

## **What Happens When Islamic Capital Markets Move Away From Tax Neutrality – A Look At Oman & Saudi Arabia**

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### **ABSTRACT**

This article evaluates how tax reforms affect stock prices of local and foreign firms in Oman and Saudi Arabia. Both countries introduced corporate tax on foreign firms, exempting local firms from corporate tax, when they moved away from a pre-existing Islamic tax neutrality policy. These reforms were implemented in 2009 in Oman and in 2004 in Saudi Arabia. These tax reform events – applying to foreign firms and not applying to local firms in the same markets – offer ideal experimental situations in two economies to test the taxation theories on how stock prices must react. We find that the results support the Modigliani-Miller and Elton-Gruber tax theories in two ways. Firstly, foreign firms that had their taxes reduced experienced stock price increases. Secondly, local firms not subjected to tax or tax reduction showed no visible tax effect. These are theory-consistent findings in the unique tax environments in these two Islamic countries, which moved away from tax neutrality, enabling us to obtain very clear evidence on modern theories of taxation. In our view, this evidence is significantly important addition to the literature on tax and taxation and for those contemplating a move away from Islamic tax neutrality.

*Keywords:* Corporate tax reform, Islamic tax-neutrality policy, announcement effect, corporation incomes, ex-dividend days

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### **INTRODUCTION**

This article has two objectives: measuring stock price changes when corporate tax laws changed in two Islamic countries, moving away from tax neutrality to modern taxation practices). Prior to this reform,

both countries had entrenched tax rules that did not tax any incomes of corporations or individuals. The second aim is to verify if stock price changes are consistent with the dividend tax effect theories in finance and financial economics. With the practice of traditional Islamic tax neutrality, historically both countries uniquely did not also have dividend and capital gains taxes nor corporate or income taxes until a very high corporate tax was imposed in some time back but only on foreign firms (Jalili, 2006).

In recent years, taking cognition of low rates of corporate taxes in most countries, Oman first and Saudi Arabia later reduced the tax rates substantially. These corporate tax reduction events in these two countries have yet to be studied despite the events offering unique situations for testing tax theories. The two taxation theories to be explained in this paper predict that asset prices are insensitive to specific tax laws if there is no tax on taxable incomes and if there is no change. These countries provide an ideal experimental situation as their reforms changed Islamic tax neutrality by introducing corporate tax only on corporations before-tax income while not taxing the dividend incomes accruing to shareholders with no capital gains tax in both cases.

These two countries have previously implemented progressive corporate tax rates only on foreign firms mainly to gather revenue from non-domestic firms: note that, under tax neutrality, the domestic firm's incomes were not taxed. Local firms enjoyed no corporate tax as had been

historically practised under Islamic tax neutrality. Besides this, these countries have vast revenues to conduct their government functions without imposing any corporate tax on local firms. We analysed the effect of an unexpected change in the tax policy, which was a reduction in the corporate tax rate on foreign firms while preserving tax neutrality for individuals and locally-owned firms. Under taxation theories, tax reductions or tax eliminations (as in the case of the Bush-Obama laws during 2003 and 2012: see Aslam *et al.*, 2012) are viewed as conveying good news by investors in foreign-owned firms, hence stock prices are expected to rise.

In Oman, corporate income tax was introduced in 1981 for all firms; nevertheless, it was immediately amended to provide exemption for local firms, so under Islamic tax neutrality, there was no tax levied on local firms. The exemption for local firms was lifted in 1993, where local corporate income was taxed at between 5 to 30 %, with a maximum rate of 50 % for foreign firms. Our concern was with foreign firms experiencing large falls in tax rates from 50 to 12 %. In 2009, the government introduced a flat reduced tax rate for all firms, including domestic firms, to 12 %, as in the case of China, which did a similar reform in 2005. The new tax law took effect on 1 January 2010: a reduction was considered good news for all firms, both local and foreign. Local firms had their tax reduced from a maximum of 30 to 12 % while the foreign firms had their taxes reduced from 50 % to 12 %; the latter is obviously noteworthy. Also, in

Oman there were the same zero dividend incomes and capital gains taxes. This new income tax law only affected corporations. Individuals were not subject to taxation on any income.

