

INTEGRATION OF STATEMENT OF CASH FLOW INTO RATIO ANALYSTS

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Abstract

The study evaluates the integration of statement of cash flow into ratio analysis. It is often difficult to derive useful and relevant information merely by looking at the reported figures in the financial statements which is presently limited to income statement and balance sheet. Several cash flow ratios were used in this study to analyze the statement of cash flow of GlaxoSmithKline Consumer Nigeria Plc, and results compared with the income statement ratios. The study reveals the vital importance of the cash flow statement by providing useful information relating to the quality of reported earnings and financial position of the business. It was also found out that the cash flow statement provides readymade answer to many questions regarding a firm's cash dynamics. It is recommended that cash flow ratios used in the study be applied to companies' interpretation of financial statements.

Introduction

The funds flow statement, generally known as statement of changes in financial position was introduced in 1971 as a part of the published financial statement (IAS 7; effective 1 January, 1979). The purpose of the funds flow statement was to explain the changes in all balance sheet accounts occurring from one reporting period to the next. Until 1971, users of financial statements only had information reconciling beginning and ending retained earnings in addition to income statement and balance sheet. There was no information with regard to any financial and investment transactions that took place during the year. The funds flow statement was introduced to fill this gap. The funds flow statement was a test of effective use of working capital by the management during a particular period. The adequacy or inadequacy of working capital told us about the possible steps that the management should take for effective use of surplus working capital or make arrangement in case of inadequacy of working capital.

In 1987, the statement of source and application of funds was replaced by the statement of cash flows (IAS 17). In Nigeria SAS 18 (Statement of Cash Flows) became effective on 1st January 1998. Cash inflows and outflows represent the most fundamental and prevalent economic events engaged in by companies. Given primary importance of cash, it is not surprising that the statement of cash flow has become one of the central financial statements. It provides a detailed explanation of the changes that occurred in the firm cash balance during the entire accounting period. The statement of cash flow allows both investors and managers to keep their fingers on the pulse of any company's lifeblood-cash. Companies that lose too much cash become critically ill. Bankruptcy is loosely used to refer to companies that are unable to meet their obligations as at when due. Every company benefits by tracing its cash flow and every investor would wish to check out a company's statement of cash flow before investing. Cash flow information is very important to enable users to assess a company's ability (i) to generate future positive cash flow (ii) to meet its maturing obligation and (iii) to pay dividends. Cash flow information can also provide important insights regarding a company's continuing investment in productive assets and assessing the quality of its earning (Inanga and Ajayi, 1985). A thorough understanding of a cash flow activity provides important insights not obtainable from a study of income statement and balance sheet. Thus, cash flow statement has recently received renewed emphasis by managers, investors and financial analysis.

Though, the importance of cash flow statement for providing useful information to decision makers has been recognized and widely accepted as an indicator of the quality of reported earnings, the usual ratio analysis is limited to the income statement and balance sheet. Thus, there is a need for integrating statement of cash flow into ratio analysis.

The objectives of the study are to:

- i) Compute ratios based on statement of cash flow;
- ii) Interpret the results of the ratios, and iii) Incorporate cash flow ratio into the usual ratio analysis.

In the study ratios are calculated by using ratios developed by Dharmadasa (2005). A comprehensive financial analysis is carried out by applying both of these cash flow ratios and other relevant ratios to GlaxoSmithKline Consumer Nigeria Plc. This study mainly focuses on the importance of statement of cash flow for providing useful information to decision makers. It also analyses the cash flow information presented in the statement of cash flow making use of cash flow ratios.

Section two considers the objective of financial statements. In the third section the need for financial statement analysis is discussed. Under section four the techniques of financial statement analysis and the types of financial analysis

are explained. The fifth section discusses the limitations of income statement and balance sheet analysis. In the sixth section the statement of cash flow is examined followed by an explanation of the ratios applied to get our results in section seven. The last section summarises and draws conclusions from the study.

Financial Analysis

The primary objective of financial reporting is the provision of useful information to users of financial statements such as shareholders/owners, potential investors, suppliers, creditors and government agencies to help them in making rational economic decisions (Igben, 1999 and Wood, 1996). Accounting information is useful to anyone who must make decisions that have economic consequences. Financial statements are the means by which the basic data are provided to these decision makers. According to SAS 2 financial statements include the following:

- a. Statement of Accounting Policies
- b. Balance sheet
- c. Profit and Loss Account or Income Statement
- d. Notes to the Accounts
- e. Statement of Cash Flows
- f. Value Added Statement
- g. Five-year Financial Summary

Financial statements are indicators of the two significant factors of business organizations. These factors are profitability and liquidity of the business organization. The primary questions concerning a business organization's financial success that decision makers require answer are: i) What is the financial picture of the organization? ii) How well did the organization perform during the financial year ended? (Omolehinwa, 1996).

