Dividend Is Relevant: A Restatement

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Abstract

Dividend is relevant: A restatement or dividend does not lead to increase in stock price, needs to be tested against the backdrop of controversies of Millet-Modigliani (M-M) thesis, other contributors and local contributions from Nigeria using First Bank of Nigeria Plc (Nigeria's major Bank) figures in a regression. The major finding is that dividend given alone cannot increase the stock price. The major recommendation is that dividend, price-earnings ratio, retained earnings, return on capital employed and autonomous part assumed to be government, external, internal, and economic environment, should be coordinated through policy instruments for corporate governance for dividend to have relevance.

Introduction

Dividend policy, an aspect of financial management aids organizational success. It is a guiding principle for determining the portion of company's after tax profits to be paid out to shareholders for the year. It comprises of all or a portion of today's dividend for more dividends tomorrow. An effective dividend policy means effective trade-off between cash dividend and profitable investment opportunities (Erhijakpo and Ogunrin, 2006). For example, there are four alternatives of effective dividend policy. These are: stable dividend policy (fixed amount per share yearly), stable pay out ratio (fixed percent of profits after interest and tax yearly), residual policy (paying

everything left after the company had met all debt obligations, and index linked policy (dividend paid linked to level of inflation in the country). On the other hand, having profitable investment opportunities mean creating the enabling environment which includes supply of funds accessed through paying little or no dividend which leaves room for retained earnings. There is another option for new issues through the capital market. However, dividend or no dividend, does it increase the value of the firm? That is, dividend relevance, is it true? This is the problem. Therefore there is need to test the hypothesis that dividend does not increase stock price using First Bank (Nigeria) Plc data in a regression for the study because it is a bank, first among equals, within the big banks and out of the 23 banks in Nigeria and was established in 1984 as bank of British West Africa. It later became standard bank of Nigeria, metamorphosed to bank of West Africa, First Bank of Nigeria Ltd and its current name, respectively. It is headed by the group managing director and has over 536 branches, 39 business development offices and 8 local subsidiaries in Nigeria alongside with FBN bank (UK) offices in Paris and.South Africa. Again, it has over one million shareholders. Over the years, it has been of immense assistance to the Nigerian government and the private sector. Also, it has technological support (software) for its aggressive retail banking, apart from its electronic banking services. During the turbulent global financial melt-down, its revenue grew by 40% and total assets by 31.5% but profitability declined by 65.7% (First Bank, 2008, 2009) The rest of the study is made up of literature review, model specification, analysis of result and the concluding part.

Literature Review

Clark (1999) defined dividend as a benefit or income out of the profit of a company. Bannock (1998) noted that a dividend is expressed as a percentage of the nominal value of a share or an absolute amount per share. Richard and Stewart (2003) noted the direct compensation and servicing of share capital involved in a dividend paid to shareholders. Adding that dividend policy is a trade-off between retained earnings and paying out cash as well as issuing new shares. Where there is no cash a scrip issue or bonus share is given. Osaze and Anao (1999) noted that dividend relevance lies on dividend pay-out levels more significantly determining a company's stock price. Adding that the Bird-in-Hand theory stressing uncertainty of future earnings making investors to settle on the certainty of dividend payment now to determine the stock price. Moreover, reported earnings are not true earnings because of manipulations of accounting figures by companies. Again, the investors are

motivated to buy shares because of anticipated dividend which by implication makes the capital market in developing countries un-impressive for long-term finance.

But dividends do not matter as noted in Miller-Modigliani (M.M) argument, dividends being cash in hand and capital appreciation in the bush (Amadasu, 1987, Richard and Stewart, 2003). They added that a firm can capitalize operating earnings or resort to new issues. Dividends are paid by companies because of clientele and information effects. The clientele effect is effect on the shareholders, i.e. income seekers like pension funds, unit trusts, investment trusts, etc. welcome high dividend payment. Capital gains seekers welcome low dividend payment because of low taxation and scrip issue benefits. Low-growth companies attract investors more interested in dividends while high-growth companies are interested in investors less interested in dividends. The information effect is the signal sent to shareholders when dividends are paid such that the company is taken as doing well and will continue to pay dividends so that the firm's value bids up and the cost of capital falls, being less risky.The stock market in this case is premised on perfect information and perfect competition (Amadasu, 1997, Usifo, 2008; Osaze, 2007).

