

THE IMPACT OF 2003 DIVIDEND TAX CUT ON STOCKS IN THE S&P 500

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ABSTRACT

This paper investigates pricing behavior of stocks in the Standard & Poor's 500 after and before May 28, 2003 when tax cut on dividends income was enacted. It focuses on differential effects of the tax cut on selected groups of S&P 500 stocks such as S&P 500 Dividend Aristocrats. The effects were significant for the S&P 500 Dividend Aristocrats in particular. However, the effects were not significant for the highest dividend-paying stocks and other groups. It draws implications for effective investment strategy for investors with a conclusion that there is no compelling reason to favor highest dividend-paying stocks for investors.

INTRODUCTION AND LITERATURE REVIEW

The purpose of this study is to examine the comparative performance of higher dividend-yielding stocks and lower dividend-yielding stocks of the S&P 500. Specifically, it will examine whether there are compelling reasons to favor higher dividend-paying stocks for investors due to the dividend tax cut. In addition, the findings of this study would shed some light on whether dividend policies of corporations do matter for performance of stocks in the S&P 500. This study will investigate whether the effects of dividend tax cut legislation on higher dividend-yielding stocks and lower dividend-yielding stocks are different. This study will also examine the differential effects of the tax cut on subgroups of S&P 500 stocks. The findings of this study will also shed some light on the pricing efficiency with respect to the effects.

According to Gross (2003), in the weeks since Congress slashed the tax on dividends to 15 percent, stocks that pay dividends have fared worse than the stocks that do not pay dividends at all. Shares of dividend paying members of the S&P 500 rose 2.5 percent, while shares of nonpayer rose 3.9 percent for the period between the beginning of June and mid-August. The dividend yield of 2.174 percent annually for payers does not come close to making up the difference. According to American Shareholders Association (2005), the dividend tax cut reversed the 25-year decline of companies paying a dividend. The number of S&P 500 companies paying a dividend significantly declined, from 469 in 1980 to 351 in 2002; however, the tax cut coupled with strong cash flow reversed this trend as 19 more firms paid dividends in 2003 and 8 firms followed in 2004.

Chetty and Saez (2004) found that the tax response was confined to firms with lower levels of forecasted growth, consistent with an improvement in capital allocation efficiency. The response to the tax cut is strongest in firms with strong principals (presence of independent directors with large share holdings or large

institutional ownership) and in firms where agents had stronger incentives to respond (large executive ownership and low levels of executive stock options outstanding). These findings show that principal-agent issues play a central role in corporations' responses to taxation.

PERFORMANCE COMPARISONS

Would cutting dividend taxes give higher dividend-paying stocks better returns than lower dividend-paying stocks? One would think that the tax cut could have made higher dividend-paying stocks become more attractive and do better than lower dividend-paying stocks after the dividend tax cut. First, this study examined descriptive performance data after and before the tax cut announcement.

Comparative Performance Before and After the Announcement

Table 1 compares performance of S&P 500 Dividend Aristocrats with performance of other benchmarks --- S&P 500 index, Dow Jones Industrial Average, and NASDAQ 100 index --- for six months after and before May 28, 2003 when the dividend tax cut legislation was enacted. The performance measures the holding period yield for six months before and after May 28, 2003. As a group, the S&P 500 Dividend Aristocrats TR (=Total Returns) did a little better than the S&P 500 TR index for both periods after and before the announcement. The average performance for six months after the announcement was 10.9%, which was much better than the performance before the announcement, 5.2%. On the other hand, performance of 30 Dow stocks for six months before and after the May 28, 2003 was more dramatic. As a group, the DOW 30 stocks did much better after the announcement. Excluding dividends, the average performance for six months before the announcement was -0.3%, but the performance after the announcement was +14.1%, which seemed significant improvement. Excluding dividends, NASDAQ 100 index did even better than both S&P 500 and the Dow --- the average performance for six months before the announcement was 18.4%, and the performance after the announcement was +31.3%, which was quite impressive.

Table 1
Performance Comparison: S&P 500 Dividend Aristocrats Vs.
S&P 500, Dow 30, Nasdaq 100 For Six Months Before And After Dividend Tax Cut

STOCKS GROUP	BEFORE AFTER	
59 S&P 500 DIVIDEND ARISTOCRATS	+5.2%	+10.9%
S&P 500	+2.9	+9.8
DOW JONES INDUSTRIAL 30 STOCKS	-0.3	+14.1
NASDAQ 100 STOCKS	+18.4	+31.3

Note: Performance of S&P 500 stocks is holding period yield based on total returns that include capital gains and dividends reinvested (drawn from Standard & Poor's Indices database). However, performance of Dow 30 stocks and the Nasdaq 100 stocks is holding period yield based on prices adjusted only for stock splits and dividends.

Comparative Performance of S&P 500 DIVIDEND ARISTOCRATS vs. S&P 500 as of December 31, 2005

As shown by Table 2, S&P 500 Dividend Aristocrats has done impressively. It outperformed the S&P 500 for most periods except the most recent year. In particular, its Sharp ratio for the five years period (0.17) is convincingly higher than the negative Sharp ratio (-0.01) of the S&P 500 for the same period.

Comparative Performance of Dividend Payers vs. Non-Payers as of January 31, 2006

Paradoxically, dividend payers of S&P 500 did worse than the non-payers did recently. As shown by Table 3, the total return performance for 13 months ending January 31, 2006 shows that the 386 payers had 13.85% increase, but the 112 non-payers had 17.43% gain, which was 3.58% greater than the payers' increase. This study developed investigative and measurement questions with respect to different groups of S&P 500 components as shown in following sections.