Answers to the above questions are found in the financial statements. The balance sheet focuses on the financial picture of an organization. The other financial statements focus on the performance of the organization over time. Therefore, useful information with respect to profitability and liquidity position of an organization is provided by the financial statements to users to help them in making rational economic decisions.

The Need for Financial Statement Analysis

Financial statements serve their users in making an informed judgment with regard to the profitability and liquidity of a business organization before making a rational economic decision relating to a particular business organization (Jennings, 1993). For example, after receiving the financial statements of the company for the year, an existing shareholder of a company has to take one decision out of the following three available alternative economic decisions in relating to his investment in the company, i) Buy some more shares. ii) Sell the shares iii) Hold the shares

Before making a decision, a particular shareholder has to form an opinion as to whether the company has performed well or not, is in a position to make sufficient profit in the future or not and as to whether the liquidity position of the company is sound or not. Based on his opinion on the above-mentioned aspects, he will make a final decision to sell, buy or hold the shares of the company.

The important question here is whether the figures in financial statements directly give him the necessary and useful information to come to an informed opinion.

Mere examination of the figures in a set of financial statements is not a particularly useful exercise and it is only through comparison that the significance of particular figures can be established. An absolute amount of net profit shown by the income statement does not reveal the adequacy of the profit. For example, the 2005 annual report and Financial Statements of GlaxoSmithKline Consumer Nigeria Plc showed a net income of N499.223 million. As an absolute amount, this profit sounds enormous, but it was only 6.03% of GlaxoSmithKline turnover. The accounts of the group showed a profit of N593.061 million which is 6.90% of turnover (see appendix). This is rather a poor performance. There are many ways of appraising the adequacy of company's earnings. Certainly, earnings should be compared with total assets, capital employed as well as turnover.

Analysis and interpretation of financial statements; therefore; involves the analysis, and/or criticism of a given financial statement with the aim of providing information useful for decision making, especially in respect of profitability and liquidity of the business. According to Dharmadasa (2005) analysis and interpretation of financial statements can be defined as the way of translating the figures therein in such a way as to reveal the financial strength and weaknesses and the operating performance of a business and the causes, which have contributed thereto. The analysis of financial statements should be geared to the needs of the person for whom the comments are intended. Some items of information will be of less significance to one user of financial statements than to another. A shareholder or potential investor will be interested in the

solvency of the business but much more interested in the past and potential future profits and the proportion of the profit paid out as dividends. To a short-term creditor the ability to repay in due course is very important, together with information about cash flow and the liquidity of the assets. To a long-term lender, the generation of sufficient profit to meet interest charges, the nature of capital structure and the assets available as collateral security are more significant (Anao, 1993).

The Techniques of Financial Statement Analysis

Financial statement analysis involves using the information in the financial statement to assess a company's performance such that we will fully understand the story it tells about the company. Following are the techniques available for financial statement analysis.

- a. Comparative financial statements
- b. Common size financial statements
- c. Ratio analysis
- d. Source and application of funds statement analysis
- e. Statement of Cash flow analysis
- f. Value added statement analysis (Dyson, 1991; Jennings, 1993 and Magee, 1979).

Although many analysis methods exist, the most common method of financial statement analysis is the use of ratio analysis. An accounting ratio shows the relationship in mathematical term between two interrelated accounting figures. The figures have to be interrelated because no useful purpose will be served if ratios are calculated between two figures, which are not at all related to each other. A financial analyst may calculate different accounting ratios for different purposes. Accounting ratios should be treated as indicators supplying evidence of what may be taking place in business. They can act as signposts or as symptoms revealing the strength or weaknesses of a business.

Financial analysis can be classified into different categories depending upon the material used.

- i) *External analysis*: This analysis is done by those who are outsiders for the business. The term outsiders include investors, creditors, and credit agencies, government agencies that have no access to the internal record of the company. Published financial statements mainly are used in the external analysis.
- ii) *Internal analysis*: This analysis is done by persons who have access to the books of accounts and other information related to the business. Executives and employees of the organization or officers appointed for this purpose by the government or the court under powers vested in them can do such analysis.
- iii) *Horizontal analysis*: In this case, financial statements for a number of years are reviewed and analyzed.
- iv) *Vertical analysis*: Under this type a study is done by utilizing the data for one accounting period. For example, the ratios of different items of cost for a particular period may be calculated with sales for that period. Such an analysis is useful in comparing the performance of several companies in the same group or divisions or departments in the same company. It is to be noticed that both vertical and horizontal analysis can be done simultaneously.

