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Article

Do ADR Firms Have Different Dividend Policies Than U.S. Firms? A Comparative Study

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Abstract: This paper examines and compares the dividend policies of American depository receipt (ADR) firms and U.S. firms and identifies the factors that determine these policies for both types of companies. We find that ADR firms have higher dividend yields than U.S. firms, while U.S. firms have higher stock repurchase ratios than ADR firms. Results from univariate comparisons and multivariate analysis show that the determining factors of dividend payout and stock repurchases differ between these two types of firms. This finding holds for the robustness check conducted in this study. This paper provides further evidence regarding dividend policies of ADR firms and sheds light on the differences in dividend policies between non-U.S. firm and U.S. firms.

Keywords: dividend policy; ADR firms; U.S. firms; comparative study

JEL Classification: G15; G35



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1. Introduction

Throughout the past few decades, a large body of literature has explored corporate dividend policies from various perspectives, and researchers have achieved much progress thus far (Lintner 1956; Miller and Modigliani 1961; Baker and Wurgler 2004; DeAngelo et al. 2004; Denis and Osobov 2008; Skinner 2008). Given the heterogeneity of firm characteristics and economic factors influencing dividend policies across countries, debate continues regarding the optimal dividend policy (Booth and Zhou 2017).

Most of the extant research about dividend policies is based on sample firms from the United States or other developed countries, which means that the findings of these studies cannot be applied to emerging economies (Jabbouri 2016). Black (1976) ascertained substantial differences in dividend policies between developed and emerging capital markets. Firms of different countries indeed show differences in their dividend policies (Denis and Osobov 2008; Benavides et al. 2016). Prior studies examine the dividend policies of American depository receipt (ADR) firms (i.e., non-U.S. firms for which their shares are qualified to be traded in ADR form) as a sample of foreign firms, and these studies have investigated the information environment that influences and determines the dividend policies of ADR firms (Aggarwal et al. 2012; Perretti et al. 2013).

However, studies examining ADR firms' dividend policies are often based on ADR firms alone; that is, these studies do not simultaneously examine the dividend policies of U.S. and ADR firms. To fill the gap, we compare the dividend policies of ADR and U.S. firms and explore the determining factors of dividend policies for these two types of firms. In this manner, we shed further light on whether the determining factors of dividend policy are the same or different between these two types of firms. Revealing key differences between ADR and U.S. firms may provide valuable information and enable investors to make better decisions when investing in the stocks of ADR firms.

ADR firms are non-U.S. firms for which their shares are cross-listed on U.S. stock markets. Investors in the United States may trade ADR stocks to diversify their investment

portfolios. ADRs are issued by major depository banks or brokers in the United States. An ADR may represent one or more shares of foreign firm stock. The extant research reveals that ADR firms may bolster growth opportunities, improve the liquidity of stock trading, enhance firm value, mitigate agency costs, reduce the cost of capital, and improve the information environment (Foerster and Karolyi 2000; Doidge et al. 2004; Aggarwal et al. 2012; Perretti et al. 2013). Cao-Alvira and Rodríguez (2017) find that Chinese ADR firms underperform a benchmark portfolio composed of U.S. firms matched. However, Cao-Alvira and Rodríguez (2017) do not examine the dividend policy of these Chinese ADR firms. Unlike prior studies, our paper focuses on both Level II and Level III ADR firms, which are listed on U.S. stock exchanges and required to file financial reports with the Securities and Exchange Commission (SEC). Level II and III ADR firms follow strict rules similar to those followed by U.S. firms, such as S&P 500 firms. The similarity of oversight and regulation these firms face makes comparing S&P 500 firms and ADR firms of Level II and III particularly meaningful.

Compared to extant literature, this paper makes incremental contributions through the new findings that ADR firms exhibit higher dividend yields and lower stock repurchase ratios than U.S. firms. Furthermore, the determining factors for dividend yields and stock repurchase ratios differ between ADR firms and S&P 500 firms. The findings provide more evidence about the determining factors of cash distribution policy for ADR firms. Our finding shows that ADR firms' dividend policies and stock repurchase policies differ from those of U.S. firms. Specifically, U.S. firms prefer to use stock repurchases, while ADR firms are inclined to use dividend payments. Our findings provide further evidence to help ADR firms adjust their cash distribution policies. For example, ADR firms could more frequently use stock repurchases as an alternative signal to mitigate information asymmetry for interested investors in the U.S. market (Aggarwal et al. 2012) or reduce ADR mispricing (Beckmann et al. 2015). In any event, extant literature shows that emerging market firms tend to follow the dividend policies of U.S. firms (Jabbouri 2016).

