



## Impact of ratio analysis on effective decision making: Case study of some selected limited companies in Cameroon

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### Abstract

The Main Research Objective is to determine the effects of Ratio Analysis on Effective decision making in some selected limited companies in the North West, West and Littoral regions of Cameroon. In order to attain this main objective, four (4) specific objectives were derived and the data was collected using a structured questionnaire from 120 private and public limited companies. The result shows that there is a significant influence of Ratio analysis towards decision making in limited companies operating in these three (3) Regions of Cameroon. As can be seen in the specific objectives, the first objective suggests profitability Ratio will have a positive effect on effective decision making negatively in organizations, the second objective reveals a significant positive relationship between Liquidity ratio and effective Decision Making, the third objective reveals a positive effect efficiency ratio towards effective decision making in limited companies and the fourth objective on Investment ratio indicated a significant positive effects on effective decision making in Limited companies. Based on these results, the study recommended that; private and public limited companies operating in Cameroon, should take ratio analysis into considerations as the main contributor to effective decisions making, since it the main guides for the growth of the business. It is therefore, important for companies to always take this four ratio analysis tools into consideration and also provide appropriate training to their workers how to use the various ratio techniques and tools.

**Keywords:** Profitability ratio, liquidity ratio, efficiency ratio, investment ratio and decision making

### Introduction

Suryanto and Thalassions (2017) <sup>[33]</sup> expressed that the financial statement are an open wellspring of data, and their content, structure presentation, and approval are bound together by fundamental guidelines so as provide details, timely, accurate, and reliable information content that is of great value to the users. Among those values is the ability to use the firms' ratio analysis to predict the performance of firms for effective decision-making, to this end information contained in the financial statement cannot be over emphasized. The information depicted in the Financial Statement for the firm past and current financial transactions enhances decision-making. Hence, it can safely be concluded that Financial Statement is not the conclusion in itself but a means to a conclusion in decision-making to improve firm performance (Susan, Innocent & Philip 2018). The Set of financial statements is the most significant tool of providing information to outside economic entities through financial analysis with the use of ratio analysis tools which includes Profitability Ratio, Liquidity Ratio, Efficiency ratio (Working Capital ratio), Investment ratio etc.

Adam (2014) <sup>[3]</sup>, noted that over the years, researchers have continually established the utility of financial ratios in investigating various aspects of business like profitability, solvency, efficiency and Investment. It provides trends within organizations by analyzing fiscal statements over a large number of financial years. This is extremely useful to understand the direction of growth of an organization and

identify any trends that affect performance. Ratio analyses assists in identifying the major strengths and weaknesses of a business enterprise as it consists of the various tools which can bring the real situation of the company. It indicates whether a firm has enough cash to meet obligations; a reasonable accounts receivable collection period; an efficient inventory management policy; sufficient plant, property, and equipment; and an adequate capital structure (Moyer, *et al.* 2005) <sup>[31]</sup>.

In a related study carried out by Mohammed (2014) <sup>[30]</sup>, on role of Ratio Analysis in Business decision making Case study of NBC Maduguri plant, he found out that companies need to analysis their financial statement by the means of financial ratio to unrevealed the mass of truth hidden in the, and to enhance decision making. He goes further to say that ratio analysis helps to reveal, compared and interpret salient features of financial statement and then concluded his study that ratio help to evaluate the pass performance, the present condition, and the future prospects of the business which enables us to ask questions about and pave a way to finding the useful answers such which lead a way to planning, forecasting and effective decision making in companies like Society Anonym des Brasseries du Cameroun SABC, Guinness Cameroon, Access Bank and other public companies operating in Cameroon territory and while not the world at large.

In Africa, precisely Cameroon, Corporate failure and distresses have been witnessed especially in the banking sectors. Evidence was the huge collapsed of B.I.C.I.C.

Meridian B.I.A.O. Cameroon Bank between the period of 1988 to 2024 and the COFINEST (Compagnie Financière de l'Estuaire) on the 23th of March 2011 with major shareholders arrested for malpractices and mismanagement. Securities and Exchange Commission (SEC) (2000), stated categorically that, when investors decided on the merits and comparability of an investment opportunity through financial statement analyses, allocation of financial resources is made easier and investor reliance is nurtured. The usefulness of comparable financial statements is underpinned in the financial accounting standard board (FASB). FASB (2000) affirmed that funding, investing and lending decision prerequisites, involve analysis and evaluations of alternative opportunities and they cannot be carried out rationally if comparative information is not obtainable. Textbooks on FSA as well, emphasize the importance of comparability across financial statement in judging a firm's performance using ratios analysis. Information provided in this form are useful for users if be transparent. In this regard, reports and ratio analysis is an important component for any decisions making in limited Companies. Existence of financial information of transparent and comparable is one of the main pillars of accountability executives and the basic needs of decision-makers of economic.

