

Residual Dividend Policy: The Case of Bangladesh

Mohammad Nayeem Abdullah*, Kamruddin Parvez**
and Rahat Bari Tooheen***

The study explores the preference for Residual Dividend Policy among companies in a developing country setting. This study examines the data for 59 companies listed on the Chittagong Stock Exchange. The companies were selected using the Selective Index Method. The study period was from 2002 to 2013. A mix of statistical techniques including the t-test has been applied to examine the preference for following the Residual Dividend Policy. The results demonstrate that the selected companies generally do not follow the Residual Dividend Policy, and that there is no preference for investment policy over dividend policy.

Field of Research: Finance

1. Introduction

Studies in the finance literature are sharply divided over dividend policy and its impact on market value. A number of studies (Gordon, 1959; Litzenberger and Ramaswamy, 1979; Blume, 1980; Litzenberger and Ramaswamy, 1982; Ang and Peterson, 1985; Dyl and Weigand, 1998; Koch and Shenoy, 1999) strongly support the relation between dividend policy and market value, while other studies assume the opposite stance (Miller and Modigliani, 1961; Black and Scholes, 1974; Miller and Rock, 1985; Bernstein, 1996). A company's value depends mainly on its ability to achieve continued earnings, and the dividend policy is only a tool for the distribution of earnings achieved with the company's investment policy to shareholders (Miller and Modigliani, 1961; Fama, 1974; Titman, 1984; Cornell and Shapiro, 1987; Horne and McDonald, 1971; Holder, Langrehr and Hexter, 1998). The dividend decision is complementary to the investment decision as a result of which funds available should be directed largely towards investment and the surplus distributed as dividends. This is known as the Residual Dividends Policy (Baker, 2009).

The adoption of a residual dividend policy does not necessarily mean that cash dividends are not distributed (Baker and Smith, 2006). This article examines whether Bangladeshi companies followed a residual dividend policy during the period 2002 to 2013 following the methodology discussed in Baker and Smith (2006) and by calculating the Standardized Free Cash Flow (SFCF) as per the definition prescribed by Lehn and Poulsen (1989). The sample consisted of active equity companies for which information has been available for ten years from 2001 till 2013 from DataStream.

The final sample consisted of 59 firms divided into 15 sectors. The standardized free cash flow (SFCF) was calculated by using excel sheets for each of the companies and sectors in the sample.

* Dr. Mohammad Nayeem Abdullah, Associate Professor, School of Business, Chittagong Independent University, Bangladesh. Email: nayeem@ciu.edu.bd

** Kamruddin Parvez, Assistant Professor, School of Business, Chittagong Independent University, Bangladesh. Email: parvez@ciu.edu.bd

*** Rahat Bari Tooheen Assistant Professor, School of Business, Chittagong Independent University, Bangladesh. Email: tooheen@ciu.edu.bd

Abdullah Parvez & Tooheen

Thereafter, the means and standard deviation for the market in general and for each sector were calculated. This was followed by running t-test through SPSS.

The scientific literature has devoted a relatively limited coverage on residual dividend policy. On the one hand, the existence and execution of the residual dividend policy appears to facilitate the provision of an additional stream of revenue which benefits all the corporate stakeholders through a distribution of financial risks and benefits. On the other hand, the literature does not exhibit a uniform consensus about the utility of the residual dividend policy, but there is an acknowledgement that it introduces an additional level of uncertainty in what is already a highly complex and interconnected system.

If there are surplus funds after exhausting all opportunities for investment, then the company will consider paying dividends, but if there are no surplus funds then no dividend will be distributed (Baker, 2009). A number of questions come to the fore in this respect according to (Baker and Smith, 2006) such as:

- Is there a pure residual dividend policy?
- What happens if there are no funds on hand after exhausting investment opportunities over a long period?
- Will a company stop distributing dividends?
- Will the management seek to issue new equities if it is found that the cash available is not sufficient for investment opportunities?
- To what extent?
- What impact will this then have on the finance decision?

