### Analyze The Contribution Of Assets Management Strategies On The Customer Satisfaction Of Commercial Banks In Rwanda

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Abstract- The study was about Asset management strategies and customers satisfaction of commercial banks in Rwanda as the case study. The study was motivated by the various episodes of private bank failures in many parts of the world. This study therefore, examined the contribution analysis of Asset management strategies on customers satisfaction of commercial banks in Rwanda. To achieve, the general objective was to analysis the contribution of Asset management strategies on customers satisfaction of commercial Banks in Rwanda. A multimethod approach composed of both qualitative and quantitative research design was used. Data was collected from both primary and secondary sources using questionnaire and documentation were used. A population comprised of 270 from different commercial banks operating in Rwanda. Data was captured using the statistical package for sciences (SPSS 21) and presented into frequency tables. A simple regression and Anova analysis were carried out. A significance test  $t \le 5\%$  was assumed. The findings indicated that Asset performance measures have strong effect where the econometrics and statistical analysis shows a strong contribution with  $(\beta=0.721)$  on Satisfaction Rate (SR),  $(\beta=0.768)$  on the Customer Effort Score (CES); The Same findings demonstrate that the Risk management strategies plays a positive contribution on customer satisfaction of Commercial banks where the econometrics and statistical analysis shows positive contribution of Asset management strategies with ( $\beta$ = 0.623) on Satisfaction Rate (SR) and ( $\beta$ =0.655) on the Customer Effort Score (CES). Lastly the findings demonstrate that the Asset portfolio Risk has a good effect on customers satisfaction of commercial banks in Rwanda where the econometrics and statistical analysis shows the ties contribution of Asset portfolio Risk with (β=0.531) on Satisfaction Rate (SR), (β=0.510) on the Customer Effort Score (CES) on customers satisfaction of commercial banks

*Index Terms*- Asset portfolio Risk; Risk management strategies and Asset performance measures

#### I. HISTORICAL BACKGROUND

#### Introduction

Scholars and practitioners have been analyze the contribution of Assets Management Strategies on the Customer

Satisfaction of Commercial Banks for some years, The Assets Management Strategies such as Asset portfolio Risk; Risk management strategies and Asset performance measures in large Financial corporations has been documented to be a key ingredient in the revitalization of commercial Banks as well as in the ongoing management of these larger commercial banks. While the research on commercial banks is clear evidence that Assets Management Strategies plays an important contribution in the success of these commercial banks, there is less data to support the idea that Assets Management Strategies plays a similarly vital role in other levels of the executive chain, including the management effeciency, policy instrument and financial sector strategies segment, the dearth of research in the wholeworking capital component such as Cash, Raw materials and inventory, finished goods and Account receivable that surprising to consider the important contributions.

#### I.1 contextual Expansion aspect

According to (WEF, 2014) the Steeped in a rich history of managing nation wealth, some big Banks in the world such as Clarien Bank established itself as one of Bermuda's first family offices in 1974 demonstrate how to controling corporate's Assets Management Strategies. With deep roots in the community and a full suite of wealth management offerings, contries such USA, Western Europe and some Asian and African States were improved their wealth of a discerning, international clients based on whose changing and complex needs demand better tailored solutions.

Since the financial crisis priod, clients have become increasingly engaged in the process of managing their wealth supported by the Assets Management Strategies. There is now a notable trend away from the dominance of global, wholesale banks, as families gravitate towards boutique-style wealth managers offering more personalised, bespoke financial solutions; The contemporary client often has a global footprint and, as such, is increasingly seeking out a trusted advisor to help them navigate a more complex world, (Thomas, Franz, James, & Jess, 2011)

Today With increased reporting and due diligence standards, along with myriad tax regimes through which clients may operate, it is essential Assets Management Strategies providers solve these complexities and offer trust, estate planning and fiduciary services; Furthermore, with a heightened awareness of one's tax

obligations, it is important Assets Management Strategies have access to a network of multijurisdictional tax advisors and other service providers for their clients in order to assist in the setup of complex, tax-effective private client structures. (Ling & F. W. Kellermanns., 2010)

At the Continent perspective, After showing that the intensity with which people were enslaved and exported from Africa during the 1400–1900 period helps account for overall financial development, household access to credit, and firm access to finance which assisted them to improved their Assets Management Strategies, evaluate in three potential mechanisms linking the slave trade to modern finance information sharing institutions, trust in financial institutions, and the quality of legal institutions, (Ross, Chen, & Wensi, 2017)

According to (Lamar & Jason, 2017) Since the beginning of the 21st century, Africa has benefited from an unprecedented growth in GDP supported by the corporate's Assets Management Strategies; In fact, since the beginning of its ascent in 2002, it has risen to become one of the fastest growing regions in the world; Despite suffering a serious economic downturn during the global financial crisis, overall African nominal GDP growth has managed to stay at around 12.4 percent on average supported by increasing the Assets Management Strategies

At the regional perspective, the origins of the Assets Management Strategies in East African Community (EAC) can be traced back to the long history of Finance, trade, administrative, and socio-cultural ties between Partner States, stretching back nearly a century in its present form was formally created to include Kenya, Tanzania, and Uganda in 1999, In 2007, EAC membership was extended to Burundi and Rwanda, (Elke & Craig, 2017)

According to (Sandrey, 2015), The EAC implemented a Customs Union from the beginning of 2005 as a significant milestone achieved with the signing of the Common Market Protocol in November 2009, ratified by all Partner States in April 2010; The agreement envisages the phased liberalisation of Assets Management Strategies in financial services and the elimination of restrictions on the free movement of capital by 2015 at the latest supported by strong Assets Management Strategies on the achivement of Customer santisfaction component such as cash, accounts receivable (customers' unpaid bills) and inventories of raw materials and finished goods, current liabilities and accounts payable.

For (World Bank., 2014) About 22 multinational and transnational finance corporate such as Kenya Commercial Bank, Equity Bank, Fina Bank, and Commercial Bank of Africa and others owned by EAC members states as hub are operating in the region; There are four (4) Kenyan banks with a total of 63 branches 35 in Kenya,16 in Tanzania, 31 in Uganda 16 in Rwanda, 7 in Burundi in 2012.

At National perspective, the development of the Assets Management Strategies in Financial sector in Rwanda was based on few financial institutions composed by 3 commercial banks and 2 specialized banks operated with a total of less than 20 branches in the country, and one microfinance (UBPR) with around 146 branches which the genocide affected heavily the banking sector as resulted in closure of the Central bank for 4 months, government wealth looted, with two-thirds of the national monetary base in addition to US \$7 million in cash which was

taken from the UBPR as consequently, contry took almost a period to reestablish Rwandan finacial system, (Ingabe & Kigabo, 2016) According to the same scholar (Ingabe & Kigabo, 2016) The post genocide period was marked by increase in number of banks, where in 2010 there were 6 commercial banks with 28 branches, 2 specialized banks and 1 union of financial institutions (UBPR) with 148 branches, only 7 % of all branches of financial institutions and by the end of 2019, 10 commercial banks, 7 specialized banks and 34 Microfinance bank were in operations supported by Assets Management Strategies in the Country.

#### I.1 Problem Statement

Since 2011, Rwanda coordinated its the Financial sector improving for its Assets Management Strategies plans such as Asset portfolio Risk; Risk management strategies and Asset performance measures which assisted on her customers santisfaction in the Commercial Banks with the implementation of the country where its aiming to become a Middle Income Country (MIC) status by 2035 and High-Income Country (HIC) status by 2050. This has made the Country to be ranked by several international bodies such as International Monetary Fund, World Bank; World Economic Forum on Africa; Easy of Doing Business, (Laure, et al., 2020)

Some studies including (BNR, 2019) (Karemera, 2013) and (BK, 2014) indicate the highest level of despite the widely recognized importance of the Financial Sector and the increased the international attention in this area, at which Assets Management Strategies operations remains low at domestic level as facing a low level of contribution on her dependent indicators of Satisfaction Rate (SR) and Customer Effort Score (CES), to face the Financial challenges in which should resolve by them.