According to Osaze and Anao (1999), it is the objective of a firm to have a stable dividend policy whereby a stable amount of Naira is paid yearly as dividend irrespective of the firm's performance. The snag in this case is that shareholders loose value in real terms because of inflation and during business downturn it tends to have less retained earnings to capture investment opportunities that may come around. The second option is to have a stable payout ratio whereby a fixed percentage of a firm's net profits (after tax profits) as dividend. This is however subject to fluctuations when profits are low and irritating making shareholders to have a low value or price for the firm. The third option is paying out as dividends all leftovers after a company's debt has been paid. That is, nothing is paid where there is no left over. Finally, the fourth option being extra dividends payment after paying the fixed payout ratio to recognize better profit performance. However an indexed policy could be a better option whereby dividends are paid according to inflation level not to reduce the take home value in real terms.

A firm may also consider some limitations to paying dividends. There could be a legal limitation or ceiling on dividends payment where, for example, an unprincipled management sells all the assets and utilizes it to pay dividends

without paying debts or bondholders. The state law prohibits a company's creditors against excessive dividend payments or using invested capital to pay dividends, in addition the government can dictate permissive rates of dividend payment yearly. Secondly, business-wise, the payment of cash dividends depends on the amount of cash-flow generated, profitable business opportunities available, debt services profile, comparing notes by knowing the dividends other competitors are paying, indenture or covenant or restrictions placed by the company's creditors on the operational character or performance of the company like maintaining minimum current ratio or liquidity ratio or working capital. Also, the company may not pay dividend at all during the duration of the loan or depend on outside sources of funds provided that the cost of capital is not more than the cost of paying dividends. Shareholders with high tax profile in the company can influence it to have retained profits so that they can enjoy capital appreciation when they sell their shares later, tax on dividends being 45% and that of capital gains is 20% in Nigeria. Companies may not want to dilute control or shares and therefore choose retained earnings. But the Nigerian company's act of 1968 imposes extra taxation on excess accumulation of retained earnings (Osaze and Anao, 1999).

More importantly, the value of the firm should be protected from falling in the consideration of dividend policy. Gordon's model seeks to maximize shareholders' wealth through dividends payments and by implication maximizes the firms' value. Walter's dividend model allows dividend to be paid to maximize stock price or value of the firm. It explains further that r (rate of return) greater than k (cost of capital) in a growth firm and therefore no dividend given but reinvesting all earnings. r less than k in a non-growth firm therefore all (100%) given as dividend and no business retaining profits. r equals k in a normal firm, the assumption is that investment opportunities are exhausted, therefore, the dividend policy has no effect on market value per share. However, there is a snag as r and k are constant in Walter's model. But in practice they change as the firm's efficiency and access to funds improve or decline. Also, Walter's model assumes no risk and only the use of retained earnings as a source of finance whereas firms use external source of finance as well (Amadasu, 2006 and Usifo, 2008). According to Richard and Stewart (1999), dividends are determined by long-run target dividend payout ratios (paying high proportion of earnings) of mature companies with stable earnings as against low payout of growth companies. There is also more focus on dividend changes rather then absolute level. Dividends are supposed

to follow long-run sustainable earnings. The transitory earnings changes may not affect dividend payout. Finally, the firm may not want to rescind dividend increase after making it. However, in Lintner's model, shareholders prefer target payment or steady progression in dividends rather than a large increase in dividends of which a firm will not need to change its dividends. That is, a conservative company moves slowly towards the target and for a low adjustment rate. Therefore, the independent variables determining dividends are the firm's current earnings and the previous dividends (which earlier on depended on that year's earnings), That is, dividends depend on weighted average of current and past earnings. Nevertheless, Osaze and Anao (1999) noted that proposed dividends will always be more relative to current dividend because investors need to be protected against inflation eroding characteristics of shares by adjusting for inflation.