Limitation of Income Statement and Balance Sheet Analysis

Financial statement analysis is mainly limited to income statement and balance sheet analysis. In trend analysis or comparative financial statement analysis the figures in income statement and balance sheet over a period of several years are taken into account in analyzing. Common size financial statement analysis is also confined to the income statement and balance sheet in which both statements are re-stated by using a common base. It is evident that the most common technique used in financial statement analysis is the ratio analysis. In ratio analysis, a firm's profitability, short-term liquidity, long-term solvency and market-based activities are measured by using a number of different ratios. The basic inputs to ratio analysis are the firm's income statement and balance sheet (Dharmadasa, 2005).

It is believed that a cash flow statement showing movements of cash within a company over a period of time normally provides a more accurate assessment of the state of a company's affairs than income statement and the balance sheet (Jennings 1993). This is because income statement and balance sheet have a limited role to perform. The income statement will show in detail profit and loss arising from the operating activities but it does not show the cash generated by the operating activities or received from other sources. A company might be very profitable. It might also be seriously short of cash or vice-versa. A cash flow statement gives a guide to the quality of a company's profits. Profits are not necessarily a reliable measure of a company's performance. Companies can adjust profits to suit their own purposes. Creating cash is virtually impossible. The importance of cash flow statement is discussed in the next section.

Statement of Cash Flow

A cash flow statement is a statement showing an increase or decrease in cash or cash equivalents as the result

of a transaction (Jennings 1993, SAS 18). The cash flow statement discloses the complete story of cash movement of the financial year. It shows the sources from which the cash has flown into the company and the manner in which they have been utilized. The cash flow statement summarizes the operating, investing and financing activities of the company (SAS 18). Cash flow statement is the latest statement added to the published financial statements of a company. It is prepared showing separately the cash flows from operating activities, investment activities and financing activities.

Accounting regulations (IAS, SAS, etc) do require the presentation of cash flow statement together with the income statement and balance sheet. Even in interim financial reporting, cash flow statement is presented for the relevant quarter or half-year. As a result of the acceptance of the International Accounting Standards by most countries in the world the contents and the format of the cash flow statement do not vary much from country to country.

In the past, the importance of cash to the healthy growth, or even survival of enterprise has either been neglected or simply underestimated (Wood, 1996). As a result, there have been numerous business failures. It has now been recognized that cash is, in effect, the lifeblood of an enterprise and that close attention to its inflows and outflows should be paid by the management and by external parties such as actual and potential investors, creditors, etc.

Income statement and balance sheet are based on accrual accounting. Focusing too heavily on accruals and deferrals can make it easy to forget about cash. An understanding of where a company's cash come from and where it goes is essential to knowing whether the company is in good

financial condition. Given the primary importance of cash, it is not surprising that the statement of cash flow has become one of the most important financial statements because it provides a thorough explanation of the changes that occurred in the company's cash balance during the entire accounting period.

Its purpose is to highlight the major activities that have provided and used cash during a period and to show the resulting effect on the overall cash balance, it must be remembered all the time that ultimately success or failure of a business will depend on availability and better utilization of cash given a particular situation. Cash flow statement explains the financial consequences of business operations. It provides a ready answer to so many questions such as:

- i) Why the liquid position of the business is becoming more and more unbalanced in spite of the profits made by the business?
- ii) How was it possible to distribute dividends in excess of current earning or in the presence of a net loss for the period?
- iii) How could the business be in a good liquid position in spite of making losses or acquisition of fixed assets?
- iv) What happened to profits made during the period?
- v) Why are dividends not large?
- vi) How has the enterprise met its need for cash?
- vii) Where did the cash come from to finance investment in fixed assets or subsidiaries or to retire debt?
- viii) How were proceeds from the sale of fixed asset, and the proceeds of shares and debt issues used?
- ix) How will the enterprise meet its repayment schedule on existing or proposed loans?
- x) What is the overall credit worthiness of the enterprise?
- xi) In what way did management utilized cash in the past and what will be the likely use of cash? xii) How much of its required capital has the firm been able to generate internally?

The classification of cash flow statement as operating, investing and financing activities helps to address a variety of questions including the ones stated above regarding a company's cash flow dynamics (SAS 18). Cash flow from operating activities is very important to the users of financial statements because it clearly details, more than any other information, the quality of the earnings of a company. It informs whether the company is a net provider or net user of cash in its internal operations. It is obvious that the operating activities of the company should provide sufficient cash inflow for payment of interests, dividends, long-term debt and for the maintenance of operating capabilities of the company.

