TREND IN CAPITAL STRUCTURE; A COMPARATIVE STUDY OF COMPANIES IN GHANA AND INDIA

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Abstract: The crucial financial decision of business is balancing the risk and return on the choice of financing pattern. Since there is no specific optimal debt-equity mix, companies keep changing the pattern to meet its objective and environmental conditions. An attempt has been made to analyze the emerging trends in capital structure patterns of companies in Ghana and India, the existence of inter-country differences and identify the possible sources of such variations in capital structure. To achieve this objective, 20 listed companies were selected from Ghana and India and 5years debt-percentage to total capital structure trend analysis was used. It was found out that companies in Ghana is less debt financing in its capital structure pattern as compared to companies in India. Indian companies are decreasing the debt finance over the period while Ghanaian companies are increasing at (1%) a marginal rate. The less debt financing in Ghana is due to the fact that there is high interest rate. The high performance and efficient capital market in India has boosted shareholders confidence thereby reducing company borrowings.

Keywords: Capital Structure, Emerging trends, debt financing.

Introduction: With the waves of shareholder's wealth maximization as business objective, the need for an appropriate capital structure cannot be overemphasized. The challenging and all time difficult decision of financial managers is not the kind of project to undertake but how to finance such projects. Every time the firm makes an investment decision it is at the same time making a financing decision also (Pandey 10th edition) [6].

Most studies on the subject of debt-equity composition of firms commonly ignore the many difference among countries. The few who try to consider these conditions limits the study to generalization such as developing countries and developed countries. But do all developing countries have the same financial conditions? Is there a common pattern in their choice of financing projects? This paper tries to find out whether the generalized assumption of developing countries with common income levels and economic features shares similar patterns in capital structure as the case of Ghana and India.

Capital Structure Overview: Capital structure is the composition of debt and equity that a firm uses to finance it assets. Capital structure represents the proportionate relationship between debt and equity. (Pandey 10th edition) [6].

Equity which refers to the amount attributable to the shareholders of the firm includes paid-up share capital share premium, share deals account, reserves and surpluses.Debt is any fixed interest or income bearing financial instrument which usually enjoys continuous periodic interest for the life of the instrument. It includes bonds, debenture and long term loan. In the context of capital structure decision short term loan such as overdraft are not included.

Mathematically from the balance sheet; *Total capital = Equity + Noncurrent liability*. The capital structure can be calculated from many angles such as using the current market values or book values. Though book values may not reflect the current wealth of capital, it is widely use because is stable and reliable as compared with market values which fluctuates daily and difficult to access. Since the research is based on the annual reports of selected companies which is prepared on basis of book value figures, the paper adopts the book value method of calculating capital structure

Table 1 India and Ghana at glance.

Parameters	India	Ghana
GDP growth rate[1]	3.2%	7.9%
GNP per capital$[2]	1580	1550
Income level[3]	lower middle income	lower middle income
Number of listed companies[4]	over 5000	36
Exchange Rate$	Rs 62	GHS2.6
Base Rate[5]	10.47%	21.35%
Corporate Tax[6]	30%	25%
Number of stock exchanges[7]	8	1

Sources: 1,2,3 world bank 4,7. Stock exchanges 5. Averages of banks, 6. Income tax India, Ghana Revenue Authority,

Patterns of capital structure

Capital Structure with ordinary shares only.

Capital Structure with ordinary and preference shares.

Capital Structure with ordinary and debt.

Capital Structure with ordinary, preference shares and debt

Justification of the Study: Most of the research studies on capital structure turn to generalise that developing countries follow similar pattern of capital structure. This study was carried out to find out the trend of capital structure of India and Ghana and if possible identify the cause of variation between them. The study will give good information for the understanding of how developing countries like Ghana and India manage its source of finance in the different economic environment such as capital market efficiency, industrialization and interest rate levels.

Literature Review: The rationale behind a company's particular source of fund or combinations has always been a major concern of financial managers. This rationale has become a centre of disagreement among many theories in the concept of capital structure since the publishing of Modigliani and Miller (MM) classic paper in 1958 on the irrelevance of capital structure. The MM theory which is popularly known as "Theory of Irrelevance" states that in a perfect efficient market, there will be no optimal financial structure. Therefore in the over simplified world with efficient capital market, no capital structure mix will better than another. MM further states that, the increase in the overall return due to increase in debt ratio will exactly be offset by the risk incurred by equity holders irrespective of the financing mix chosen.

While other theories such as Net Operating Income (NOI) supports MM assertion, Net income (NI) and the Traditional view rejects the MM theory by saying that debt - equity combination has effect on the value of the firm to a large extent hence is relevant in decision making.

