrease samples exhibits less dispersion; 27% of the sample cut dividends by 25% while 13% cut dividends by at least 75%.

This table reports the frequency of firms in total by dividend-change group and year (Panel A), tests of difference between pre-pandemic and during-the-pandemic (Panel B), and magnitude of dividend increases and decrease during the pandemic period (Panel C). Div. Omit is the number of firms that omit dividends. Div. Dec. is the number of firms that decrease dividends; No change is the number of firms that maintain dividends; Div. Inc. is the number of firms that increase dividend; Total is the number of dividend announcements in total. The differences between the two groups are tested using the t-test.

To gain insights into the characteristics of the different dividend-change groups, Table 4 provides preliminary statistics on the firm-specific characteristics across the groups during the pandemic. Overall, dividend-increasing firms – compared to the other sub-samples – have better profitability and earnings prospects. For example, the ROA for dividend increase sample is 7.30% compared to only 1.92% (-3.42%) for dividend decrease (omission) sample. The findings also reveal that dividend-increasing firms have -on average- relatively larger size and higher market-to-book ratio. This table presents the correlation matrices of the variables considered in the analysis during the pandemic period.

Table 5 presents the correlation matrices of the variables considered in the analysis during the pandemic period. Consistently, the findings exhibit that the instances of dividend cuts and omissions are significantly negatively correlated to the firm profitability, earnings prospects, liquidity and size, while they are positively correlated to leverage. In contrast, the instance of dividend increases exhibits a significantly positive association with the firm profitability, earnings prospects, asset turnover, size, and market-to-book ratio while they are negatively correlated to leverage. Meanwhile, firms’ tendency to have their dividends unchanged is negatively correlated to profitability, leverage, size and market-to-book ratio.

Next, I investigate the probability of dividend policy changes during the pandemic, and how firms’ attributes during this period can drive their dividend changes. As shown earlier, the COVID-19 pandemic exerts a profound adverse influence on corporate dividend policy. Therefore, I analyze the probability of dividend policy changes and how it is related to firms’ attributes during the pandemic.

Table 6 exhibits the findings for a series of logit regressions. Overall, consistent with prior evidence (e.g., Hauser, MazurDang and Vo, 2020, Krieger et al. 2020), I find a strong impact of profitability and earnings growth on dividend changes. In regressions I-II, firms that have higher profitability and better (past or expected) earnings changes are more likely to maintain than cut dividends, while in regressions III-IV (regressions V-VI), those firms with higher profitability and better past earnings changes tend to decrease or maintain than omit dividends. Consistently, in regressions VII-VIII (regressions X-XI), firms that have higher profitability and better
earnings changes are more likely to increase than maintain (cut) dividends. With respect to the impact of other firm characteristics, the findings are mixed. For example, the results, as demonstrated in regressions I-II, reveal that leverage and liquidity (asset turnover) carry significantly positive (negative) coefficients, while firm size exhibits insignificant coefficients. As for the decision to omit than decrease or maintain dividends, as seen in models III-VI, it is mainly affected by leverage and size; firms with higher financial risk due to leverage are more likely to cease dividends, in contrast to larger firms that tend to maintain or decrease than omit dividends. The findings on the firms’ tendency to increase than maintain or cut dividends, as reported in regressions VII-XI, indicate that firms with higher asset turnover, less financial leverage and larger size tend to increase than maintain or cut dividends. In contrast, the coefficients on liquidity and market-to-book ratio are not robustly significant and change sign.

4. Additional analysis

Table 7 sheds more light on the firms that unexpectedly have sharp dividend increases during the pandemic versus those that have modest dividend increases. As shown in Panel A, firms that have large dividend increases during the pandemic exhibit significantly higher profitability, expected earnings growth and asset turnover, in addition to being more liquid and larger in size. Consistently, Panel B shows that firms’ tendency to have large than modest dividend increases is significantly positively affected by firms’ expected earnings growth, liquidity and asset turnover. However, firms that have higher leverage and are smaller in size are also found to be more likely to have large dividend increases. Although these results appear to be surprising, yet it can be attributed to the idea that among the dividend-increasing firms, those firms that are more leveraged and relatively smaller in size, tend to announce large dividend increases in order to reduce the asymmetric information and adverse selections costs associated with having more leverage and being smaller.

5. Conclusion

With the aim to provide a more complete picture of corporate dividend policy during the pandemic, this paper examines how corporate dividend changes are affected by the COVID-19 pandemic, utilizing a sample of 8889 firms listed in the G-12 countries. The study shows that the COVID period has indeed witnessed relatively higher rates of dividend reductions and omissions. However, the
majority of firms could either maintain or increase dividends during the pandemic; perhaps aiming at pursing a more stable dividend policies in response of the crisis, and signaling their financial prospects. Theoretically, these findings stand in line with the view that firms’ mangers are especially reluctant to decrease or omit dividends to either avoid signaling bad news about future earnings, as posited by the signaling models (e.g., DeAngelo et al. 1992) or to maintain their personal benefits, as proposed by the agency models (e.g., Lambrecht and Myers 2012). Logit regression findings reveal that dividend policy decisions are significantly affected by firm profitability and earnings prospects during the pandemic. Moreover, firm size and leverage appear to be important determinants of the decision to omit dividends during the pandemic.

Author statement

This paper was developed solely by the author, Heba Ali.

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