A healthy profit from operation, when matched with a net cash inflow from operation will tend to indicate a favorable state of affairs. Conversely, if reported operating profit is healthy but the operating activities has a net cash outflow, there is the possibility that the profits have been inflated by creative accounting and the company's position is less robust. If the operating cash flow is negative, why? Is it because the company is growing? Is it because its operations are unprofitable? Or is it having difficulty in managing its working capital properly?

The next section of the cash flow statement reports cash flow from investing activities. It reveals the amount of investment in plant and equipment and other non-current assets during the financial year. The level of capital spending can be ascertained from this section. Looking at the figures over a number of years, it enable us to consider whether capital spending is rising or falling and at what rate. Reviewing net cash flow from operating activities gives us an understanding of the extent to which a company's trading position is generating cash for investment activities. If a company has cash flow problems- insufficient cash generation from operating activities, capital spending may be

curtailed.

The third major section of the cash flow statement is the cash flow from financing activities. If net cash flow from operating activities after dividends was less than the net cash used for investment, then cash must have been provided from the financing activities. The cash flow from financing activities shows changes in the capital structure of the company. If net cash flow from operation is positive, the company may wish to reduce its debt load. This choice must be considered in light of the company's capital expenditure needs.

A cash flow statement is useful for short-term planning. A business enterprise needs sufficient cash to meet its various obligations in the near future such as payment for purchase of fixed assets, payment of debt maturing in the near future, tax etc (Anao, 1993; Jennings, 1993). A historical analysis of the different sources and application of cash will enable the management to make reliable cash flow projection for the immediate future. It may then plan out for investment of surplus or meeting the deficit, if any. Thus, a cash flow analysis is an important financial tool for the management. Projected cash flow statement will enable the management to plan and coordinate the financial operations properly. The management can know how much cash is needed, from which source it will be derived, how much can be generated internally and much could be obtained from outside. Cash flow analysis provides information about cash, which will be available from operating activities. This will help the management to determine policies regarding internal financial management e.g. possibility of repayment of long-term debt, dividend policies, planning replacement of plant and machinery etc. The extent of success or failure of cash planning can be known by comparing the projected cash flow statement with the actual cash flow statement and necessary remedial measures can be taken.

Methodology

The study makes use of ratios based on statement of cash flows. The ratios (as developed by Dharmadasa, 2005) were based on both, statement of cash flows figures and income statement figures. These ratios were used to analyze the financial statements of GlaxoSmithKline Consumer Nigeria Pic are explained below.

a) Operating Cash Ratio

The operating cash ratio is calculated as follows: Operating cash ratio =
$$\frac{\text{Cash flow from operation}}{\text{Sales}} \times 100$$

This ratio measures the percentage of cash from each sale of Naira remaining after all operating cash cost and expenses. This ratio is used to measure the cash generating ability of the company's sale* This ratio is supplementary to the operating profit margin. Operating cash ratio can be used to measure the liquidity of the operating profit margin.

b) Net Cash Ratio

The net cash ratio is calculated as follows: Net cash ratio =
$$\frac{\text{Net cash flow from operation}}{\text{Sales}} \times 100$$

The net cash ratio measures the percentage of cash from each sale of Naira remaining after all cash cost and expenses including interest and taxes. This ratio measures the cash generating ability of the company. This ratio can be used to measure not only the quality of sale of the company but also the quality of the net profit of the company. If the net cash ratio is lower than the net profit ratio it indicates that major part of the company sales have not been realized. This suggests that, to show a higher profit, sales have to be increased by lowering credit policies or some other creative accounting. A low net cash ratio also suggests that the company's net profit have not been realized in cash.

c) Net Operating Cash to Total Assets

This ratio is calculated as follows:

Net operating cash to total assets =
$$\frac{\text{Net cash flow from operation}}{\text{Total assets}} \times 100$$

Net operating cash to total assets measures the firm's overall performance in using its total assets to generate cash. This ratio is supplementary to the return on assets ratio. It is argued that the investors are more interested in looking at the cash generating ability of the company rather than the profit. Moreover, the value of a company is the present value of the future cash flow of the company.