In Saudi Arabia, the imposition of corporate tax of foreign firms was made even earlier, in the 1950s: the rate varied from 25 to 45 % of corporate pre-tax incomes. The tax did not apply to firms with local ownership, unlike in Oman. Furthermore, oil investment firms were required to pay a tax rate of 85 %, which is an oil-royalty-type payment. After some pressure from foreign firms and international organisations, the Saudi government gave serious consideration to lowering the tax rate. In 2003 (also moving away from historical tax neutrality), after considerable debate, the new law reduced the tax rate to 25 %, which is a substantial change, and this was good news for foreign firms. Nevertheless, the Crown Prince through a royal edict managed to push the rate even lower to 20 % at the time of signing the law into effect on 15 August 2004.

The rest of the paper is divided into three more sections. Section 2 is a very brief statement on relevant tax theories, while the methodology is explained in section 3. The results are presented thereafter in section 4 with a short conclusion found in section 5. The overall result affirmed the predictions of the two tax theories and is explained in the next section: the ideal environment provides a clean test situation.

## BRIEF REVIEW OF TAX LITERATURE

Our research is rooted in the well-known literature of Modigliani and Miller (1958) on corporate taxation and the announcement effect studies that abound in finance literature. This theory suggests that when there is no tax of any kind, as in Islamic tax neutrality, a firm's value is invariant to debt funding. That is, there would be no tax advantage in acquiring either debt or equity. Hence, any combination of securities as equity or debt (say *sukuk* debt under Islamic laws) is as good as any other combination. This could be written as:

$$V_L = V_U, \text{ if } \tau_c = 0 \quad \text{Eq. (1)}$$

where the value of levered firm ( $V_L$ ) is equal to the value of unlevered firm ( $V_U$ ) when corporate tax does not exist with no tax-deductibility of interest payments (*sukuk* dividends). That is, with tax neutrality for local firms in these two Islamic nations, tax should not affect domestic stock prices in our two cases although foreign firms would be affected by tax laws. Unlike in most developed and developing countries, there is also no capital gains nor is there personal income taxation under tax neutrality. Thus, if tax is introduced in Oman and Saudi Arabia on foreign firms only, only those firms in the share market should react to the news as foreign firms in Saudi Arabia are the only ones that had tax reduced in 2003, which was good news. This is a unique event, so it deserves to be examined to investigate how the theory-suggested stock price effect would play out in this unique tax situation without the additional complication of

testing this effect in countries with dividend tax and capital gains tax as is the case in most countries practising other tax policies.

Nevertheless, it must be recorded here that the value of levered and unlevered firms would be different if corporate tax were imposed ( $\tau_c \neq 0$ ) as per a revision to the above theory by the same authors (Modigliani & Miller, 1963), hereafter MM. The value of the levered firm would increase by the amount of tax deduction on interest payment, which is sourced from debts. This theory, while not tested in this paper, is very much so worth studying in detail.

Taxation effect can also be observed from the ex-dividend day share price behaviour since investors price stocks on the basis of “after-tax” dividend flows if there are dividend tax and capital gains tax. In both our markets, these taxes are set to zero under tax neutrality. It is widely observed that price would generally decline around an ex-date since payment of dividends on the ex-date is cash outflow. Elton and Gruber (1970) outlined a basic model to measure average share price decline where both these taxes are implemented:

$$\frac{P_B - P_A}{Div} = \frac{1 - \tau_p}{1 - \tau_{cg}} \quad \text{Eq. (2)}$$

The calculation is derived from an equilibrium equation that implies investors’ indifference towards dividends or capital gains from selling stocks when dividend tax and capital gains tax are the same. Referring to the above equation, the changes in share price before ex-date ( $P_B$ ) and after ex-date

( $P_A$ ) is reflected in the difference in dividend and capital gains tax, provided no arbitrage. This is a relevant theory for testing if the tax effect is zero as in our two cases given the unique situation that there is no capital gains and dividend tax.

Nevertheless, the theory has drawn some criticism. Some researchers have acknowledged that the price drop is due to short term arbitrage (Kalay, 1982; 1984) and also to the microstructure effect on prices, or that the drop is associated with the market frictions such as price-discreteness and bid-ask bounce (Bali & Hite, 1998; Frank & Jagannathan, 1998; Dubofski, 1992). However, these explanations are mostly irrelevant to our investigation as in our study, capital gains and dividend taxes were zero. Therefore, it is important to conduct research in a tax-controlled environment such as that in Saudi Arabia and Oman.