This study focuses on exploring whether or not Bangladeshi companies followed a residual dividend policy during the period 2002 to 2013 following the approach as discussed by Baker and Smith (2006). The methodology applied for calculating the Standardized Free Cash Flow (SFCF) is according to the definition stated by Lehn and Poulsen (1989) as the mean and standard deviation for standardized free cash flow for the companies that follow a residual dividends policy should be close to zero. The study sample consisted of the active equity companies in Taka available for twelve years from 2002 till 2013. The sample companies stood at 59 out of 60 companies divided into 15 sectors. The results showed that the companies in general do not follow the residual dividend policy. This result provides the evidence that companies in Bangladesh do not prefer investment policy to dividend policy. This result provides further evidence of the non-validity of Miller and Modigliani (1961).

The paper is organized as follows: Section 1 deals with Introduction and Section 2 focuses on Literature Review. Section 3 contains the Methodology and Model. The Findings are provided in Section 4 and Conclusion is in Section 5.

2. Literature Review

Researchers today have been unable to reach a general consensus on the impact of financial decisions and policies on the market value of the company, regardless of certain researchers having suggested the impact of dividends on the company. Other researchers attribute the impact on the firm to the investment policy. Fama (1974) tested for the presence of a relationship between the dividends decision and the investment decision and determined that the investment decision taken by the efficient market is separate from the dividend decision. Miller and Modigliani (1961) in their seminal study confirmed that the

Abdullah Parvez & Tooheen

dividend policy has no effect on the market value under the conditions and assumptions of the efficient market. The study reports the real influence on market value comes from the investment policy. Other researchers (Kalay and Loewenstein, 1986; Impson, 1997; Nissim and Ziv, 2001) argue that the dividend decision assumes a special importance since it is employed by management to convey information to the shareholders about their company status and the future expected earnings. These researchers also highlight that dividend policy and investment decisions are separate. Partington (1985) points to three types of dividend policy. Firstly, the residual dividend policy which denotes that cash dividends should be distributed after exhausting all investment opportunities. In other words, priority must be given to the investment decision in the allocation of funds available. The second is the independence of the dividend policy regardless of the investment and finance policies. The third type follows neither the residuals nor the independent dividend policy.

Loderer (1989) deals with the connection between investment, finance and dividend decisions, in which he discusses the idea of paying dividends in the case of corporate debts. The study examines this situation in the light of US companies by assessing two scenarios: first, do these companies seek to pay dividends and finance the required funds for investment and dividends; and second, do companies seek to raise the leverage target and pay for dividends using funds not required for investment. The study also asks if there is a pure residual dividend policy. The study tests the two scenarios and finds that there is no target for corporate dividends under the first scenario. For the second scenario, the study determined that financing and investment decisions cannot be separated since managers execute both decisions simultaneously. The results stress that investment decisions are simultaneously made with the dividend and financial decisions. This means that dividend considerations affect investment decisions, which denotes that managers are not only willing to incur transaction costs of raising outside funds to maintain a level of dividends, but also willing to forego otherwise beneficial investment projects.

Alli, Khan and Ramires (1993) tested the dividend payout ratio in connection with eight factors, namely issuance costs, pecking order, ownership dispersion, dividends stability, tax and agency cost effects, financial slack, cash flow quality and capital structure flexibility. The sample for the study consisted of 105 companies in the United States for the period 1985-1987. The paper established a significantly negative relationship between the dividend payout ratio and issuance costs and pecking order. This indicates that the companies which suffer from high issuance costs, risk and high level of expected capital expenditure and growth will pay low dividends. This supports the residual dividend theory in that the funds are prioritized for growth and capital expenditure. The study also found a significant positive relationship between the dividend payout ratio and capital structure flexibility. Brav et. al. (2005) conducted a survey to identify factors that monitor dividends and repurchases decisions in the US. The survey covered 384 financial executives in 256 public companies and 128 private companies. The public companies were divided into the following categories: 166 companies that paid dividends, 167 companies that have bought back their shares, and 77 companies that didn't pay dividends. The researchers also conducted separate interviews with 23 financial executives for inquiring about matters lacking clarity. The study finds two important results in the context of this article. First, the companies try to avoid reducing dividends, seeking to make them stable. In addition, the study finds that companies do not repurchase their shares before finalizing any investment decisions.