Based on the above studies, different challenges entitled gaps such as feeble investment in Financial sectors of 17%, the low level of using management systems and management capacities services at the rate 9%, low Skills and expertise of implimenting financial leadership at the rate of 21% low savings rate level of 16.6%, High-interest rate of 20%, and total assets decreased from 58% in 2010 to 42% in 2015, the population living below the poverty line to less than 30%; extreme poverty to less than 9%, Unemployment Rate of 13.2% and this could be fixed by the Assets Management Strategies management and control, however, it has no enough effect on customers satisfaction of Commercial Banks in Rwanda.

This is the reason the Researcher decided to carry out a study, which provided his contribution to the aforementioned gaps by analyse the existence contribution of Assets Management Strategies and customers satisfaction of Commercial Banks in Rwanda.

#### I.2 Research Objectives

The general objective is to analyze the contribution of Assets Management Strategies on the Customer Satisfaction of Commercial Banks

#### I.2.2. Specific objectives

- ✓ To Analyze the contribution of Asset Portfolio Risk on the Customer Satisfaction of Commercial Banks
- ✓ To assess the impact of Risk management strategies on the Customer Satisfaction of Commercial Banks

✓ To understand the effect of Asset performance measures on the Customer Satisfaction of Commercial Banks

#### I.3 Research hypothesis

According to (Creswell J., 2009) the Hypothesis is defined as a proposition which can be tested to determine its validity; it may prove to be correct or incorrect (positive or negative aspect). The function of hypothesis is to test specifically relationship between phenomena in such way. Referring on this assumption the researcher verified if really and at what extent the pillars of Independent variable in this study (Asset portfolio Risk; Risk management strategies and Asset performance measures) has a significant role on the dependent variable in this study (Customer Satisfaction of Commercial Banks). The Hypothesis of this study was proposed based on the Creswell's confirmation

 $\mathbf{H}_{01}$ : The Asset Portfolio Risk has no significant contribution on the Customer Satisfaction of Commercial Banks

 $\mathbf{H}_{02}$ : The Risk management strategies has no impact on the Customer Satisfaction of Commercial Banks

**H**<sub>03</sub>: The Asset performance measures has no significant effect on the Customer Satisfaction of Commercial Banks

#### II. Diverse Literature on the contribution of Assets Management Strategies and Customer Satisfaction of Commercial Banks

Different theories and models from Literature were used that assisted the conceptual contribution between Assets Management Strategies and Customer Satisfaction of Commercial Banks, Rwanda as a case study.

### **II.1** Theoretical on the contribution of Assets Management Strategies and Customer Satisfaction of Commercial Banks

During this study, Theoretical literature was based on as thoughts and opinions of how Commercial Banks are in operations

## II.1.1 A Modern Portfolio Theory Approach to Asset Management in the listed South African Property Market (Albertino, 2009)

According to (Albertino, 2009) A Modern Portfolio Theory Approach to Asset Management in the listed South African Property Market is generally less risky than the same asset held in isolation of Brigham and Gapenski; The expected rate of return on the portfolio is a weighted average of the expected returns on the components securities, with the same portfolio properties as weights. For example, in the simplified case of two securities, the portfolio return

can be calculated as follows:

E(rp) = WA E (rA) + W B E (rB)

Where E(rp) = Expected return of Portfolio P

E(rA) = Expected return of security A

E(rB) = Expected return of security B

WA = Proportion of portfolio invested in security A

WB = Proportion of portfolio invested in security B

Kinghorn suggested that if the same were true for portfolio risk, investors would have little, if any incentive to diversify their holdings. Any risk-spread benefits would be offset by a reduction in expected returns (Kinghorn, 1990). It is clear that under these

conditions an investor would simply set their specific risk levels and choose the security or asset that offered the required returns. However, portfolio risk is a function of the weighted average of the individual variances plus the weighted covariance's between the returns of pairs of shares. In the simplified case of two securities, with returns on the individual securities having a normal distribution, the portfolio standard deviation can be calculated as follows:

 $\sigma p = \sqrt{(WA \ \sigma B)^2 + (WA \ \sigma B)^2 + 2 \ (WA \ \sigma A)(WA \ \sigma B)} \ \rho AB$ 

Where  $\sigma p = portfolio variance (represents risk)$ 

 $\sigma A$  = standard deviation of security A

 $\sigma B$  = standard deviation of security B

WA = Proportion of portfolio invested in security A

WB = Proportion of portfolio invested in security B

 $\rho AB$  = Correlation coefficient between A and B

The variance of the portfolio is a sum of the contributions of the component security variances plus a term that involves the correlation coefficient between the returns on the component securities. The correlation coefficient between security A and B should between -1 and 1 for example -1 < GAB < 1. If the correlation between the component

securities is small or negative, then there will be a greater tendency for the variability in the returns on the two assets to offset each other. This will reduce portfolio risk. The reduction in portfolio risk is represented by portfolio variance in the above equation, when the correlation coefficient is lower.

All property investment requires careful analysis of many contingencies on which the decision depends. There are five basic steps that will guide an investor to make an investment decision. The five steps are as follows.

- (i) Identify the goals, objectives and constraints of the various participants in the investment process which an investment must satisfy in order to be acceptable.
- (ii) Analyse the overall investment environment-market, legal, financing and tax in which the investment decision must be made.
- (iii) Forecast the expected future benefits and costs (cash flows) arising from the ownership of the investment. This analysis involves four types of decisions: operating, financing, and reversion decisions as well as tax planning.
- (iv) Apply appropriate decision-making criteria to compare the benefits with the costs of the investment. An analysis must be carefully developed to be relatively certain of the investments ability to meet the constraints and objectives of all the participants in the investment process.
- (v) Accept or reject the investment under the assumptions of the input variables.

The investment process is used to discover whether a particular investment is feasible. A property investment is feasible when the investor determines that there is a reasonable likelihood of satisfying explicit investment objectives, which must be tested against a specific set of structure in which the expected risks and expected returns can be analysed.

## II.1.2 The Risk Management theory: the integrated perspective and its application in the public sector, (Ignacio, 2013)

According to (Ignacio, 2013), the Despite these possible theoretical disputes in the conception of risk mentioned before, we should focus in our case, in the different application of the concept in social science. In finance for instance, risky options involve monetary outcomes with explicit probabilities and they are evaluated in terms of their expected value and their riskiness. Thus the traditional approach to risk in finance literature is based on a mean-variance framework of portfolio theory of Markowitz; Moreover, the idea of risk in finance would be understood within the scope of systematic (non-diversifiable) risk and unsystematic (diversifiable) risk of Gehr; Another established concern in finance is default risk and it is often argued that the performance of the firm is linked to the firm's default risk Shapiro and Titman. A large part of the literature on risk on finance, deals as well with several techniques to measure the risk of the firm's investment portfolio.

the Risk in economics on the other hand, is understood within two separate categories, endogenous (controllable) risk and background (uncontrollable) risk. Thus, it is recognized by scholars that economic decisions are made under uncertainty in the presence of multiple risk.

Therefore, the researchers can say that economics, or to be more precise Neoclassic economy, argue that people would be risk averse when the size of the risks would be large; Therefore, in economics, the concept of risk-bearing preferences of agents for independent risk would be described under the notion of "standard risk aversion". While the economist assumes an individual's risk preferences as a function of probabilistic believes, psychology would explore how human judgment and behavior systematically forms such beliefs. As a consequence, psychology mainly concentrates in the risk taking behavior (risk preferences); Therefore this discipline searches for the patterns of human reactions to the context, reference point, mental categories and associations that influence how people make decisions.

The same scholar (Ignacio, 2013), risks might affect economic activity through the psychological influence of uncertainty. Risk perception plays a central role in psychology, where the key concern is how individual perceives risk and how it differs from the actual outcome.

Additionally the sociological perspective on risk was originated from the psychological and anthropological view of the discipline. Nonetheless, in the last decades we have seen some convergences between economist and psychology in the literature of economic behavior, a distinctive discipline of decision theory. The intention of this approach is to include the standard economic model of individual's formal rational action in the understanding of the way they actually think and behave (irrationality). In contrast to efficient market hypothesis behavioral economics would provide descriptive models in making judgments under uncertainty. Consequently, the researchers might see several disciplinary overlaps considering the concept of risk which is currently progressing with the emerging of new research on the topic.