## DATA AND METHODOLOGY

Two basic methods were employed to pursue the research objectives: (1) event study method on corporate tax event announcement effects, and (2) measurement of the average share price decline on the ex-dividend date. MM’s theory would suggest that the value of the firm would have to go up if corporations paid less tax: see Eq. (1). As per Eq. (2), the stock price decline ratio at the time of ex-dividend days should be equal to the amount of dividends, so that the ratio of dividend-to-stock price is equal to 1.

The well-entrenched event study method was applied as outlined by MacKinlay (1997) to investigate the impact of the

announcement effect. Event dates were selected from the formal announcement by the government that was found in news available from Factiva database. This was due to a lack of English news publications available, especially in the early 1990s. The news report also confirmed the available law report found on the government website. The firms' data were collected from Datastream, a database provided by Thomson-Reuters. The database includes adjusted share price, main index price, dividend yield, firm capitalisation and debt-to-equity ratio. Also, to estimate the expected return, we applied the widely used market model method (MacKinlay, 1997). Results were then validated through computation of t-test to see whether the announcement provided a significant impact across event windows (Brown & Warner, 1984).

The second measurement was the average price decline on the ex-dividend day. We applied the classic Elton-Gruber (1970) model to measure this tax effect:

$$\frac{P_B - P_A}{Div} = \frac{1 - \tau_p}{1 - \tau_{cg}}$$

If personal tax on dividends (numerator) is zero along with capital gains tax also being zero, the stock price drop to dividend ratio must be equal to 1, as the term on the right-hand side reduces to 1.00. The average price decline is expected to be 1 or significantly not different from 1, since the dividend tax rate is equal to the capital gains tax rate. Bell and Jenkinson's (2002) method is also

conducted as a way of verifying the results through OLS (Ordinary Least Square) regression:

$$\left( \frac{P_{cum} - P_{ex}}{P_{cum}} \right) = \alpha + \beta \left( \frac{Div}{P_{cum}} \right)_i + e_i \quad \text{Eq. (3)}$$

Deriving the equation from the Elton-Gruber model, the average price drop ratio could also be estimated from the slope coefficient in the regression. Corrections for heteroskedasticity were carried out using the Newey-West (1987) method and we also allowed for non-zero intercept as this would avoid biased estimates of the slope coefficient.

## EVIDENCE OF TAX EFFECT ON ANNOUNCEMENTS OF TAX RATE REVISIONS

### *Announcement Effect on Foreign Firms*

In this section, we present the findings of the announcement effect measurements: see summary test statistics in Table 1 and 2.

It must be noted that the windows we used were short windows as is the practice in such studies; later we widened the windows, which yielded different numbers. It was found that the announcement of changes to the corporate tax laws had a positive effect on the portfolio of foreign firms.

In the case of Oman, the portfolio of foreign firms showed a highly positive significant price effect measured as Cumulative Average Abnormal Returns (CAAR) around the issuance dates of the law on 1 June, 2009.

TABLE 1  
Oman Foreign and Local Firms, CAARs

Event Date		-1 to 0	0 to +1	-1 to +1	Others	
25/5/2009	Foreign	18.159	1.462	1.570		
Law passed		(4.565)**	(0.363)	(0.318)		
	Local	0.306	1.269	1.731		
		(0.124)	(0.515)	(0.573)		
1/6/2009	Foreign	-0.195	16.831	16.493	16.978	0 to +9
Law issued		(-0.048)	(4.382)***	(3.377)***	(1.904)*	
	Local	0.051	-0.276	-0.752	-0.178	
		(0.021)	(-0.113)	(-0.251)	(-0.032)	

Note: Available firm sample is 6 for foreign firms and 97 for local firms. Level of significance is noted with asterisks, \*(0.1), \*\*(0.05) and \*\*\*(0.01).

Table 2:  
Saudi Arabia Foreign-Local Portfolio CAARs

		-1 to 0	0 to +1	-1 to +1	Others	
5/1/2004	Foreign	0.564	0.262	0.336		
Shura voting		(1.351)	(0.364)	(0.536)		
	Local	0.625	-0.063	0.662		
		(1.212)	(-0.455)	(0.748)		
12/1/2004	Foreign	0.476	0.636	0.590		
Law passed		(0.839)	(1.560)	(1.165)		
	Local	0.803	0.753	0.907		
		(1.622)	(1.381)	(1.737)*		
30/7/2004	Foreign	-0.953	-0.393	-1.357		
Effective date		(-0.976)	(-0.945)	(-1.601)		
	Local	0.319	0.7548	1.043		
		(1.244)	(1.090)	(1.720)*		
15/8/2004	Foreign	1.056	1.582	3.0126	6.122	-3 to +3
Law announcement		(0.585)	(0.679)	(1.423)	(2.542)***	
	Local	-0.068	-0.757	-0.054	2.100	
		(-0.299)	(-0.027)	(-0.017)	(1.246)	

Available sample of firm is about 4 to 6 for non-Saudi owned firms and 12 to 22 for Saudi-owned firms. The level of significance is noted with asterisks, \*(0.1), \*\*(0.05) and \*\*\*(0.01).