Therefore, the net operating cash on total assets can be used to measure the firm's cash generating ability.

d) Cash Based Interest Coverage Ratio

The cash based interest coverage ratio is calculated as follows: Cash based interest

coverage - $\frac{\text{Cash flow from operation}}{\text{Interest expenses}}$

The cash based interest coverage ratio measures the firm's real ability to service debt. The firm should be able to generate sufficient cash, not profit, to pay interest expenses. A company may have earned a net income, but is short of cash to meet its interest commitments. The normal interest coverage ratio does not represent the real situation. If the company is not in a position to generate sufficient cash to meet its interest commitment it leads to bankruptcy. Therefore, the cash based interest coverage ratio is a more reliable measure of a company's ability to meet its interest expenses. This ratio shows the strength of the operating activities of the company to service debt. It also indicates the ability of the company to obtain more debt capital, if needed,

e) Dividend to Operating Cash Flow

Dividend to operating cash flow is calculated as follows:

$$\text{Dividend to operating cash flow} = \frac{\text{Dividend}}{\text{Net cash inflow from operation}} \times 100$$

Dividend to operating cash flow shows dividend as a percentage of cash internally generated. This ratio provides insight regarding the extent to which operating cash are used to service shareholder dividend. If a company is financing dividend by means other than operation it shows the inability of the operation of the company to generate sufficient cash to pay dividend.

f) The Long-Term Debt Coverage Ratio

The long-term debt coverage ratio is calculated as follows: Long-term debt

$$\text{coverage ratio} = \frac{\text{Net operating cash}}{\text{Long-term debt payment}} \times 100$$

The long-term debt coverage ratio shows the capacity of the operating activities of a company to generate sufficient cash to repay its long-term debt. The high ratio indicates that the operating activities of the company have generated much more cash than what is needed to repay its long-term debt. The high ratio also indicates the quality of the cash generating ability of the company. High long-term debt coverage ratio shows the company's ability to obtain more debt capital in the future, if it is needed. This will be a very useful ratio for long-term debt suppliers. If the ratio is less than one, it means the repayment of long-term debt was financed by means other than operating activities of the company. This is a rather very unsatisfactory situation.

g) Segment Cash Flows to Total Cash Inflow

This ratio is calculated as follows:

$$\text{Segment cash flows to total cash inflow} = \frac{\text{Segment cash flow}}{\text{Total cash inflow}}$$

This ratio shows the contribution of each major segment of the cash flow statement to the total cash inflow. Thus this ratio indicates which cash flow is the significant contributor to the total cash inflow.

i) Operating Cash to Investment in Fixed Assets

This ratio is calculated as follows:

$$\text{Operating cash to investment in fixed assets} = \frac{\text{Cash flow from operating activities}}{\text{Investment in fixed assets}}$$

This ratio measures the percentage of fixed asset investment financed by the operating cash flow. It reveals whether the operating activities of the company have generated sufficient cash to finance the required investment activities of the year. If the ratio is more than 1 then it means that 100 percent of the investment made during the year is covered by the cash generated by the operating activities of the company. If the ratio is less than one, then it shows a percentage of investment made during the year covered by the operating activities of the company.

Results and Discussion

Under this section the ratios based on statement of cash flows and income statement of the GlaxoSmithKline Group were calculated. All figures are in thousands of naira.

(i) a. Operating cash ratio = $\frac{\text{Cash flow from operation}}{\text{Sales}} \times 100$

2005	770,037 x 100 = 8.96%	2004	1,725,925 x 100 = 24.14%
	8,589,814		7,149,033

b. Operating profit margin: $\frac{\text{Operating profit}}{\text{Sales}} \times 100$

1,403,038 x 100 = 16.33%	8,589,814	1,285,945 x 100 = 17.99%	7,149,033
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The operating cash ratio for GlaxoSmithKline pic was 8.96 percent in 2005 and 24.14% in 2004. There was a very substantial decrease in 2005 compared to 2004. It reveals a low cash generating capacity of the sale of GlaxoSmithKline Pic in 2005, operating cash ratio was much lower than the company's operating profit margin which was 16.33%. This shows that the operating activities of the company have generated less cash than the operating margin of the company. However, the operating cash ratio was higher than the operating profit in 2004, meaning that the operating activities generated more cash than the operating margin.

(ii) a. Net cash ratio = $\frac{\text{Net cash flow from operation}}{\text{Sales}} \times 100$

403.433 x 100 = 4.7%	8,589,814	<u>K 307.628</u> x 100 = 18.29%	7,149,033
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b. Net profit margin = $\frac{\text{Earning after interest and tax}}{\text{Sales}} \times 100$

$\frac{975.741}{8,589,814} \times 100 = 11.36\%$	$\frac{955.261}{7,149,033} \times 100 = 13.36\%$
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The net cash ratio for GlaxoSmithKline was 4.7 % in 2005 which was very low compared to 2004 results. The net cash ratio for 2005 was also lower than the net profit margin, which was 11.36 % in 2005. The low net cash ratio indicates a high cash generating ability of the company. It also shows a low quality of sales and net profit of the company. The low net cash ratio compared to net profit margin also indicate that a large part of the gross profit was set aside as depreciation. This high net cash ratio of 18.29% in 2004 shows that the cash generating ability of the company was higher than what was shown by the net profit margin of 13.36% in that same year.