Accounting records represents the backbone of financial reporting. Corporate yearly reports and financial statement is a specific report that is expected to be delivered by all business entities at regular interval. Basically, accounting measures and communicates economic information needed for decision making. Thus, the American Accounting Association (in Okezie 2002) defined accounting as "the process of identifying, measuring and communicating economic information to permit informed judgments and decisions by the information". Statement and the Balance Sheet. The Income Statement shows the profitability or operational result of a business, while the balance sheet shows the solvency or financial position of a business. Although profits are often used as the basis for judging the performance of a business, such profits must be related to the various items of the financial statements and should be interpreted using ratio analysis in order to be meaningful and useful for decision making. The ratio analysis is considered an important tool for the organization to evaluate its financial situation, competitiveness, liquidity, solvency, risk, operational effectiveness, productivity, and appropriate use of funds (Asrizal *et al.*, 2018) <sup>[10]</sup>. Furthermore, owing to the summarized nature of financial statements, a lot of truth is hidden in them. Thus, they need to be analyzed and interpreted by means of ratio analyses to enable the users understand the meaning of the absolute amounts shown in them, and make informed business decisions (Palepu *et al.*, 2020). Attainment of business and its effects can be appraised viewing ratios as key tool. Information presented by financial analysis eyeing ratios accredit management to shaping well-informed business decisions, name their strengths and weaknesses, and also predict the economic climate. Ratios feed healthy sign that manager is hopeful of firm's future and back presage firm's cogent postures of financial health in future, and adjudge expected earnings and dividends (Mitchell, 2006; Besley; Brigham, 2008). Ratio analysis interprets distinctive cue of financial statements and, thus, abets manager's control and promotes organizations operations (Bull, 2007). Ratios analysis can be

mentioned as an accounting tool which will help the various decision makers to take decisions regarding the financial performance of the company, Ratio Analyses will also enable the managers to assess the organizations' operations, growth, and benchmark the organization with its competitors. Analyzing the ratios will also help them in planning future performance by taking the current period's performance into consideration. According to Erdogan *et al.* (2015) ratios analyses and performance becomes one of the main responsibilities of the managers due to the above reasons. Green (1978) <sup>[23]</sup> has mentioned in his study, that financial ratios of the failed firms differed from the successful firms as early as five years prior to the failure. Therefore, to avoid bankruptcy, it is important to analyze the financial statement of a business organization using ratio analysis.

### Statement of the problem

According to Vincent (2013) <sup>[34]</sup> Many financial organizations also compare their own ratio values to those of similar organizations looking for differences that could indicate weaknesses or opportunities for improvement. The outcome of this comparison will contribute to effective decision making after financial statement have been interpreted using the various ratio analysis tools. More so, the main aim of financial statement analyses is to inform the users about the financial position of the company as well as to serve as decision making aid for managerial personal (Tamplin, 2023). Other authors like Dooley (2016) in his book title Financial Statement Analysis & Forecasts consider financial analysis as not the only tool for decision making but also look at other effective decision-making tool like benefit Analyses. Ratios analysis focus on financial results that reflect the owners' perspective, whereas the Balanced Scorecard focuses on financial and nonfinancial results that reflect not only the owners' perspective, but also the customer perspective, internal process perspective and growth perspective (Khalad, 2011). Based on these writers, ratios analysis is not an adequate method to evaluate the overall performance of an organization for effective decision making in limited companies in Cameroon.

This study is intended to look into the extent to which effective decision making in limited Companies both internally and externally in Cameroon, also rely on the results of ratio analysis tools like profitability ratio, liquidity ratio, efficiency ratio and investment ratio.

In addition to the research findings, the study extended inclusively on how achieve some of the agenda for 2030 sustainable development goals like No poverty, Decent work and economy growth, industry innovation and infrastructure and also the Cameroon national Development strategy 2030(NDS30) in the domain of industry and service, private sectors revitalization and the Transformation of the financial System (Development of local financing of investments and export) through the expansion of existence companies by implementing the use of ratio analysis not only in limited companies in Cameroon but also to Companies in the world at large in all the business sectors. The study in literature has therefore quantify the relationship between ratio analysis and decision making in Cameroon limited Companies.

**General objective**

The main objective for the study is to determine how Ratio analysis can influence effective decision making in limited companies in Cameroon.

**Specific objectives**

- To assess the effect of profitability ratio on effective decision making in some selected limited companies in Cameroon;
- To investigate the effect of liquidity ratio on effective decision making in some selected limited companies in Cameroon;
- To determine how efficiency ratio influence effective decision making in some selected limited companies in Cameroon;
- To assess the effect of investment ratio on effective decision making in some selected limited companies in Cameroon.