The local firms with no tax effect from being excluded from tax did not have any significant tax effect: CAAR (-1 to 0) is 0.306 % with no significant t-value. The foreign stocks gained a 18.159 % gain

since these firms would have a significant reduction in tax payments from 50 % reduced to 12 %. In the literature on tax effect, this is perhaps the largest CAAR observed in any country. The tax effect



was obvious in all but one test window for foreign firms. Similarly, the sample on Saudi Arabia firms also yielded similar stock price behaviour.

We found that there was one significant positive price reaction as measured by the CAAR of foreign firms around the announcement date of 15 August, 2004. The tax effect was more complicated in the case of Saudi Arabia. Consistent with the more simple situation of this tax reform, no local firms were affected as these firms had no laws changed requiring taxes to be reduced. So, all the tests showed that there was no significant tax effect in any of the tested windows for local firms. With no unexpected change in tax laws, there was no information effect at all for local firms. In the case of foreign firms, the law was pretty much uncertain until the Crown Prince took the initiative to reduce the tax rate by law. Hence, in the windows traditionally used in event studies (-1 to 0; 0 to +1; etc.) there was no observable impact. However, when the amendments to the law were done, it became clear there was a delayed impact in the period -3 to +3 test window. The CAAR was 6.122 %, and the t-value was significant at 0.01 acceptance level.

Thus, the behaviour of local firms conformed to the information effect theory in that there was no unexpected change in tax rate, so there was no effect. The tax reform did affect only the foreign firms.

#### *Ex-dividend Day Price Effects*

As for the ex-dividend day share price behaviour, the calculated average price-drop

(APD)-to-dividend ratio (using adjusted price and dividends) was found to be close to the theory-hypothesised value of 1. The APD value of 0.996 was not significantly different from 1: the test was done to see if the measured coefficient (0.996 in column 2) was different from 1.00 (see Table 3.1). The test was done in two parts, with and without outlier trimming. The “adjusted” results were after winsorian data trimming for outliers 2.5 standard deviations. The data series with very small dividends tended to have an extreme APD, so winsorian testing was needed. The second sample was without outlier trimming: the results were misleading, so we present the results to justify why winsorising the observations was important in this research.

Table 3.1  
Average Price Drop, Omani Firms

The table summarises the calculation of the Elton-Gruber model of average price drop-to-dividend ratio. The calculated average price drop (APD) omits the outliers through winsorisation and exclusion of low dividend and non-trading data.

	APD (Adjusted)	APD (Unadjusted)
Average	0.996	2.768
N	69	112
T-value	(-0.077)	(5.949)***

Level of significance is noted with asterisks, \*\*\* (0.01).

The theory states that if there are no capital gains and personal tax, stock price formation should ignore any tax effect on the dividends, just as found for Oman. Note that the t-value of -0.077 was not significantly different from 1.00. The unadjusted values are shown here to indicate

Table 3.2  
Regression Analysis of Price Drop Ratio, Omani Firms

The regression refers to price-drop-to-dividend ratio during the period 2004 to 2012 using the adjusted price and dividend data. The last two columns are the result after the intercept was dropped. F-statistic was not indicated in that regression. The regression was heteroskedasticity corrected using the Newey-West method as provided in EViews.

C	DIV/P	Adj. R2	F-Stat	DIV/P	Adj. R2
0.068	0.174	0.034	2.700	1.029	0.513
(6.563)***	(1.377)			(9.371)***	
0.000	0.175			0.000	

Level of significance is noted with asterisks, \*\*\* (0.01).

that the adjustment for dividend, if not done correctly, would have given the opposite result of a significant change.

As a robustness testing, we also ran the Bell and Jenkinson’s model (see Eq. 3) to further verify the significant relationship between the ex-day price drop,  $(P_{cum} - P_{ex})/P_{cum}$  and dividend,  $Div/P_{cum}$ . In the initial regression, the variable was not significant, with a coefficient of 0.174, which is further away from our hypothesis. The ratio might be a bit biased since the intercept was suppressed to zero. Nevertheless, after the intercept was dropped, the coefficient became significant with a p-value of less than 0.01, whereas the coefficient was 1.029 (see Table 3.2). It was indeed very close to our hypothesis ratio of 1.

