The Impact of Dividend Payments on Stock Prices in a Developing Economy. The case of Services Firms listed on the Zimbabwe Stock Exchange, (2008 to 2012).

Author Details: [(1)]Chirima Darlington Tinashe-
Department of Banking and Finance Bindura University of Science Education
P. Bag 1020 Bindura, Zimbabwe

ABSTRACT
The study aimed at providing a modern and concrete perspective on the role of dividends in Zimbabwe, a developing economy, by examining views regarding the role of the relevance of the conventional signaling theory. The objective of this study was to add to the knowledge body concerning stock price reactions at the dividend announcement and at the ex-dividend day. Data was collected through documentary review, questionnaires and interviews. The sample included finance executives, stock brokers and investors on the Zimbabwe Stock Exchange (ZSE). The chi-square, linear regression and correlation techniques were used in data analysis. The findings of the study show that 70% of the sampled firms take the dividend decision as an active decision variable due to the realization that dividend decisions influence firm value and because dividend policy decisions send messages to the market. A coefficient of 0.9707 indicates a strong positive relationship between dividend announcements and share prices. Share prices increase upon announcements. From the ex-dividend date share prices start to go down. However, this study failed to show that prices go down by an amount equivalent to the dividend paid. This paper therefore recommends that managers avoid dividend increases which may not be sustained by the future earnings. Further research may be conducted cutting across all sectors in the economy and over an extended period of time. Other efforts may be directed at investigating dividend policies in hyper-inflationary environments, or even dividend preference in an economy with high dividend taxation levels.

Key Words: *Signaling Hypothesis, ex-dividend date, dividend announcement date, dividend preference.*

1.0 INTRODUCTION

There are a number of issues that have been resolved and agreed upon in finance over the last two decades, but dividends still remain one of the few issues yet unsolved. Black (1976) comments that the harder we look at the dividend picture, the more it seems like a puzzle, with pieces that just do not fit together. The payment of regular cash dividends to shareholders is a long-established tradition in developed capital markets. In our developing world, there is greater need to establish new truths, to demystify this puzzle which is compounded by lack of empirical tests on the degree of efficiency of the markets. The dividend decision is widely regarded as one of the most important financial decisions to be taken from a strategic point of view. The dividend decision, which is determined by a firm's dividend policy, affects the level of equity retained in a firm (Lease, et al., 1999).

The subject area on corporate dividend policies has not received adequate attention from financial researchers in Zimbabwe. In this information-technology era, financial markets examine every action a firm takes to determine the implications for future cash flows and firm value. When firms announce changes in dividend policy, they are conveying information to markets, whether or not that is their intent. Financial markets tend to view announcements made by firms about their future prospects with a great deal of skepticism, since firms routinely make exaggerated claims (Damodaran, 2006). This research was motivated by the need to establish the extent of the price reactions to such dividend announcements in this developing Zimbabwean economy. The belief in the financial circles is that dividend payments result in share price increases. This question is, is this true for developing economies in Africa? The study has also found that the bulk of research findings testing the signaling hypothesis (information content of dividends) in journals and finance text books are for developed economies.

2.0 LITERATURE REVIEW

According to Gitman (2003), dividends are the proportion of profits paid made by a corporation to its shareholder members. When a company earns a profit or surplus, that money can be put to two uses; it can either be re-invested in the business, or can be distributed as a dividend. According to Wayne (2008), dividends must be declared/ announced (approved) by a company's Board of Directors (BOD) each time they are paid. For public companies, there are four important dates to remember regarding dividends. The declaration/announcement date is the day the BOD announces its intention to pay a dividend. On the declaration date, the BOD will also announce a date of record and a payment date. The date of record is the day on which shareholders who properly register their ownership on or before will receive the dividend. The payment date is the day when the dividend cheques will actually be mailed to the shareholders of a company or electronic transfers credited to brokerage accounts.

The ex-dividend date is the day on which all shares bought and sold no longer come attached with the right to be paid the most recently declared dividend. Existing holders of the stock will receive the dividend even if they now sell the stock. It is relatively common for a stock's price to decrease on the ex-dividend date by an amount roughly equal to the dividend paid. The company does not take any explicit action to adjust its price; in an efficient market, buyers and sellers will automatically price this in (Mitra et al., 1995; Damodaran, 2006). The degree of the ZSE efficiency was unclear to the researcher so as to predict what the Zimbabwean scenario would be relative to developed capital markets. This paper was also triggered by the need to investigate the extend of price reduction on the ex-dividend date.