**Theoretical review**

▪ **The agency cost theory**

Germinal Theory proposed by Jensen and Meckling (1976) [26] that analyzes the conflict between shareholders and managers - agents of shareholders. Conflict arises because shareholders require payouts for their investment, reducing internal resources controlled by managers (Jensen, 1986) [24, 25]. Managers are compensated on the basis of accounting profits, it increases the incentives to manipulate information and/or favor projects with poor NPV if they provide immediate profits (Dogan & Smyth, 2002) [18]. This has negative consequences of potential loss in value of public corporations (Jensen & Meckling, 2001) [27]. Dogan and Smyth (2002) [18] conducted a study of 223 companies listed in the Kuala Lumpur Stock Exchange (KLSE) using the agent theory to test relationships between corporate performance, performance criteria and executive compensation. Results showed that the theoretically positive relationship between board remuneration and firm performance was weaker in Malaysia than in U.K. or U.S. mostly explained by concentration of ownership. The desire for high rewards induces managers to manipulate, overestimate or underestimate indicators to make them more achievable in detriment of the value of the firm, e.g. low budgets, inefficient debt targets. Jensen & Meckling (1976) [26] contend that the agency costs of separating ownership from control should not be excessive provided that factors such as competition, executive labour market, and incentive plans are designed to reduce the self-interest of managers. This theory relates to the Free Cash Flow theory proposed by (Jensen in 1986) [24, 25]

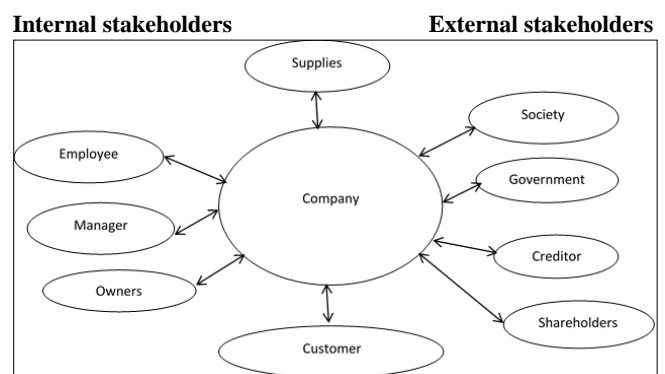
▪ **Decision-usefulness’ theory**

According to Kazeem *et al.* (2017), financial reporting quality is a broader concept that not only refers to financial information, but also to disclosures, and other non-financial information useful for decision making included in the report. Therefore, in the Exposure Draft (ED)- ‘An improved Conceptual Framework for Financial Reporting’ through the use of ratio analyses of the FASB and IAS, both the FASB and the IASB (2008) explicitly express their desirability of constructing a comprehensive measurement tool to assess the quality of financial reporting considering all dimensions of decision usefulness. Hence, this measurement tool considers all the quantitative characteristics because these characteristics determine the

decision usefulness of financial reporting information. IASB (2008). The Financial Accounting Standards Board (FASB) has stated that major object of financial reporting is to “provide information that is useful to present and potential investors and creditors and other users in making rational investment, credit and similar decisions.

▪ **The stakeholder’s theory**

Another theory on which corporate governance finds its basis is the stakeholder’s theory. It was embedded in the management discipline in 1970 and gradually developed by Freeman (1984) incorporating corporate accountability to a broad range of stakeholders. Stakeholders are those who have a stake or claim in some aspect of a company’s products, operations, markets, industry and outcomes. Stakeholders can influence and are influenced by businesses. Stakeholders are thus classified into two types namely: primary stakeholders whose continued association is necessary for a firm’s survival (Employees, customers, investors, governments and communities) and Secondary stakeholders who are not essential to a company’s survival (media, trade associations, and special interest groups). Stakeholder theory can be defined as “any group or individual who can affect or is affected by the achievement of the organization’s objectives”. To Freeman (1984), the internal and external stakeholders of a company can be shown in the Figure below:



Source: Adapted from the works of Freeman (1984)

Fig 1: Internal and external stakeholders of a company Internal stakeholder’s External stakeholders

The firm performance is affected by the degree to which the firm understands and addresses stakeholder demands conducting activities like generation of data about stakeholder groups, distribution of the information throughout the firm, organization’s responsiveness to this intelligence. Generally, to implement the stakeholder perspective, firms should do the following: assessing the corporate culture, identifying stakeholder groups, identifying stakeholder issues, assessing organizational commitment to social responsibility, identifying resources and determining urgency and giving stakeholder’s feedback. To ensure participation of a wider constituent groups (with economic and/or social stakes in corporate activities such as employees, customers, suppliers, stockholders, banks environmentalists, government, to name but a few) in the governance process, assuring that their wide range of interests are taken into account by giving shareholders increased rights to participate in important management decisions by:

- Change in the composition of boards by including more outside directors to alleviate concern boards are too subservient to management;
- Employee representation at some level in corporate governance;
- Reinforce of government rules and regulation over issues like insider trading, hostile takeover Buchholz (1989).

Stakeholder approaches combine compliance and value-based approaches. In compliance, corporate officers define a moral and legal minimum; this consists of the minimum set of rules necessary for stakeholder coexistence. Beyond this, value-based approaches seek to create common, broader objectives and aspirations that can unite the different stakeholders in the pursuit of excellence. Stakeholder approaches need both the compliance approach to get things started and the values-based approach sets them on the path to excellence. Donaldson and Preston (1995) <sup>[19]</sup> offered four central theses related to stakeholder theory:

- Stakeholder theory is descriptive in that it offers a model of the corporation;
- Stakeholder theory is instrumental in offering a framework for investigating the links between conventional firm performance and the practice of stakeholder management;
- Although stakeholder theory is descriptive and instrumental, it is more fundamentally normative. Stakeholders are identified by their interests and all stakeholder interests are considered to be intrinsically valuable;
- stakeholder theory is managerial in that it recommends attitudes, structures, and practices, and requires that simultaneous attention be given to the interests of all legitimate stakeholders; where instrumental justification: success in satisfying multiple stakeholder interests constitutes the ultimate test of corporate performance, with monitoring devices that reduce information asymmetry, and enforcement mechanisms including law, exit and voice, and emphasis of fairness. And normative justifications: a pluralistic theory of property rights supports various groups a moral interest or stake in the affairs of the corporation (Donaldson & Preston, 1995) <sup>[19]</sup>

Unlike agency theory in which the managers are working and serving for the stakeholders, stakeholder theorists suggest that managers in organizations have a network of relationships to serve-this include the suppliers, employees and business partners. And it was argued that this group of networks is important other than owner-manager-employee relationship as in agency theory (Freeman, 1999).

#### ▪ The signaling theory

The signaling theory, according to Brigham and Houston (2001) <sup>[12]</sup> is the company's action in giving signals to investors about how the management views the company. The signaling theory explains how the signals of success or failure of the management (agent) are conveyed to the owner (principal). Encouragement in giving signals is due to asymmetric information between the company (management) and outsiders, where investors know that the company's internal information is relatively less and slower than that of the management. Prospective investors, who

will invest in the company's bonds, need information about the condition of the bonds. The company's management is expected to give signals in the form of information about the condition or quality of the bonds, whether they have the potential to default or not. The signaling theory in this study explains that the company's management is the party that gives signals in the form of corporate financial statements and non-financial information to rating agencies. This bond rating agency carries out the rating process so that it can issue bond ratings for these bond issuing companies. Bond ratings give a signal about the probability of the company's debt service failure. Spence (1973) argues that by giving a signal, the sender (owner of information) tries to provide relevant pieces of information that can be utilized by the recipient. The recipient will then adjust his behavior according to his understanding of the signal. The signaling theory explains why companies strive to provide financial statements to external parties. Signals given by the managers aim to reduce information asymmetry between the company's management and external parties.

#### Empirical review

Abiola (2013) <sup>[2]</sup> carried out Financial Ratio Analysis of Firms as Tool for Decision Making. The purpose of this study was to present primarily the relationship between financial analysis and accounting, and the fundamental role which accounting holds, through the information it produces, into analysts' work. It was argued that financial analysis was a specialty in accounting that aimed at formulating a diagnosis and a prognosis relative to the situation and the financial performance of a company or an organization. The research method is the bibliographic one, being studied timely books and articles of the domain. Literature did not provide concrete answers to this problem, resolutions being expected especially from practitioners. Alhilfi (2018) evaluated the NIC company financial health by using financial ratio analysis method, included a three periods analysis for three aspects: profitability, liquidity and solvency. It found from the comparison of the NCI Company's financial ratios of three periods, that there is a remarkable progression in the profitability indicators in 2013 compared with the previous two years; nevertheless, there is an intense regression in its liquidity and solvency indicators. It concluded that the company's profitability increased in 2013, while its liquidity and solvency decreased. Accordingly, the earning power of the business is good presently, but its riskiness is too high.

Alsamaree (2013) analyzed financial ratios and the performance of banks case study was Kuwait (2007-2010). The purpose of this study was to make assessment on attention to the financial performance and financial ratios, including analysis contributed to decision-makers to take correct decisions. About the methodology this study used a descriptive approach by describing the analytical and diagnostic and analysis of data and information relating to the budgets and income statements had been taking financial analysis approach in monitoring the facts about the reality where application entrance qualitative approach which reflects the most important indicators that measure financial performance. He found that there were No statistically significant differences between the profitability of Kuwait Finance House (KFH) and capital adequacy (2007-2010). Mabwe (2010) analyzed the performance of South Africa's commercial banking sector for the period 2005- 2009.

Financial ratios were employed to measure the profitability, liquidity and credit quality performance of five large South African based commercial banks. They found that overall bank performance increased considerably in the first two years of the analysis. Vardhan (2017) studied on the role of ratio analysis in business decision, the objective of this study was to examine how ratio analysis helps the manager, shareholders, investors, creditors, and other stakeholders make informed and judgment about the firms past performance, present condition and future potential of the business through the use of ratio analyses tool. Base on the chi- square independent test, the kruskal-wallis comparison test, and the logistic regression on the data collected by questionnaires from some 75 preparers. Lee and Lee (2018) investigated the financial ratio of savings banks and the effect of the ratio having influence upon bankruptcy by quantitative empirical analysis of forecast model to give material of better management and objective evidence of management strategy and way of advancement and risk control. Research design, data, and methodology. The author added two growth indexes, three fluidity indexes, five profitability indexes, and four activity indexes CAMEL rating to not only the balance sheets but also the income statement of thirty savings banks that suspended business from 2011 to 2015 and collected fourteen financial ratio indexes. IBMSPSS VER. 21.0 was used. Results - Variables having influence upon bankruptcy forecast models included total asset increase ratio and operating income ratio of growth index and sales to account receivable ratio, and tangible equity ratio and liquidity ratio of liquidity ratio. The study selected total asset operating ratio, and earning and expenditure ratio from profitability index, and receivable turnover ratio of activity index. Conclusions - Financial supervising system should be improved, and financial consumers should be protected to develop saving bank and to control risk, and information on financial companies should be strengthened.