The results for Saudi Arabia also provide similar evidence of no effect on stock prices on the ex-dividend days. The average price drop ratio was 0.994, which is in line with the hypothesised value of 1 as predicted by the Elton-Gruber Model (see Table 4.1). Thus, this value was also not significantly different from 1 as shown by the low t-value of -0.152, that is, the pricing behaviour of the investors on the “after-tax

cash flow” basis takes into account that there is zero capital gains and dividend tax rates for investors, such that the price drop was exactly equal to the dividends.

Table 4.1  
Average Price Drop, Saudi Firms

The table summarises the calculation of Elton-Gruber model of average price drop-to[dividend ratio. The calculated average price drop (APD) omits the outliers through winsorisation and exclusion of low dividend and non-trading data.

	APD (Adjusted)	APD (Unadjusted)
Average	0.994	1.505
N	159	215
T-value	(-0.152)	(3.572)***

Level of significance is noted with asterisks, \* (0.10) and \*\*\* (0.01).

It is worthwhile noting that tests on several countries have shown that this price drop ratio is significantly away from 1.00: the ratio is 0.76 for the US in one study, which is what one would expect with an average US tax rate of about 34 % in that country during the test period. The unadjusted numbers are not reliable, and we show that number to emphasise the point that without winsorising the observations, we would end up with a wrong conclusion.



Table 4.2

## Regression Analysis of Price Drop Ratio, Saudi Firms

The regression refers to price drop-to-dividend ratio during the period of 2004 to 2012 using the adjusted price and dividend data. The last two columns are the result after the intercept was dropped. The F-statistic was not indicated in that regression. The regression was heteroskedasticity corrected using the Newey-West method as provided in EViews.

C	DIV/P	Adj. R2	F-Stat	DIV/P	Adj. R2
0.005	0.840	0.414	116.891	0.969	0.405
(1.384)	(7.376)***		000.00	(13.105)***	
0.168	0.000			0.000	

Level of significance is noted with asterisks, \*\*\* (0.01).

Table 5

## Oman Foreign and Local Portfolio AARs

	1/6/2009 (Law issued)			
	Foreign		Local	
	AAR	T-Statistic	AAR	T-Statistic
-5	5.262	(1.801)*	-0.156	(-0.270)
-4	-4.083	(-0.187)	1.425	(4.318)***
-3	0.215	(0.244)	-0.360	(-1.064)
-2	0.571	(0.810)	0.691	(1.917)*
-1	-0.314	(-0.510)	-0.476	(-1.704)*
0	0.066	(0.076)	0.527	(0.511)
+1	4.168	(0.345)	-0.804	(-2.791)***
+2	-0.932	(-1.776)*	-1.490	(-4.925)***
+3	-1.502	(-1.461)	-2.424	(-3.650)***
+4	0.793	(0.611)	0.755	(1.896)*
+5	-0.358	(-0.242)	-1.448	(-3.919)***
+6	1.449	(2.109)**	-1.448	(-3.919)***
+7	0.168	(0.059)	1.083	(-0.581)
+8	1.464	(2.031)**	1.639	(5.727)***
+9	1.561	(2.203)**	<b>0.452</b>	<b>(1.514)</b>
<b>+10</b>	<b>-0.523</b>	<b>(-0.886)</b>	<b>-0.949</b>	<b>(-3.020)***</b>

Note: Available firm sample is 20 for foreign firms and 97 for local firms. Level of significance is noted with asterisks, \*(0.1), \*\*(0.05) and \*\*\* (0.01).

Robustness testing: Using the Bell-Jenkinson model, we ran a regression of the price drop variable,  $(P_{cum} - P_{\alpha})/P_{cum}$  against the dividend,  $Div/P_{cum}$  (see Eq. 3). We found that there was a positive significant relationship (p-value < 0.01) indicating the relevance of dividends, with a coefficient value of

0.84. After suppressing the intercept, the coefficient was found to be 0.969, which was very close to our initial hypothesised ratio of 1. The adjusted R-squared seemed to be reasonable at 0.414 and 0.405, before and after the intercept was dropped, respectively. Also, the F-statistic indicated a significant

goodness of fit. The summary of result is shown in Table 4.2.

