Determinants of Dividend Payout Ratios in Kenya

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Abstract

Dividend policy is one of the most important and controversial corporate finance decisions. It is important because it is a repetitive decision that involves large amounts of cash outflow and closely related to most capital structure and budgeting decisions the firm makes. It is controversial because despite the extensive research conducted so far, there remain conflicts as to why firms pay dividends and why investors pay attention to dividends. This paper examines the effect of six factors shown to influence dividend policies in companies operating in developed countries on companies operating in Kenya, a developing economy using a Tobit Regression model. It is observed that dividend payout ratio is impacted negatively by the growth rate, debt ratios and firm size and positively by earnings, market-to-book ratio and retained earnings to total assets ratio. The results of this study are beneficial to investors with regard to their investment portfolio management and financial managers with regard to developing dividend policies that maximise shareholders' wealth. The study also adds more empirical evidences to existing dividend policy literature in Kenya and provides additional evidence internationally regarding payout policies.

Keywords: Dividends, Payout ratio, Kenya

1. Introduction

Dividend policy is often controversial. Fischer Black (1976) stated 'the harder we look at the dividend picture, the more it seems like a puzzle, with pieces that just don't fit together'. Over the years, dozens of theories have attempted to explain the dividends phenomenon with no consensus reached. Many of the theories view agents as rational and dividends either serve as an efficient way to resolve agency problems or as a signaling device to mitigate information asymmetry problems. Allen & Michaely (2003), Frankfurter & Wood (2006), Baker (2009), and DeAngelo, DeAngelo, & Skinner (2009) provide excellent reviews of these theories and the related empirical facts. After reviewing the literature, Allen & Michaely (2003) and Frankfurter & Wood (2006) conclude that theories based on agency or signaling are not consistent with the empirical evidence and that the question of why firms distribute dividends remains a puzzle. DeAngelo, DeAngelo, & Skinner (2008) however, reach a different conclusion and argue that asymmetric information could provide an explanation for the dividends phenomenon.

A dividend is a pro rata distribution to shareholders that is declared by the company's board of directors. In Kenya, the rule is that dividends cannot be paid out of capital. Lintner (1956) showed that first, firms set target dividend payout ratios, by deciding on the fraction of earnings they are willing to pay out as dividends in the long term. Second, they change dividends to match long-term and sustainable shifts in earnings, but they increase dividends only if they feel they can maintain these higher dividends. Because firms avoid cutting dividends, dividends lag earnings. Finally, managers are much more concerned about changes in dividends than about levels of dividends.

Literature suggests that the dividends are affected by ratio of retained earnings to total equity (and of total assets), firm size, profitability and growth opportunities (DeAngelo, DeAngelo & Stulz, 2006, Redding, 1997, Denis & Isabov, 2008, von Eije & Megginson, 2006). Larger and more profitable firms and those with a greater proportion of earned equity are more likely to pay dividends, while the effect of growth opportunities on the likelihood of dividend payments is mixed (DeAngelo, DeAngelo & Stulz, 2006, Denis & Osobov, 2008). Developing market firms may be more sensitive to some of these variables because of the greater financial constraints under which they operate.

To a large extent, the majority of research conducted so far has been focused on developed markets with little attention being paid to developing or emerging markets. This paper examines the effect of factors shown to influence dividend policies in companies operating in developed countries on companies operating in Kenya, a developing economy. It is imperative to investigate these factors because dividend policy in developing markets is often different from the norms that have been accepted in developed countries. One major difference is that developing market firms place more emphasis on dividend payout ratios than they do on the level of dividends paid. As a result, dividend payments tend to be more volatile in emerging markets than in developed countries. Secondly, as developing markets such as Kenya develop and open to international capital, dividend policy increases in importance, even if it is not altered in character.