2.2 DIVIDEND THEORIES

Of great interest in this dividend puzzle is the question; "Is the value of shareholders' wealth affected by the dividend policy of the firm?" According to Damodaran (2006) there is considerable debate on how dividend policy affects firm value. One group of theorists believes that dividends increase shareholder wealth (Gordon and Lintner, 1957). Others believe that dividends are irrelevant (Miller and Scholes, 1978). Still others believe that dividends decrease shareholder wealth (Litzenberger and Ramagwamy, 1979).

2.2.1 Irrelevance School

The Modigliani-Miller (MM) Theorem (1961) is a cornerstone of modern corporate finance. At its heart, the theorem is an irrelevance proposition. This proposition argues that the value of the firm is independent of its dividend policy (Damodaran, 2006). The theory states that dividend policy has no effect on either the price of a firm's stock or its required rate of return. This group of financial theorists (Modigliani and Miller, 1961; Miller, 1986; Martin, et al., 1999) provides a hypothesis for dividend policy irrelevance. This group bases its theory on a stringent set of assumptions and under those assumptions they proved that a firm's value is determined only by its basic earning power (income produced by its assets) and its business risk, and not on how that income is split between dividends and retained earnings. They assumed perfect capital markets (no taxes or transaction costs) in which the market price cannot be influenced by a single buyer or seller, and there is costless access to information.

2.2.2 Information Signaling

Financial markets examine every action a firm takes to determine the implications for future cash flows and firm value (Damodaran, 2006). When firms announce changes in dividend policy, they are conveying information to markets, whether or not that is their intent. Financial markets tend to view announcements made by firms about their future prospects with a great deal of skepticism, since firms routinely make exaggerated claims (Damodaran, 2006). Houston et al (2010) noted that MM argued that a higher-than-expected dividend increase is a signal to investors that management forecasts good future earnings, while a dividend reduction or a smaller-than-expected increase is a signal that management forecasts poor future earnings. Ramirez, (1993); Holder *et. al.*, (1998), the announcements of cash dividends signal information to investors that include the company's efficiency such as the profitability, liquidity and investment opportunity. Signaling theory suggests that firms need to take actions that cannot be easily imitated by firms without good projects. Increasing dividends is viewed as one such action (Damodaran, 2006). According to Black et al (1995) the relationship between share price and dividend announcements depends on how much information is contained in the announcements and how much the information influences the investors' expectations. Managers usually establish a stable cash dividend policy to avoid sending negative information to investors (Dewenter & Warther, 1998; Escherich, 2000). Companies with an unstable cash flow pay a greater proportion of cash dividends than companies with stable cash flow (Bradley, Capozza & Sequin, 1998).

2.2.3 The Bird in hand fallacy

Early critics of MM's (1961) theory, like Gordon and Lintner (1956), suggested that investors preferred a sure dividend today to an uncertain future capital gain. They argued that the firm's cost of its equity declines as the dividend payout is increased because investors are less certain of receiving the capital gains that should result from retaining earnings than they are of receiving dividend payments (Houston et al, 2009). Investors appear to prefer dividends to capital gains because dividends are certain, whereas capital gains are uncertain. Proponents of this view of dividend policy feel that risk-averse investors will therefore prefer dividends (Damodaran, 2006).

2.2.4 Dividend Preference

Some investors have a strong preference for dividends and view large dividends positively. The most striking empirical evidence for this comes from studies of companies that have two classes of shares: one type pays cash dividends, and another that pays an equivalent amount of stock dividends. Thus, investors are given a choice between dividends and capital gains. Long (1978), in Damodaran (2006), studied the price differential on two classes of shares traded on a firm called Citizens Utility. The study found, surprisingly, that the shares which paid cash dividends and had a tax disadvantage, sold at a premium over the period of analysis. Bailey (1988) extended Long's 1978 study to examine Canadian utility companies which also offered dividend and capital gains shares, and had similar findings. He found out that on average the cash dividend shares sell at premium of 7.5% over the stock dividend shares.