Similar to the findings for Omani firms, Saudi firms also had a similar interpretation of tax effect on the ex-dividend days. In a tax-controlled environment, where dividend and capital gains are not taxed, the share prices appear to drop by the same amount of dividends, on average.

#### *AAR and Plots of the CAAR for Oman and Saudi Arabia*

The daily AARs over the event days -5 to day +10 are shown in Table 5 for Oman. We report daily average abnormal returns (AARs) around announcement days for Oman and Saudi Arabia over -5 and +10 days. As for the stock returns in Oman, it was observed that there was a mixed price effect around the days when the bill was passed into law on the 25 May, 2009. Our test windows were much wider than those used in tests discussed in the earlier section. The results were different owing to the delayed impact or lack of investor reaction over different stages of the bill going through till it was passed or amended by the Crown Prince (in Saudi Arabia). There was a large AAR of 5.2 % in the case of foreign firms, where change in price was a significant change acceptable at the p-value  $< 0.1$  during the day of passing the bill. The local firms did not have any significant AAR: the AAR -0.156 %.

The plots of the CAARs are found in Figure 1. There was a highly significant CAAR of about 5 % when the law came into force on 1 June, 2009. One could also note

Event Date: 1/6/2009 (Law issued)

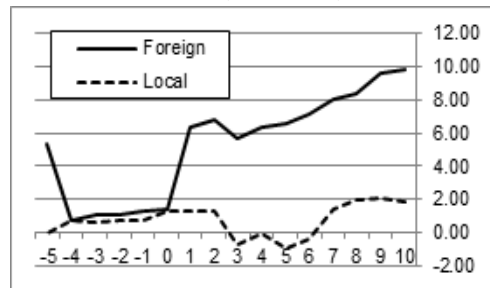


Fig 1: Stock price Reactions in Oman Around Event

that the price reaction of the foreign firms was much more prominent because these firms would enjoy a large cut in tax.

Daily AARs for both local and foreign firms are reported in Table 6.

As for Saudi Arabia, there were two events pertaining to the corporate tax changes applicable only to the foreign firms; the date of passing the bill into law was 6 January, 2004. The issuance of the amended law lowering the tax rate was on 15 August, 2004.

Although there were positive changes in price indicating that the market was reacting to the news as good news, none of the individual day changes in prices were statistically significant. One explanation for this is that, under Saudi parliamentary (Shura) procedures, the law can be changed by the rulers after Parliament has passed it. Hence, it is possible that the investors would only react after the ruler had signed the law into effect. This is similar to the US practice of the President passing the law into effect. Hence, we would expect a delayed effect on the day the law came into force. However, it appears that the news was treated as good news, but there was no significant upward price revision as in Oman.

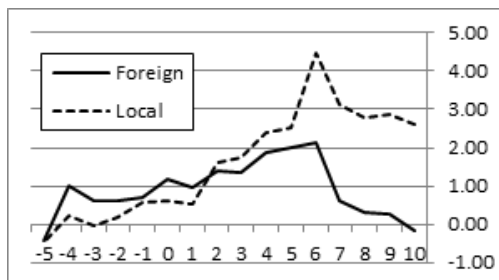
Table 6  
Saudi Foreign and Local AARs

	Foreign				Local			
	6/1/2004		15/8/2004		6/1/2004		15/8/2004	
	Bill being voted		Law issued		Bill being voted		Law issued	
	AAR	T-Stat	AAR	T-Stat	AAR	T-Stat	AAR	T-Stat
-5	-0.407	(-0.245)	0.028	(-0.022)	-0.464	(-0.306)	0.299	(0.119)
-4	1.394	(0.503)	0.160	(0.142)	0.683	(0.433)	-0.119	(-0.034)
-3	-0.392	(-0.222)	0.175	(0.051)	-0.267	(-0.167)	0.637	(0.278)
-2	0.030	(0.093)	1.283	(0.689)	0.233	(0.131)	0.482	(0.564)
-1	0.073	(-0.007)	1.431	(0.668)	0.391	(0.198)	0.703	(0.465)
0	0.491	(0.312)	-0.375	(-0.316)	0.037	(0.107)	-0.771	(-0.521)
+1	-0.228	(-0.144)	1.957	(0.803)	-0.100	(-0.079)	0.014	(-0.044)
+2	0.445	(0.188)	0.449	(0.028)	1.079	(0.683)	0.209	(-0.077)
+3	-0.046	(-0.254)	1.202	(0.553)	0.154	(0.004)	0.826	(0.731)
+4	0.522	(0.151)	-0.926	(-0.480)	0.649	(0.437)	-0.010	(0.086)
+5	0.114	(0.020)	0.053	(0.069)	0.104	(0.032)	0.806	(0.543)
+6	0.143	(0.145)	-0.358	(-0.242)	1.964	(1.229)	0.018	(-0.102)
+7	-1.544	(-0.626)	-0.942	(-0.549)	-1.352	(-0.766)	-0.290	(-0.358)
+8	-0.276	(-0.171)	-0.290	(-0.158)	-0.339	(-0.155)	0.807	(0.842)
+9	-0.068	(-0.001)	0.116	(0.186)	0.075	(0.036)	-0.190	(-0.291)
+10	-0.412	(-0.140)	-0.021	(0.344)	-0.241	(-0.299)	-0.934	(-0.865)