The relationship of the dividend puzzle (Baker, Powell and Veit, 2002) with investments can be stated to be fluid in nature since their interactions according to published literature

Abdullah Parvez & Tooheen

is inconsistent. The view is shared by Blau and Fuller (2008) who state that the dividend policy of a firm affects the management's flexibility and how in turn dividend policy is influenced by the tradeoffs in flexibility perceived by the management. Dividend payments take funds out of the management's control and puts in the control of the investors (Blau and Fuller, 2008). This is where the concept of the Residual Dividend Policy (Smith and Baker, 2009) comes into play.

The underlying tenet of the Residual Dividend Policy is that the investment, dividend and financing policies should be interrelated even in the short run (Smith and Baker, 2009). Although one dividend policy is not applicable for all firms in general, managers can make a selection between two major dividend policies, namely the managed dividend policy and the residual dividend policy (Baker and Smith, 2006). A managed dividend policy allows management to attempt to achieve a specific pattern of dividend payments whereas with a residual dividend policy the management basically pays the amount remaining after the deduction of the capital expenditures from internal cash flows (Baker and Smith, 2006). Baker and Smith (2006) also state that as a third alternative, firms may chose to follow a modified version of the residual dividend policy, which combines the characteristics of a managed and residual dividend policy. The authors find no such study in Bangladesh that check the preference of Bangladeshi firms on whether they prefer investment policy over dividend policy. This will lead to test the dividend irrelevance theory in the residual dividend policy dimension.

3. The Methodology and Model

The Mean, Standard Deviation of SFCF as well as the T-test to check the significance of the value will justify whether the company is following residual dividend policy or not. The establishment of this result was significantly facilitated by using the methodology applied by Baker and Smith (2006) by calculating the Standardized Free Cash Flow as per the Lehn and Poulsen (1989) definition, as the Mean and Standard Deviation for Standardized Free Cash Flow for the companies that follow a residual dividends policy are close to zero.

3.1 Study Model

The Standardized Free Cash Flow (SFCF) is calculated for all companies and sectors thereafter the study tests the hypotheses by t-Test on 95% confidence level to determine whether the market or any sector accepted or rejected the hypothesis.

3.1.1 Reasons to Choose Standardized Free Cash Flow (SFCF)

Free Cash Flow is a measure of the after-tax operational funds produced by the company, without taking into consideration the source of debt and equity financing that is available for distribution to the stakeholders. Free cash flow must be available for distribution to the stakeholders (Tham and Velez-Pareja, 2004). Jensen (1986) defines Free Cash Flow as the cash flow in excess of that required funding all projects that have positive net present value when discounted at the relevant cost of capital. Easterbrook (1984) and Jensen (1986) argue that agency cost exists in firms because managers may not always want to maximize shareholders' wealth due to the separation of ownership and control. The Residual Dividend Policy concept means that the company tends to direct all available funds to the investment opportunities available to it, and if there remains a surplus of funds after exhausting all opportunities there may be a chance for dividends, but if there are no extra funds, there will be no dividends for distribution (Lumby and Jones, 1999; Baker,

Abdullah Parvez & Tooheen

2009). Based on the above concepts, the researcher agrees with Baker and Smith (2006) that low standardized free cash flow will be indicative of Residual Dividend Policy.

3.2 Operational Definition

The operational definition used by Lehn and Poulsen (1989) is adopted to determine the operational definition of the concept of standardized free cash flow (SFCF). It will be calculated according to the following steps for each one of the ten years:

The Undistributed cash flow = The operating profits before depreciation – income taxes – gross interests – preferred stock cash dividends – stock cash dividends .