De Jong et al. (2008) work on the importance of firm specific and country specific factors in the leverage choice of firms across 42 countries revealed that firm specific determinants differ across countries whereas earlier studies suggested that the determinants have an equal impact. An extension of the studies on direct country specific determinants like capital formation, rule of law, stock market development, bond market development, concluded that there is positive relationships between tangibility, liquidity and leverage. They also found non-significant inverse relationships between leverage and size, profitability, tax and risk. One of the possible reasons why they did not have strong results for India was because they had only 226 observations.

The findings of Sukhdev and Rajui (2013) [7] in their study on the capital structure of metal and refinery shows that the average trend of debt and equity is rising implying that these industries have access to both equity and debt financing. The research covered 24 companies from both metal and refinery industry in India over a period of 10 years. Initially companies were raising maximum debt fund to reduce the cost of capital which resulted in increase in financial risk. The studies also found out that the average equity ratio of both industries in 2002-2003 ie 2.6:1 is only as per standard norm of 2:1 of debt equity for all the industries.

Doku et. al. (2011) [3] studies into the relationship between financial development and choice of finance of listed firms in Ghana revealed that financial market development in developing economy like Ghana will expose more financial options in attempt to minimize financial constraints. The study found out that aside firm specific factors recognized in extant literature responsible in explaining financing choices of firms, financial market development also accounts for financing decision of listed firms. This conclusion is similar to that of Antoniou et al. (2002) who found out that a stock market and banking sector affect the capital structure of firms in Ghana.

This fact is also supported by, Abor and Biekipe (2005) [2] in their examination on how capital structure is determined in Ghana came out that the stock market of the country was vital source of long term financing for listed firms.

Most listed firms in Ghana finance a large proportion of its growth of total assets from external sources as compared to their counterparts in advanced countries (Yartey 2002) [8].

Objectives of the Study

- To analyze the trend in debt- equity composition of selected companies in Ghana and India.
- To comparatively analyze the trend of capital structure between India and Ghana.
- To study the difference [if any] between choice of source of financing in India and Ghana.

H_0: "There is no difference in the capital structure pattern between India and Ghana". [Since the two countries are developing countries there will be no difference in how companies finance projects].

H_1 "There is difference in the capital structure pattern between the India and Ghana". [Although both countries are developing, country specific factors may cause a difference in the pattern of debt-equity combination].

Research Methodology.

Data Collection: The study is based on secondary data. The main source of data is audited published annual reports of selected companies, journal and articles. Twenty (20) listed companies each were selected from India and Ghana for the analysis.

Sampling: The selection of Indian companies is from random sampling of NIFTY and SENSEX companies to represent the sectors of the country. In the case of Ghana priority was given to indigenous companies followed by old foreign autonomous companies. The study covers a period of 5years ending March 2013 and December 2012 for India and Ghana respectively.

Data Analysis: The data was analysed using trend analysis. To achieve the objective of analyzing the trend in financing pattern within and among countries the trend analysis of debt-equity mix as well as financial leverage for 5years has been used for study.

Limitation of Study: As the world is not perfect, anything within it is affected by its imperfections including this research work. This research is highly limited by incomplete data from the selected companies. Some companies which may give good representation were removed because of incomplete data. Again due to the limited number of listed companies in Ghana the sample size was reduced to fit the comparison.

Analysis of the Study

Table 2 Trends in Ghanaian companies of debt percentage to total capital

COMPANIES	2008	2009	2010	2011	2012	Averages
Aluworks	35%	34%	15%	30%	54%	34%
Camelot Ghana	36%	49%	45%	55%	39%	45%
Ayrton Drugs	0%	0%	0%	0%	0%	0%
Benso Oil Palm Plantation	0%	0%	0%	0%	0%	0%
Clydestone	0%	0%	20%	40%	43%	21%
Cocoa Processing Com.	43%	66%	73%	83%	89%	71%
Enterprise Group	0%	10%	0%	0%	0%	2%
Fan Milk	0%	0%	0%	0%	0%	0%
Ghana commercial Bank	37%	45%	38%	37%	38%	39%
Ghana Oil Company	28%	17%	1%	14%	10%	14%
Societe Generale Ghana	0%	0%	0%	0%	0%	0%
Guniness Ghana	22%	13%	51%	32%	7%	25%
Mechinicalllyod	15%	21%	9%	13%	18%	15%
Pioneer Kitchware	0%	0%	0%	0%	0%	0%
Producing Buying Com.	33%	42%	20%	21%	23%	28%
Sam Woode	0%	1%	2%	2%	2%	1%
State Insurance Company	1%	1%	1%	0%	0%	1%
Starwin Products	14%	5%	17%	0%	0%	7%
Unilever Ghana	4%	6%	6%	6%	7%	6%
UT financial Services	0%	0%	15%	16%	20%	10%

Source: annual reports of selected companies from Ghana

Generally the companies over the period show a rise and fall leverage pattern. Seven 7 companies follow equity culture with less than 3% debt component. While one company Cocoa Processing Company continuously increase its debt component to a tune of 89%. On the other hand, the companies who

combine both debt and equity have range of 20%- 40% debt- capital ratio.