Evaluating corporate performance for profitability, liquidity, solvency, etc, for the purpose of dividend payment, is aided by financial analysis namely, financial ratios (despite the pitfalls), percentage trend, etc., from annual reports like income statement, balance sheet, sources and uses of funds, value added statement and five-year summary of key financial factors. Also, inclusive is past summary of the figures where applicable. Of course, figures are compared with a standard in form of previous experience or a cross section of similar firms. The comparison can be inter-firm or inter-period. Also, two or more ratios can be utilized to make decisions (Amadasu, 1997; Amadasu, 2006; Osaze and Anao, 1999; Richard and Stewart, 1999). Over the years other variables were added such that cash can be distributed to investors through share repurchases rather than regular dividends relying on stock, cash distributions and how to balance the cash flow preferences of highly taxed individuals with those of untaxed institutional investors increasingly dominant in the capital market (Bagwell, 1992, Megginson, 1995). Two major questions remain - does dividend policy matter and if so, what factors determine the optimal payout level. However, dividends payment may not matter, under perfect market condition according to Miller-Modigliani. The MM model of dividend policy irrelevancy means that a split of earnings between dividends and retained earnings does not determine the value of the firm. The value of the firm depends on the firm's earnings that result from its investment policy. But the Black and Scholes hypothesis on the neutrality of dividend policy concludes that shareholders trade-off the benefits of dividends against tax loss. Therefore, there are three clienteles – those for the fact that dividends are good, those taking dividends as

something bad and those indifferent to dividends. This is because of those in high tax bracket suffering high tax disadvantage from high payout ratio. But tax disadvantages are not as great as imagined (Pandey, 2007).

Observed Dividend Policy Patterns

It is remarkable similarity throughout the non-communist world though with interesting differences. The British firms have the highest payouts in the industrialized world. North American companies have higher payouts than Western European or Japanese companies. Companies with headquarters in developing countries have low dividend payouts, if they pay at all. These patterns are due to the use of capital markets for financing the corporations in Britain, Canada and USA as against those of Germany, South Korea, Japan using more of intermediated financing. France with strong socialist tradition and Italy with long state intervention in the economy tend to discourage dividend payments. The industry patterns include profitable, mature firms paying more dividends than younger, rapidly growing firms. Utility firms have high dividend payout. Factors influencing these dividend payments include: industry growth rate, capital investment needs, profitability, earnings variability, and assets characteristics (Berglif and Perotti, 1994, Koretz, 1993)   .Within industries, dividend payout is directly related to size and asset intensity and inversely related to growth rate. Almost all firms maintain constant nominal dividend payment per share for long periods. The stock market reacts positively to dividend initiations, increases and strong negative reaction to dividend decreases/eliminations. Dividend changes convey information about management expectations regarding the firm's current and future earnings (De Angelo, De Angelo and Skinner, 1992; Gaver and Gaver, 1993). Taxes influence dividend payout but the net effect is ambiguous as the taxes do not bring about or stop firm's in**itiation** of dividend payment. By research, it is not clear how dividend payments affect a firm's common stick required return. Changes in transaction costs/technical efficiency of capital markets have little impact on dividend payment. Ownership structure matters when private companies rarely pay any dividend at all while public companies pay a huge fraction out of their earnings as dividends every year (Ang and Peterson, 1985). However, all the above dividend patterns can be explained by two theoretical models: the agency cost/contract model of dividends or Agency cost model and the dividend signaling model.

Model Specification

Regression analysis is utilized to test the hypothesis that dividend does not increase the stock price per share (PPS) is the dependent variable while

dividend per share (DPS), earnings per share (EPS), return on capital employed (R.O.C.E), retained earnings (R.T.E) and price earnings ratio (PER) are the independent variables. Other factors that may have influence apart from DPS are included to have an overall effect. Functionally, they are:

$$PPS = F(DPS, EPS, ROCE, RTE, PER, U_t) \text{ ------------ (1)}$$

$$= b_0 + b_1 DPS + b_2 EPS - b_3 ROCE + b_4 RTE + b_5 PER + Ut$$

Where

PPS = Dividend per share (stock price)

DPS = Dividend per share

EPS = Earning per share

ROCE = Return on capital employed

RTE = Retained earnings

PER = Price earning ratio

U_t = Stochastic error term

b_0 = Intercept for estimation

b_1, b_2, b_3, b_4, b_5 = slopes for estimation

Apriori expectations:

DPS > 0

EPS > 0

RTE > 0

ROCE < 0

PER > 0

$b_0, b_1, b_2, b_4 b_5 > 0, b_3 < 0$

DATA:

Desk research is utilized. This includes Annual Reports and Financial Statements of First Bank of Nigeria Plc, 1999- 2008. They are presented in Appendix A.