Finally and for the purpose of this article we will select a definition of risk, which should be coherent with the objectives and scope of the document. The definition of risk that researchers will use for this article as being more consistent with the modern perspective of Risk Management, is "the distribution of possible deviations from expected results and objectives due to events of uncertainty, which might be internal or external to the organization". In this perspective, the influence of risk factors could have then connotations of positive or negative and assumes the risk to be a generator of both potential losses and opportunities. Both elements together ambivalence of threat and opportunity as well as the chance to create the desired future might explain why risk management has become so popular in business and politics.

### II.1.3 A Performance Management Model For Physical Asset Management By (JL & DC, 2016)

According to (JL & DC, 2016), the Performance management is a topical subject in business and the past decade has seen a significant number of publications on performance related issues, such as performance frameworks, operational efficiency and performance integration. Performance can be seen as a collection of processes that will assist stakeholders in taking appropriate actions to create a performing organization in the future (i.e. more efficient and effective) Lebas and Euske. To take such actions, decisions must be based on information from quantitative indices. This process of measuring and collecting performance data, interpretation, identifying problems and making decisions to improve performance within the scope of the business goals, have been associated with the term performance management (Kaydos. Industry has become obsessed with performance, attempting to quantify every aspect of a business (Neely and Austin), whilst not focusing on the "critical few" processes that do need to be managed. Although companies have always managed their assets, Woodhouse asset management is becoming increasingly important. In today's competitive business environment it is prerequisite to manage assets effectively and efficiently in order to get maximum return on investment. This can only be achieved by considering the entire life cycle of the asset together with all related costs.

A general description for asset management is the global management process through which the highest value decisions regarding the use and care of assets are made and executed. In conjunction with the asset life cycle, and acknowledged by authors (for example, Woodhouse, it is clear that asset management affects all areas of the business. Therefore it needs to be aligned and integrated into functional and operational business processes. The relationship between asset management and structured performance management was identified through systems thinking philosophies such as Total Productive Maintenance and reliability models. In the current business environment a mere relationship proves to be inadequate. Modern performance practices promote the vertical integration between top-level goals and operational strategies as well as horizontal integration between process results and customers' requirements. These practices need to be applied to asset management explaining the need for synergy between asset- and performance management that can be incorporated within business processes.

### II.1.4 Consumer Satisfaction Theories: A Critical Review by (Atila & Fisun, 2008)

According to (Atila & Fisun, 2008), This theory has not gained much support from researchers, partly because it is not clear whether consumers would engage in such discrepancy adjustments as the model predicts in every consumption situation. In his criticism of the Dissonance theory, Oliver for instance, argues that "Generally, it is agreed that satisfaction results from a comparison between X, one's expectation, and Y, product performance. Thus, it is the magnitude and direction of this difference, which affects one's post-decision affect level. X serves only to provide the comparative baseline. Moreover, consumers are under no particular pressure to resolve the X-Y difference. In fact, satisfaction/dissatisfaction is thought to arise from recognition and acknowledgement of dissonance" (p. 206). If the Dissonance Theory holds true, then companies should strive to raise expectations substantially above the product performance in order to obtain a higher product evaluation.

However, the validity of this assumption is questionable. Raising expectations substantially above the product performance and failing to meet these expectations may backfire, as small discrepancies may be largely discounted while large discrepancies may result in a very negative evaluation; This suggestion fails to take into account the concept of "tolerance level"; The tolerance level suggests that purchasers are willing to accept a range of performance around a point estimate as long as the range could be reasonably expected. When perceptions of a brand performance, which are close to the norm (initial expectation), are within the latitude of acceptable performance, and then it may be assimilated toward the norm of Woodruff. That is, perceived performance within some interval around a performance norm is likely to be considered equivalent to the norm. However, when the distance from this norm is great enough, that is perceived performance is outside the acceptable zone, then brand performance will be perceived as different from the norm, which, in contrast to this model's assumption, will cause dissatisfaction not a high product evaluation.

The Dissonance Theory fails as a complete explanation of consumer satisfaction, however, it contributes to the understanding of the fact that expectations are not static in that they may change during a consumption experience. For instance, the importance attached to pre-holiday expectations may change during the holiday and a new set of expectations may be formed as a result of experiences during the holiday. This implies that as customers progress from one encounter to the next, say from hotel's reception to the room or the restaurant, their expectations about the room may be modified due to the performance of the previous encounter

#### II.2 The Econometric Model on the contribution of Assets Management Strategies on the Customer Satisfaction of Commercial Banks

The researchers empirical strategy was used to test the to analyze the contribution of Assets Management Strategies on the Customer Satisfaction of Commercial Banks, uses the methodology of (Beck *et al.* 2004) to analyze the empirical

contribution between Assets Management Strategies on the Customer Satisfaction of Commercial Banks. Thus, the researchers regression equation of financial perfomance of commercial banks is defined as follows:

$$W_{i,t} - W_{i,t-1} = \alpha W_{i,t-1} + \beta INS_{i,t} + \delta X_{i,t} + \delta X_{i,t} + n_t + \epsilon_{i,t}$$
(1)

where  $(\boldsymbol{W_{i,t}} - \boldsymbol{W_{i,t-1}})$  is Customer Satisfaction of Commercial Banks, X represents a vector of control variables (Satisfaction rate, Net Promoter Score (NPS), Customer Satisfaction Score (CSAT), Customer Effort Score (CES) and Intention to buy again), The researcher use the following approximation to calculate the Satisfaction Rate (SR) and Customer Effort Score (CES)

between t et t-1: 
$$\frac{W_{i,t}-W_{i,t-1}}{W_t} = \frac{\Delta W_t}{W_t} \cong lnCW_{t-1} + \frac{W_{i,t}-W_{i,t-1}}{Y_t}$$

According to literature on Satisfaction Rate (SR) and Customer Effort Score (CES) regressions to Solow, authors such as Beck *et al.* (2002) and Allen *et al.* (2001), made an assume of technical progress rate and a depreciation rate of the physical capital constants, the sum of which is  $\rho + d = 0.05$ 

The government consumption, openness to commercial and terms of commercial),  $W_{i,t-1}$  the logarithm of initial Satisfaction Rate (SR) and Customer Effort Score (CES) to control the conditional convergence effect of the standard Solow-Swan growth theory and INS is customers satisfaction penetration defined as ratio of premiums to Satisfaction Rate (SR) and Customer Effort Score (CES)  $n_t$  is time fixed effects,  $\epsilon_{i,t}$  is the idiosyncratic error term and the subscripts  $i=1,\ldots N$ , and  $t=1,\ldots T$ , represent country and time period, respectively. In equation (1),  $\beta$  is the researcher coefficient of interest and allows to analyse the effect of Customer satisfaction in commercial Banks. The researcher anticipate a positive sign for  $\beta$ .

Furthermore, the convergence hypothesis between the financial studied suggests that the coefficient  $\alpha$  of  $W_{i,t-1}$  is negative and significant in the growth model, ie 0 < 1 + < 1. To examine the heterogeneity the effect analyse of Asset management strategies on Customer satisfaction in Commercial Bank, the researcher specify an augmented version of equation (1) as follows:

$$W_{i,t} - W_{i,t-1} = \alpha' W_{i,t-1} \beta' INS_{i,t} + \rho * (INS_{i,t} \beta' MS_{i,t})$$
$$+ yMS_{i,t} + \theta' * \delta X_{i,t} + n'_{t} + \epsilon_{i,t}$$

Where MS<sub>i,t</sub> represents the conditional variables of countryspecific structural characteristics which are Asset portfolio Risk; Risk management strategies and Asset performance measures and Customer satisfaction in Commercial Bank compsed by Satisfaction Rate (SR) and Customer Effort Score (CES); The three categories of conditional variables defined above include variables described as follows: first, to analyse whether Asset portfolio Risk has a positive contribution on Customers satisfaction in Commercial Bank in Rwanda; Second, to assess if Asset performance measures has a positive impact on Customer satisfaction in Commercial Bank in Rwanda; lastly Third, to understand if management capacities have a positive effect on Customer satisfaction in Commercial Bank in Rwanda. The researcher retains the Asset portfolio Risk; Risk management strategies and Asset performance measures in Commercial Bank composed by Satisfaction Rate (SR) and Customer Effort Score (CES), by himself but also through complementarities with Financial Sector in general, Commercial banks in particular.