2.2.5 The Residual Theory

The theory of residual dividend suggests that a company will pay dividends only when generated gains are not used for investment (Alli *et. al.*, 1993; Keown *et. al.*, 2002). According to Gitman (2006), Houston and Brigham (2009), the dividend paid by a firm should be viewed as a residual- the amount left over after all acceptable investment opportunities have been undertaken. It is important to note that internal equity is cheaper than external equity (new common stock); so if good investments are available, it is better to finance them with retained earnings than with new stock. Companies that are experiencing higher rates of growth will need to maintain minimum payments of dividends to avoid external financing costs (Holder et. al., 1998; Rozeff, 1982). Because investment opportunities and earnings vary from year to year, strict adherence to the residual dividend policy would result in unstable dividends.

2.3 EMPIRICAL EVIDENCE

Controversies among empirical studies related to cash dividend policy exist (Juma'h et al, 2008). Bhana (1997), in Firer et al (2008), studied the behavior of share prices on the announcement of scrip dividends over the period 1986-1995. They found a significant increase in share price on announcement. The size of the dividend was important – distributions of less than 3% conveyed no information to investors. Bhana (1998) also found that over the period 1975-1984 the announcement of special dividends (especially if they were infrequent) were also considered positive signals by the market.

Marx (2001) found support for the earlier results by surveying financial directors of JSE listed companies. Just over 70% agreed that a company should avoid making changes in its dividend rates that might have to be reversed in the near future and that a company should strive to maintain an uninterrupted record of dividend payment. Nissim and Ziv (2001) found that current dividend changes are positively correlated to future earnings changes. On the other hand, other studies (among many, Deangelo, DeAngelo, and Skinner (1996), Benartzi, Michaely, and Thaler (1997) and Grullon, Michaely, Benartzi, and Thaler (2005)) found positive correlation between dividend changes and concurrent or lagged earnings changes, but no correlation with future earnings changes. Even more interesting, they found that companies that cut dividends have higher earnings in the future relative to comparable companies.

Ooms, Archer and Smith (1987), studying the speed with which market prices react to dividend information were unable to earn abnormal returns. They suggested that the market was not reacting to the dividend announcements per se, but rather to the (simultaneous) release of earnings information. They further supported their earlier argument in 1989 when they said that the market uses dividend announcements as information for assessing share value. They concluded that a change in the existing dividend pay-out was more important than the actual amount of the dividend; and that financing decisions should be independent of a company's dividend decision. However, Knight and Affleck-Graves (1987) had different conclusions. They found that the announcements contained little or no information about a firm's future earnings. They (tentatively) concluded that dividend changes did not provide a signaling role (Firer et al, 2008).

Hypothesis

H1. There is a relationship between dividend changes and stock price movements.
H2. Share prices increase upon announcement of dividend payouts.
H3. Investors respond positively to dividend payments and dividend increases.