Analysis of Results

The results of the regression (appendices B and C) include:

PPS = b_0 + b_1 DPS + b_2 EPS – b_3 ROCE + b_4 RTE + b_5 PER + U - 53.7577 + 6.4283DPS + 12.8854EPD – 59.3666ROCE + 6.4309RTE + 3.4184PER

t = (-2.31041) (0.69809) (1.45371) (-2.27931) (1.15311)   (6.29821)

S. E of regression = 4.5542: R^2 = 0.96815: $\overline{R^2}$ = 0.87859

F (stat_: F (6,2) = 10.13161:   D.W 1.8569

The coefficient of determination R^2 shows 97% explanation or prediction of the dependent variable, price per share. The D.W-Statistics approximately 2 help to reduce autocorrelation. The b_0, the autonomous part is negatively related to the price per share, 4 units increase in it leads to about 54 times decrease in the stock price. The dividend per share is positively related to the stock price as a unit increase leads to 6 times increase in the stock price. The earnings per share is positively related to the stock price as a unit increase in it leads to about 13 times increase in the stock price. The return on capital employed is negatively related to the stock price as a unit increase in it leads to 59 times decrease in the stock price. The retained earnings is positively related to the stock price as a unit increase in it results in 6 times increase in the stock price. Finally, the price earning ratio is positively related too, a unit increase in it leads to 3 times increase in the stock price. The t-ratio of the autonomous part, DPS, EPS, ROCE and RTE at 5% (2-tailed test) are not significant because each of the calculated figures is less than the table figure of 2.7. But that of the price-earning-ratio (PER) is greater than the table figure and therefore significant. The overall significance test, the F-ratio at 5%, the calculated figure is greater than that of the table (6.26) and therefore significant.

Findings and Policy Implication

The autonomous part is against a priori expectation of positive relationship with the stock price. This autonomous part can be international influences, economic boom, recession and government policy. Though the present exercise is not on the autonomous part, yet its t-ratio test does not, support stock price increase. There is need for reduction in its size to increase the stock price as more wealth is preferred to less wealth for the firm or the individuals. That is, the autonomous part needs more research. In the same vein, the earnings per share agree with a priori expectation of positive relationship with the stock price but its t-ratio does not support stock price

increase. The policy implication is that earnings which supposed to add value to stock price are not doing so, there is need for more research. The return on capital employed agrees with a priori expectation of inverse relationship with the stock price, this is because of the fact that one cannot eat his cake and have it back. So the price must depreciate. Its t-ratio does not support the stock price increase. The policy implication is that more action needed to bear on more ROCE, more earnings, more dividends and indirectly, more stock value. The retained earnings agree with a priori expectation of positive relation with stock price but its t-ratio does not support stock price increase. This is because of the trade-off between it and dividend. Where there is more dividends and less retained earnings, there is less investment and less stock price, the policy implication is that more action should bear on less dividend though an alternative source of finance is raising new issues or loans. The price earnings ratio agrees with a priori expectation of positive relationship with the stock price and this passes the t-ratio significance test. That is, increase in price earnings ratio supports increase in stock price. The policy implication is that action should bear on constant or less earnings for price increases.