#### **II.3** Conceptual framework

A Conceptual framework is a diagrammatical research tool intended to assist the researcher to develop awareness and understanding of the situation under scrutiny and to communicate this (Kandampully & Tingting, 2019). In this case the reseacher find out that the <u>Financial statement analysis</u> is the process of reviewing key financial documents to gain a better understanding of how Customer satisfaction in Commercial Bank are performing in terms of impacting the <u>Balance Sheet</u>, <u>Income Statement</u>, <u>Cash Flow Statement</u> and the <u>Annual Report</u>.

Normally the Customer satisfaction in Commercial Bank in Rwanda are characterized by different indicators such as Satisfaction rate SR, Net Promoter Score (NPS), Customer Satisfaction Score (CSAT), Customer Effort Score (CES) and finally Intention to buy again which all of these component can have academic challenges to analyse all of them based on the limitations on one side academic linkages between these pillars of

Asset management strategies and its indicators of are Asset portfolio Risk; Risk management strategies and Asset performance measures and on other side of dependent variable. based on that challenge, the researcher was focused on two active indicators only such as Satisfaction Rate (SR) and Customer Effort Score (CES)

A theoretical framework is used in research to outline possible courses of action or to present a preferred approach to an idea or thought. It can be defined as a set of broad ideas and principles taken from relevant fields of inquiry and used to structure a subsequent presentation. In this conceptual framework in figure 2.1, there are demonstrate the linkage between the independent variable and dependent variable is an outline

Figure 2. 1: Conceptual framework, 2020

**Source:** (Dickson, Emad, & Joe, 2018), modified by the researcher 2020

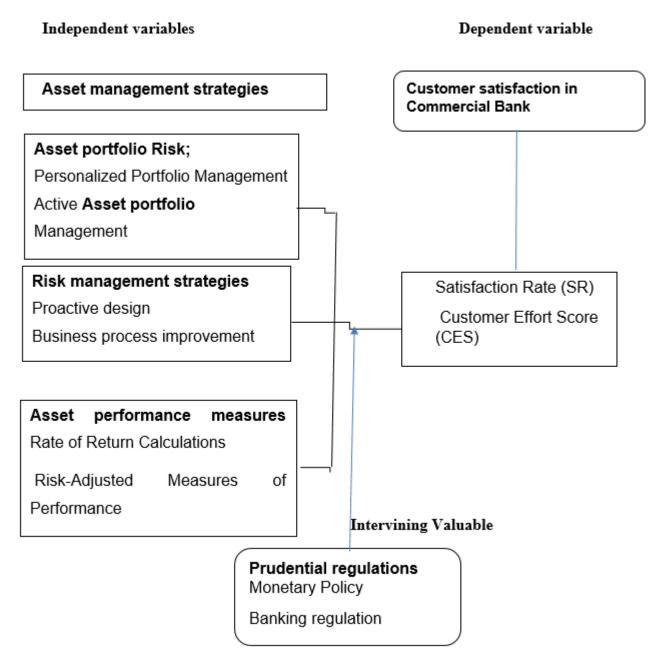


Figure 2. 1: Conceptual framework, 2020 Source: (Dickson, Emad, & Joe, 2018), modified by the researcher 2020

In figure 2.1, the conceptual framework gives an overview of the types of research variables that play roles in this study. In the above conceptual framework are Asset Portfolio Risk; Risk management strategies and Asset performance measures are independent variables. The independent variables that are Asset management strategies also referred to as manipulating variables deal with all theories and practices related to customers' satisfaction of commercial banks; On the other hand, bank performance is the dependent variable measured such as Satisfaction Rate (SR) and Customer Effort Score (CES).

The use of appropriate framework Asset portfolio Risk in commercial banks gives them competitive advantage, reduces costs in most operations and services, and leads to efficiency in transactions and better customer services; These in turn lead to better Bank performance of commercial banks which adopt framework Risk management strategies in their operations; On the other hand when commercial banks don't adopt framework Asset performance measures, they are likely not to realise competitive advantage, their costs should be high in most operations and services, maybe inefficient in their transactions and they should offer poor customer serve which in turn lead poor Bank performance; accordingly when there are good and favourable

Prudential regulations like Monetary Policy and Banking regulation, working capital of commercial banks should be high and low when regulations, policy instruments and sector strategies are poorly crafted and unfavourable.

After firms achieve optimal efficiency in Asset performance measures such as Leadership capacity building management and Reaserch and Development utilization and deploying them to effectively two likely scenarios can emerge; The organizations will be very successful at home and amass sufficient resources and capabilities that they can effectively deploy in competing regionally and globally; As a result, these firms should expand regionally and globally and into new products either to stretch their success record globally or to protect their home advantage; In expanding regionally and globally and into new products, these firms gain access to complementary resources domiciled within these new territories leading to greater heterogeneity and complementarily enhancing regional and global competitiveness; This is an initial explanation of resources, expansion strategies, and performance. Conversely, after internal efficiency is attained firms may fail to deploy their internal competitiveness effectively within territorial markets.

#### II.4 Empirical analyses on the contribution of Assets Management Strategies on the Customer Satisfaction of Commercial Banks

Different Knowledge and results derived from the investigation, observation, experimentation, and experiences were done by different researches on similar work with Assets Management Strategies with is pillars of Asset portfolio Risk (Personalized Portfolio Management Active Tax Management); Risk management strategies (Proactive design and Business process improvement) and Asset performance measures (Rate of Return Calculations

Risk and Risk-Adjusted Measures of Performance) Customer Satisfaction of commercial Banks (Satisfaction Rate (SR) and Customer Effort Score (CES)) were dependent variables while Prudential regulations (Monetary Policy and Banking regulation) as intervining Valuable on opposed to the theoretical knowledge based on logical or mathematical assumptions to drive the study.

### II.4.1 The contribution of Asset Portfolio Risk on the Customer Satisfaction of Commercial Banks

According to (Florin, Drahomira, & Bruce, 2017) The contribution of Asset Portfolio Risk on the Customer Satisfaction of Commercial Banks may wish to split their funds between securities – for example in a two asset portfolio say 50% of A and 50% of B in which case the portfolio return will be a weighted average of the expected returns on the individual securities. If we return to our example and select Securities A & B for illustration purposes and invest 50% of our funds in A and 50% of our funds in B the expected return will be (5.2% x 0.5) + (3.6% x 0.5) generating a weighted return of 4.4% for this two security portfolio.

For (Ray, 2010) The contribution of Asset Portfolio Risk on the Customer Satisfaction of Commercial Banks in big part of Europe, especially in the Czech Republic has been the engine for the inclusive growth of the country, both in terms of economic performance and in terms of labour market. With the annual production of 118 vehicles per 1,000 inhabitants, the automotive

sector makes up nearly 25% of the country's industrial production and exports and contributes approximately 7.4% of GDP (Kozelský & Novák, 2015). In 2016, cars were exported for the total amount of \$18.7 billion and vehicle parts of \$13.5 billion.

As for (Khan, 2011) The contribution of Asset Portfolio Risk on the Customer Satisfaction of Commercial Banks with average return of the auto manufacturers (2005-2014) stands on the level of 16% while mean return is 15.9%; The average risk based on results of 2005-2014 captured from the formula (1), is 6.3%; Volatility of returns is computed on the winsorized values (2.5% smallest and largest values were replaced by respective 0.025 and 0.975 quantile values) to eliminate influence of outliers. The findings shows risk-return characteristics of manufacturers in Portfolio A on the yearly basis.