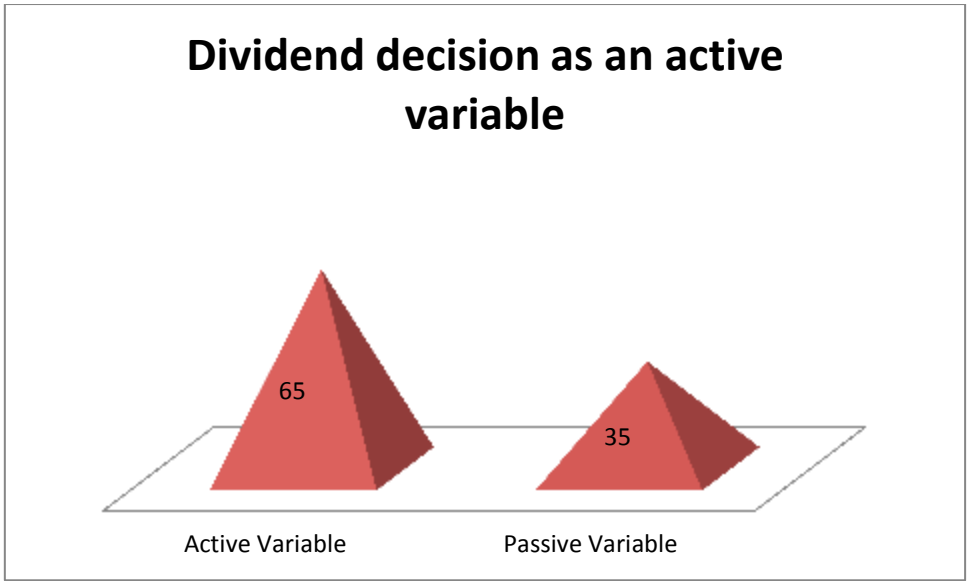
3.0 RESEARCH METHODOLOGY

The descriptive survey research design was employed to observe and to describe the behavior of investors' reactions to dividend payouts without influencing their reactions in any way. This research is non-experimental in that it deals with relationships between non-manipulated variables in their natural rather than artificial setting. Data was collected from documentary review and from a sample of company executives, investors and stock brokers using questionnaires and interviews. The sample size was 100 respondents. To test the hypothesis, the researcher employed the chi-square, regression and correlation analysis to interpret data concerning the dividend declarations and ex-dividend effects versus share price movements and volumes traded.

4.0 DATA ANALYSIS AND DISCUSSION

4.1 Firms taking the dividend policy as an active decision variable

Graph 1



Source: Primary Data n=20

Out of the 20 sampled firms, respondents from 13 firms, agreed that they use the dividend policy as an active variable when making financing and investment decisions. The other 35% of the respondents indicated that they do not use the dividend decision as an active decision variable. From the questionnaires administered and the interviews conducted, the following reasons were commonly cited for taking the dividend decision as an active variable:

1. The dividend policy has an impact on the future operations of the firm. It has an impact on the future financing decisions.
2. The majority of these respondents argued that the dividend policy sends and communicates to the market that the company is able to pay its shareholders. This finding is consistent with Lintner's 1956 findings from his survey of CEO/CFOs. He found out that dividend policy is an active decision variable because managers believe that stable dividends lessen negative investor reaction.
3. The dividend payouts reveal the company's performance or that its future prospects are bright.

These research findings are consistent with the findings of Seneque and Gourley (1983) who conducted a 24 year old survey of 145 JSE listed companies and established that management at that time pursued dividend policy as an active variable, and strongly supported the view that continuity of payments and stable payout ratios were of great importance.

4.2 The number of days between the declaration date and the day the share becomes ex-dividend.

Table 1: Period from dividend declaration to the ex-dividend date.

	Number of Firms	**Percentage**
Less than 15 days	0	0
15 to 30	14	70%
31 to 45	5	25%
46 to 60	1	5%
Above 60 days	0	0%
Total	20	100%

Source: Survey Data 2012 n=20

The results in Table 1 above show that, the window period from dividend declaration to the ex-dividend date ranged from 15 days to 60 days. 70% of the sampled firms have a window period between 15 days and 30 days. An average of 25% of the companies have a window period between 31 and 45 days. There are no firms with a window period within 15 days and beyond two months.

4.3 Trends of share price behaviour and volume of shares traded

Table 2: Share prices and volume of shares traded **after announcements**

	Share price	**Volume of shares traded**
Increased	54	51
Same	6	9
Decreased	0	0
Total	60	60

Source: Survey Data 2012 n=60

Out of the 20 dividend paying firms, 90% of the respondents confirmed that share prices increased upon announcement/ declaration of the dividend. A huge number (85%) of the respondents also confirmed that the volume of shares traded increased upon dividend declaration. These views are consistent with the actual records in the books of the sampled companies. From some company records the researcher looked at, the share price did not go up with an amount equivalent to the dividend. At times the share prices increased at prices varying, but in some cases above the dividend amount. What pushed share prices up beyond the dividend amount could be high demand for the shares due to the information contained in the dividends paid about the future prospects of the firms. After dividend announcements, investors would rush to grab the shares causing the natural law of demand and supply to push the share prices upwards.