(iii) a. Net operating cash on total assets = $\frac{\text{Net cash flow from operation}}{\text{Total assets}} \times 100$

Total assets

403.433 x 100 = 4.86%	8,296,389	1,307,628 x 100 = 21.71 %	6,021,983
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b. Return on total assets = $\frac{\text{Earnings after tax but before interest}}{\text{Total assets}} \times 100$

LJQ!L442 x 100 = 12.16%	8,296,389	972,611 x 100 = 16.15%	6,021,983
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The net operating cash on total assets for GlaxoSmithKline was 4.86% in 2005 which was very low compared to 2004 ratio of 21.71 %. This ratio shows the overall efficiency of the use of the total assets in generating cash. This ratio was lower than the return on total assets of the company. Return on total assets does not show the cash generating ability

of the assets of the company. The high ratio of net operating cash to total assets of 21.71% in 2004 shows a high cash generating ability of the company's assets in that year when compared to the return on total assets of 16.15%.

(iv) a. Cash based interest coverage - $\frac{\text{Net operating cash flow}}{\text{Interest expenses}}$

$$\frac{403,433}{32,701} = 12.34 \text{ times}$$

$$\frac{L_{307jS28}}{17,350} = 75.37 \text{ times}$$

b. Interest coverage ratio = $\frac{\text{profile after tax but before interest}}{\text{Interest expenses}}$

$$\frac{1,008,442}{32,701} = 30.84 \text{ Times}$$

$$\frac{972.611}{17,350} = 56.10 \text{ Times}$$

The cash based interest coverage ratio for GlaxoSmithKline was 12.34 times in 2005. This shows a decrease of 83.62% when compared with the year 2004 figure of 75.37 times, The actual interest payment capacity of a company is given by the cash based interest coverage ratio, because the company must have generated cash to pay interest. The cash based interest coverage of the company was lower than the normal interest coverage ratio, which was 30.84 times in 2005. Therefore, the low cash based interest coverage ratio shows the company's capability of servicing debt. In year 2004 the ability of the company to service debt was higher because the interest was covered by more than 75 times.

(v) Dividends to operating cash flow ~ $\frac{\text{Dividends}}{\text{Net cash flow from operation}}$

$$\frac{403,433}{403,433} = 94.86 \%$$

$$\frac{279.038}{1,307,628} = 21.34 \%$$

The dividend to operating cash flow ratio of GlaxoSmithKline was 94.86 % in 2005. This shows that almost all of the cash generated by the operating activities was applied for the payment of dividends. We are of the opinion that the company did that because it wanted to maintain a stable dividend policy. But one of the factors that determine the dividend policy of a firm is liquidity. From the foregoing however it can be seen that the firm's liquidity is very low which suggest that it need not have paid dividends. In fact, a close observation of the financial statements suggests that the dividend was financed with debt. This shows that operating activities have generated sufficient cash only for the payment of dividend but not for investment. The same ratio for 2004 was quite low. In 2004, GlaxoSmithKline was funding dividends with 21.34% of net cash flow from operation. This is because the cash generated from operation in 2004 was very high as can be seen in the financial statements.

(vi) Long-term debt coverage ratio = $\frac{\text{Net operating cash}}{\text{Long-term debt payment}}$

$$\frac{403,433}{569,354} = 0.71 \text{ times}$$

$$\frac{1.307.628}{528,626} = 2.47 \text{ times}$$

Long-term debt coverage ratio for GlaxoSmithKline was 0.71 times in 2005. This shows a decrease when compared to 2004 ratio of 2.47 times. This low coverage ratio showed that the operating activities of the company can bear more long-term debt, if it is needed. This high long-term debt coverage ratio, coupled with the high interest coverage ratio shows very healthy position from the point of view of long-term debt suppliers. This high ratio also showed that the operating activities of the company generated sufficient cash after repaying long-term debt.

