

THE WEALTH EFFECTS OF DIVIDEND TAX CUTS: EVIDENCE FROM THE MALAYSIAN
REIT'S MARKET

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ABSTRACT

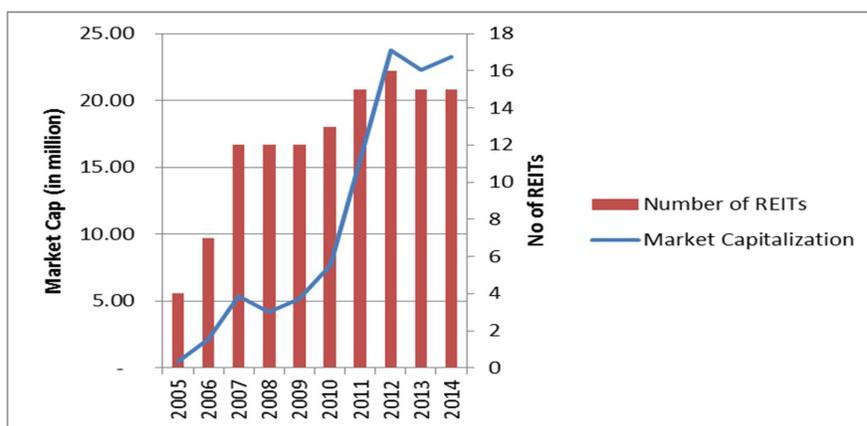
Dividend tax reforms for REIT sector in Malaysia provide a rare opportunity to examine the impact of dividend taxation on firm valuation. It is found that dividend tax cut announcements result in positive abnormal returns. There are evidences to suggest that REITs with a higher retail and institutional ownership representing the main beneficiaries of these tax cuts are associated with higher cumulative abnormal returns (CARs). It is also found that dividend payout increased significantly during the quarter immediately after the implementation of the first dividend tax cuts. These findings are consistent with the “old view” of dividend taxation which posits that dividend tax cut could affect firms’ investment and payout policies.

Keywords: Dividend tax cut. REIT. Wealth effects. Dividend policy. Trading Volume

INTRODUCTION

Malaysia is the fourth country in Asia to embrace modern REIT structure after Japan (September 2001), South Korea (January 2002) and Singapore (July 2002).¹ The maiden REIT was listed on 3 Aug 2005 (Axis REIT). **Figure 1** tracks the dramatic growth of REIT sector in Malaysia for the period of 2005 to 2014. Total market capitalization grew from a mere RM0.5 billion on September 30, 2005 to RM23.2 billion as at September 30, 2015. In the same period, the number of listed REITs increased from 4 to 15.

Figure 1: Malaysian REITs’ Market Capitalization during 2005-2014



¹ Prior to February 2005, there exist three listed property trusts (Amfirst Property Trust Fund, AmanahHarta Tanah PNB, and AmanahHarta Tanah PNB 2) operated under the restrictive property trust guidelines that provide no corporate tax exemption for dividend distributed to unitholders. These property trusts were eventually re-branded as REIT ever since the introduction of the new REIT guidelines in 2005.

The Malaysian government has played a pivotal role for the impressive growth of this industry through the introduction of supportive regulatory framework and the offering of incentives that make REIT attractive to investors and property owners. One such incentive is the temporary dividend tax cuts announced during the presentation of the national budget by the Malaysia Prime Minister in 2006, 2008 and 2011. As shown in **Table 1**, since the beginning of 2007, dividend taxes on foreign institutional investors were reduced from 28% to 20% while the tax rate for individual and other non-corporate investors such as unit trust funds was reduced to 15% from the highest rate of 28% for a period of five years ended December, 31 2012. Tax incentive at the corporate level was also extended in the form of tax-exemption for undistributed income as long as REITs distribute at least 90% of their taxable income as dividends. The dividend tax rates were further reduced to 10% for both the institutional investors (foreign and local) and individual investors in the 2009 budget. Finally, these tax incentives were extended for another four years ending December 31, 2016 during the presentation of the 2012 national budget.