4.3.1 After the ex-dividend date:

Table 3: Share prices and volume of shares traded **after ex-dividend date**

	Share prices	**Volume of shares traded**
Increased	0	0
Same	18	15
Decreased	42	45
Total	60	60

Source: Survey Data 2012 n=60

From the survey findings, there is no evidence to point to any increase in stock prices after the ex-dividend date. Rather 70% of the respondents agreed that share prices decline on the ex-dividend date, while 30% of the respondents indicated that the share price normalizes, or returns to its price before the dividend declaration date (either way, there is a decline). However, the amount

by which the share prices dropped was not always equivalent to the dividend paid. Of interest was also the fact that 75% of the respondents indicated that even the volume of shares traded declines upon the ex-dividend date.

4.4 Impact of dividend changes on share price

The researcher was also interested in finding out whether dividend cuts or dividend increases have an effect on share price. The direction of share price movements would indicate investors' preferences. If stock prices decrease after dividend increases, then investors penalize dividend increases. If prices remain the same it means that dividend changes have no effect on share price. To aid in the analysis, the chi-square technique was employed.

Ho: Dividend pay-out changes have no effect on share price.
H1: Dividend pay-out changes have an effect on share price.

Table 6: Computation of the chi-square

O	**E**	**$(O-E)^2/E$**
39	23.3	10.57
2	17.7	13.92599
8	11.4	1.014
12	8.6	1.3442
3	15.3	9.888
24	11.7	6.3038
ΣO = 88	**ΣE = 88**	**= 43.0459**

Source: Survey Data 2012

- Degrees of freedom = (2-1)(3-1) **= 2**
- Significance Test Level = 1%
- Rejection Criterion: X^2 1% (2) = 9.21

Since the calculated X^2 is above 9.21 and is in the rejection zone, therefore the Ho must be rejected.

Interpretation and discussion:

There is a statistical significance or sufficient evidence suggesting that dividend payout changes have an effect on share price. The result of this statistical analysis indicates that investors may penalize dividend cuts and pay a premium on dividend increases. In 1994, a profitable utility called Florida Power & Light (FPL) announced a dividend cut by a heft 33%. FPL was a strategic pioneer in this strategic move. The stock price immediately fell by 15%, just as had been predicted (Damodaran, 2006). These findings show some similarities with South African findings by Marx (2001) who surveyed financial directors of JSE listed companies. From Marx (2001)'s research, just over 70% agreed that a company should avoid making changes in its dividend rates that might have to be reversed in the near future and that a company should strive to maintain an uninterrupted record of dividend payment. Two-thirds believed that companies should have target dividend payouts and periodically adjust the payout towards the target.

4.5 The Declaration Date and the Ex-Dividend Date

The regression and correlation techniques were employed here to establish whether dividend declarations lead to share price increases. Because it was almost impossible to regress share price movements for every company in this research due to the analytical technique being used, the fish-bowel random sampling technique was used to randomly select one firm out of those that declared dividends. The largest telecommunications firm was selected, therefore its share price movements were used and it was assumed that the findings were representative of the entire population.

Ho: Dividend announcements do not lead to share price increases.
H2: Dividend announcements lead to share price increases.

- $Y = a + bx$
- $B = \frac{n\Sigma xy - \Sigma x\Sigma y}{n\Sigma x^2 - (\Sigma x)^2} = \frac{11*87330 - 165*5672}{11*3465 - (165)^2} = \mathbf{2.273}$
- $A = \frac{\Sigma y - b\Sigma x}{N} = \frac{5672 - 2.273*165}{11} = \mathbf{481.54}$
- $Y = a + bx$
  $= 481.51 + 2.273*x$

Computation of the Pearson's Correlation Coefficient

$$R = \frac{n\Sigma xy - \Sigma x\,\Sigma y}{\sqrt{[n\Sigma x^2 - (\Sigma x)^2] * [n\Sigma y^2 - (\Sigma y)^2]}} = \frac{11*87330 - 165*5672}{\sqrt{[11*3465 - (165)^2] * [11*2930116 - 5672^2]}}$$