For (William, 2018) The contribution of Asset Portfolio Risk on the Customer Satisfaction of Commercial Banks was also broken down into a number of categories including age of the firm, peer group, NSE listed, number of years in operation, number of clients, asset base and turnover. The analysis shows that 60.8% of the commercial banks in Kenya were 10-15 years old, 24.2% of the banks were 6-10 years old, 10% were 16-20 years old, 3.3% were over 20 years old while 1.7% of the banks were 0-5 years old. The majority of the banks (38.5%) had asset base of 10 billion and above. About 54.2% of the commercial banks in Kenya had 100,000-500,000 customers while 44.2% of the commercial banks in Kenya had a turnover of less than Kshs. 50 billion. About 57.5% of the firms belonged to tier I, 23.3% of the firms belonged to tier II while 19.2% of the firms belonged to tier III. Nearly 81.7% of the commercial banks in Kenya were not listed in NSE while 18.3% were listed in NSE. About 60.8% of the commercial banks had operated in Kenya for 11-15 years, 24.2%.

"Risks are evaluated with assumptions and uncertainties being clearly considered and presented" had a mean of 4.4 and a standard deviation of 1.23. "Risk is evaluated in terms of both quantitative and qualitative value" had a mean of 4.7 and a standard deviation of 1.17.

According to (Harelimana, 2017) analytically showed that the contribution of Asset Portfolio Risk on the Customer Satisfaction of Commercial Banks in Rwanda was increased the portfolio size of 20 is required to eliminate 95 % of the fiable risk on required to eliminate an extra 4 % (i.e., 99 % total) of fiable risk; the result depends neither on the investment horizons, sampling periods nor the markets involved; But the number of stocks required in portfolio in order to eliminate the same percentage of fiable risk; according to the size of population; For example, in order to eliminate 98 % of fiable risk, 50 stocks are required in 10000 stocks population and 22 – in 40 stocks population.

Same scholar (Harelimana, 2017) show the perception of the respondents about business risk in RSSB; respondents with a mean of 2.8500 and standard deviation of .94266 agree that RSSB manage financLal risk by investing in more than one asset, respondents with a mean of 2.9750 and standard deviation of .42022 agree that Financial risk is one of unsystematic risks which can be reduced through dLversLficatLon, respondents with a mean of 2.5625 and standard deviation of .82437 appreciate the way RSSB manage its financLal risk, respondents with a mean of 2.5375 and standard deviation of .77857 agree that RSSB investments are nationwide, in most of all the districts in Rwanda most especially in the real estate sector, respondents with a mean

of 3.0125 and standard deviation of .66549 agree that Financial Risk stems from the alteration in capital structure of the firm correlated with the company's financLng activities.

### II.4.2 The impact of Risk management strategies on the Customer Satisfaction of Commercial Banks

According to For (Sundararajan & Balino, 2011) The impact of Risk management strategies on the Customer Satisfaction of Commercial Banks carry out risk evaluations while 37% of the respondents indicated that enterprises carry out risk evaluations; They also indicated that enterprises carry out risk evaluations to enable them to correctly understand, evaluate and manage the risk exposure embedded in its existing and future lines of business. This is in line with Speklé (et al., 2007), who stated that many firms have realized the importance of risk management in IT project management to achieve project success.

For (Esther, Kennedy, & David, 2015) The impact of Risk management strategies on the Customer Satisfaction of Commercial Banks gave almost 62% of its contribution indicated that enterprises undertook risk identification for the purposes of mitigating risk facing projects to a very great extent, 30% indicated to a great extent while 8% enterprise undertook risk identification for the purposes of mitigating risk facing projects to a moderate extent. This implied that the enterprises distinctive risk identification effort to influence achievement of project performance.

As for (EAC., 2011) the new membership of Burundi and Rwanda in the EAC Risk management strategies on the Customer Satisfaction of Commercial Banks process has come to further widen the market up to 135.5 million people in 2010; The expanded trade and investment among the EAC Partner States has increased economic growth and development prospects in the region, with regional GDP (at constant 2000 levels) increasing from US\$42.4 billion in 2006 to 74.5 billion in 2009 and is expected to reach \$ 80 billion in 2012. Uganda, Rwanda and Tanzania sustained incremental growth trends between 2006 and 2008.

For (Didier & Michael, 2014) the results on the impact of Risk management strategies on the Customer Satisfaction of Commercial Banks between risk transfer and performance of Kigali Gatuna road rehabilitation project was at 0. 827 mean that risk transfer was at the level of 82.7% which prove significant relationship between risk transfer and project performance. If the researcher considers the level of significance which is 0.05, there is therefore a significant relationship between risk transfer and performance of Kigali-Gatuna rehabilitation project because their p-value (0.000) is statistically significant at 5%.

## II.4.3 The effect of Asset performance measures and the contribution of Assets Management Strategies on the Customer Satisfaction of Commercial Banks

According to (Aditya, 2016) the Asset performance measures on analyze the contribution of Assets Management Strategies on the Customer Satisfaction of Commercial Banks demonstrates an ISO 55002 offers interpretation and guidance for such a system to be implemented in accordance with the requirements of ISO 55001. The adoption of ISO 55000 series is to enable an organization to achieve its objectives through the effective and efficient management of its assets. Implementation of this asset

management system provides assurance that organizational objectives can be achieved consistently and sustainably over time. Besides, ISO 5001for energy management was launched in 2011; ISO 27001 on information security was released in 2013. Presently work is going on to finalize ISO 45001 on occupational health and safety during 2016.

For same scholar (Elizaveta, Irina, & Yegor, 2020) The Asset performance measures on analyze the contribution of Assets Management Strategies on the Customer Satisfaction of Commercial Banks in different contries of Europe and northern Amercian appeared to provide either a theoretical (45.2%) or descriptive (33.9%) contribution, while 20.7% of papers have a prescriptive orientation. Among the theoretical papers, conceptual or exploratory are presented by an even number (42% of each type), and only 16% of papers appeared to be predictive. Only two papers from the sample were found to have a normative orientation and were primarily devoted to sustainability issues. Most of the prescriptive papers (81%) are instrumental.

As for (Anna, Macleans, & Roseline, 2013) the Asset performance measures on analyze the contribution of Assets Management Strategies on the Customer Satisfaction of Commercial Banks IN EAC Tea tops with very high RCA of 961.3 well above the minimum of 1. It is followed by jute with RCA of 823.6. Cut flowers are in a third place with 653.3. Tanzania is the second competitive country in the EAU. It has revealed comparative advantage in 471 product lines. It is highly specialized in the production of such products. Tanzania has a very high RCA of 2263.5 in the production of raw furskin pieces. It is followed by ivory in which it has RCA of 1173.7. The third place is occupied by precious metal ores and concentrates with RCA of 1108.6. Tanzania like Kenya the top 10 products are predominately primary products.

As for (MBONIGABA, 2019) The Asset performance measures and the contribution of Assets Management Strategies on the Customer Satisfaction of Commercial Banks ECOBANK generated reported diluted earnings per share (EPS) of 0.28 U.S. Dollar cents, a fall of 83% compared with the 1.69 U.S. Dollar cents reported in 2014. Return on total shareholders' equity (ROE) was 4.2% in 2015 versus 16.5% in the prior year. Profit attributable to shareholders of ETI amounted to \$66 million, compared to \$338 million in 2014.

The major reason behind these less than satisfactory results was the high level of impairments on loans and financial assets made in 2015, totaling \$532 million, almost double 2014's level. For instance, the reported revenues decreased by 8% in 2015, underlying revenues would have increased by 9%, assuming constant exchange rates. The cost base remained fairly stable, with a cost-to income ratio (CIR) of 64.9%; The balance sheet is healthy, with a Tier 1 ratio of 20.5% and a total capital adequacy ratio (CAR) of 23.9%; The revenue for the year ended 31 December 2015 was \$2.1 billion while that of the parent company was \$174 million. Profit before tax for the Group was \$205 million and \$61 million for the parent company. The profit after tax stood at \$107 million, (ibid, 2019).

### II.4.4 The importance of Customers satisfaction on commercial Banks in Rwanda

According to (Kabu & Soniya, 2017) The importance of Customers satisfaction on commercial Banks demonstrates the

service provider and service receiver is really important to make the relation smooth; The gray section of graph shows 37% of the members are in neutral with the amount of contact between Customers satisfaction and the members; While 30% of the total members thought that the communication between the organization and the customer was not satisfactory; Meanwhile, 27% of the respondents were satisfied with the contact between Customers satisfaction and the members. Although the percent is still less than other, 7% of the customers need to have an adequate amount of the contact and discuss the problems that they are facing.