2. Literature Review

Fama and French (2001) show that the fraction of U.S. non-financial non-utility dividend paying firms dropped from a post-1972 peak of 66.5 percent in 1978 to 20.8% in 1999. They show that this decline in the incidence of dividend payers is due to two factors: changing firm characteristics and a declining propensity to pay. In the first instance, the financial characteristics of the "typical" publicly-traded company have changed dramatically since 1978, with many new listings of small firms with low earnings, high growth opportunities, large investments relative to earnings and an asset base tilted heavily towards intangible rather than fixed assets. The second, roughly equally important influence, has been the declining propensity of all types of companies to pay dividends.

DeAngelo, DeAngelo, and Skinner (2004) show that although many fewer firms now pay dividends, dividends themselves are flourishing, with aggregate real dividends paid by industrial firms in 2000 standing 16.3% above their level in 1978. The combinations of an increase in aggregate dividends and a decrease in the number of dividend payers reflects major underlying changes over the past two decades in the cross-sectional distribution of real earnings, which is now dominated by a relatively small number of firms with very high earnings. Although they observed a reduced propensity to pay dividends among industrial firms, almost all firms with very high real earnings pay dividends, and the increased real earnings of this group drives the aggregate increase in dividends and the substantial concomitant increase in dividend concentration. Almost half of all industrials reported losses in 2000, and almost none of these firms paid dividends, so that poor earnings performance plausibly helps explain why many fewer industrial firms paid dividends. The decline over 1978-2000 in the number of dividend payers occurs predominantly among firms that pay very small real dividends, and is due primarily to acquisitions and secondarily to financial distress.

DeAngelo, DeAngelo, and Stulz (2006) found out that the fraction of firms that pay dividends is high when retained earnings are a large portion of total equity (and of total assets) and falls to near zero when most equity is contributed rather than earned. They observed that there exists a significant relationship between the decision to pay dividends and retained earnings divided by total equity (and total assets) ratio, controlling for firm size, current and recent profitability, growth, total equity, cash balances, and dividend history, a relation that also holds for dividend initiations and omissions. The earned/contributed capital mix has a greater impact on the probability that a firm pays dividends than do measures of current profitability and growth opportunities. Their evidence supports a life-cycle theory of dividends, in which a firm's stage in that cycle is well captured by its mix of internal and external capital, so that dividend payers tend to have high earned equity relative to contributed capital, and non-payers the reverse.

Denis and Osobov (2008) reported that dividends are affected by firm size, profitability, and growth opportunities. They showed that larger and more profitable firms are more likely to pay dividends, while the effect of growth opportunities on the likelihood of dividend payments depends on a country's legal origin: the propensity to pay is negatively related to growth opportunities in common law countries, but positively related in civil law countries.

Redding (1997) showed that large companies are more likely to pay cash dividends under the following assumptions: First, markets are imperfectly liquid. Trading therefore incurs transactions costs. Second, institutional investors, for fiduciary and tax reasons, are more likely to buy companies that pay dividends. As these large institutional investors own the large companies, managements of large companies (acting to minimize the cost of equity capital or to satisfy fiduciary responsibilities) are led to declare dividends on their companies' stocks.

Aivazian, Booth & Cleary (2003) found out that for both U.S. firms and emerging market firms, profitability affects dividend payments and high return on equity often translates to high dividend payments. Similarly, higher debt ratios correspond to lower dividend payments, suggesting that financial constraints affect dividend policy. In addition, the market-to- book ratio has a positive effect on dividend payments. They found there was little evidence that business risk or size affects dividend policy in a significant or consistent way. Finally, for emerging market firms, they found out that dividends are negatively related to the tangibility of firm assets.

In conclusion the above cited literature shows that the following are the major determinants of dividend policy: earnings, ratio of retained earnings to total equity (and total assets), firm size, growth opportunities, debt ratios (leverage) and market-to-book ratio. This paper continues the debate over dividends, by presenting new evidence from a developing country. By so doing, it may be that additional insight into the dividend policy debate can be gained for the case of developing countries.