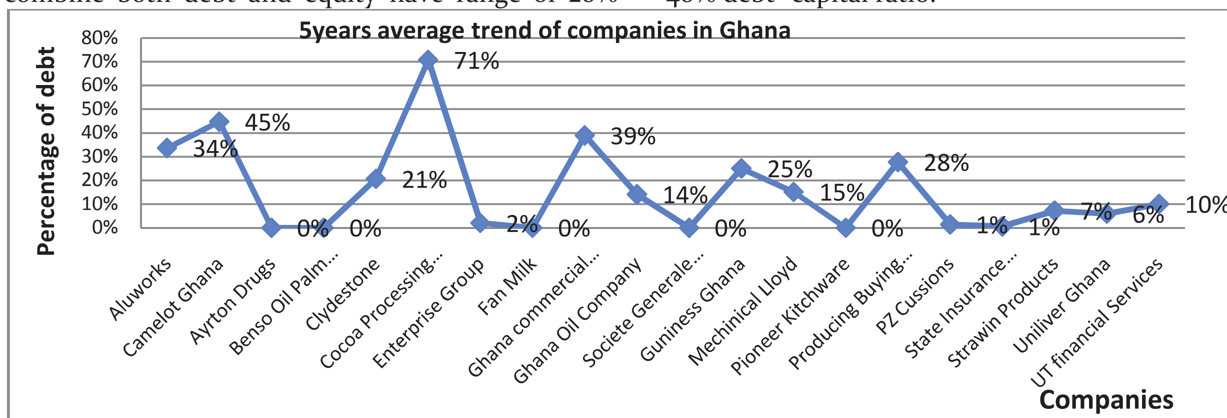

Figure 1; 5years average trend graph of percentage of debt to total capital of Ghanaian companies

	Table 3 Trends in Indian companies of debt percentage to total capital						
SN	COMPANIES	2008	2009	2010	2011	2012	AVG
1	ACC ltd	9%	9%	7%	7%	1%	7%
2	Bharti Airtel	22%	12%	22%	14%	15%	17%
3	Cipla	18%	0%	6%	0%	0%	5%
4	Coal India	10%	8%	7%	6%	4%	7%
5	DLF	44%	50%	40%	36%	33%	40%
6	Dr. Reddy	11%	9%	8%	7%	0%	7%
7	Gail	8%	8%	9%	18%	25%	14%
8	HDFC	85%	84%	74%	75%	78%	79%
9	Hindustan Uniliver	17%	0%	0%	0%	0%	3%
10	ICICI Bank	57%	65%	66%	70%	69%	65%
11	Infosy	0%	0%	0%	0%	0%	0%
12	ITC	1%	1%	1%	0%	0%	1%
13	L & T	34%	27%	20%	17%	20%	24%
14	Mahindra & Mahindra	44%	27%	50%	35%	18%	35%
15	Marutu Suzuki Auto	10%	6%	1%	0%	3%	4%
16	Reliance Energy	87%	23%	19%	20%	16%	33%
17	State Bank of India	59%	61%	55%	60%	63%	60%
18	Tata Motors	51%	53%	44%	29%	30%	41%
19	Tata Steel	47%	41%	39%	31%	32%	38%
20	Wipro	29%	24%	18%	8%	0%	16%

Source: annual reports of selected companies from India

Two 2 companies (Infosy and ITC) follow equity culture with less than 2% debt source of finance. 16 companies show a declining debt-capital ratio whiles the rest shows rise and fall over the period. With the exception of HDFC, ICICI, and State Bank of India (all are banks) which has an average between 65%-75% leverage ratio, most of the companies fall within 30-50% leverage bracket. HDFC has the highest ratio of 85% in 2008. Overall, most of the companies are moving towards a falling debt source of finance.