For (Tao, 2014) All the members of the Trivsel are getting a response regarding their concerns and question about the services. 80% of the member' states that Customers satisfaction has been very responsive to the questions and concerns about the services. Whereas, 13% of the respondents' states that Customers satisfaction is extremely responsive. The figure also shows there are a certain percentage of customers who didn't fully agree that, Customers satisfaction is responsive regarding to concern of the customers. According to the pie chart, it mentions that 3% out of total respondent believes that Customers satisfaction is not so responsive.

As for (Negi, 2009 ) the importance of Customers satisfaction on commercial Banks in Rwanda

(well above 70%) were aware of the financial services therein. However, some of the domestic services were not well known especially by the medium and small financial services. Specifically, services such as issuance of withholding finance (43.9%), privileged persons refund (36.1%), appeal process (47.9%), finance arrears certificate (54.8%), automatic VAT refund (54.2% and non-automatic refund (43.7%) need more emphasis to enable taxpayers to understand and be able to use them. Impliedly, categories of taxpayers who were not aware of these services were not equally appreciative of the services.

#### III. Materials and Methodology

This study adopted a research philosophy from the empirical literature, hinged on two prominent research paradigms: positivistic and deductive philosophical approach. The positivist approach is quantitative and based upon values of reason, truth,

and validity. The focus is purely on facts gathered through direct observation and experience and measured empirically using quantitative survey methods, experiments, and statistical analysis (Erickson & Kovalainen, 2008). Positivism maintains that knowledge should be based on real facts, not on the abstractions.

#### III.1 Research Design

A research design is a plan or an overall strategy for conducting the research. It is a means of ensuring that a research process is systematic and scientific enough so that the results obtained can be applied in real life (Prabhat & Meenu M., 2015). This study was mainly descriptive research. Descriptive research studies are those studies, which are concerned with describing the characteristics of a particular individual or characteristic of a group, (Kothari, 2004).

For (Mugenda & Mugenda, 2003), on the other hand, define descriptive research as a process of collecting data to gain insight on the data patterns and answer questions concerning the status of the subject of study. (Sekaran, 2003), also contends that a descriptive study is undertaken to ascertain and be able to describe the characteristics of the variables of interest in a situation; A descriptive survey design was adopted for this study because; first, it was used to quantitatively describe specific aspects of the population. Finally, the study data used a sample of the population from Commercial Banks by utilizing questionnaires, from which research findings were generalized to the population.

#### **III.2** Target population

The target population is an aggregation of study elements and refers to all members of a real or hypothetical set of people, events, or objects to which researcher wish to generalize the findings (Prabhat & Meenu M., 2015); The target population for the study was 829 from Bank of Kigali, Bank Populaire du Rwanda, I &M Bank, Cogebanque, Ecobank, KCB, Equity Bank, GT-Bank, Access Bank, and CraneBank (BCR) in financial activies operating in the period of 2011-2019 which means that some of these Commercial Banks were started its performance activities in Rwanda in the formentioned period with a sample size of 270 given after statistic calculation.

#### Proportional stratified sample size

Targeted Banks	Target Population	Proportion (%)	Sample
Bank of Kigali	95	11.46	31
Bank Populaire du Rwanda	94	11.34	30
I &M Bank	85	10.25	28
Cogebanque	85	10.25	28
Ecobank	75	9.04	24
KCB	85	10.25	28
Equity	80	9.25	26
GT-Bank	85	10.25	28
Access Bank	75	9.04	24
Crane Bank (BCR)	70	8.44	23
Total	829	100	270

#### Source: Secondary data, 2020

The selected sample units show a general representation of other Commercial Banks Organs in the study area that operate in different business activities (sectors).

#### **III.3 Sampling Frame**

The sampling frame was designed to cover Commercial Banks officials such as DGs, CEOs, Directors, Head of Units, Specialists, Experts, Professionals from Rwanda. A study sample is a subgroup or a fraction of the target population and is a representation of the study population (Roger, 2011); Multistage sampling was used in this study; This was followed by systematic random sampling, by using random number table digits to identify the respondent; The next step involved the selection of the respondents from the sampling frame of potential respondents from each targeted institution.

#### **III.4 Sampling Technique**

The sample size is the number of individuals from whom the researcher obtains the required information and is usually denoted by the letter n. The respondents for this study were the Experts from Bank of Kigali, Bank Populaire du Rwanda, I &M Bank, Cogebanque, Ecobank, KCB, Equity, GT-Bank, Access Bank, and CraneBank (BCR); In determining the sample size, this study adopted the formula and procedure for categorical data using the Fishers formula; According to (Singh & Masuku, 2014) reformulated the formula of Yamane 1967, provided a simplified formula to calculate the said sample sizes as below.  $n = \frac{N}{1 + N(e^2)}$ 

$$n=\frac{N}{1+N(e^2)}$$

Where n is the sample size, N is the population size, and e is the level of precision 5% for our study

Thus, 
$$=\frac{N}{1+N(e)2} = \frac{829}{1+829*(0.05)^2} = 269.7$$
, and then, n= 270 employees.

As for (Singh et al, 2014) added that the proportional stratified sample size means that, the number of sampling units drawn from each stratum is in the proportion to the relative population size of that stratum.

#### **III.5 Data Collection Instruments**

According to (Kothari, 2004) questionnaires are popularly used data collection tools. Primary data was collected using structured to have a broad range of data to enhance data accuracy.

#### III.5.1 Primary Data

Primary data was collected from 270 officials from different Commercial Banks such as Bank of Kigali, Bank Populaire du Rwanda, I &M Bank, Cogebanque, Ecobank, KCB, Equity, GT-Bank and Access Bank, and CraneBank (BCR) operating in Rwanda.

#### III.5.2 Secondary Data

Secondary data was collected based in the Financial Reports, Financial Statement reports, Journals, Books, and other document reports from Bank of Kigali, Bank Populaire du Rwanda, I &M Bank, Cogebanque, Ecobank, KCB, Equity, GT-Bank and Access Bank, and CraneBank (BCR).

#### III.6 Data collection procedures

According to (Creswell & Garrett, 2008), defined data collection as the process of gathering and measuring information on variables of interest in an established systematic fashion that enables one to answer stated research questions, test hypotheses, and evaluate outcomes. For this study, primary data was collected by administering questionnaires face to face and via e-mail. 270 questionnaires were distributed to the different officials from the commercial Banks.

#### III.6.1 Validity Test of Research Instrument

Validity is about the accuracy of the data obtained in the study in representing the variables of the study (Saunders, 2015), defined validity as to how well an instrument measures what it is intended to measure. The study used open-ended and close-ended questionnaires with Likert scale; Another important feature is the population for which the measure is intended, once some of these decisions were made and a measure was developed. This study established the validity of the research instrument with the help of the university supervisors and the pilot testing; In this study, the following measures were put place to ensure the items in the questionnaire produced valid data.

#### III.7 Data Analysis and Presentation

#### III.7.1. Data analysis

To support the relationships as suggested in the model, the study used statistical and econometrics Package for Social Sciences (SPSS version 21) to analyze the perception, multinomial model, and descriptive analysis. First, the researcher analyzed internal correlations to analyse the contribution among the research variables. Second, the researcher conducted a standard multiple regression analysis to test for the direct contribution of the independent variables on customers' satisfaction of commercial banks in Rwanda with its indicators such as Satisfaction Rate (SR) and Customer Effort Score (CES)

#### III.7.2 Data Analysis and Presentation

The Data analysis was conducted according to the research objectives and hypotheses; This included the need to analyze the contribution of the contribution of Assets Management Strategies and Customer Satisfaction of Commercial Banks based on different Institutions of Rwanda; Before processing the responses, data preparation was done on the completed questionnaires by editing, coding, entering, and cleaning the data.