3. Data and Research Methodology

The necessary data have been sourced from the Nairobi Securities Exchange (NSE) handbook for the period 2008-2012 and NSE Monthly Statistical Bulletins. The period of the study is five years from 2008-2012. Only those companies that were non-financial and non-utility and had continuously paid dividends during the study

period were included in the sample. Only interim and final cash dividends paid by companies have been considered as usually Kenyan companies pay out at most two dividends during a year. The process gave a final sample of thirty companies. The appendix shows the sample selected.

The study considers six variables to examine their effect on the dividend payout ratio using a multiple regression analysis. These are earnings (EARN), ratio of retained earnings to total assets (RE/TA), firm size (natural logarithm of total assets in millions of Kenya Shillings (KES)), growth opportunities (change in sales per year), debt ratio or leverage (leverage calculated as total debt divided by the sum of total debt and market capitalization (total firm value)) and market-to-book ratio (average ordinary share price divided by book value per share). The dependent variable in study is the dividend payout ratio. However, a problem with the dividend payout ratio is that it might be negative. A negative payout ratio indicates that a company paid dividends even though it generated negative earnings, or a net loss. The study therefore used a Tobit Regression in which the negative dividend payout ratios were censored to zero (Daunfeldt et.al 2006).

The following is the testable model:

 $DIV_{i,t+1} = \alpha + \beta EARN + \beta RE/TA + \beta LOGSIZE + \beta \Delta S + \beta D/V + \beta M/B + \varepsilon_{i,t}$ Where

 DIV_{i+t} = Dividend payout ratio for firm i at time t+1

EARN = Earnings for firm i at time t

RE/TA = Retained Earnings divided by Total Assets for firm i at time t

LOGSIZE = natural logarithm of total assets for firm i at time t

 ΔS = change in sales for firm i at time t

D/V = total debt divided by the sum of total debt and market capitalization for firm i at time t

M/B = average ordinary share price divided by book value per share for firm i at time t

 $\varepsilon = \text{Error variable}$

4. Results and Discussion

The Tobit regression results are presented in the tables below:

Table 1: Regression Results

Variables	В	Std. error	t-statistic	P-value
EARN	0.158	0.138	1.16	0.009
RE/TA	0.369	0.067	0.669	0.158
LOGSIZE	-3.79E-10	2.51E-10	-1.54	0.135
ΔS	-0.621	0.143	-3.90	0.000
D/V	-0.118	-3.602	-3.10	0.215
M/B	5.518	0.004	3.25	0.241

It is observed that the growth rate ΔS has a significant relationship to the dividend payout ratio but the relationship is negative, that is, as the growth rate increases, the dividend payout ratio decreases and vice-versa. The negative relationship can be explained by the fact that growing companies choose to retain and plow back retained earnings rather than pay dividends to shareholders and borrow from lenders to finance projects.

The relationship between the dividend payout ratio and leverage D/V was also found to be negative suggesting that financial constraints affect dividend policy. However, the relationship is statistically insignificant since the p-value is greater than 5 percent and the t-statistic is relatively low. There is found a positive relation between earnings and the dividend payout ratio; this is not a surprise since dividends in Kenya are usually paid out of earnings. Market-to-book ratio and retained earnings to total assets have a positive relation to dividend payouts. Size has a negative relationship to the dividend payout ratio but the relationship is insignificant.

5. Conclusion

The study set out to examine the effect of dividend determinants on payout ratios in firms listed on the Nairobi Securities Exchange. A Tobit regression and the sample consisted of thirty companies listed on the Nairobi Securities Exchange. The period of the study is five years from 2008-2012. The study considered six variables to examine their effect on the dividend payout ratio using a multiple regression analysis. These are earnings, ratio of retained earnings to total assets, firm size, growth opportunities, debt ratio or leverage and market-to-book ratio. It is observed that dividend payout ratio is impacted negatively by the growth rate, debt ratios and firm size and positively by earnings, market-to-book ratio and retained earnings to total assets ratio.

Following from these findings about dividend payout ratio determinants, future research should consider the following: What other company factors other than the ones selected for this study would impact on the dividend payout ratio in Kenya? What factors determine the dividend payout ratios of financial sector firms? What factors determine the dividend policy decisions of non-listed firms? Such study would assist in identifying other factors that affect dividend payout ratios and contribute to solving the dividend puzzle in general and in developing economies in particular.