### Research methodology

#### ▪ Primary source and secondary sources

Questionnaires were distributed to some selected limited companies in Cameroon by the researcher through person contact and online survey. The responses helped the researcher to get the necessary information for this study in other to have and accurate results at the end of the study. The researcher created good relationship with the participants to increase the response rate, this was to ensure that the respondent understood the question asked. The researcher patiently waited while following up on the respondents who were unable to submit their questionnaires immediately. More so, the researcher also made arrangements with some company to send the questionnaires directly to their emails.

This source has to do with data collected from archives, document, magazines, journals, Dictionaries, Articles and the internet which also fully contributed in the review of related literature. The choice of this form of data is to enables the researcher add additional information for the study.

### Data collection instrument

The research instrument used is a closed- ended questionnaire which can also be defined as a structured

questionnaire issued to limited companies. In designing the questionnaires, some points are taken into consideration to avoid misinterpretation of questionnaires. The questions are specific that is: simple to understand, in order to reduce the complexity of further explanation or needing to guide the respondent. In the process of administering the questionnaires to limited company, help is granted to those with language problems in order for them to understand the question, data is collected and classified with the purpose of analysis and diagnosis. The researcher personally served the questionnaires by hand and collected them back through the same means and the total number of questionnaires administer were so.

### Data collection method and tools of data collection

A formal questionnaire served as the primary method of information collection. Information's obtain from these companies on profitability, liquidity, efficiency and investment ratio obtain from some selected limited companies operating in these three (3) regions were all gathered as a primary source of data using questionnaires and secondary sources through articles, documents, magazines journal, dictionaries and online. Quantitative and qualitative information are collected using Likert scale items and free-form inquiries.

#### ▪ Population of the study

A population is a complete set of groups of individuals whether that group comprises a nation or a group of people with a common characteristic. As a tool for objectively studying population, ecologist rely on a series of statistical measures known as demographic parameters, to describe that population (Lebreton *et al.*, 1992) population consist of all the units on which findings of research can be applied. In other words population is a set of all the units which possess variable characteristic under study and for which findings of research can be generalized, (Satisprakash shukla 2022). The population of the study consists of limited companies in the North West, West and Littoral Region of Cameroon.

#### ▪ Sample size

Sample size refers to the number of people that are chosen from which the researcher wishes to gather information (Evans *et al.*, 2000). Sample size refers to the number of elements to be included in the research (Malhotra & Briks, 2005). According to Ngechu (2014) <sup>[32]</sup>, it is important to select a representative sample through making a sampling frame from the target population. In this study, the proportionate stratification was used which was based on the stratum's share of the total population to come up with the sample in each stratum. The actual limited companies in which the questionnaires were distributed were arrived at using simple random procedures to draw the sample from each stratum. The sample size for this study comprises of limited companies in the North West, West, and Littoral region of Cameroon. Given that the population of the study was known to the researcher, the researcher employed the Yamane (1967) formula to determine the sample size as follows. A Sample size will be gotten from the 169 Limited Company in the North West, West and the Littoral Region of Cameroon, Limited companies is use as the total population.

**Table 1: Sample Size**

Regions	Number of limited company	Sample size
North West	45	33
West	42	29
Littoral	82	58
Total	169	120

Source: Author

The sample size was 120 limited companies from the North West, West and Littoral Regions of Cameroon. A total of 145 questionnaires were administered to limited companies in these three (3) regions of Cameroon, 120 were collected back and used.

▪ **Techniques of data analysis**

The main purpose of data analysis is to obtain maximum information that is pertinent to answer the research questions the effects of ratio analysis on effective decision making. Quantitative data was collected and analyzed using descriptive statistics. The raw data collected was edited to detect errors and omissions and to correct the where possible. Data collected was also coded into logical, descriptive, and meaningful categories to provide a framework for analysis. Descriptive statistics such as percentages to facilitate the change of raw data into a form that enabled understanding and interpretation in relation to the research questions were used. Also, inferential statistics such as linear regressions were used to analyze quantitative data. Linear regression model was developed and tested to explain the relationship between limited companies decision making based on ratio analyses practices. Linear regression was preferred since it's a linear model which reveals statistical relationships between variables and can be used to predict or estimate the behavior of variables. According to McCartney *et al* (2006), multiple regression analysis is useful in determining whether or not a particular effect is present, in measuring the magnitude of a particular effect and in forecasting what would be of a particular effect.