The remainder of this paper is structured as follows. Section 2 reviews the extant literature on the determinants of dividend policies as well as ADR firms' payout policies and then develops the main hypothesis. Section 3 describes data selection and research methodology. Section 4 discusses the empirical results, and Section 5 concludes this paper.

2. Literature Review and Hypothesis Development

Miller and Modigliani (1961) first suggested that dividend changes could provide investors with managers' information about a firm's future earnings prospects. Several subsequent studies support their proposition, finding that dividend policies convey information about firms' earnings (Benartzi et al. 1997; Skinner and Solters 2011). A few influential dividend policy theories have been developed over the last three decades. The most significant of these include signaling theory (Miller and Rock 1985; Healy and Palepu 1988), catering theory (Baker and Wurgler 2004), and lifecycle theory (Fama and French 2001; DeAngelo et al. 2006; Denis and Osobov 2008).

Signaling theory states that managers convey future earnings prospects to outside investors by adjusting cash dividends due to information asymmetry (Bhattacharya 1979; John and Williams 1985; Miller and Rock 1985). Dividends convey information about future earnings (Ham et al. 2020), and firms paying dividends have less information asymmetry (Li and Zhao 2008). Even during the COVID-19 pandemic, which has certainly undercut firms' ability to maintain dividend payments, the majority of firms have either maintained or increased their dividends, aiming to signal their financial prospects (Ali 2021). Kim et al. (2021) revealed that financially constrained firms can use their dividend policies to provide a positive signal to the financial markets. Based on a dataset covering 19 countries, Attig et al. (2021) presented the first international evidence that dividend policies may help mitigate agency problems when economic policy uncertainty is high. The authors, therefore, lend support to the signaling theory of dividend policy from an international perspective. Al-Malkawi et al. (2014) also showed that, during periods of financial crisis,

the signaling theory of dividend policy still holds. In a study based on firms of MENA countries, [Jabbouri \(2016\)](#) found that firms tend to use increased dividend payouts to reassure investors during economic slumps.

In contrast, the catering theory states that firms cater to their investors when developing their dividend distribution policies ([Baker and Wurgler 2004](#)). Given that ADR firms are foreign firms for which their stocks are traded on the U.S. stock market, this catering likely brings greater risk for U.S. investors. For example, exchange rate risk often plagues ADR firms ([Kim et al. 2000](#); [Doidge et al. 2004](#)). According to catering theory, paying higher dividends to mitigate these risks and attract U.S. investors is a reasonable avenue for ADR firms; thus, catering to investors in the United States is a logical choice. The third major theory is the lifecycle theory. This theory argues that mature firms are more inclined than young firms to pay dividends ([Fama and French 2001](#); [Grullon et al. 2002](#); [DeAngelo et al. 2006](#)). [Denis and Osobov \(2008\)](#) provide some support for this theory by studying sample firms from several developed countries.

The extant literature examines the advantages and disadvantages of ADR firms quite thoroughly. One group of studies ascertain the benefits that ADR firms attain by being traded on U.S. stock markets. These studies show that ADR firms cross-list their stocks because U.S. markets are more liquid, have lower transaction costs and agency costs, provide higher forecasting accuracy by analysts, offer better protection mechanisms for investors, and may reduce the risk for investors ([Officer and Hoffmeister 1987](#); [Wahab and Khandwala 1993](#); [Fang and Loo 2002](#); [Salva 2003](#); [Doidge et al. 2004](#); [Owers et al. 2007](#)). Paying higher dividends to realize these benefits and attract U.S. investors is a reasonable choice for ADR firms.

On the other hand, a handful of studies reveal the downsides facing ADR firms. Cross-listing of ADRs is associated with a permanent increase in the return volatility of underlying stocks ([Jayaraman et al. 1993](#)). At the same time, the effect of exchange rates on ADR prices also contributes to uncertainty ([Huang and Stoll 2001](#); [Kim et al. 2000](#)). [Hope et al. \(2013\)](#) found that cross-listed firms provide lower quality management earnings guidance than comparable U.S. firms. Furthermore, the economic fundamentals of ADRs' home countries are not integrated into the ADR market in a timely manner ([Gupta et al. 2016](#)). Thus, ADR mispricing is related to the information asymmetry associated with the underlying stocks of ADR firms ([Beckmann et al. 2015](#)).