#### **Model specification**

#### III. 8.1 Multiple Linear Regression Model

The study employed a multiple linear regression model given by equation below

 $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$  without the moderator Where:

- Y: Customers satisfaction of commercial banks in i. Rwanda
- i.  $X_1$ : Asset Portfolio Risk;
- ii.  $X_2$ : Risk management strategies;
- iii.  $X_3$ : and Asset performance measures,
- Z: Prudential regulations

- v.  $\beta_0$ : Coefficient of Intercept
- vi.  $\beta 1 \beta 3$ : The corresponding coefficients for the respective independent variables for Asset management strategies
- vii. ε: error term

The linear regression model is based on the following assumptions; the randomness of the error term, assumption of zero means of the error term, the assumption of constant variance, and assumption of normality of the variables, (Robert & Lachlan, 2014) emphasize that regression methods have become an integral component of any data analysis concerned with describing the relationship between a response variable and one or more explanatory variables; The data were obtained from the questionnaires are the primarily quantitative analyzed to identify the most statistically significant contribution of Asset management strategies ( Asset Portfolio Risk; management strategies and Asset performance measures,) with the variables of Asset management strategies and customers satisfaction of commercial banks in Rwanda.

#### **III.9** Test of Hypotheses

According to (Creswell & Garrett, 2008) the ANOVA was used to determine whether there are significant differences between independent variable's pillars of assets management strategies on customer satisfaction of commercial banks in Rwanda at a selected probability level; The conclusion is based on the p-values where, if the null hypothesis is rejected then the overall model is significant and if null hypothesis fails to be rejected the overall model is insignificant. The null hypothesis with a p-value greater than 0.05 was rejected and the p-value less than 0.05 we failed to be rejected.

#### III.10 Statistical and econometric technique

Both econometrics and statistics allowed the researcher to analyze, present, and interpret data; the output was leading the researcher to show the contribution of Assets Management Strategies on the Customer Satisfaction of Commercial Banks.

#### IV Data analysis and interpretation of the contribution of Assets Management Strategies on the Customer Satisfaction of Commercial Banks

#### IV.1 Response Rate

The survey was conducted in 2020 covering commercial banks in Rwanda. 270 structured questionnaires were distributed to the DGs, CEOs, Directors, Head of Units, Specialists, Experts, and Professionals. Out of the 270 questionnaires, 270 were filled and returned. This represented 100% response rate. This response rate is considered excellent to make conclusions for the study. (Mugenda & Mugenda, 2003), observed that a 50% response rate is adequate, 60% good 70% rated very good and above 95% excellent.

The response rate of 100% is therefore excellent. The recorded high response rate can be attributed to the data collection procedure. Then, pre-notified the potential participants of the intended survey utilized a self-administered questionnaire where the respondents completed the questionnaires. The questionnaires

were picked shortly after follow up calls to clarify queries as well as prompt respondents to fill the questionnaires.

#### IV.2 Demographic information

This section presents the demographic characteristics such as gender, level of education, year worked in the organizations, organization size and number of years' institutions and organization's has been in existent.

#### **IV.2.1 Respondents Gender distribution**

Table 2.1: Respondents Gender distribution.

	Frequency	Valid Percent
Female	158	58.5
Male	112	41.6
Total	270	100.0

Source: Primary data, 2020

On the table **2.** 1; out of 270 respondents who returned all the questionnaires distributed 58.52 % were the Females and 41.48% were the Males. This implies that females were the majority of the researcher's respondents whom were implying that they are the majority heading the commercial banks in Rwanda.

#### **IV.2.2** The Level of Education

Table 2.2: Level of Education.

	Frequency	Valid Percent
Universities level Postgraduate level	225 45.6	83.3 16.6
Total	270	100.0

Source: Primary data, 2020

On the table **4. 2;** The Respondents' qualifications varied greatly with a higher proportion of employees having university level education at 83.3%, Post University at 16.7% which demonstrate that the respondents of the commercial banks were skilled with knowledge

#### IV.2.3 The Working Experiences in the commercial Banks

Table 2.3: The Working Experiences in the commercial Banks

	Frequency	Valid Percent
Over 5 years	260	99.2
Between 3 and 5 years	10	1.0
Total	270	100.0

Source: Primary data, 2020

On the table **2. 3;** The years worked distribution were that majority had worked for over 5 years 99.2%, while 1.0% of respondents worked with those commercials between 3 and 5 years.

### IV.2.4 Type of Commercial Banks Institutions or Organizations

Table 2.4: Type of commercial banks

	Frequency	Percent
Accepting Deposits	s 0.0	
Commercial Bank	0.0	
The lending of Funds	S	0.8
Commercial Bank	2	0.8
Mixt Commercial Bank	268	99.2
Total	270	100.0

Source: Primary data, 2020

In the table 2.4 above, 99.2% of respondents were from the Mixt Commercial Bank, 0.8% were from The lending of Funds Commercial Bank and 0.0% were from Accepting Deposits Commercial Bank prospectively equal proportion.

#### **IV.2.5** Life of institutions

Table 2.5: Life of institutions

	Frequency	Percent	
6 to 10 years	4	1.5	
11 to 15 years	265	98.1	
Over 15 years	1	0.4	
Total	270	100.0	

Source: Primary data, 2020

https://youtu.be/94ZKyu6SVgoThe results from table 2.5 indicates that 98.1% of respondents indicated that their Commercial Banks have been in operation for years between 11 and 15 years, 1.5% between 6 to 10 years, 0.4% for over 15 years.

### IV.2.6 Commercial banks faced financial leadership component

Table 2.6: Opinion on financial leadership component.

	Frequency	Valid Percent
Yes	295	97
No	05	3
Total	270	100.0

Source: Primary data, 2020

The findings from table 2.6 show that 97% of respondents said that their institutions faced the commercial bank face one of these three financial leadership component (Management efficiency, management systems, management capacities, and prudential regulations) towards working capital of commercial banks.

### IV.3 The contribution of Asset Portfolio Risk on the Customer Satisfaction of Commercial Banks.

This section focuses to the results of the research on contribution between Asset Portfolio Risk and the Customer Satisfaction of Commercial Banks

## IV.3.1 The Asset management strategies supported by its pillar of Asset Portfolio Risk is improving positively on the Customer Satisfaction of Commercial Banks.

The Respondent's perception to The Asset management strategies supported by its pillar of Asset Portfolio Risk is improving positively on the Customer Satisfaction of Commercial Banks. Their responses were summarized in the table below.

**Table 3.1:** The Asset management strategies supported by its pillar of Asset Portfolio Risk is improving positively on the Customer Satisfaction of Commercial Banks

	Frequency	Percent	
Strongly agree	49	17.5	
Agree	88	32.6	
Disagree	130	48.1	
Strongly disagree	3	1.7	
Total	270	100.0	

Source: Primary data, 2020

The results from table 3.1 indicate that among 270 respondents, 48.1% of respondents disagreed the statement that the Asset management strategies supported by its pillar of Asset Portfolio Risk is improving positively on the Customer Satisfaction of Commercial Banks, 32.6% agreed that the perception to the Asset management strategies supported by its pillar of Asset Portfolio Risk is improving positively on the Customer Satisfaction of Commercial Banks, 17.5 strongly agreed

the perception to the Asset management strategies supported by its pillar of Asset Portfolio Risk is improving positively on the Customer Satisfaction of Commercial Banks and 1.7% strongly agreed statement that the Asset management strategies supported by its pillar of Asset Portfolio Risk is improving positively on the Customer Satisfaction of Commercial Banks

## IV.3.2 Investment Management as part of Management efficiency should improve the working capital of commercial banks in Rwanda

The Respondent's perception to Investment Management as part of Management efficiency should improve the working capital of commercial banks in Rwanda remain constant. Their responses were summarized in the table below

Table 3.2: The Personalized Portfolio Management as part of Asset Portfolio Risk should improve the Customer Satisfaction of commercial banks in Rwanda

	Frequency	Percent	
Strongly agree	33	12.2	
Agree	123	45.6	
Disagree	114	42.2	
Total	213	100.0	

Source: Primary data, 2020

On the table 3.2. Shows that, among 270 respondents 45.6% agreed the statement that The Personalized Portfolio Management as part of Asset Portfolio Risk should improve the Customer Satisfaction of commercial banks in Rwanda, 42.2% disagreed the statement while 12.2% strongly agreed that The Personalized Portfolio Management as part of Asset Portfolio Risk should improve the Customer Satisfaction of commercial banks in Rwanda.