▪ **Model specification**

When the errors are homoscedastic and serially uncorrelated, the OLS estimator is the best among the linear unbiased estimators, according to the Gauss-Markov theorem. When all of the regressors are independent and have finite fourth moments, the variance estimate of the residuals is consistent, and the regressors form perfect collinearity (rank condition). The OLS technique yields a minimum-variance mean-unbiased estimate when the error variances are finite. Under the additional condition that the errors are normally distributed with zero mean, OLS is the maximum likelihood estimator that beats any non-linear unbiased estimator. The OLS regression model specification for examining the link between ratio analysis and effective decision making is provided below.

$$Dm = a + \beta_1Pr + \beta_2Lr + \beta_3Er + \beta_4Ir + \beta_5We + e$$

Where:

- Dm = Decision Making (continuous variable);
- A= Constant Term or intercept;
- Pr = profitability ratio (continuous variable);
- Lr= liquidity ratio (continuous variable);
- Er =Efficiency ratio (continue variables);
- Ir= Investment ratio (continuous variable);
- We= Working Environment;
- e = error;
- $\beta_0$  = Intercept or constant term  $\beta_1, \beta_2, \beta_3, \beta_4$  = Regression coefficients or slopes for each of the four independent variables;
- $\epsilon$  = Error term or residual.

Validity of a questionnaire refers to the degree to which it measures what it claims to measure (Mugenda and Mugenda, 2013). In testing the validity, the researcher prepared questionnaires and presented to the supervisor for examination and suggestion on the level and transparency of the information. The supervisor then made suggestions which were combined into final draf for the work.

**Research results**

**Table 2: Respondent response on ratio analyses and decision making**

Ratio analysis and decision making	No			Yes		
	Count	Row N %	Column N %	Count	Row N %	Column N %
Are you very familiar with ratio analysis as a tool for decision making?	22	18.30%	100.00%	98	81.70%	100.00%
Have you used ratio analysis to make decisions in your own firm?	24	20.00%	100.00%	96	80.00%	100.00%
In your experience, have there been any instances where ratio analysis has been unsuccessful in guiding a decision?	72	60.00%	100.00%	48	40.00%	100.00%
Would you say ratio analysis is cost effective tool for decision making in firm?	68	56.70%	100.00%	52	43.30%	100.00%
Financial investment and planning are the most suitable for using ratio analysis as a tool?	20	16.70%	100.00%	100	83.30%	100.00%
Have you recieve training or education on how to properly interpret and used ratio analysis for decision making?	18	15.00%	100.00%	102	85.00%	100.00%

Source: Author

From table 1 above, 98(81.70%) agreed (yes) that they are familiar with ratio analysis as a tool for decision making, 22(18.30%) disagree(No) on that., 96(80%) agreed(Yes) that they have use ratio to make decision in their companies while,24 (20%) disagree(No) on that point, 48(40%) of the respondent agreed(Yes) that there are instances where ratio analysis has been unsuccessful in guiding decision making, 72(60%) disagreed(No) on this point. In terms of ratio as cost effective tool for decision making,52(43.3%) of the respondent agree (Yes) that ratio analysis is cost effective

tool for decision making while,68(56.7%) disagree (No) on that point, more so,90(83.30%) agree (Yes) that financial investments and planning are the most suitable for using ratio analysis as a tool,20(16.7%) disagree (No) on that. As for proper training or education on ratio analysis, 102(85%) agree (Yes) that they have received training or education on how to properly used ratio analysis for decision making, 18(15%) of the respondent disagree (No) on the aspect of proper training on how to use ratio for decision making.

**Table 3:** Respondent Response on Effective Decision Making

Effective Decision Making in your institution is based on the following ratio analysis Techniques	Disagreed		Agreed			
	Count	Row N %	Column N %	Count	Row N %	Column N %
The results obtain after the calculation and analyses of the various profitability ratio is main contributor to effective decision making in the firm	42	35.00%	100.00%	78	65.00%	100.00%
Effective decision making in the firm is influence by the various liquidity ratio techniques after been calculate and analysis	4	3.30%	100.00%	116	96.70%	100.00%
Efficiency ratio techniques are some of the key contributors of effective decision making in the firm after been analysis	2	1.70%	100.00%	118	98.30%	100.00%
Effective decision making in the firm is influence by the results obtain after calculating and analyzing of the various investment ratio techniques	6	5.00%	100.00%	114	95.00%	100.00%

Source: Author

From the information above in table 2, 78(65%) of the respondent agree that the result they obtain after the calculation and analysis of the various profitability ratio is a main contributor to effective decision making, 42(35%) of the respondent disagree on that. On the other hand, 116(96.7%) of the respondents had a positive view that effective decision making in the firm is influence by the various liquidity ratio technique after been calculated and analyses, 4(3.30%) disagree on liquidity ratio as tool for effective decision making. More so, 118(98.30%)

respondents agree that efficiency ratio technique are some of the key contributors to effective decision making in the firm after been analyses, 2(1.70%) disagree on this. Finally, 114(95%) of the respondents agree that effective decision making in the firm is influence by the result obtain after calculation and analyzing of the various investments ratio techniques,6(5%) of the respondent, disagree on the point that the results been obtained after the calculation and analyzing the Various investment ratio techniques can influence effective decision making.