We plotted the AARs for both local and foreign firms' portfolio (see Figure 2). It can be noted that there was a significant upward price change of about 3 % for foreign firms over the window from day -3 to +3 days after the ruler had passed the law into effect on 15 August, 2004. Thus, there was a 6.2

% change in recognition of the ruler further lowering the tax rate that Parliament had passed, but the ruler had lowered it for foreign firms. It is not surprising therefore for this unique legal practice to have been the reason for the investors' delaying their reaction until the ruler affirmed the tax

Event Date: 12/1/2004 (Law passed)



Event Date: 15/8/2004 (Law issued)

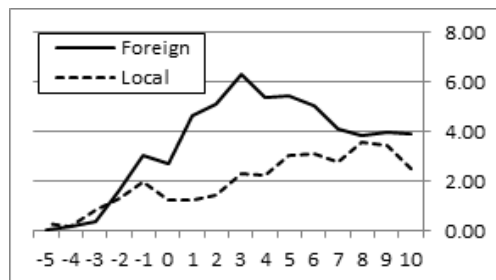


Fig 2: Stock Price Reactions in Saudi Arabia Around Tax Reform Events

reduction with a further lowering of tax from 24 % to 12 %. Earlier events thus went off without significant change to prices. The local firms also reacted sympathetically although our tests showed that there were no significant changes to prices.

## CONCLUSION

Analysing theory-relevant tax effects on tax-exempt countries such as Oman and Saudi Arabia provided a clean test situation with identical samples although both countries practised different tax laws. Foreign firms had corporate taxes while locally-owned firms were exempt from corporate tax or only the foreign firms had a huge reduction in the tax rate after the reform. Further, unlike most modern economies where there is capital gains and dividend income taxes, both Oman and Saudi Arabia have zero capital gains and zero dividend taxes. Thus, a study of these two countries (there are a few more; see Aslam *et al.*, 2014) with their unique tax environments is worthwhile in testing the taxation theories. However, these two countries are the ones with (Islamic) tax neutrality moving to modern tax policies whereas most other countries have personal income taxes, which is absent in Oman and Saudi Arabia. This is the motivation for the study to test the theory in a much more ideal environment than is possible in any other markets.

A further motivation is much more general in nature and is relevant for the study of Islamic capital market behaviour. Islamic countries rely very little, historically, on corporate, income, capital gains and

dividend taxation. This is not the case for Islamic countries that came under colonial rule, when the colonisers introduced all sorts of taxes, ignoring the centuries-old tax neutrality policy practised there previously. Further, most resource-endowed Islamic countries tended to rely on revenues other than tax to meet government expenses. We characterise such Islamic taxation regimes as “tax-neutrality regimes” in comparison with the countries with a multitude of taxes because these countries preserved the pre-1903 tax environment, during which time almost the whole world relied upon excise tax, land tax and wealth tax (and a few non-income related taxes) for revenue. It was in 1903 that, for the first time, a new form of taxation, the corporate tax, was introduced by the US government: in that year the rate was set at 3 % of the pre-tax corporate income.

Our attempt in this paper is to reveal how taxation policies away from a tax-neutrality environment may affect stock price behaviour using the Modigliani and Miller (1958) and Elton and Gruber (1970) theories on taxation. The announcement effect of tax reduction in Oman and Saudi Arabia on foreign firms appeared to serve as good news. The abnormal return to this event was a large increase in stock prices around the time of the tax reduction event in both countries. These findings were strong enough to confirm that in a controlled environment, announcement effects are quite clear and non-controversial. These results are consistent with the Miller-Modigliani prediction that a lowering of tax would

increase cash flow to the shareholders, and hence the value of the firms would increase.