Table1: Dividend taxes for REIT during 2006-2016

	Budget 2007	Budget 2009	Budget 2012
Foreign institutional investors	20% (from 28%)	10%	10%
Individual resident	15% (from top rate of 28%)	10%	10%
Foreign Individual	15% (from 28%)	10%	10%
Other residents (unit trust funds)	15% (from the appropriate rate)	10%	10%
Other non-residents	15% (28%)	10%	10%

(Source: *Inland Revenue Board Malaysia*)

It is likely that the incentive provided by the government through dividend tax rates cut would influence the REITs share prices, payout policy and volume traded. Thus, the main objective of this research is to measure the effect of dividend tax cut announcements on stock prices. We also attempt to provide empirical evidence as to how these dividend tax cuts affect REITs' payout policy and share trading volume. Answers to these research objectives will justify Malaysian government's dividend tax concession which is estimated to cost more than RM306 million over the first five years (2007-2012) of its implementation.²The findings also add to the debate of whether dividend cuts are beneficial to corporations and society at large. As highlighted in Brav et al. (2008), the proponents of dividend tax cut argue that reduction in dividend taxation could increase stock prices, spending and consequently economic growth. Auerbach (2002) for instance provides a theoretical model showing how dividend tax cut reduces firm's cost of capital which leads to a positive impact on the corporate investment. Reduction in the disparity between cost of debt (lower due to tax

² This is based total tax saving enjoyed by retail and institutional investors computed by multiplying average non-corporate shareholders ownership (50%) with gross dividend and dividend tax rate reduction, i.e. 13% (28%-15%) for 2007-08; 18% (28%-10%) for 2009-2012.

deductibility of interest expenses) and cost of equity (higher due to double taxation) is also cited as a reason for dividend cut. Opponents to the dividend tax cut argue that reduction of dividend tax will make worse income inequality problem since majority of the dividends are received by wealthy individuals. Moreover, lower dividend tax rate could result in unintended consequence of lower economy growth where firms deliberately reduce their investment to cater for higher dividend distribution as expected by the shareholders (Auerbach, 1979).

Findings from this paper also shed light to the dividend taxation literature that is relatively unexplored because major changes in dividend tax rates are not common. A small strand of papers has used Jobs and Growth Tax Relief Reconciliation Act of 2003 (2003 Act) in the US as laboratory test to examine the impact of dividend tax cut on corporate decisions. The 2003 Act was signed by President George W. Bush on May 28, 2003 reduces the maximum statutory personal tax rate on dividends from 38.1 percent to 15% percent. Blouin, Ready and Shackelford (2004) argue that the 2003 Act which represents the largest decrease in the dividend tax rate in the US history overcomes identification problems associated with empirical tests. This is because dividend tax changes usually coincided with other tax policy reforms which make it difficult to isolate the effect of dividend tax rate and other non-dividend tax effects.³

Malaysia's REIT dividend tax cuts provide a cleaner test to the economic impact of dividend policy due to the following reasons. First, similar to the 2003 Act, the magnitude of the dividend tax change is significant, i.e., on average, 13% cut for 2007-2008 and 18% cut for 2009-2016. Second, unlike the 2003 Act which saw the reduction on both dividend and capital gain tax rates (from 20 percent to 15%) on all sectors in the US, Malaysia dividend tax cuts were applied only to dividend tax rates for listed and private REITs (property trust funds) in Malaysia. Third, there were many announcements (noises), debates and negotiations leading to the passing of the 2003 Act into law. Auerbach and Hassett (2005) who use event study methodology to measure the abnormal returns surrounding the 2003 Act announcements resorted to eight event dates that track the release of significant news concerning the likelihood passage of the 2003 Act. On the contrary, dividend tax cut announcements made during the tabling of the Malaysian budgets were clean and largely unpredictable events.

The empirical tests are carried out in two stages. First, an event study is conducted to examine the dividend tax cut announcement effects. Regression analysis of the cumulative abnormal returns (CARs) against firm level characteristics is then executed to uncover factors that drive the wealth effects of dividend tax cuts. Next, we examine the impact of tax cuts on firm's payout policies and stock trading volume. To preview our results, the empirical evidence rejects the dividend tax irrelevance hypothesis where tax cut announcements