**TABLE 2
PERFORMANCE COMPARISON AS OF DEC. 31, 2005
S&P 500 DIVIDEND ARISTOCRATS VS. S&P 500**

Returns	S&P Div. Aristocrat	S&P 500
1 Month	0.38%	0.03%
3 Month	4.01%	2.09%
YTD	3.69%	4.91%
Returns (% pa)		
1 Year	3.69%	4.91%
5 Years	8.44%	0.54%
10 Years	11.57%	9.07%
15 Years	13.24%	11.52%
Risk (% pa)		
5 Years Std Dev	10.92%	14.94%
10 Years Std Dev	13.62%	15.64%
Sharpe Ratio		
5 Years	0.1735	-0.0092
10 Years	0.1751	0.1160

Source: Factsheet, S&P 500 Dividend Aristocrats, Standard and Poor's, Dec. 31, 2005.

**TABLE 3
S&P 500 DIVIDEND PAYERS VS. NON-PAYERS: AVERAGE TOTAL RETURN
PERFORMANCE, JANUARY 31, 2006**

	Payers	Non-payers
13-months	13.85%	17.43%
Issues	386	112

Source: Standard & Poor's Indices database

INVESTIGATIVE QUESTIONS

To examine the comparative performance of higher dividend-yielding stocks and lower dividend-yielding stocks of the S&P 500, this study specifically investigates the following:

- 1) Was the performance of the S&P500 stocks paying highest dividends after the announcement significantly different from the performance before the announcement?
- 2) Was the performance of the S&P500 stocks paying no dividends after the announcement significantly different from the performance before the announcement?
- 3) Was the performance of the S&P500 Dividend Aristocrats paying highest dividends after the announcement significantly different from the performance before the announcement?
- 4) Was the performance of the S&P500 Dividend Aristocrats paying lowest dividends after the announcement significantly different from the performance before the announcement?
- 5) Was the performance of all S&P500 Dividend Aristocrats as a group after the announcement significantly different from the performance before the announcement?

METHODOLOGY

This study used Wilcoxon Matched-Pairs Signed-Ranks Test of SPSS© (2002) to handle the investigative questions. Daily stock price data and trading volume data are collected from historical data and daily updates provided by Commodity Systems, Inc and Compustat database.

It used the daily stock price quotes adjusted for stock splits and dividends for the sample period. The Wilcoxon Matched-Pairs Test has excellent efficiency and can be more powerful than the t-test in part because the sample sizes of stock groups investigated in this study are relatively small. The Wilcoxon test is useful for a partial equilibrium analysis to examine the effects of dividend tax cut.

TEST RESULTS AND FINDINGS

Table 4 shows the test results to compare holding period yields of 12 S&P 500 stocks paying the highest dividends for six months after and before the tax cut. As indicated by its z value (-1.5689), the positive impact of dividend tax cut was mildly significant for the stocks paying the highest dividends.

Other three groups --- 12 S&P500 lower-cap stocks paying no dividends, 12 S&P500 Dividend Aristocrats paying highest dividends, 12 S&P500 Dividend Aristocrats paying lowest dividends --- showed that the impact of dividend tax cut was not statistically significant. However, all 59 S&P500 Dividend Aristocrats as a group showed clearly significant impact by the dividend tax cut. The S&P500 Dividend Aristocrats as a group showed that the positive impact of dividend tax cut was significant at 1.04% of a two-tailed test. That is, the S&P500 Dividend Aristocrats did significantly better after the announcement than before the announcement. Of course, the outstanding performance could be due to factors other than the dividend tax cut. However, it is reasonable assessment that the dividend tax cut was a significant factor for the positive performance of the S&P500 Dividend Aristocrats in particular.

Table 4
Wilcoxon Matched-Pairs Signed-Ranks Test
Performance After And Before Dividend Tax Cut

STOCKS GROUP	Z	2-tailed P
12 S&P500 stocks paying highest dividends	-1.5689	.1167
12 S&P500 lower-cap stocks paying no dividends	-.7845	.4328
12 S&P500 Dividend Aristocrats paying highest dividends	0.0	1.0000
12 S&P500 Dividend Aristocrats paying lowest dividends	-.6668	.5049
59 all S&P500 Dividend Aristocrats	-2.5627	.0104

Note: Performance is based on close prices adjusted for dividends and splits.

SUMMARY AND CONCLUSIONS

The most striking finding of this study is that the tax cut effect was statistically significant for the S&P 500 Dividend Aristocrats as the whole group; other selected groups examined in this study showed insignificance. Among the S&P500 Dividend Aristocrats, the stocks paying lowest dividends showed almost neutral effect of dividend tax cut; on the other hand, the tax cut effect was not significant at all on the S&P 500 Dividend Aristocrats paying highest dividends. It probably implies that the dividend tax cut raised investors' expectation and upbeat interest in stocks paying dividends consistently rather than the highest level of payment. In the case of stocks paying highest dividends, investors probably perceived that the after-tax dividend yields would be not enough to offset inferior capital gains of the stocks. Inverse relationship between dividend yields and capital gains yields, and pricing efficiency of dividend-paying stocks should have influenced the price behavior.

As for dividend policies of corporations, it would be worthwhile for S&P 500 constituents to aim for joining the S&P500 Dividend Aristocrats to attract dividend-conscious investors. The main qualification to join the index is 25 consecutive years of increased cash payments. Consistency of dividend payments has appealed to investors particularly due to the dividend tax cut. S&P 500 Dividend Aristocrats could have continuous upside potential in the future. However, there is no compelling reason to favor dividend-payments as high as possible. It appears that investors value the historical consistency more than the level of dividend payment alone.

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