Further, to test robustness, we tested whether the price-to-dividend drop ratio on the ex-dividend days were as per the Elton-Gruber Model. Robustness testing was also done using the Bell-Jenkinson Model. The results showed that after winsorising the observations for outliers, the price drop ratio was exactly equal to 1.00 as tested using t-tests. This was so for both Oman and Saudi Arabia, two economies that have yet to introduce capital gains and dividend taxation.

Tests carried out using US, Malaysia and Singapore data on the days of tax law changes for dividend tax rates have shown results consistent with the two theories as well (Aslam *et al.*, 2012; Aslam *et al.*, 2014). Taken together, these findings in this paper using data from Oman and Saudi Arabia would suggest that both stock market reactions to tax law changes (in these cases only corporate tax rate reductions) are consistent with the theory predictions: (i) there should be no price drop if the capital gains and dividend tax rates are zero; and (ii) reductions in corporate tax rates constitute as good news, so the stock prices must increase from anticipated increases in cash flow to shareholders of foreign firms in both countries tested.

Our results have some caveats. We mentioned that there were serious outlier problems, which we fixed by robust statistical procedures. The trading intensity was not very high in Oman, which may have introduced errors in the results. However,

we noted that trading was quite brisk at the times of dividend payments (ex-dates) and when the law was passed into effect. There are other ways of testing the tax effect, although we relied upon the more widely used tests. Finally, these results should be further corroborated in future when more observations and possible tax law changes take place in tax-neutrality countries. There are 56 majority-Muslim countries, and a number of them still practice tax neutrality.

## REFERENCES

- Aslam S., Ariff, M., & Shamsher M. (2012). Dividend tax cuts in the United States and single-tier tax regime in Malaysia: Share price reactions to tax policy changes. *Pertanika Journal of Social Sciences and Humanities*, 20(4), 1210-1228.
- Aslam S., Ariff, M., & Shamsher M. (2012, May 22-26) Do cash dividend increases from dividend tax cuts reflect good news to NYSE shareholders? In *Proceedings of the Global Finance Conference*. Chicago, IL, USA.
- Aslam S., Ariff, M., & Mohamad, S. (2014). The introduction of one-tier corporate tax system: Its effect on share price. *Capital Markets Review* (forthcoming).
- Bali, R., & Hite, G. L. (1998). Ex dividend day stock price behavior: Discreteness or tax-induced clienteles? *Journal of Financial Economics*, 47(2), 127-159.
- Bell, L., & Jenkinson, T. (2002). New evidence on the impact of dividend taxation and on the identity of the marginal investor. *The Journal of Finance*, 57, 1321-1346.
- Brown, S., & Warner, J. (1985). Using daily stocks: The case of event studies. *Journal of Financial Economics*, 14, 3-31.

- Dubofski, D. (1992). A market microstructure explanation of the ex-day abnormal returns. *Financial Management*, 21, 32-43.
- Elton, E. J., & Gruber, M. J. (1970). Marginal stockholder tax rates and clientele effect. *The Review of Economics and Statistics*, 52(1), 68-74.
- Frank, M., & Jagannathan, R. (1998). Why do stock prices drop by less than the value of the dividend? Evidence from a country without taxes. *Journal of Financial Economics*, 47, 161-188.
- Jalili, A. R. (2006). A descriptive overview of Islamic Taxation. *Journal of American Academy of Business*, 8(2), 16-28.
- Kalay, A. (1982). The ex-dividend day behavior of stock prices: Re-examination of the clientele effect. *The Journal of Finance*, 37(4), 1059-1070.
- Kalay, A. (1984). The ex-dividend day behavior of stock prices: A re-examination of the clientele effect: A reply. *The Journal of Finance*, 39(2), 557-561.
- MacKinlay, A. C. (1997). Event studies in economics and finance. *Journal of Economic Literature*, 35(1), 13-39.
- Modigliani, F., & Miller, M. H. (1958). The cost of capital, corporation finance, and the theory of investment. *American Economic Review*, 48(3), 261-297.
- Modigliani, F., & Miller, M. H. (1963). Corporate income taxes and the cost of capital: A correction. *American Economic Review*, 53(3), 433-443.
- Newey, W. K., & West, K. D. (1987). Hypothesis testing with efficient method of moments estimation. *International Economic Review*, 28(3), 777-787.