The Free cash flow = the undistributed cash flow - Capital expenditure.

Standardized calculation of free cash flow = Free cash flow / market value of the company.

Study Hypothesis

The main hypothesis can be stated as follows: Companies listed in the Chittagong Stock Exchange follow the residual dividends policy.

3.3 Data Collection and Description

60 listed companies from various sectors were selected using the Selective Index Method. From the selected 60 companies, for a final sample of 59 companies listed in the CSE for the period 2002 to 2013, data were available for 650 time points for SFCF variables out of 708 time points. The data pertaining to market value was obtained from the Chittagong Stock Exchange and all the data related to free cash flow were obtained from the cash flow statements of the various companies. Table 1 presents the sample size and available data (annual) from Data Stream for the period 2002-2013 broken down by economic sectors for 12 years.

Table 1: Descriptive Statistics

Sector	Sample	Available	Percentage
Bank	132	126	95.5%
Cement	12	11	91.6%
Ceramic	24	24	100%
Energy	12	10	83.3%
Eng& Electrical	48	48	100%
Foods & Allied	24	24	100%
General Insurance	72	69	95.8%
ICT	60	40	66.6%
Leasing & Finance	108	84	77.7%
Leather & Footwear	24	24	90.9%
Miscellaneous	84	82	97.6%
Mutual Funds	36	36	100%
Pharma & Chemicals	48	48	100%
Textiles & Clothing	24	24	100%
Total	708	650	91.8%

This table presents a descriptive statistical analysis (mean, standard error of mean, median, standard deviation, variance, range, minimum, maximum and sum) of the SFCF

Abdullah Parvez & Tooheen

mean for the total market and each sector for the sample of 59 Bangladeshi companies for time periods 2002 to 2013.

4. The Findings

Table 2: SFCF for Market and Sectors

Group	Observation	Mean(SFCF)	Standard Deviation	Minimum	Maximum
Bank	126	62600000	132000000	-88000000	996000000
Cement	11	8076789	16900000	-7354553	55800000
Ceramic	24	-265648	1985122	-6206670	3476043
Energy	10	4443557	6816182	-2303507	19800000
Eng & Electrical	48	537034	1644041	-5502142	5535076
Foods & Allied	24	1950195	3333216	-4863058	9142170
General Insurance	69	892800	2075799	-2710277	9233112
ICT	40	798371	3727014	-6238671	13600000
Leasing & Finance	84	-711051	39400000	-132000000	225000000
Leather & Footwear	24	951053	1723168	-3093879	5483801
Miscellaneous	82	3525055	22100000	-20100000	177000000
Mutual Funds	36	431354	577028	-63919	3033113
Pharma & Chemicals	48	-2252093	13800000	-93600000	4178974
Textiles & Clothing	24	-2574493	11000000	-35900000	9992601
Overall	650	12700000	65000000	-132000000	996000000

There are a total of 650 observations across 14 sectors. The highest number of 126 observations from is observed from the banking sector and the least number of 10 observations from the energy sector. The banking sector has got the highest SFCF whereas the pharmaceutical and chemical sector got the lowest SFCF.

This table shows the calculations of standardized free cash flow (SFCF) by economic sector for each of the years from 2002-2013 for the sample of 59 Bangladeshi companies. The SFCF calculations are based on Lehn and Poulsen (1989). The SFCF is calculated according to the following steps:

The Undistributed Cash Flow = The operating profits before depreciation – income taxes – gross interests – preferred stock cash dividends – stock cash dividends.

The Free Cash Flow = the undistributed cash flow - capital expenditure.

Standardized calculation of free cash flow = Free cash flow / market value of the company.

