



American Finance Association

Dividend Policy and Valuation: Theory and Tests: Discussions

Author(s): M. R. Gibbons

Source: *The Journal of Finance*, Vol. 37, No. 2, Papers and Proceedings of the Fortieth Annual Meeting of the American Finance Association, Washington, D.C., December 28-30, 1981 (May, 1982), pp. 474-476

Published by: Blackwell Publishing for the American Finance Association

Stable URL: <http://www.jstor.org/stable/2327351>

Accessed: 27/11/2009 08:16

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of low risk premia. LR reports dramatic differences in the behavior of “low” and “no” dividend securities. This is what one would expect on the argument made here. Fourth, this explanation accounts for LR’s otherwise puzzling finding that the dividend yield has a significant positive effect even in the months when dividends are not paid. Finally, the hypothesis here that LR’s beta measure inadequately proxies for risk is consistent with their positive and often significant estimates of the intercept term, and with the significant differences in the results which are obtained when the risk measure is constrained to have the same coefficient across clientele groups.

Only subsequent research can identify the importance of the effect suggested here. It is doubtful that it can be the whole story since large positive dividend effects are also found in ex-day studies where the bias discussed here should be much smaller. Finally, it should be noted that the “reverse causation” argument adduced here can potentially explain the “high earnings price ratio” and “small firm” anomalies which have recently been the subject of much attention.

DISCUSSION

M. R. GIBBONS*: This research by Pat Hess studies both the theoretical implications of dividend yield clienteles as well as the empirical evidence on tax effects using the ex-dividend behavior of stock returns; both aspects of this paper provide useful information. Hess indicates the importance of certain assumptions in deriving dividend yield clienteles, and with daily stock return data, confirms earlier statistical results relating to tax effects. The following comments discuss separately each aspect of the paper.

On the Theoretical Justification of Dividend Yield Clienteles

Hess [3] discusses a structural model of dividend yield clienteles developed by Litzenberger and Ramaswamy [7] (hereafter, LR), and extends that discussion to the case of uncertainty. For both a world of certainty and uncertainty, Hess claims that the LR model is incomplete without further assumptions.

Using an argument analogous to that put forth by Miller and Scholes [8], Hess demonstrates that an individual in a high tax bracket could earn a higher risk-adjusted return (after taxes) by holding securities of a lower tax bracket clientele as long as individuals can offset dividend income with interest expense. Since LR assume interest expense is not deductible when individuals hold tax-free bonds (see their pages 475–476), the previous dominance argument is not applicable to their model, but it does highlight that the non-deductibility of interest expense is a critical assumption.

Hess also points out that the LR model has a problem if dividend yields for two (or more) clienteles exceed the riskless rate, for no investors would hold securities with the lower implicit tax rate. This dominance argument is not applicable to the LR analysis in the world of certainty since the shadow price of the margin constraint is inversely related to the implicit marginal tax bracket of

* Stanford University, Graduate School of Business.

a given clientele if the excess dividend yield is positive (see their pages 472–473). However, LR need to include something like a margin constraint in the world of uncertainty to avoid this criticism.¹

On the Empirical Evidence Relating to Tax Effects

Since the focus of the empirical work is not on the relation between beta and expected return, the econometric model used by Hess is useful in that risk need not be measured or even defined. The advantage of this more general econometric model is that it avoids problems due to misspecification; of course, the potential cost is a decrease in the power of the test statistics since the variance of the disturbance is higher when fewer regressors are included. Hess should also be complimented for his use of daily data which provides not only a different glimpse at tax effects, but which also may minimize informational effects of dividend yields when using a longer sampling interval.

However, the use of daily data may also present some problems as well. Appropriate distributional assumptions are difficult since departures from normality are more severe, and since peculiar non-stationarities are also present (e.g., see Gibbons and Hess [2]).² Furthermore, daily data may not eliminate the informational effect associated with dividend yields, for Hess had to form portfolios of different clienteles using an average of dividend yields. If dividend yields are averaged over the same sample period used for estimation, then such ex post grouping still will be contaminated by informational effects.

Table 1 based on daily, rather than monthly, data confirms the results reported by Hess [4]. Apparently a simple tax effect model without clienteles is not an adequate description of the data, for the tax effect is not consistent across different securities. In fact, the estimated “tax effect” is negative in four out of ten subperiods!