³ As noted by Wang and Guo (2011), there is no consensus in dividend tax reforms among the developed countries. While the US reduces dividend tax rate through the 2003 Act, Britain and Germany have increased their dividend taxes since tax reforms in 1997 and 2000 respectively

are associated with positive CARs. Our cross-sectional analysis of the CARs shows that, to a certain extent, retail and institutional ownership contribute to firm value. We also find dividend tax cuts to exert positive impact on dividend payout. Overall, these findings are consistent with the “old view” on dividend taxation. The rest of this paper proceeds as follows. In the next section, a brief review of the literature is presented which is followed by the data and research design in the third section. The fourth section discusses the empirical results. The fifth section concludes the paper

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

There exist three widely held views with respect to the effects of dividend reduction on equity value and firm behavior. The “tax irrelevance view” postulates that dividend reduction has no impact on firm value. This view is valid when the marginal shareholder is a tax-free entity such as pension fund that is indifferent towards dividend tax changes. Under the “new view” of dividend taxation developed in Auerbach (1979), Bradford (1981) and King (1977) studies, dividend tax cut has a positive impact on share value as dividend cut is capitalized into share price. Tax cut has no influence on firm investment policy because firms under the new view are assumed to rely on retained earnings to finance growth. Dividends are only paid when there are residual cash flows after meeting firms’ investment and finance requirements. Finally, the “old view” predicts that share price will react positively to dividend cut in the short run. The source of these gains is due to a reduction in firms’ cost of capital. Since firms under the old view are assumed to rely on new share issuance as the marginal source of funds, lower dividend taxation will reduce firms’ cost of equity, hence, increase firm value. This is different from the new view’s paradigm where stock price gains are connected to the timing of extra dividend payments following tax cut.

REIT fits well into the old view theory developed by Auerbach (2002) for two reasons. First, REITs are cash constrained entities that rely heavily on external financing due to the mandatory 90% distribution requirement.⁴Ott, Riddigiouh and Yi (2005) document that only 7% of the US REITs’ investments are funded by retained earnings, as compared to 70% usage of retained earnings by general firms. Second, there exists a minimum distribution (payout) requirement in REIT which is absent under the new view paradigm. Auerbach (2002) theorizes that the value for firm with minimum distribution constraint is equal to:

$$V_t = \int_t^{\infty} e^{-\frac{\phi}{[1-(1-p)c_s - p\theta_s]}(s-t)} G_s ds \quad (1)$$

According to this expression, the value of firm equals the present value of its cash flows net of proceeds from share issues and dividend paid (G_s), discounted with a before-personal-tax discount rate based on an individual tax rate that is a weighted average of the tax rates on dividends (θ) and capital gains(c), with

⁴ REITs are mandated by law to distribute at least 90% of their taxable income in order to preserve their corporate tax exemption status.

weights based on the payout rate p , $\frac{\phi}{[1-(1-p)c-p\theta]}$. ϕ is shareholders' required rate of return. Since there

is no capital gain tax in Malaysia, expression (1) reduces to $\frac{\phi}{1-p\theta}$. A simple numerical analysis using

equation (1) based on payout ratio of 90% and a dividend tax cut from 28% to 20% in year 2007 will result in an increase of 2.7% in firm value based on a five years investment horizon. As noted in the introduction, empirical evidence on the wealth effects of dividend taxation is scarce. To the best of our knowledge, Auerbach and Hassett (2005) and Amromin et al. (2005) are the only two empirical papers that examine the impact of the changes in dividend taxation on stock prices. The former however did not show explicitly whether stock prices react positively to the announcement of the 2003 dividend tax cut proposal. The latter provides only visual evidence (line graphs) of abnormal returns surrounding dividend tax cut without indicating whether these abnormal returns are statistically significant.

The foregoing literature review leads to the following alternate hypothesis.

H1: Stock prices react positively to dividend tax cut announcements.

The validity of H1 will support both the new and old views but reject the irrelevance view of dividend taxation. We further hypothesize that positive announcement impact is larger for the first two announcements as compared to the third announcement because the later represents an extension of tax cut for another five years ending December 31, 2016.

H2: The magnitude of abnormal returns for the first and second event announcements are larger than the third event announcement.

As shown in Table 1, the dividend tax cuts reduce the dividend tax rate of institutional and individual investors; we therefore hypothesize that the announcement effect will increase monotonically with the importance of these groups of shareholders in the REITs represented by the number of shares owned by them. On the other hand, we do not expect any significant relationships between corporate share ownership (mainly held by REIT's sponsors) and abnormal returns.