The null hypothesis states that the Bangladeshi companies follow the residual dividend policy, while the alternative hypothesis states that Bangladeshi companies do not follow the residual dividend policy. The companies tend to follow the residual dividend policy if the mean and standard deviation of Standardized Free Cash Flow (SFCF), calculated according to the Lehn and Poulsen (1989) model, is equal to zero during the study period. Therefore, the hypothesis can be expressed in a statistical format as follows:

$$H_0: \mu_k = 0$$

$$H_a: \mu_k \neq 0$$

Abdullah Parvez & Tooheen

Where: μ_k represents the mean of the Standardized Free Cash Flow (SFCF) during the study period.

The SFCF has been calculated by using Microsoft Excel for companies in the sample at the level of the market in general and at the level of each sector in particular. The SFCF is summarized in Table 2 which provides a descriptive statistical analysis of the SFCF mean for the market and sectors, showing that the mean value is not equal to zero. Therefore, it may be concluded that companies in Bangladesh do not follow the residual dividend policy in general and for most sectors. In addition, it has been observed that sectors such as Cement, Leasing, Pharmaceutical & Chemicals, and Textiles & Clothing SFCF values are negative in large magnitude, while the values for the remaining other sectors are positive in large magnitude. Therefore in general it can be stated that CSE companies do not follow the residual dividend policy.

Table 3: Calculated t for the Mean of SFCF for the Total Market and each Sector

Sector	Test value=0				
	t-statistics	Degree of freedom	Mean	Standard deviation	P-Value(2-tailed)
Bank	5.338	125	62600000	1.32e+08	0.000
Cement	1.58	10	8076789	1.69e+07	0.143
Ceramic	-0.65	23	-265648	1985122	0.518
Energy	2.06	9	4443557	6816182	0.069
Eng & Electrical	2.26	47	537034	1644041	0.028
Foods & Allied	2.86	23	1950195	3333216	0.008
General Insurance	3.57	68	892800	2075799	0.000
ICT	1.35	39	798371	3727014	0.183
Leasing & Finance	-0.17	83	-711051	3.94e+07	0.869
Leather & Footwear	2.70	23	951053	1723168	0.012
Miscellaneous	1.45	81	3525055	2.21e+07	0.151
Mutual Funds	4.49	35	431354	577028.3	0.000
Pharma & Chemicals	-1.13	47	-2252093	1.38e+07	0.264
Textiles & Clothing	-1.14	23	-2574493	1.10e+07	0.265
Overall	4.99	649	12700000	6.50e+07	0.000

The above mentioned table shows the calculated t for the mean of SFCF for the total market and each sector. t test for the SFCF is based on annual data sample from Data Stream consisting of 59 Bangladeshi companies from 2002 to 2013. The P-value for the overall market is significant meaning that the alternative hypothesis is accepted which clarifies that Bangladeshi companies do not follow the residual dividend policy in general. But when t-tests are conducted separately by economic sector, it shows interesting results. It is observed that for the Bank, Energy, Engineering, Food, General Insurance, Leather, and Mutual Fund sectors P-values are below 0.05 meaning that the null hypothesis is rejected, so companies from this sector follow the residual dividend policy.

On the other hand, in the Cement, Ceramic, ICT, Leasing, Miscellaneous, Pharmaceutical and Chemicals, and Textiles sector, P-values are greater than 0.05 meaning that the null

hypothesis is not rejected. From the mean value of these sectors, it is observed that they are far from zero, but t-test shows different results because of large standard deviations associated this sector resulting in smaller numbers in t-statistics as a result p values are greater than 0.05.

The results display a notable degree of variation across the sectors examined, and for the market as a whole. Interpreting the results of Table 2 in conjunction with Table 3, it is stated that the alternative hypothesis is accepted in general for the listed companies of the CSE, whereas the null hypothesis is accepted for the Bank, Energy, Engineering, Food, General Insurance, Leather and Mutual Fund sectors.