Synthesizing the above summarized studies, we thus formulate the following two hypotheses.

H1. *Given the differences in overall risk and information asymmetry between ADR firms and U.S. firms, ADR firms should have different dividend policies than U.S. firms.*

H2. *Given the differences in overall risk and information asymmetry between ADR firms and U.S. firms, the determining factors of a dividend policy should be different between ADR firms and U.S. firms.*

3. Data and Methodology

3.1. Data and Variables

Our research motivation is to examine and compare the dividend payout policies of ADR firms and U.S. firms and then to investigate the determinants of dividend policies for each type of firm. To ensure comparability, the ADR firms in the research sample include only Level II and Level III ADR firms. We use S&P 500 firms as a representative sample for U.S. firms. Naturally, these two groups of firms are more comparable because the stocks of both groups are listed on U.S. stock exchanges. We use dividend yield, dividend payout, and stock repurchase to proxy dividend policy in this study. The explanatory variables include total assets, cash-to-assets ratios (cash/assets), returns on assets (ROA), and Tobin's Q because prior literature has shown that these variables may be related to dividend policy ([Aivazian et al. 2003](#); [Lang et al. 2003](#); [Aggarwal et al. 2012](#); [Perretti et al. 2013](#)). The data of these variables are collected from *Capital IQ* and *Bloomberg* during the sample period from

2009 to 2018. After excluding all firms from financial sectors and firms that lack data for key variables, such as dividend yield or the stock repurchase, the sample selection process yields 80 ADR firms and 316 S&P 500 firms. Table 1 presents the summary statistics for all variables. We display descriptive statistics for ADR firms and S&P 500 firms in Panel A and Panel B, respectively. Among these variables, the values of assets are in millions of USD. Dividend yield, dividend payout, and stock repurchase are dependent variables in regression models, while assets, cash/assets, ROA, and Tobin's Q are independent variables.

Table 1. Descriptive statistics.

Panel A: ADR firms				
Variables	N	Mean	Median	S.D.
Dividend Yield	479	4.345	3.3	4.194
Dividend Payout	424	0.697	0.428	1.498
Assets	662	8271.657	1819.1	21,970.8
Repurchase Payout	154	0.183	0.112	0.200
Cash/ Assets	662	0.191	0.111	0.207
ROA	662	0.057	0.069	0.061
Tobin's Q	270	1.991	1.391	2.648
Panel B: S&P 500 firms				
Variables	N	Mean	Median	S.D.
Dividend Yield	2969	2.429	2.27	1.456
Dividend Payout	2695	0.663	0.382	4.08
Assets	2954	32,576.7	16,139.7	55,025.88
Repurchase Payout	2147	0.587	0.477	0.547
Cash/ Assets	2954	0.104	0.0635	0.118
ROA	2953	0.068	0.061	0.062
Tobin's Q	2948	1.996	1.7	1.06

Note: This table reports the number of observations, means, medians, and the standard deviations for the variables used in this paper. The sample period is from 2009 to 2018.

Table 2 presents the results of the univariate comparison of these variables between ADR firms and S&P 500 firms. The comparison results reveal that ADR firms exhibit significantly higher dividend yields than S&P 500 firms, although the dividend payout ratios of ADR firms are significantly higher than those of S&P 500 firms only in terms of median dividend payout ratios. The cash/assets ratios are significantly higher for ADR firms than for S&P 500 firms, demonstrating that ADR firms hold a greater proportion of their total assets in cash. The comparative results also reveal that the ROAs of S&P 500 firms exceed those of ADR firms. In addition, S&P 500 firms have a higher median value of Tobin's Q than do ADR firms. Importantly, S&P 500 firms have higher stock repurchase ratios than do ADR firms, indicating that ADR firms prefer to use dividend payouts over stock repurchases to attract U.S. investors. In sum, univariate comparison results indicate that the dividend policies of ADR firms and S&P 500 firms differ substantially. ADR firms are inclined to pay higher dividends to investors, and this finding is consistent with the signaling and catering theories of dividend policy. Thus, univariate comparison results clearly lend support to both hypotheses.