H3: Institutional and retail ownerships are positively related to abnormal returns from dividend tax cut announcements

H4: Corporate ownership is not related to abnormal returns from dividend tax cut announcements

Empirical papers on dividend tax cuts have been focusing on the impact of dividend tax cuts on firms' payout policy. The "old view" posits that reduction in dividend taxes could spur dividend distribution, business investment and firm profitability. The "new view" on the other hand posits that tax on dividend should not affect firm's investment and dividend policies because new investments could be entirely

financed by retained earnings, a proposition which is clearly does not apply to the Malaysian REITs. Chetty and Saez (2005) provide clear evidence showing a surge in the frequency and amount of dividend following dividend tax cut which is consistent with the old view's prediction. Wang and Guo echo (2011) this old view of dividend taxation with evidence from listed companies in China. They document that China's dividend tax cut in 2005 led firms to increase their dividend payments. Individual investors' dividend tax rate in China was reduced from 20% to 10% effective on June 13, 2005.

The above empirical evidence leads to the following alternate hypothesis.

H5: REIT's dividend payout increases after the implementation of dividend tax cut announcements

The validity of H5 may not be obvious in REITs as compared to other general companies due to REITs' dividend distribution requirements which is unlike the 2003 Act where increasing in dividend payout is considered as one of the purported benefits of dividend tax cut (Amromin et al. 2005). The official objective of dividend tax cut as stated in the Malaysia Prime Minister's budgetary speech was to attract more foreign and domestic investment into the REIT sector. We verify this objective in H6 by examining the popularity of REITs share during the first two quarters after the implementation of dividend cuts. We hypothesize a surge in demand for REIT shares proxied by trading share volume following the implementation of dividend tax cuts.

H6: REIT's share trading volume increases after the implementation dividend tax cut announcements

DATA AND METHODOLOGY

The primary data used in this research is an unbalanced panel data of 12 Malaysian REITs obtained from Thomson Reuters's database over the period of June 2006-September 2012. We use event study methodology to examine the wealth effects surrounding the three dividend tax cut announcements on September 1, 2006 (Event 1), August 29, 2008 (Event 2) and October 7, 2011 (Event 3). Next, we examine the cross-sectional determinants of the cumulative abnormal return (CAR). The event date is taken as the first day the announcement appears during the tabling of 2007, 2009 and 2011 national budgets. The final sample comprises 26 observations. Abnormal returns surrounding the dividend tax cut announcements are estimated using the standard market model where the abnormal return of firm i on day t ($AR_{i,t}$) is:

$$AR_{i,t} = R_{i,t} - (\hat{\alpha}_i + \hat{\beta}_i R_{m,t})$$

where

$$\begin{aligned} R_{i,t} &= \text{return of REIT } i \text{ on day } t \\ \hat{\alpha}_i \text{ and } \hat{\beta}_i &= \text{parameters estimated in the estimation period} \end{aligned}$$

The average abnormal return of all REITs on day t (AAR_t) is computed using the following formula:

$$AAR_t = \frac{1}{n_t} \sum_{i=1}^n AR_{i,t}$$

Where

- $AR_{i,t}$ = abnormal return of REIT i on day t
 n_t = number of observation of abnormal return on day t

The variance of the average abnormal return on day t ($Var_{AAR(t)}$) using the market model is:

$$Var_{AAR(t)} = \frac{1}{n^2} \sum_{i=1}^n \sigma_{ei}^2$$

where

- σ_{ei}^2 = variance of residuals of REIT i from the market model estimation
 n = number of observation of abnormal return on day t

The significance of AAR_t is estimated as:

$$Z - stat = \frac{AAR_t}{\sqrt{Var_{AAR(t)}}}$$

The cumulative average abnormal return of all REITs from day t_1 until t_2 ($CAAR(t_1, t_2)$) is:

$$CAAR(t_1, t_2) = \sum_{t=t_1}^{t_2} AAR_t$$

The variance of the cumulative average abnormal return of all REITs from day t_1 until t_2 ($Var_{CAAR(t_1, t_2)}$) for the market model is:

$$Var_{CAAR(t_1, t_2)} = \frac{1}{n^2} \sum_{i=1}^n \sigma_{ei}^2(t_1, t_2)$$

$$\sigma_{ei}^2(t_1, t_2) = \sum_{t=t_1}^{t_2} \sigma_{ei}^2(t)$$

Where

- $\sum_{t=t_1}^{t_2} \sigma_{ei}^2(t)$ = cumulative variance of residuals of REIT i from the market model estimation from day t_1 until t_2
 n = number of observation of cumulative abnormal return on day t