5. Conclusions

The results showed that the companies in general do not follow the residual dividend policy as a policy for cash dividends at the market level in general and all other individual sectors although T-test show different results. This result provides the evidence that companies in Bangladesh do not prefer investment policy to dividend policy. The above results indicate a separation between the investment policy and dividend policy. The researchers are of the opinion that the observed results can be attributed to several reasons. The investment policy in insurance companies is connected with the nature of the insurance concept of the operation as the investment income is one of the main sources of insurance to cover various expenses. This result provides further evidence of the non-validity of Miller and Modigliani (1961) assumption in 1961. The above results indicate a separation between the investment policy and dividend policy. This is supported by Fama's study (1974) regarding the independence of investment decisions from the cash dividend decisions.

This study is the first in the context of the Bangladesh market that seeks to investigate whether companies follow a Residual Dividend Policy. This helps to explore the relationship between dividend policy and investment policy and provides an indication about the management's preference for these policies. The study is used as a part of the holistic approach to prove dividend irrelevance proposition in Bangladesh. As the selected Bangladeshi companies do not follow the residual dividend policy, they do not prefer Investment policy over dividend policy. So dividend policy has an impact on market value.

These results are not consistent with the findings of Baker and Smith (2006) who found that during the nineties, most companies follow the modified residual dividends policy. The study provides a significant opportunity to examine the validity of the Dividend Irrelevance Theory in the context of Bangladesh. This study is also the first in the Bangladesh market that seeks to investigate whether companies follow a Residual Dividend Policy which helps to explore the relationship between dividends policy and investment policy and provides an indication about management preferences for these policies. The capital market of Bangladesh is growing. Even though corporate financing is still bank based, increasing adoption of corporate culture and a stable middle class will change the scenario in coming decades. To adopt the current dividend policy that might maximize the shareholder's wealth, management should forecast the current dividend policy and implement the same. The study will serve to contribute interpretive ideas linking the theory related to stock market and dividend policy of a firm. Dividend policy may matter because for mature companies with highly stable cash flows, paying out too little of operating cash flow may cause managers to over invest. On the other hand for companies in higher growth or riskier businesses, paying out too much may reduce financial flexibility.