Now, the dividend per share relevancy to the stock price increases which is the main issue of the study, the a priori expectation of positiveness with the stock price is satisfied though with less force to that of earnings per share. This means that more earnings are needed to stimulate more dividends. However, the t-ratio does not support increase in the stock price. That is, according to the hypothesis, the dividend does not lead to increase in stock value. This is lending support to Miller-Modigliani (M.M) thesis of dividend irrelevance. Just invest well, manage well and more profits, value increases. However, the overall test of F-ratio is significant and therefore rejects that hypothesis. That is, all the independent variables including the dividend per share contributed to increase in the stock price. The policy implication is that the dividend, earnings retained earnings, return on capital employed, price earnings and the autonomous part. That is, following the use of Nigerian figures, First Bank Nigeria Plc data, the restatement that dividend is relevant is confirmed. The concluding part follows:

Conclusion
The restatement: dividend is relevant can only be confirmed if other factors work with the dividend. This is by findings and policy implication. It is therefore recommended that:

i. Dividend policy and therefore dividend per share should be given priority in corporate governance

ii. Earnings per share, retained earnings, return on capital employed and price earnings ratio should be addressed through company policies and decisions to meet with industry standards and other external environment.

iii. The autonomous part assumed to be government, external, internal economic factors and which can act negatively on stock price should be checked by the government.

iv. All the above must work together in a coordinated policy framework.

Appendix A

Year	Price/Share N	DPS N	EPS	ROCE	RTE*	P/E Ratio
1999	21	1.0	3.07	.028*	2.07	6.84
2000	30	1.25	3.46	0.31*	2.21	8.67
2001	61	1.30	3.12	0.28*	1.82	19.55
2002	19.05	1.30	2.35	0.25*	1.05	8.12
2003	20.80	1.50	4.34	0.41*	2.84	4.79
2004	29.31	1.55	3.99	0.28	2.44	7.35
2005	24.49	1.60	3.35	0.27	1.95	7.31
2006	36.55	1.00	3.33	0.24	2.33	10.98
2007	39.00	1.00	1.78	0.22	0.78	21.91
2008	26.43	1.35	2.67	0.10	1.67	9.90

Source: 1st Bank of Nig Plc/Right Issue Brochure/ document of 15/9/03:

1st Bank of Nig Plc: Annual Accounts and reports: 05/07/07

1st Bank of Nig Plc: Annual Accounts and reports: 2008

*RTE from EPS-DPS.

Appendix B

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                        Ordinary Least Squares Estimation
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Dependent variable is PPS
10 observations used for estimation from 1999 to 2008
****************************************************************************
Regressor           Coefficient       Standard Error      T-Ratio[Prob]
INPT                  -25.4936            17.7440          -1.4367[.224]
DPS                   -11.8641            32.3658          -.36656[.733]
EPS                    25.6243            39.0102           .65686[.547]
ROCE                  -44.3408            54.4561          -.81425[.461]
RTE                   -13.1841            38.5405          -.34208[.750]
PER                     2.6310             .48809          5.3904[.006]
****************************************************************************
R-Squared                   .89514   R-Bar-Squared                  .76408
S.E. of Regression          6.0757   F-stat.    F( 5,   4)   6.8296[.043]
Mean of Dependent Variable 30.7630   S.D. of Dependent Variable    12.5087
Residual Sum of Squares   147.6576   Equation Log-likelihood      -27.6509
Akaike Info. Criterion    -33.6509   Schwarz Bayesian Criterion   -34.5587
DW-statistic                1.4804
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                            Diagnostic Tests
****************************************************************************
*    Test Statistics   *      LM Version      *        F Version         *
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*                      *                      *                          *
* A:Serial Correlation*CHSQ(  1)=  2.5400[.111]*F(  1,   3)=  1.0214[.387]*
*                      *                      *                          *
* B:Functional Form   *CHSQ(  1)=  6.3599[.012]*F(  1,   3)=  5.2414[.106]*
*                      *                      *                          *
* C:Normality         *CHSQ(  2)=   .18523[.912]*     Not applicable     *
*                      *                      *                          *
* D:Heteroscedasticity*CHSQ(  1)=  7.2744[.007]*F(  1,   8)= 21.3509[.002]*
****************************************************************************
    A:Lagrange multiplier test of residual serial correlation
    B:Ramsey's RESET test using the square of the fitted values
    C:Based on a test of skewness and kurtosis of residuals
    D:Based on the regression of squared residuals on squared fitted values
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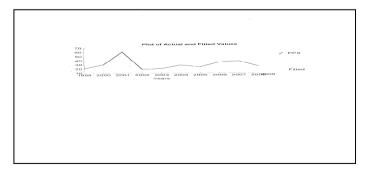
Appendix C

Plot of Actual and Fitted Values

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