By assuming that $CAAR(t_1, t_2)$ is normally distributed, the Z-statistic is computed using the following formula:

$$Z_{CAAR(t_1, t_2)} = \frac{CAAR(t_1, t_2)}{\sqrt{Var_{CAAR(t_1, t_2)}}}$$

Where

- $CAAR(t_1, t_2)$ = cumulative average abnormal return from day t_1 until t_2
 $Var_{CAAR(t_1, t_2)}$ = variance of the cumulative average abnormal return from day t_1 until t_2

RESULTS

Exhibit 1 tracks the mean cumulative average abnormal returns (CAARs) for the sample over the corresponding 21-day window period. This figure provides preliminary results supporting H1 and H2 where stock prices increase following dividend tax cut announcements. The gradual rise of abnormal returns in days leading to the Event 1 and Event 2 suggests that the market could have predicted the impending tax cut announcements. The extension of tax cut period for another five years during Event 3 did not receive a positive market response as in Event 1 and Event 2.

Exhibit 1: Cumulative average abnormal returns for Malaysian REITs surrounding dividend tax cut announcements

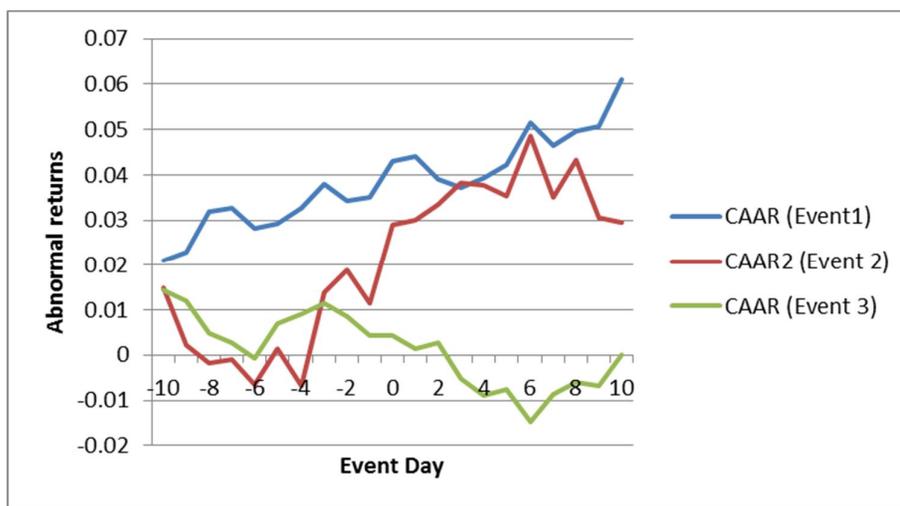


Table 2 reports CAARs for the five-day period surrounding the dividend tax cut announcements. Consistent with Figure 1, we find that dividend tax cut announcements at day $t=0$ for Events 1 and 2 results insignificant positive abnormal returns at 0.81% and 1.76% respectively. The announcement of dividend tax cut extension (Event 3) however does not yield any significant changes in prices. The cumulative effect is positive for all eight windows for Event 1 and Event 2. However, only four event windows are significant. A significant CAAR of 0.98% is observed in the three days window for Event 1 while significant CAAR ranged from 1.98% to 2.20% for Event 2. Interestingly, all four event windows of Event 3 are negative of which two are significant. Taken together, these results are consistent with the old and new views of dividend taxation while rejecting the dividend irrelevance proposition.

Table 2: Five-day abnormal returns surrounding dividend tax cut announcements.

Table 2 reports the three announcement effects on 1st Sep 2006 (Event 1), 29th August 2008 (Event 2) and 7th October 2011 (Event 3) on listed REITs in Malaysia. Event time is measured in days relative to the announcement date (0); *, **, *** denotes statistical significance at the 1%, 5% and 1% level respectively.