References

- Alli, KL, Khan, AQ and Ramirez, GG 1993, 'Determinants of corporate dividend policy: A factorial analysis', *Financial Review*, Vol. 28, No. 4, pp. 523-547.
- Ang, JS and Peterson, DR 1985, 'Return, risk, and yield: evidence from ex ante data', *The Journal of Finance*, Vol. 40, No. 2, pp. 537-548.
- Baker, HK (Ed.) 2009, *Dividends and Dividend Policy*, Vol. 1, John Wiley & Sons.
- Baker, HK and Smith, DM 2006, 'In search of a residual dividend policy', *Review of Financial Economics*, Vol. 15, pp. 1-18.
- Baker, HK, Powell, GE and Veit, ET 2002, 'Revisiting the dividend puzzle: Do all of the pieces now fit?', *Review of Financial Economics*, Vol. 11, No. 4, pp.241-261.
- Bernstein, PL 1996, 'Dividends: The Puzzle', *Journal of Applied Corporate Finance*, Vol. 9, No. 1, pp. 16-22.
- Black, F and Scholes, M 1974, 'The effects of dividend yield and dividend policy on common stock prices and returns', *Journal of Financial Economics*, Vol. 1, No. 1, pp. 1-22.
- Blau, BM and Fuller, KP 2008, 'Flexibility and dividends', *Journal of Corporate Finance*, Vol. 14, No. 2, pp.133-152.
- Blume, ME 1980, 'Stock returns and dividend yields: Some more evidence', *The Review of Economics and Statistics*, Vol. 62, No. 4, pp. 567-577.
- Brav, A, Graham, JR, Harvey, CR and Michaely, R 2005, 'Payout policy in the 21st century', *Journal of Financial Economics*, Vol. 77, No. 3, pp. 483-527.
- Cornell, B and Shapiro, AC 1987, 'Corporate stakeholders and corporate finance', *Financial Management*, Vol.16, No. 1, pp. 5-14.
- Dyl, EA and Weigand, RA 1998, 'The information content of dividend initiations: Additional evidence', *Financial Management*, Vol. 27, No. 3, pp. 27-35.
- Easterbrook, FH 1984, 'Two agency-cost explanations of dividends', *The American Economic Review*, Vol. 74, No. 4, pp. 650-659.
- Fama, EF 1974, 'The empirical relationships between the dividend and investment decisions of firms', *The American Economic Review*, Vol. 64, No. 3, pp. 304-318.
- Gordon, MJ 1959, 'Dividends, earnings, and stock prices', *The Review of Economics and Statistics*, Vol. 41, No. 2, pp. 99-105.
- Holder, ME, Langrehr, FW and Hexter, JL 1998, 'Dividend policy determinants: An investigation of the influences of stakeholder theory', *Financial Management*, Vol. 27, No. 3, pp. 73-82.
- Horne, JCV and McDonald, JG 1971, 'Dividend policy and new equity financing', *Journal of Finance*, Vol. 26, pp. 507-519.
- Impson, M 1997, 'Market reaction to dividend-decrease announcements: public utilities vs. unregulated industrial firms', *Journal of Financial Research*, Vol. 20, No. 3, pp. 407-422.
- Jensen, MC 1986, 'Agency cost of free cash flow, corporate finance, and takeovers', *Corporate Finance, and Takeovers. American Economic Review*, Vol. 76, No. 2, pp. 323-329.
- Kalay, A and Loewenstein, U 1986, 'The informational content of the timing of dividend announcements', *Journal of Financial Economics*, Vol. 16, No. 3, pp. 373-388.
- Koch, PD and Shenoy, C 1999, 'The information content of dividend and capital structure policies', *Financial Management*, Vol. 28, No. 4, pp. 16-35.
- Lehn, K and Poulsen, A 1989, 'Free cash flow and stockholder gains in going private transactions', *The Journal of Finance*, Vol. 44, No. 3, pp. 771-787.
- Litzenberger, RH and Ramaswamy, K 1979, 'The effect of personal taxes and dividends on capital asset prices: Theory and empirical evidence', *Journal of Financial Economics*, Vol. 7, No 2, pp. 163-195.

Abdullah Parvez & Tooheen

- Litzenberger, RH and Ramaswamy, K 1982, 'The Effects of Dividends on Common Stock Prices Tax Effects or Information Effects?', *The Journal of Finance*, Vol. 37, No. 2, pp. 429-443.
- Loderer, C 1989, 'The Residual Decision: Dividend Payments for Outside Financing', *Financial Markets and Portfolio Management*, Vol. 3, pp. 301-312.
- Lumby, S and Jones, C 1999, *Investment Appraisal and Financial Decisions*. 6th Edition. London: International Thomson Business Press.
- Miller, MH and Modigliani, F 1961, 'Dividend policy, growth, and the valuation of shares', *The Journal of Business*, Vol. 34, No. 4, pp. 411-433.
- Miller, MH and Rock, K 1985, 'Dividend policy under asymmetric information', *The Journal of Finance*, Vol. 40, No. 4, pp. 1031-1051.
- Nissim, D and Ziv, A 2001, 'Dividend changes and future profitability', *The Journal of Finance*, Vol. 56, No. 6, pp. 2111-2133.
- Partington, GH 1985, 'Dividend policy and its relationship to investment and financing policies: Empirical evidence', *Journal of Business Finance & Accounting*, Vol. 12, pp. 531-542.
- Tham, J and Vélez-Pareja, I 2004, *Principles of Cash Flow Valuation: An Integrated Market-based Approach*. Academic Press.
- Titman, S 1984, 'The effect of capital structure on a firm's liquidation decision', *Journal of Financial Economics*, Vol. 13, No. 1, pp. 137-151.