= 0.9707

Interpretation of Findings

$0 < r < 1$ means that there is a positive linear correlation. An increase in x results in an increase in y. A correlation coefficient of +0.9707 indicates that there is a strong positive direct relationship between dividend announcements and share price. Dividend announcements result in share price increases. The figure calculated, 0.9707, is very close to 1, which represents a perfect positive linear correlation. In a nut shell, the window period from dividend announcement to when shares become ex-dividend, represents the time when the share price will be increasing. The findings of this research are consistent with those by Bhana (1997), who studied the behavior of share prices on the announcement of dividends over the period from 1986 to 1995 in South Africa and found out that dividends were an effective signaling device. He found a significant increase in share price on announcement. He also suggested that the size of the dividend was important- distributions of less than 3% conveyed no information to investors. However, Knight et al (1987) contradicted after examining the impact of 230 dividend announcements on share prices for 41 JSE listed companies, and found that the announcements contained little or no information about a firm's future earnings. They concluded that dividend changes did not provide a signaling role.

4.6 The ex-dividend effects
(The same company and assumptions made above still hold).

Ho: Share prices do not go down upon the ex-dividend date.
H3: Share prices will go down upon the ex-dividend date.

- $Y = a + bx$
- $B = \frac{n\Sigma xy - \Sigma x\Sigma y}{n\Sigma x^2 - (\Sigma x)^2} = \frac{11*81579 - 165*5553}{11*3465 - 165^2}$
  $\underline{\mathbf{= -1.7333}}$
- $A = \frac{\Sigma y - b\Sigma x}{N} = \frac{5553 - (-1.7333*165)}{11} = \underline{\mathbf{530.818}}$

Computation of the Pearson's Correlation Coefficient

$$R = \frac{n\Sigma xy - \Sigma x\,\Sigma y}{\sqrt{[n\Sigma x^2 - (\Sigma x)^2] * [n\Sigma y^2 - (\Sigma y)^2]}} = \frac{11*81579 - 165*5553}{\sqrt{[11*3465 - 165^2] * [11*4806739 - 5553]}}$$

$\underline{\mathbf{= -0.0249}}$

Interpretation of Findings
$-1 < r < 0$ means that there is a negative correlation. An increase in x results in a decrease in y. There is an indirect relationship. A correlation coefficient of -0.0249 indicates that there is a weak indirect relationship. The coefficient indicates that share prices reduce from the ex-dividend date. Such a weak decline may be due to the effects of the reluctance of investors to off load this counter due to the desire to hold a more secure counter. The decline is huge immediately after and levels off at a decelerating rate to a region slightly above where the share price was before the announcement date.

These findings are consistent with the earliest studies of dividend day price changes conducted by Elton et al in 1970. They examined the behavior of stock prices on ex-dividend days for stocks listed on the New York Stock Exchange between 1966 and 1969. Based on their finding that the price drop was only 78% of the dividends paid, they concluded that dividends are taxed more heavily than capital gains. They also estimated the price change as a proportion of the dividend paid for firms in different dividend yield classes and reported that the price drop is larger, relative to the dividend paid, for firms in the highest dividend yield classes than for firms in lower dividend yield classes.

5.1 SUMMARY OF FINDINGS
The study aimed to investigate the impact of dividend payments on stock prices in Zimbabwe. Data was collected from documentary review and from a sample of 100 company executives and investors. The results of the study show that the largest number of respondents, about 70%, indicated that their firms take the dividend policy as an active decision variable. They believe that dividend decisions influence firm value (due to cost of external financing) and that dividend policy has a bearing on the future financing decisions. The dividend policy decisions send and communicate to the market that the firm is financially viable/ stable and has bright future prospects.

The majority of the respondents (90%) from the dividend paying firms confirmed that share prices increase upon announcement of dividends and 85% of the respondents confirmed that volume of shares traded increased upon dividend declaration. However, the share prices didn't increase by an amount equivalent to the dividends paid, share prices increased at varying price levels. The research also found out that there is a strong positive correlation between dividend announcements and share price movements. A correlation coefficient of 0.9707 indicates a strong positive direct relationship between dividend announcements and share price.

Upon the ex-dividend date, 75% of the respondents indicated that share prices decline. The remaining 25% believes that share prices normalize and stick at the new level. The findings of this research show that there is a weak negative correlation between the time from the ex-dividend and share price. A correlation coefficient of -0.0249 indicates that share prices reduce from the ex-dividend date. The rate of decline is huge immediately after the ex-dividend and levels off at a decelerating rate to the region the share price was before the announcement date.