(vii) Segment cash flows to total cash inflow = $\frac{\text{Segment cash flow}}{\text{Total net cash flow}}$

a. $\frac{\text{Net cash flow from operating activities}}{\text{Total net cash flow}}$

$$\frac{403,433}{1,307,628} \ll 1.07:-1$$

$$\frac{1,307,628}{528,626} = 3.50: 1$$

(376,983)

373,548

In year 2005, operating activities contributed positively to total net cash flow. The net cash flow from operating activities was used to pay part of the obligations of the firm in respect of purchase of fixed assets and dividends. The ratio in 2004 was very impressive in that the firm generated more than enough net cash from operating activities to pay its obligations in respect of investment and financing activities. This is the reason why the firm has a credit cash balance at the end of the year after deducting negative net cash flows from the balance at the beginning of the year,

b. Net cash flow from investment activities

Total net cash flow

(761. 106) = -2.02: -1
(376,983)

(1. 155, 351) = -3.09: 1
373,548

The contribution of investment activities in 2004 was negative. The cash inflow from investment activities was not enough to pay for the purchase of fixed assets. Therefore the purchase of fixed assets led the firm into incurring debt obligation which the cash flow from operation and bank balance could not adequately pay for. However the case was relatively better in 2004, though the firm invested much in the purchase of fixed assets, it nevertheless generated enough cash from operating activities i.e. NI, 307, 628 to pay for the purchase of fixed assets.

c. Net cash flow from financing activities

Total net cash flow

(392. 857) - -1.04: -1
(376, 983)

(220.016) = -0.59: 1
373, 548

In 2005 cash flow from financing activities are payments to providers of finance in respect of dividend and interest, there are no cash inflows, therefore the contribution of financing activities to total net cash flow was negative. This is perhaps the reason why the firm operates on bank overdraft. The relationship was quite different in 2004. Though financing activities contributes negatively too in respect of payment of dividend and interest to providers of finance, the company generates enough cash from operating activities to pay its obligations. That suggests why there remains a credit cash balance at the end of the year after the payment of negative net cash flows from the cash balance at the beginning of the year.

(viii) Operating cash to investment in fixed assets = Net cash from operation
Investment in fixed assets

$403 \div 775,144 \times 100 = 52.05\%$

$1,307,628 \div 1,186,499 \times 100 = 110.21\%$

Operating cash to investment in fixed assets for GlaxoSmithKline was 52.05% in 2005. This indicates that cash from operating activities was only equivalent to 52.05% of the investment in fixed assets made in 2005. In other words, operating activities have not generated sufficient cash for the purchase of fixed assets by the company. Investment in fixed assets was financed through external sources, for example bank overdraft. The situation in 2004 was better. Cash generated by operating activities in 2004 was 10% in excess of the investment in fixed assets made during the year.

Summary and Conclusion

It was observed that cash flow from operation has gained widespread acceptance as an indicator of the quality of reporting earnings. We saw that thorough understanding of a company's cash flow activities provides important insight not obtainable from a study of balance sheet and income statement. In this study, several cash flow ratios were used to analyze the cash flow statement and then combined with the analysis of income statement and balance sheet. The cash flow ratios were applied to analyze the cash flow statement and income statement of GlaxoSmithKline for 2005 and 2004. This analysis clearly shows that the cash flow analysis gave a true picture of the cash generating ability of the company.

Net cash' ratio for GlaxoSmithKline is very much lower than the operating margin of the company. Similar results were obtained by comparing net cash ratio with the net profit margin. Cash return on total assets is also lower than the return on total assets. The results revealed by all the above cash flow ratios proved that the cash generating ability of

the company is much lower than what was shown by its income statement. And when a company is not generating adequate cash from its activities it means that the firm's liquidity is very low, in other words the firm may not be able to meet its obligations as at when due.

Cash based interest coverage ratio also indicated that the company's debt serving ability was much lower than what was shown by normal interest coverage ratio. Dividends to operating cash flow revealed that 94.8% of cash generated from operating activities were utilized to pay shareholders. Long-term debt coverage ratio was 0.71 times in 2005, this shows GlaxoSmithKline did not generate enough cash from operation to meet its long term debts. The above-mentioned facts are evidence from the quality of cash generating ability of the company's operating activities b'lt are available only after statement of cash flow was integrated into financial statement analysis. However, investment in fixed assets to net operating cash ratio showed that about half (52.05%) of the investment made during the year was covered by the cash generated from operating activities ,of the company.

Finally, cash flow ratios applied in this study could be applied to a large sample of companies to test for its validity and reliability. Further attempt could also be made for the improvement of the ratios and their interpretation.