Table 2. Univariate comparisons.

	ADR Firms		S&P 500 Firms		<i>t</i> -Test of Diff. in Means	Wilcoxon Test of Diff. in Medians
	Mean	Median	Mean	Median	<i>p</i> -Value	<i>p</i> -Value
Dividend yield	4.345	3.3	2.429	2.27	0.000 ***	0.000 ***
Dividend payout	0.697	0.428	0.663	0.382	0.765	0.023
Assets	8271.657	1819.1	32,576.7	16139.7	0.000 ***	0.000 ***
Repurchase payout	0.183	0.112	0.587	0.477	0.000 ***	0.000 ***
Cash/assets	0.191	0.111	0.104	0.0635	0.000 ***	0.000 ***
ROA	0.057	0.069	0.068	0.061	0.000 ***	0.000 ***
Tobin's Q	1.991	1.391	1.996	1.7	0.951	0.000 ***

Note: The table shows the univariate comparison results between ADR firms and S&P 500 firms. * Denotes statistical significance at the 10% level; ** denotes statistical significance at the 5% level; *** denotes statistical significance at the 1% level.

3.2. Empirical Models

To ascertain the determining factors of dividend policies for ADR firms and S&P 500 firms, we estimate the following three regression models for dividend yields, dividend payouts, and stock repurchase, respectively:

$$DivYield_{it} = \beta_0 + \beta_1 \times DivPayout_{it} + \beta_2 \times Ln(Assets)_{it} + \beta_3 \times CashAssets_{it} + \beta_4 \times Roa_{it} + \beta_5 \times TobinsQ_{it} + countries + years + industries + \varepsilon_{it}$$

$$DivPayout_{it} = \beta_0 + \beta_1 \times Ln(Assets)_{it} + \beta_2 \times CashAssets_{it} + \beta_3 \times Roa_{it} + \beta_4 \times TobinsQ_{it} + countries + years + industries + \varepsilon_{it}$$

$$Repurchase_{it} = \beta_0 + \beta_1 \times DivPayout_{it} + \beta_2 \times Ln(Assets)_{it} + \beta_3 \times CashAssets_{it} + \beta_4 \times Roa_{it} + \beta_5 \times TobinsQ_{it} + countries + years + industries + \varepsilon_{it}$$

where *i* indexes firm, and *t* indexes time. The dependent variables in each regression model are dividend yield, dividend payout, and stock repurchase, respectively. In addition to industry-fixed effects and year-fixed effects for ADR firms, country-fixed effects are also included to remain consistent with the existing ADR literature (Aggarwal et al. 2012). We adjust standard errors at the firm level.

4. Empirical Test Results and Analysis

4.1. Empirical Results

Table 3 reports the results of the regression analyses. The six columns in Table 3 display the regression results of Model 1 to Model 6, respectively. Model 1 and Model 2 use the dividend yield as the dependent variable. The regression results of Model 1 reveal that the dividend payout ratio and Tobin's Q are positively related to dividend yield, while firm size and ROA are negatively associated with dividend yield. This result suggests that dividend payout and growth potential are likely the driving factors for higher dividend yield among ADR firms. In contrast, the regression results of Model 2 demonstrate that dividend yield is significantly and positively related to dividend payout ratios, firm size, and ROA but negatively associated with cash/assets and Tobin's Q. Comparing the regression results of Models 1 and 2, we learn that only DivPayout carries a positive and significant coefficient in both models. Thus, the determining factors of dividend yield for ADR and S&P 500 firms clearly differ.

Table 3. Regression analysis of the dividend policy on firm characteristics.