**Table 4:** Respondent response on decision making

Decision making	Disagreed		Agreed			
	Count	Row N %	Column N %	Count	Row N %	Column N %
Are you always satisfied with the results you made?	24	20.00%	100.00%	96	80.00%	100.00%
Do your decisions always meet the expected goals?	34	28.30%	100.00%	86	71.70%	100.00%
Does the team or employees always involved in decision making process in the firm?	44	36.70%	100.00%	76	63.30%	100.00%
Are the employees always satisfied with the timeline of decision making in the firm?	22	18.30%	100.00%30	98	81.70%	100.00%
Do you have short term and meet term strategies to address challenges that comes up in the firm?	0	0.00%	0.00%	120	100.00%	100.00%

Source: Author

From table 3 above, 96(80%) of the respondent agree that they are always satisfied with the result the made,24(20%) of the respondent indicated that they are not always satisfied with their results, moreover, 86(71.70%) of the respondent agree that their decisions always meet the expected goal and 34(28.3%) of the respondent disagree on the point that their result do not always meet the expected goal.76(63.30%) of

the respondents agree that the employees are always invold in decision making while, 44(36.7%) disagree on this. In addition, 98(81.70%) agree that the worker or employees are always satisfied with the timeline of decision making in the firm, 22(18.3%) disagree on this point. In terms of short term and meet term strategies to address challenges that come up in the firm, 120(100%) agree on this point

**Table 5:** Summary of descriptive statistics

Descriptive statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
PR	120	0.2	4.2	3.1667	1.09953
LR	120	1.25	3.25	2.7875	0.58845
ER	120	0.33	2.33	2.1222	0.42765
IR	120	2	3.25	2.8542	0.4857
Female	120	0	1	0.5	0.502
FSLC	120	0	1	0.02	0.129
GCEO_L	120	0	1	0.07	0.25
GCEAL	120	0	1	0.45	0.5
Bachelor	120	0	1	0.34	0.421
Master	120	0	1	0.18	0.389

Source: Author from computation (2024)

Results From the descriptive Analysis shows that the mean value of growth is 3.166 which is closer to its maximum implying that the growth of companies was improving at the

time of the survey. The mean of the profitability ratio 3.166 which indicates that more that 100% respondents were in fevour of profitability ratio during the survey, more so, the

mean value of liquidity ratio is 2.7875 which also shows that majority of the respondents were also in favour of liquidity ratio. Furthermore, 100% of the respondents were also in favour of Investment ratio with an overall mean of 3.25, in terms of gender, 50% where of both sexes, in terms of education, 2% had FSLC, O/L 0.45, A/L 0.07, Bachelor's degree 0.34 and Master's degree 0.18

**Model summary**

**Table 6:** Regression analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.379 <sup>a</sup>	.144	.082	1.05354

**a. Predictors:** (Constant), Liquidity ratio, efficiency ratio, Female, GCEO/L, FSLC, investment ratio, profitability ratio, GCE A/L, Bachelor degree and Masters

The R-squared is 0.144, this implies that 14% variation in growth is being explained by the independent variables in this model (profitability ratio, liquidity ratio, efficiency Ratio, investment ratio, FSLC, O/L, A/L, Bachelor Degree and Master Degree) are the remaining 82% is being captured by the error term

**Table 7:** ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	20.662	8	2.583	2.327	.024 <sup>b</sup>
	Residual	123.205	111	1.110		
	Total	143.867	119			

**a. Dependent variable:** DM

**b. Predictors:** (Constant), Liquidity ratio, efficiency ratio, Female, GCEO/L, FSLC, investment ratio, profitability ratio, GCE A/L, Bachelor's degree and Masters

From the ANOVA table above, the overall model is significant at 5% level of significance. Which implies that our model was well specified.

**Table 8:** Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.192	.742		2.954	.004
Profitability ratio	.822	.471	.164	1.744	.084
Liquidity ratio	.123	.172	.066	.717	.475
Efficiency ratio	.281	.225	.116	1.250	.214
Investment ratio	.476	.239	.184	1.991	.049
Female	-.151	.199	-.069	-.760	.449
FSLC	1.103	.780	.129	1.415	.160
GCEO_L	.725	.404	.165	1.793	.076
GCEAL	.050	.212	.023	.236	.814
Bachelor Degree					
Master's Degree					

Source: author

**Dependent variable:** Decision making

From the results above the coefficient of Profitability ratio is positive. this implies that an increase profitability ratio will lead to an increase in growth. Specifically, a 1 unit's increase in profitability ratio will result to 0.822unitss increase in growth (Profitability). This results is statistically significant at 5%. More so, the coefficient of the liquidity ratio is positive. This implies that an increase in liquidity ratio will lead to an increase in growth (profitability). Specifically, a unit 1 unit's increase in liquidity ratio will

lead to a 0.123 unit increase in growth (Profitability). This results is statistically significant. Furthermore, the coefficient of efficiency ratio is positive. This implies that an increase in efficiency ratio will lead to an increase in growth (profitability). Specifically, a 1 unit's increase in efficiency ratio will result to 0.281 unit increase in growth (Profitability). More to that, Investment ratio is also positive. This implies that, an increase in investment ratio techniques will lead to an increase in growth. Specifically, a unit increase in Investment ratio techniques will result to 0.476 unit increase in growth. This results is statistically significant at 5% level. Female is negative. This implies that an increase in the numbers of females will lead to decrease in growth. Specifically, the results obtain indicates a negative of -0.151. FSLC has a positive coefficient of 1.10. Which implies that those having FSLC will perform 10% more, relative to those with no education. This results is statically significant at 5% levels. GCE Ordinary level has a positive coefficient of 0.725. Which implies that those having Ordinary level will perform 73% more, relative to those with no education. This results is statistically significant at 5% levels. GCE advance Level has a positive coefficient of 0.50 which implies that those having advanced level will perform 50% more, the relative to those with no education.