	Event 1	Event 2	Event 3
-2	-0.39%	0.50%	-0.29%
-1	0.07%	-0.73%	-0.40%
0	0.81%**	1.76%***	-0.02%
1	0.10%	0.10%	-0.29%
2	-0.49%	0.35%	0.13%
CAAR (-1,+1)	0.98%*	1.13%	-0.71%**
CAAR (-2,+2)	0.10%	1.98%**	-0.88%**
CAAR (0,+1)	0.91%	1.86%**	-0.31%
CAAR (0,+2)	0.42%	2.2%***	-0.18%
No of Observations	4	10	12

Next, we extend our event study analysis by examining cross-sectional factors that could influence the CARs. We begin with a set of control variables as presented and defined in **Table 3**. The ownership measures and associated mean values are *Retail Ownership* (6.8%), *Foreign Inst Investors* (5.9%), *Domestic Inst Investors* (23.6%) and *Corporate Shareholders* (50.0%). Approximately 97% (0.49/0.50) of the corporate shares are owned by REIT sponsors. The average REIT in our sample holds RM943 million worth of assets, employs a 28.5% debt ratio and maintains a 6.3% cash holdings. The mean age of the REITs is 37 months, which confirms their lack of track record. The dividend yield and profitability (i.e., ROA), means are 8.29% and 7.8%, respectively.

Table 3: Descriptive Statistics for CAR regression

	Definition	Mean	Std. Dev	Min.	Max.
<u>Dependent Variable</u>					
<i>CAR (-1,+1)</i>	Cumulative abnormal returns for a 3-day window covering 1-day before and after the event date	0.003	0.017	-0.043	0.048
<i>CAR (-2,+2)</i>	Cumulative abnormal returns for a 5-day window covering 2-day before and after the event date	0.004	0.029	-0.068	0.062
<i>CAR (0,+1)</i>	Cumulative abnormal returns for a 2-day window covering 1-day after the event date	0.007	0.022	-0.024	0.082
<i>CAR (0,+2)</i>	Cumulative abnormal returns for a 3-day window covering 2-day after the event date	0.008	0.023	-0.032	0.052
<u>Control Variables</u>					
<i>Retail ownership</i>	The percentage of shares held by shareholders holding 100,000 or less	0.068	0.053	0.017	0.215

	REIT shares.				
<i>Foreign Inst Investors</i>	Percentage shares owned by foreign institutional investors	0.059	0.057	0	0.200
<i>Domestic Inst Investors</i>	Percentage shares owned by domestic institutional investors	0.236	0.132	0.070	0.580
<i>Corporate Shareholders</i>	Percentage shares owned by corporate shareholders	0.500	0.207	0	0.772
<i>Sponsor Ownership</i>	Percentage shares owned by IPO sponsors	0.487	0.210	0	0.765
<i>Cash holdings</i>	Cash and Short Term Investments scaled by total assets	0.063	0.131	0.000	0.682
<i>Dividend yield (%)</i>	Dividend per share scaled by share price	8.290	2.188	5.470	13.770
<i>REIT Size</i>	Total assets (Millions RM)	942.71	859.19	173.40	4,452.90
<i>REIT Age (month)</i>	Number of months from IPO date	36.54	23.08	5	75
<i>ROA</i>	Net income divided by total assets	0.078	0.031	0.029	0.138
<i>Leverage</i>	Total debts divided by total assets	0.285	0.100	0.113	0.454

Our key variables of interest are ownership variables (retail, institutional and corporate). Findings consistent with H3 and H4's predictions will establish a stronger tax cut- abnormal returns causality because only REITs for whom retail and institutional investors (the beneficiaries of tax cut) are most important will react positively to tax cut announcement while REITs controlled by corporate shareholders (not affected by tax cut), in theory, should be neutral towards the announcements. We also include an indicator variable that equal to one for Event 1 and Event 2 and zero for Event 3. We combined instead of estimate separately for each of the event due to our small sample size.