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Appendix 1

Profit and Loss Account for the Year ended 31 December, 2005

	The Group		The Company	
	2005 N'0000	2004 N 000	2005 N' 000	2004 N' 000
Turnover	8,589,814	7,149,033	8,273,679	6,866,933
Cost of sales	(5,254,815)	(4,350,526)	(5,109,759)	(4,208,919)
Gross profit	3,334,999	2,798,507	3,163,920	2,658,014
Operating expenses	(1,931,961)	(1,512,562)	0,908,02n	(1,480,294)
Trading profit (operating profit)	1,403,038	1,285,945	1,255,899	1,177,720
Other income	38,826	56,664	38,212	55,216
Interest charges	(32,701)	(17,350)	(32,701)	06,960)
Profit before taxation	1,409,163	1,325,259	1,261,410	1,215,976
Taxation	[43M22)	(369,998)	(379,507)	(334,774)
Profit after taxation	975,741	955,261	881,903	881,202
Dividend proposed	(382,680)	(279,038)	(382,680)	(279,038)
Retained profit for the year transferred to general reserve	593,061	676223	499.223	602,164
Earnings per share before bonus issue (kobo)	122	120	111	111
Earnings per share diluted (kobo)	102	100	92	92
Dividend per share (kobo)	40	35	40	35

Source: GlaxoSmithKline consumer Nigeria Plc. 2005 Annual Report and Financial Statements.

Appendix 2

Balance Sheet as at 31 December, 2005

	The Group		The Company	
	2005 NOOO	2004 N'OOO	2005 NOOO	2004 W 000
Fixed assets	2,694,896	2,122,516	2,694,896	2,122,516
Long term investment	-	-	160	160
	2,694,896	2,122,516	2,695,056	2,122,676
Current assets				
Stocks	2,244,002	2,621,716	2,238,490	2,609,215
Debtors	3,255,330	854,010	2,837,848	848,760
Bank and cash balances	1 102,161	423,741	29,480	378,027
	5,601,493	3,899,467	5,105,818	3,836,002
Creditors due within one year	(4,616,252)	(2,978,635)	(4,457,997)	(3,155,737)
Net current assets	985,241	923,832	647,821	680,265
Total assets less current liabilities	3,680,136	3,046,348	3,342,877	2,802,941
Creditors due after a year				
Deferred taxation	(137,147)	(1,875)	(135,259)	
Retirement benefits and obligations	(432.207)	(526.751)	(432.207)	(526.751)
Net assets	3,110,783	2,517,722	2,775,411	2,276,190
Capital and reserves				
Share capital	478,351	398,626	478,351	398,626

Share premium	51,395	51,395	51,395	51,395
Reserve for bonus shares	-	79,725	-	79,725
Revaluation reserve	24,721	24,721	24,721	24,721
General reserve	2,556,316	1,963,255	2,220,944	1,721,723
Shareholders funds	3,110,783	2,517,722	2,775,411	2,276,190

Source: GlaxoSmithKline consumer Nigeria Plc. 2005 Annual Report and Financial Statements.

Appendix 3

Statement of Cash Flow for the year ended 31 December ,2005

	2005 N'000	2004 ^'000
Cash flow from operating activities		
Profit before taxation	1,409,163	1,325,259
Adjustment for non cash items		
Interest charge to profit and loss account	32,701	17,350
Interest receivable credited to profit and loss account	(9,725)	(29,895)
Depreciation of fixed assets	200,950	150,428
(Profit)/loss on disposal of assets	(2,500)	(740)
Operating profit before working capital changes	1,630,589	1,462,402
Decrease /(Increase) in stock	377,714	(513,703)
Decrease/ (Increase in debtors and prepayments	(2,139,295)	217,910
(Decrease) Increase in amount due to group	803,084	287,452
(Decrease)/ Increase in creditors and accruals	192,489	251,297
(Decrease/Increase in provision for liabilities and charges	(94,544)	20,567
Cash used in operations	770,037	1,725,925
Company income tax paid	(366,604)	(418,297)
Net cash used im>perating activities	403,433	1,307,628
Cash flow from investing activities		
Purchases of fixed assets	(775,144)	(1,186,499)
Proceed on disposal of assets	4,313	1,253
Interest received	9,725	(29,895)
Net cash used in investing activities	(761,106)	(1,155,351)
	(357,673)	152,277
Cash flow from financing activities		
Payment of dividend	(360,156)	(202,666)
Interest paid	(32,701)	(17,350)
Net increase/(decrease) in cash balance	(750,530}	(67,739)
Cash balance at the beginning of the year		
Bank and cash balances	423,741	552,669
Bank overdraft	(50,194)	(111,382)
	373,547	441,287
Cash balance at the end of the year	(376,983)	373,548
Analyzed into;		
Bank and cash balances	102,161	423,742
Bank overdraft and commercial papers	(479,144)	(50,194)
	(376,983)	(373,548)

Source: GlaxoSmithKline consumer Nigeria Plc. 2005 Annual Report and Financial Statements.