Table 2 reports a test of the dividend yield clientele model. Given the crudeness of the grouping which defines the clienteles, rejection of the null hypothesis may be inevitable. Perhaps a more appropriate criterion to gauge the clientele model is the reasonableness of the point estimates of the ten different implicit tax brackets. If the restricted estimates in table 2 are averaged over all subperiods, the resulting point estimates are quite reasonable, and the pattern across the clientele portfolios seems consistent with the LR model. In fact, collapsing the ten portfolios into five groups, as did LR, provides even stronger support for the clientele model.

Table 3 provides information as to whether or not dividend yield proxies for risk³ that is measured imprecisely. The evidence in table 3, as well as the conclusion drawn, is quite similar to that reported by Litzenberger and Ramas-

¹ This criticism is similar to the point made by Kalay [5], and also discussed by Miller and Scholes ([9]; pages 32–33), in discussing why the price decline on ex-dividend day cannot be less than the dividend if short-term traders or tax-exempt traders are not to make abnormal returns.

² As a follow-up to the day of the week effects observed by Gibbons and Hess (2), it would be useful to know if ex-dividend days tend to cluster on particular days of the week.

³ While the paper is not explicit, it appears that risk refers to the traditional notion of beta, not risks associated with more general asset pricing models. However, it is plausible that dividend yield may proxy for these more general risk measures (e.g., “interest rate risk”).

wamy [6] and Miller and Scholes [9]. However, the results of these former studies are more satisfactory than table 3 because beta, which was estimated on past data and updated through time, was included explicitly. If beta changes through time and if no attempt is made to adjust for changes in beta, then it is not surprising that dividend yield on non-ex-days is significant—especially since dividend yield appears to be correlated with beta (Black and Scholes [1]). The issue is whether or not dividend yield on a non-ex-day is statistically important after some attempt is made to control for changes in beta; table 3 fails to include any changing measure of beta.

REFERENCES

1. F. Black and M. Scholes. "The Effects of Dividend Yield and Dividend Policy on Common Stock Prices and Returns." *Journal of Financial Economics* 1 (May 1974), 1-22.
2. M. Gibbons and P. Hess. "Day of the Week Effects and Asset Returns." *Journal of Business* 54 (October 1981), 579-596.
3. P. Hess. "Discussion." *Journal of Finance* 35 (May 1980), 482-485.
4. P. Hess. "Dividend Yields and Stock Returns: A Test for Tax Effects." Unpublished Ph.D. dissertation, University of Chicago (1980).
5. A. Kalay. "The Behavior of Stock Price on the Ex-Dividend Day—A Reexamination of the Clientele Effect." Unpublished Ph.D. dissertation, University of Rochester (1977).
6. R. Litzenberger and K. Ramaswamy. "The Effect of Personal Taxes and Dividends on Capital Asset Prices." *Journal of Financial Economics* 7 (June 1979), 163-195.
7. R. Litzenberger and K. Ramaswamy. "Dividends, Short Selling Restrictions, Tax-Induced Investor Clienteles, and Market Equilibrium." *Journal of Finance* 35 (May 1980), 469-482.
8. M. Miller and M. Scholes. "Dividends and Taxes." *Journal of Financial Economics* 6 (December 1978), 333-364.
9. M. Miller and M. Scholes. "Dividends and Taxes: Some Empirical Evidence." Unpublished manuscript, University of Chicago (1981).

DISCUSSION

E. HAN KIM*: In contrast to the papers presented in this session which deal with the demand side of corporate dividends, the paper by John and Kalay looks at the supply side. It examines one possible determinant of dividend payout policy, and studies the properties of dividend constraints imposed on firms that have a positive amount of debt outstanding. Overall, the model is carefully constructed and the mathematical derivations are rigorous. Although the results are not surprising, they do provide some insight as to the role of dividend constraints in resolving the possible conflict of interest between stockholders and bondholders. However, the paper is written in an overly technical style and hence is difficult to follow. I will attempt to outline the main results of the paper and explain the intuition behind them. In addition, a couple of conceptual problems will be pointed out.

The underlying issue that forms the foundation of the model in the John-Kalay paper is the possible conflict of interest between stockholders and bondholders that arises in connection with corporate dividend policy. A positive dividend

* University of Michigan.