Table 4 shows the results for the cross-sectional analysis of CAR regressed on ownership variables, event indicator and firm characteristic variables. The average VIF for each of the regression model is 2.54 indicating that controls variables are not highly correlated. Consistent with Table 1 and Figure 1, Event 1 and Event 2 carry higher CARs as compared to Event 3 where the coefficients of *Event dummies* are significantly positive in Models 1, 2 and 4. We find weak evidence that market reactions are stronger for REITs that owned more by shareholders who benefited more from dividend tax cuts (retail and institutional investors). The coefficients for *Foreign Institutional* and *Domestic Institutional* are positive and significant in Model 2. The coefficient for *Retail Ownership* is positive and significant in Model 4. Note that we do not include *Corporate Shareholders* in the regression due to its high collinearity with domestic institutional ownership variables (pairwise:-0.82).⁵ Not reported here, we also tried to replace *Foreign Inst Investors* and *Domestic Inst Investors* with *Corporate Shareholders*. The findings are consistent with the prediction of H4 where none of the coefficients of *Corporate Shareholders* are significant. Except for *REIT Age* and *Dividend Yield* which are positive and significant in Models 2 and 3 respectively, none of the control variables are found to be significantly related to CARs. In summary, we are only able to establish a weak claim of causality

⁵ Incorporating of Corporate Shareholders into Models 1-4 lead to a VIF score of 29-30 for both *Corporate Shareholders* and *Domestic Inst Investors*.

between dividend tax cuts and CARs since the ownership variables do not produced consistent result across regressions in Table 4.

Table 4: Determinants of REITs' CARs

This table reports result of OLS regressions of abnormal returns surrounding dividend tax cut announcements on firm characteristic variables for a sample of 26 announcements. The dependent variables are CARs for 3-5 day event windows. T-statistics are reported in the parentheses with robust standard errors. ***, **, and * refer to statistical significance at 1 %, 5 %, and 10 %, respectively.

	<i>Model 1</i> CAR (-1,+1)	<i>Model 2</i> CAR (-2,+2)	<i>Model 3</i> CAR (0,+1)	<i>Model 4</i> CAR (0,+2)
<i>Intercept</i>	-0.043 (-0.72)	-0.092 (-0.89)	-0.046 (-0.56)	-0.136 (-1.29)
<i>Retail Investors</i>	0.000 (-0.01)	0.002 (1.08)	0.000 (0.18)	0.002* (1.76)
<i>Foreign Inst Investors</i>	0.030 (0.29)	0.232* (1.89)	0.059 (0.55)	0.119 (0.98)
<i>Domestic Inst Investors</i>	0.002 (0.10)	0.094** (2.27)	-0.008 (-0.16)	0.052 (0.97)
<i>Cash holdings</i>	0.016 (0.84)	0.035 (1.11)	0.017 (0.84)	0.022 (0.90)
<i>Dividend yield</i>	0.001 (0.53)	-0.004 (-0.84)	0.007* (1.85)	0.001 (0.30)
<i>REIT Size</i>	-0.000 (-0.01)	-0.016 (-0.48)	0.005 (0.25)	0.016 (0.57)
<i>REIT Age</i>	0.018 (0.99)	0.061* (1.91)	-0.011 (-0.57)	0.026 (1.05)
<i>ROA</i>	-0.053 (-0.30)	-0.108 (-0.49)	-0.029 (-0.15)	0.043 (0.20)
<i>Leverage</i>	0.004 (0.11)	0.043 (0.76)	-0.017 (-0.42)	-0.016 (-0.28)
<i>Event dummies</i>	0.025* (1.88)	0.060** (2.41)	0.002 (0.16)	0.036* (2.05)
R ²	0.40	0.47	0.51	0.43
No of Obs	26	26	26	26

As a final piece of analysis, we investigate whether dividend payout (H5) and trading volume (H6) increases after the implementation of dividend tax cuts. We use the same set of control variables as in Table 4. In addition, we also control for year and property type fixed effects. **Table 5** reports the results from ordinary least squares estimation using 205 firm-quarter observations. The dependent variable for Model 5 is dividend payout ratio one year before and after the implementation of dividend tax cuts. For Model 6, the dependent variable is the average daily share volume in each quarter one year before and after the tax cut announcements. Our key variables of interest are event dummies (*Event 1*, *Event 2* and *Event 3*) which are one for payout ratio or average daily trading volume during the first quarter after the implementation of dividend cut and zero otherwise. A positive estimated coefficient on these event dummies will be interpreted as evidence that dividend payout or trading volume increases after the implementation of tax cuts.