**Conclusions**

The purpose of this phase of the study was to examine how ratio analysis affected the company towards decision making. The selection criterion was the types of ratio technique applied. To test this association, proxy measures for profitability ratio techniques (gross profit to sales ratio, gross profit to cost ratio, net profit to sale ratio and return on capital employed), Liquidity ratio (current ratio and quick ratio), Efficiency ratio (debtor collection period, creditor payment period and stock turnover ratio) and finally Investment ratio (dividend yield, dividend cover, earning per share and price/earnings ratio) and effective decision was used. Utilizing primary information from 120 respondents, our regression study examined the relationship between various ratio analysis techniques and effective decision making in companies. As already said, our study focuses on four types of ratio analysis techniques: profitability ratio, liquidity ratio, efficiency ratio and investment ratio. This study proposed four hypotheses, and the aim of this analysis is to provide evidence for each one while also providing insight into the extent to which these ratio can guide effective decision making in companies. Ratio with positive effects will lead to a sound decision making in the company. Analysis' findings show there is greater positive effect of ratio analysis on effective decision making, which means that it will have a positive impact on how organizations view their decision making process. However, at the 5% level, this adverse effect is not statistically significant. This suggests that companies will have effective decision-making plan that desired effects in terms of improving the company's growth towards it expected goals if all the ratio techniques are been implement in the company. According to our data, there is a strong positive correlation between profitability ratio technique, liquidity ratio techniques, efficiency ratio technique and investments ratio on effective decision making, which means that a one-point increase in the index will result in a 2.192 point improvement in decision making in companies.

The statistical significance of this result at the 5% level suggests the following:

▪ **Positive effect of profitability ratio on effective decision**

Our analysis' findings show that profitability ratio has a positive effect on effective decision making, which means that it will have a detrimental impact on how organizations organize its decision making process. However, at the 5% level, this adverse effect is not statistically significant. In particular, a one-point increase in other techniques of analysis will result in a 0.164 point increase in decision making process. This suggests that companies may not achieve the desired effects in terms of improving decision making in the company if they do not implement all the profitability ratio techniques toward effective decision making.

▪ **Positive Effect of liquidity ratio on effective decision**

According to our data, there is a strong positive correlation between the index of the various liquidity ratio technique and effective decision making. The liquidity index on effective decision has a positive coefficient, which means that a one-point increase in the index will result in a 0.066 - point in decision making. The statistical significance of this result at the 5% level suggests liquidity ratio have an impact on the company's decision making process.

▪ **Efficiency ratio has a positive effect on effective decision making**

From the results obtained, there is a positive correlation between the various working capital management techniques on effective decision making. Efficiency ratio from the results above indicated a coefficient of 0.116 which is positive. As such we accept the stated alternate hypothesis and conclude that efficiency ratio has a positive effect on effective ratio in Cameroonian limited companies

▪ **Positive Effect of Investment ratio techniques on effective decisions making.**

According to our data, there is a strong positive correlation between the index on the Various Investment techniques and effective decision making in Companies. The investment index has a positive coefficient, which means that a one-point increase in the index will result in a 0.184 - point improvement in the company's decision making process. The statistical significance of this result at the 5% level suggests that other decision making tools like working environment can also have a big impact on the company's decision making plan. The relationship between the various ratio analysis techniques and decisions making is positive, indicating that an increase of one point in each ratio analysis techniques index will result in an increase of 0.04 point in decision making in companies. However, at the 5% level, this beneficial effect is not statistically significant. This finding implies that although the various ratio analysis techniques such as profitability, liquidity, and efficiency and investments ratios may improve the company's effective decision making, their effects may not be statistically significant. Our analysis offers insightful information about how well various ratio techniques might affect decision making in companies. The findings imply that while other factors like conducive working environment, might have a big impact on effective decisions making, Ratio analysis techniques may be the best way to improve companies

decision making. Our findings further emphasize the significance of taking into account all the Ratio analysis tools during the process of decision making in Companies.

In conclusion, these insights can assist firms in creating and implementing the four ratio analysis tools in order to improve the level of decision making in limited companies in order to achieve their desired results.

**Recommendations**

Based on the above conclusions, the research study recommends that limited companies managers should be thoroughly trained on how to use the 4 ratio analysis techniques and their tools. The managers should undergo continuous development programs through interactive conferences, and open forums. The study also recommends for increased government support to the limited companies. This can be done through resource allocation in this sector. The government in conjunction with its agencies should also assist limited companies in sorting out the problems of managing working capital by setting out guidelines and regulation on proper corporate governance in this sector.

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