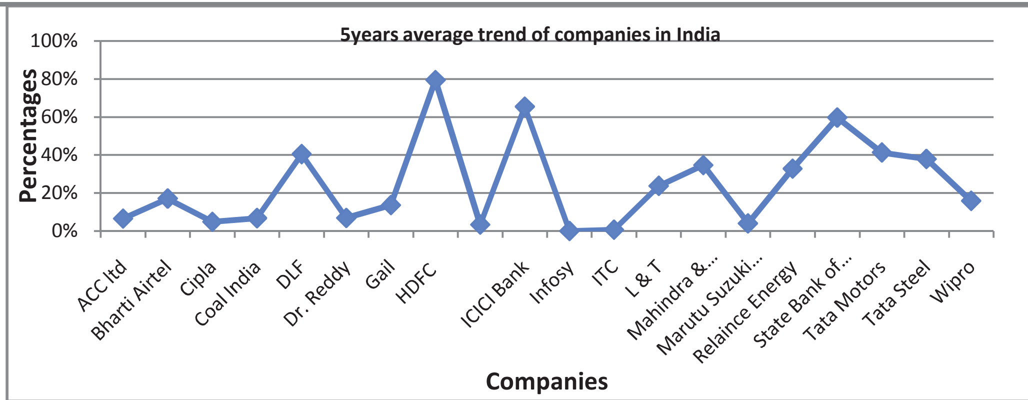

Figure 2; 5years average trend graph of percentage of debt to total capital of Indian companies

Table 4 Comparison between Ghana and India annual debt percentage to capital

COMPARISION IN TREND BETWEEN GHANA AND INDIA (simple average of ratios)

	2008	2009	2010	2011	2012
GHANA	16%	18%	18%	19%	21%
INDIA	32%	25%	25%	23%	21%

Although Ghana and India have less than 50% debt leverage ratio, India shows high promising equity culture with fall in the leverage from 32% in 2008 to 21% in 2012. Ghana on the other hand shows a marginal increase over the 5 years period.

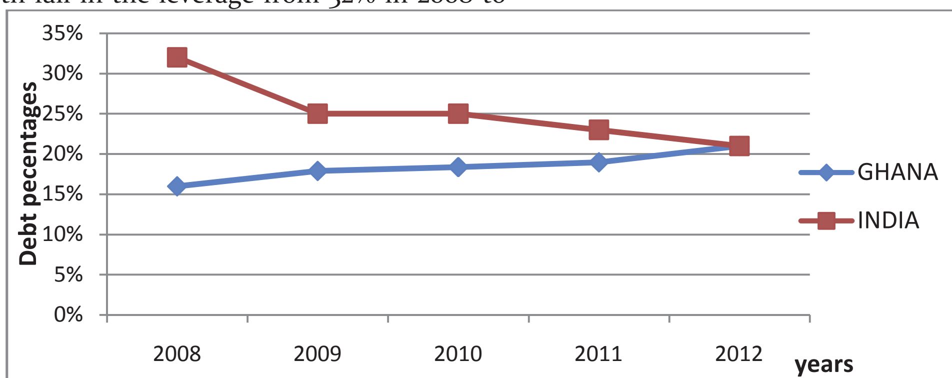

Figure 3; 5years trend graph of percentage of debt to total capital of Ghanaian and Indian companies

Findings

- The marginal rise in the leverage ratio of Ghana implies that, the companies are seeking more debt to finance business activities. This can be attributed to the fact that, the companies have been making losses or small amount of profit to finance its activities internally. The loss and marginal profit leads to small or no dividend (payout ratio between 10%-15%) making it unattractive to float shares.
- It can be inferred from the declining leverage ratio of India that, there is vibrant and efficient stock exchange markets. The research also revealed that Indian companies pay more dividends (payout ratio between 30-40%) than their counterparts in Ghana, which makes it attractive to issue shares.
- Although Ghana is experiencing marginal increase in external debt in capital structure its average ratio for the period is less than that of India (Ghana 17%<India 25%). The lesser ratio of Ghana can be said to be the result of high corporate base interest rate of 25% per annum (average) as compared with India's average base rate of 10.4%. High interest rate makes it unattractive for companies to obtain debt hence companies resort to retaining earnings leading to low dividend payout ratio.

Suggestions and Conclusion:

- Ghanaian companies should try to earn higher profit to facilitate higher dividend. This will boost investors' confidence to throw more money into the business and reduce financial risk.
- Looking out the fast growth of the India economy companies have a good chance attracting investors but this is only possible if there is less financial risk hence India companies must continuously reduce its debt capital.
- In the quest to achieve shareholders wealth maximization, companies in Ghana and India are advice to maintain a trade-off between debt and equity in future so as to achieve the objective of optimum capital structure.

It can therefore be concluded that there is difference in the capital structure between Ghana and India hence H_o (alternative hypothesis) is accept

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