The results are revealing. First, the coefficients for *Event 1* and *Event 2* are positive and significant supporting H5's proposition that dividend tax cut lead to an increase in dividend payout. This finding is consistent with the old view on dividend taxation which posits that tax on dividend could affect firm's investment and payout policy. The insignificant of coefficient for *Event 3* when combined with findings on *Event 3* in Table 4 suggest that *Event 3* is not taken as a surprise by the market as it represents only an extension of tax cut announced in *Event 2*. Not reported here, we also conducted robustness check by changing the definition of event dummies to capture the impact of tax changes during the first two quarters after its implementation. Under this specification, only the coefficient for *Event 2* remains significant while *Event 1*'s coefficient turns insignificant. We do not find evidence supporting the claim that trading volume increases following the implementation of dividend tax cuts. The coefficients for *REIT Age* is negative and significant in Model 5 and 6 suggesting that younger REITs tend to maintain a pay a higher dividend and exhibiting a higher trading volume surrounding tax cut announcements. The former finding is counterintuitive as we will expect young firms to retain more earnings to finance growth as compared to old firms. The latter finding could be due to the fact that younger REITs with their superior growth prospect generate more interest among investors, hence, carry a lower trading activity. The coefficient for *REIT Size* shows the expected positive sign since trading volume is a function of REIT size.

Table 5: The impact of divided payout and trading volume

This table reports result of OLS regressions of dividend payout and trading volume surrounding dividend tax cut announcements on firm characteristic variables for a sample of 205 firm-quarter observations for the period of 2006-2012. The dependent variable for Model 5 is dividend payout ratio one year before and after the implementation of dividend tax cuts. For Model 6, the dependent variable is the average daily share volume in each quarter one year before and after the tax cut announcements. T-statistics are reported in the parentheses with robust standard errors. ***, **, and * refer to statistical significance at 1 %, 5 %, and 10 %, respectively.

	<i>Model 5</i> <i>Dividend</i> <i>Payout</i>	<i>Model 6</i> <i>Trading</i> <i>Volume</i>
<i>Intercept</i>	1.260*** (5.45)	0.432 (0.89)
<i>Event 1</i>	0.081* (1.72)	0.050 (0.43)
<i>Event 2</i>	0.087** (2.40)	-0.153 (-1.35)
<i>Event 3</i>	0.066 (1.47)	-0.106 (-1.32)
<i>Cash holdings</i>	0.722 (1.33)	-0.208 (-1.06)
<i>Dividend yield</i>	-0.004 (-0.54)	0.002 (0.10)
<i>REIT Size</i>	0.035 (0.69)	0.940*** (12.10)
<i>REIT Age</i>	-0.145*** (-3.00)	-0.347*** (-2.73)

<i>ROA</i>	-8.906*** (-7.73)	-0.246 (-0.42)
<i>Leverage</i>	-0.191 (-1.06)	-0.515* (-1.93)
<i>Property types dummies</i>	Yes	Yes
<i>Year dummies</i>	Yes	Yes
R ²	0.61	0.55
No of Obs	205	205

CONCLUSION AND FUTURE RESEARCH

This paper adds to the scarce literature on dividend taxation. Malaysia tax cut announcements which are uniquely applied to the REIT sector allows us to provide clear evidence on the wealth effects of dividend tax cut and its impact on corporate decisions. REITs' dividend distribution requirements and its heavy reliance on external funding make it a suitable sample to verify the old view paradigm. Our findings are in line with the old view where dividend cuts are found to register positive announcement effects. Moreover, REITs react by paying more dividends during the first quarter where the dividend tax cuts are formerly implemented.

We attempt to do the following further tests to make our results more robust. First, we will compute the CARs for all listed property companies in Malaysia. These firms will serve as "control" group for our study since they are not affected by dividend tax cuts while operating in the same sector (property) as the REITs. Second, as noted in Chetty and Saez (2005), a better strategy to distinguish between the new versus old view is to analyze firms' investment patterns since the old view predicts a positive response while the new view predicts no investment response. REIT again is a good sample to verify this proposition since REITs in Asia growth aggressively acquiring properties after their listing. Wong and Ooi (2015) for instance report that REITs in East Asia grew by 9.4% p.a. during the period 2003-2012. Third, we will interact event dummies in dividend payout regression with ownership variables to shed lights to mechanism that drive the surge in payout. Chetty and Saez (2005) find that firms that controlled by shareholders whose tax incentives are affected by the tax reform respond more strongly to dividend cuts in a manner consistent with the prediction of agency theory.

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