Variables	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	ADR Firms	S&P 500 Firms	ADR Firms	S&P 500 Firms	ADR Firms	S&P 500 Firms
	Dividend Yield	Dividend Yield	DivPayout	DivPayout	Repurchase	Repurchase
Constant	6.333 *** (1.615)	0.274 (−0.255)	1.106 (1.072)	1.039 *** (−0.233)	1.068 (−1.198)	0.484 (0.118) ***
DivPayout	0.34 ** (0.129)	0.306 *** (−0.021)			−0.244 (−0.286)	0.039 (0.012) ***
Ln(assets)	−0.372 ** (0.182)	0.254 *** (−0.024)	0.002 (0.12)	−0.026 (−0.022)	−0.006 (−0.136)	0.003 (−0.011)
Cash/assets	−3.16 (1.943)	−1.299 *** (−0.227)	−1.038 (1.208)	0.471 ** (−0.208)	0.818 (−1.61)	0.62 *** (−0.101)
ROA	−14.131 *** (5.329)	1.347 * (−0.738)	−6.554 (3.436) *	−9.880 *** (−0.648)	−10.545 ** (−5.09)	−0.684 ** (−0.337)
Tobin's Q	0.462 ** (0.176)	−0.128 *** (−0.034)	0.179 (−0.12)	0.264 *** (−0.031)	0.131 (−0.233)	0.043 ** (−0.015)
Year Effect	yes	yes	yes	yes	yes	yes
Industry Effect	yes	yes	yes	yes	yes	yes
Country Effect	yes	No	yes	No	yes	No
Observation	133	2664	136	2664	70	2066
Adj R-squared	0.243	0.164	0.006	0.086	0.025	0.032

Note: This table reports results from regressions examining the determining factors of dividend policies. Standard errors are shown in parentheses below regression coefficients; * denotes statistical significance at the 10% level; ** denotes statistical significance at the 5% level; *** denotes statistical significance at the 1% level.

Models 3 and Model 4 have a dividend payout ratio as the dependent variable. The regression results in Model 3 show that only ROA is significantly and negatively associated with dividend payout. In stark contrast, Model 4's regression results reveal that cash/assets and Tobin's Q are both positively related to the dividend payout ratio, while ROA is negatively associated with dividend payout. The regression results demonstrate that the determining factors for firms' dividend payout policies are different between S&P 500 firms and ADR firms.

To further ascertain the correlation between cash distribution policy and its determining variables, we also conduct a regression of stock repurchase on the independent variables in Model 5 and Model 6. Consistent with the regression results in Model 1 to Model 2, the determining factors of stock repurchase are apparently different between ADR firms and S&P 500 firms.

As a whole, regression results reveal significant differences in the determining factors for the dividend policies of ADR firms and S&P 500 firms. However, the determining factors for dividend payout ratios and stock repurchase are largely the same for ADR firms and S&P 500 firms, respectively. Compared to S&P 500 firms for which higher dividend payouts seem driven by higher growth potential (Tobin's Q) and higher cash holdings, the dividend payouts of ADR firms are affected by different factors. Overall, our empirical results lend support to both hypotheses.

Based on the above empirical results, we conjecture that three theories can be used to explain the higher dividend yield and payout for ADR firms compared to S&P 500 firms. The first is the signaling theory (Aggarwal et al. 2012; Perretti et al. 2013). ADR firms often face more severe information asymmetry (Aggarwal et al. 2012); therefore, it is theoretically logical for ADR firms to mitigate this likely information asymmetry by paying higher dividends (Aggarwal et al. 2012; Perretti et al. 2013). The second explanation is catering theory. Given that S&P 500 firms outperform ADR firms in ROA and Tobin's Q, ADR firms probably have to cater to U.S. investors via higher dividend payouts. The third is the agency costs theory (Stulz 2005), which states that investors face more severe agency problems when investing in foreign firms. In response, ADR firms must pay high dividends to

distribute free cash flow to investors and thereby mitigate U.S. investors' worries regarding agency costs (Jensen 1986).

To assess the robustness of our results, we conducted a further test. We use an alternative test to confirm whether the dividend policies of ADR firms and S&P 500 firms are different. We estimate three additional regression models by using the combined sample (full sample), including both ADR firms and S&P 500 firms over the research period. Compared to the specifications of regression models in Table 3, we now add a dummy variable indicating whether a sample firm is an ADR firm or S&P 500 firm. The estimated regression results are presented in Table 4. As we expected, the estimation results in Table 4 show that the coefficient of the dummy variable for ADR firms is significant when dividend yield and stock repurchase are the dependent variables, indicating that being an ADR firm is more likely associated with higher dividend yields and lower repurchase. This regression results are consistent with our findings shown in Table 3. Overall, the robustness test results shown in Table 4 lend further support to our main finding that dividend policies are different between ADR firms and S&P 500 firms.

Table 4. Regression analysis with full sample.