References

Aivazian, V., Booth, L. & Cleary, S. (2003), Do Emerging Market Firms Follow Different Dividend Policies from U.S. Firms? *Journal of Financial Research*, 26: 371–387.

Allen, F. & Roni M. (2003), Payout policy, *North-Holland Handbook of Economics* edited by George Constantinides, Milton Harris, and Rene Stulz; North-Holland.

Baker, H. K. (2009), *Dividends and Dividend Policy: An Overview, in Dividends and Dividend Policy,* John Wiley & Sons, Inc., Hoboken, NJ, USA.

Black, F. (1976), The Dividend Puzzle, The Journal of Portfolio Management, Winter, Vol. 2(2), 5-8

Daunfeldt, S.O., Salender, C. & Wikstrom, M. (2006), Taxation, Dividend Payments and Ex-Day Price, *Presentation at the Portuguese Finance Network Conference*

DeAngelo H , DeAngelo L and Skinner D (2004), "Are Dividends Disappearing? Dividend Concentration and the Consolidation of Earnings", *Journal of Financial Economics*, 72, 425-456.

DeAngelo, H., DeAngelo L. & Stulz R. (2006), Dividend Policy and the Earned/Contributed Capital Mix: A Test of the Lifecycle Theory, *Journal of Financial Economics* 81:2, 227-254.

DeAngelo, H., DeAngelo, L. & Skinner, D. J. (2008), Corporate Payout Policy, Foundations and Trends in Finance, 3: 2-3, 95-287.

Denis, D. J. & Osobov, I. (2008), Why Do Firms Pay Dividends? International Evidence on the Determinants of Dividend Policy, *Journal of Financial Economics* 89 (1): 62-82.

Fama, E. F. and French, K. R. (2001), Disappearing Dividends: Changing Firm Characteristics or Lower Propensity to Pay?. *Journal of Financial Economics*, 60:1, 3–43.

Frankfurter, G.M. & Wood, B.G. (2006), Dividend policy: Theory and practice. London: Academic Press.

Lintner, J. (1956), Distribution of Incomes of Corporations Among Dividends, Retained Earnings, and Taxes, *American Economic Review*, 46(2), 97-113.

Nairobi Securities Exchange Handbook 2012-2013. Available at: http://www.african exchanges.org/download/library/NSE_Handbook.pdf. [20 July 2013]

Nairobi Securities Exchange Monthly Statistical Bulletins (2008-2012). Available at: https://www.nse.co.ke/resource-center/publications/category/49-nse-monthly-statistical-bulletin.html. [20 July 2013]

Redding, L. S. (1997), Firm Size and Dividend Payouts, *Journal of Financial Intermediation*, 6: 224–248 von Eije, J. H. & Megginson, W. L. (2006), Dividend Policy in the European Union. Available at *SSRN*: http://ssrn.com/abstract=891035

Appendix

Sample Firms from Nairobi Securities Exchange. Only those companies that were non-financial and non-utility and had continuously paid dividends during the study period were included in the sample.

NSE SECTOR	COMPANY		
Agricultural Sector	Kakuzi Limited		
	Kapchorua Tea Company Limited		
	Limuru Tea Company Limited		
	Rea Vipingo Plantations Limited		
	Williamson Tea Kenya Limited		
Automobiles and Accessories	Car and General (Kenya) Limited		
Commercial Agencies	ARM Cement Limited		
	Bamburi Cement Company Limited		
	Crown Paints Kenya Limited		
	East African Cables Limited		
Energy and Petroleum	Kenya Electricity Generating Company (KENGEN)		
	Total Kenya Limited		
Investment	Transcentury Limited		
Manufacturing and Allied	BOC Kenya Limited		
	British American Tobacco Kenya Limited		
	Carbacid Investments Limited		
	East African Breweries Limited		
	Mumias Sugar Company Limited		
Telecommunication and Technology	Safaricom		

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