5.2 CONCLUSION

The following conclusions can be made about Zimbabwean firms in the Services Sector;-

- The dividend decision is an active decision variable in Zimbabwean firms.
- The Zimbabwean window period from dividend announcement date to the ex-dividend date is between 15 and 30 days.
- Dividend payments cause share prices to go up. Investors respond positively to dividend announcements by grabbing the shares causing an upward movement in the price until the ex-dividend date.
- Upon the ex-dividend date, share prices start to go down to a level slightly above the initial price before announcement.
- Dividend payout changes have a bearing on share prices.

5.3 RECOMMENDATIONS

In light of this research's findings, it is recommended that firms in Zimbabwe should avoid dividend cuts. Management has to formulate their dividend policies in full view and estimation of future earnings to avoid future dividend cuts when they cannot sustain the prevailing dividend levels. Investors proved beyond doubt that they penalize dividend cuts. Management needs to handle this dividend puzzle with care as investors may develop a negative image about the firm. This research left out other important dividend relevant issues. The researcher recommends that further research be done using a much bigger sample using a sample that cuts across all the sectors of the economy. Other research efforts may be directed at establishing the dividend policies pursued by firms with high leverage in their capital structures.

REFERENCES

Bernhardt, D., Douglas, A., Robertson, F. (2005), "Testing dividend signaling models", *Journal of Empirical Finance*, Vol. 12 pp.77-98.

Bhana N. 1991b. Significant changes in dividend policy and insider trading activity on the Johannesburg Stock Exchange. *South African Journal of Business Management*, 22: 75–82.

Bhattacharyya, N. (2007), "Dividend policy: a review", *Managerial Finance*, Vol. 33 pp.4-13.

Brav A, Graham JR, Harvey CR and Michaely R. 2005. Payout policy in the 21st century *Journal of Financial Economics*, 77(3): 483 – 527.

Campbell, J.Y., Shiller, R.J. (1988), "Stock prices, earnings, and expected dividends", *Journal of Finance*, Vol. 43 pp.661-76.

Damodaran, A (2006) Corporate Finance- Theory and Practice, 2nd Edition, Pearson Addison Wesley, USA

DeAngelo, H., DeAngelo, L., Skinner, D.J. (2000), "Special dividends and the evolution of dividend signalling", *Journal of Financial Economics*, Vol. 57 pp.309-54.

Emery D.R, Finnerty J.D, and Stowe J.D, (2004): Corporate Financial Management, 2nd Edition, Pearson Education International, New Jersey

Faria, J.R., Carneiro, F.G. (2001), "Does high inflation affect growth in the long and short run?", *Journal of Applied Economics*, Vol. 4 pp.89-105.

Firer C., Gilbert E., and Maytham A. (2008), "Dividend Policy in South Africa." *Investment Analysts Journal* No. 68, 2008.

Gitman, L.T (2006), Principles of Managerial Finance, 11th Edition, Pearson Addison Wesley, USA

Juma'h H. Ahmad, and Pacheco J.O. Carlos (2008), "The financial factors influencing cash dividend policy: A sample of U.S. manufacturing companies." *Inter Metro Business Journal*, Vol. 4 No. 2/ p.23

Lintner J. 1956. Distribution of incomes of corporations among dividends, retained earnings and taxes. *American Economic Review*, 46: 97-113.

Marx J. 2001. Empirical Findings on Directors' Views on Dividend Policy. M*anagement Dynamics*,10(2): 50-66

Miller, M.H., Modigliani, F. (1961), "Dividend policy, growth, and the valuation of shares", *Journal of Business*, Vol. 34 pp.411-33.

Ooms LL, Archer AA and van der Merwe Smit E. 1987. The informational content of dividends on the Johannesburg Stock Exchange: An empirical analysis.*South African Journal of Business Management*, 18:187–197.

Sharpe, S.A. (2002), "Reexamining stock valuation and inflation: the implications of analysts' earnings forecasts", *Review of Economics and Statistics*, Vol. 84 pp.632-48.

Sènéque PJC and Gourley BM. 1983. Dividend policy and practice in South Africa. *Investment AnalystsJournal*, 21: 35–41.