	Dividend Yield	Dividend Payout	Repurchase
Constant	2.390 (0.292) ***	0.974 (0.229) ***	−4.695 (0.309) ***
D_ADR	1.332 (0.143) ***	0.141 (0.115)	−0.937 (0.186) ***
Ln(assets)	0.008 (0.028)	−0.02 (0.022)	0.964 (0.029) ***
Cash/assets	−0.343 (0.263)	0.325 (0.205)	2.446 (0.266) ***
ROA	−0.413 (0.614)	−9.456 (0.638) ***	9.753 (0.634) ***
Tobin's Q	0.012 (0.379)	0.243 (0.03) ***	0.049 (0.032)
Year effect	Yes	Yes	Yes
Industry effect	Yes	Yes	Yes
Observations	3115	2800	2362
Adjusted R-square	0.029	0.079	0.467

Note: This table reports the results of additional regression analyses as robustness tests. Standard errors are shown in parentheses below regression coefficients; * denotes statistical significance at the 10% level; ** denotes statistical significance at the 5% level; *** denotes statistical significance at the 1% level.

4.2. Contributions and Implications for Dividend Policy

Previous studies on the dividend policies of ADR firms usually attempt to ascertain the association between firm characteristics and dividend policy. These studies show that firm size, growth opportunities, capital structure, and the information environment all affect the formulation of dividend policy for ADR firms (Leuz 2003; Denis and Osobov 2008; Aggarwal et al. 2012; Perretti et al. 2013). However, different from these prior studies, this study compares ADR firms and U.S. firms regarding their dividend policies while considering stock repurchase policies. Thus, our findings provide further insights into the determining factors of cash distribution policy for ADR firms. Our study shows that although ADR firms are qualified to trade their stocks in the U.S. capital markets, their dividend policies and stock repurchase policies differ from those of U.S. firms. Specifically, U.S. firms prefer stock repurchases as the channel to distribute cash, while ADR firms are inclined to use dividend payments. Our findings provide empirical evidence to help ADR firms adjust their cash distribution policies. For example, ADR firms might consider using stock repurchases as an alternative signal to mitigate information asymmetry for existing and future investors in the U.S. market.

Another implication for practitioners is that when ADR firms determine their cash distribution policy, using dividend policy as a tool to mitigate the information asymmetry

is a reasonable channel. Given that mispricing ADRs still happens in the market (Beckmann et al. 2015), dividends and stock repurchase remain an important source of returns for investors. Our findings provide more empirical evidence for investors to forecast their returns earned from investing in ADRs. Since ADR firms have fewer communication channels to convey information to US investors (Aggarwal et al. 2012), trying to glean useful information via dividend and stock repurchase policy is a reasonable method for investors.

However, whether stock repurchases would be more effective than dividend payments in mitigating information asymmetry and ultimately improving the value of ADR firms is an interesting prospective research topic. In addition, from the perspective of capital market regulation, our findings may provide further information for regulators to make necessary adjustments to policies regarding ADR firms in the future.

5. Conclusions

This paper examined the dividend policies of ADR firms and U.S. firms and identifies the determining factors of dividend yield, dividend payout, and stock repurchases for these two types of firms. Our analysis demonstrates that ADR firms exhibit higher dividend yields and dividend payout ratios than S&P 500 firms. In contrast, U.S. firms have higher stock repurchase payout ratios. In addition, ADR firms generally underperform S&P 500 firms in ROA and growth potential, which suggests that ADR firms' higher dividend payouts and dividend yields are not driven by their performance or growth potential.

Furthermore, we find that the determining factors of dividend policy are materially different between ADR firms and S&P 500 firms. For ADR firms, higher dividend yields seem driven by higher dividend payouts rather than by the firm's performance. In contrast, the dividend yield and dividend payout ratios of S&P 500 firms are more directly related to the firm's performance. Although the determining factors for stock repurchase also differ between ADR and S&P 500 firms, regression results reveal that the determining factors for dividend payout ratios and stock repurchase ratios overlap significantly for both ADR firms and S&P 500 firms.

In sum, this paper further illuminates the similarities and differences in dividend policies between ADR firms and S&P firms. We also show that the associations between dividend policies and their determining factors differ between these two types of firms. Our study provides further insights into dividend policy research for non-U.S. firms.

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