#### IV.3.3 The Active Asset portfolio Management brought new strategies which assisting on the achievement of Customer Satisfaction commercial banks in Rwanda

This question brought was to check perception of respondents to the Active **Asset portfolio** Management brought new strategies which assisting on the achievement of Customer Satisfaction of commercial banks in Rwanda

Table 3.3: The Active Asset portfolio Management brought new strategies which assisting in the achievement of Customer Satisfaction of commercial banks in Rwanda

	Frequency	Percent	
Strongly agree	20	8.0	
Agree	140	51.2	
Disagree	110	40.7	
Total	270	100.0	

Source: Primary data, 2020

On the Table 3.3, 51.2% supported the statement that the Active Asset portfolio Management brought new strategies which assisting in the achievement of Customer Satisfaction commercial banks in Rwanda while 8% strongly supported the statement The Active Asset portfolio Management brought new strategies which

assisting in the achievement of Customer Satisfaction commercial banks in Rwanda.

### IV.4 The impact of Risk management strategies on the Customer Satisfaction of Commercial Banks;

This section focuses on the results of the research on the impact of Risk management strategies on the Customer Satisfaction of Commercial Banks

#### IV.4.1 The Risk management strategies well oriented assisted on the improvement of Satisfaction Rate (SR) and Customer Effort Score (CES) as indicators of customers satisfaction of commercial banks

The Respondents perception to The **Risk management strategies** well oriented assisted on the improvement of Satisfaction Rate (SR) and Customer Effort Score (CES) as indicators of customers satisfaction of commercial banks. Their responses are summarized in the table below.

Table 4.1: The Risk management strategies well oriented assisted on the improvement of Satisfaction Rate (SR) and Customer Effort Score (CES) as indicators of customers satisfaction of commercial banks

	Frequency	Percent
_		
Strongly agree	6	2.2
Agree	253	93.7
Disagree	9	3.3
Strongly disagree	2	0.7
Total	270	100.0

Source: Primary data, 2020

On the table 4.1, Among 270 respondents, 93.7% of the respondents agreed on the statement that The **Risk management strategies** well oriented assisted on the improvement of Satisfaction Rate (SR) and Customer Effort Score (CES) as indicators of customers satisfaction of commercial banks, 2.2% of the respondents strongly agreed, 3.3% disagreed on the statement that The **Risk management strategies** well oriented assisted on the improvement of Satisfaction Rate (SR) and Customer Effort Score (CES) as indicators of customers satisfaction of commercial banks, and 0.7% strongly disagreed on the same statement that The **Risk management strategies** well oriented assisted on the improvement of Satisfaction Rate (SR) and Customer Effort Score (CES) as indicators of customers satisfaction of commercial banks.

## IV.4.2 The Proactive design well oriented on management system supported by its component which affects the customer satisfaction of commercial banks in Rwanda

During the research, there were assessment on the proactive design well oriented on management system supporting its component which affecting the customer satisfaction of commercial banks in Rwanda:

Table 4.2: The Proactive design well oriented on management system supporting its component which affects the customer satisfaction of commercial banks in Rwanda

	Frequency	Percent
Strongly agree	42	16.2
Agree	187	68.6
Disagree	40	14.8
Strongly disagree	1	0.4
Total	270	100.0

Source: Primary data, 2020

The results from table 4.2 indicates that 68.6% of respondents agreed that the proactive design well oriented on management system supporting its component which affects the customer satisfaction of commercial banks in Rwanda, 16.2% strongly agreed that the proactive design well oriented on management system supporting its component which affect the customer satisfaction of commercial banks in Rwanda, 14.8% disagreed on the statement, 0.4% strongly disagreed that the proactive design well oriented on management system supporting its component which affects the customer satisfaction of commercial banks in Rwanda

## IV.4.3 Strong Business process improvement plays a critical role in ensuring Banks stay financially adaptable and able to build resilience and sustainability in today's fierce market.

During the research, there were assessments on strong business process improvement that plays a critical role in ensuring banks to stay financially adaptable and able to build resilience and sustainability in today's fierce market.

Table 4.3: Strong Business process improvement plays a critical role in ensuring banks to stay financially adaptable and able to build resilience and sustainability in today's fierce market.

	Frequency	Percent
Strongly agree	129	47.8
Agree	95	35.2
Disagree	46	17.0
Total	270	100.0

Source: Primary data, 2020

The results from the table 4.3 indicates that 47.8 % of respondents' Strong Business process improvement plays a critical role in ensuring Banks stay financially adaptable and able to build resilience and sustainability in today's fierce market, 35.2% agreed that Strong Business process improvement plays a critical role in ensuring banks to stay financially adaptable and able to build resilience and sustainability in today's fierce market.; while 17% disagreed on the statement that strong business process improvement that plays a critical role in ensuring Banks to stay financially adaptable and able to build resilience and sustainability in today's fierce market.

### IV.5. The effect of Asset performance measures on the Customer Satisfaction of Commercial Banks.

This section aims to establish the views of respondents on the effect of Asset performance measures on the Customer Satisfaction of Commercial Banks. The table 4.10 shows the respondents perspectives to the strategy.

## IV.5.1 The Asset performance measures well oriented should support on the Satisfaction Rate (SR) and Customer Effort Score (CES) achievement.

**Table 5.1:** The Asset performance measures well oriented should support on the Satisfaction Rate (SR) and Customer Effort Score (CES) achievement.

	Frequency	Percent	
Strongly agree	130	48.5	
Agree	130	48.5	
Disagree	8	3.0	
Strongly disagree	2	0.9	
Total	270	100.0	

Source: Primary data, 2020

The results from the table 4.13, 48.5% strongly agreed supported the statement that The Asset performance measures well oriented should support on the Satisfaction Rate (SR) and Customer Effort Score (CES) achievement,48.5% agreed that The Asset performance measures well oriented should support on the Satisfaction Rate (SR) and Customer Effort Score (CES) achievement, 3% disagreed and 0.9% strongly disagreed that The Asset performance measures well oriented should support on the Satisfaction Rate (SR) and Customer Effort Score (CES) achievement

## IV.5.2 The Rate of Return Calculations under Asset performance measures are used to strengthen the efficiently of the customers' satisfaction in commercial banks

The researcher tried to find out deferent sights of respondents on how The Rate of Return Calculations under Asset performance measures are used to strengthen the efficiently of the customers' satisfaction in commercial banks

Table 5.2: The Rate of Return Calculations under Asset performance measures are used to strengthen the efficiently of the customers' satisfaction in commercial banks

	Frequency	Percent	
Strongly agree	141	50.3	
Agree	106	39.3	
Disagree	19	7.0	
Strongly disagree	4	3.4	
Total	270	100.0	

Source: Primary data, 2020

From the table 5.2 above, out of 270 responded, 50.3% of respondents strongly agreed that the Rate of Return Calculations under Asset performance measures are used to strengthen the efficiently of the customers' satisfaction in commercial banks, 39.3% of the respondents agreed that The Rate of Return Calculations under Asset performance measures are used to strengthen the efficiently of the customers' satisfaction in commercial banks, 7% of respondents disagreed and only 3.4% of respondent strongly disagreed that The Rate of Return Calculations under Asset performance measures are used to strengthen the efficiently of the customers' satisfaction in commercial banks.

## IV.5.3 Risk-Adjusted Measures of Performance of Asset performance measures increase the capacity of customers satisfaction the commercial banks in Rwanda

The Respondents' perception on Risk-Adjusted Measures of Performance of Asset performance measures increase the capacity of customers satisfaction the commercial banks in Rwanda. Their responses are summarized in the table below.

Table 5.3: the Risk-Adjusted Measures of Performance of Asset performance measures increase the capacity of customers satisfaction of the commercial banks in Rwanda

	Frequency	Percent
Strongly agree	115	41.1
Agree	126	46.0
Disagree	20	7.4
Strongly disagree	8	2.5
Total	270	100.0

Source: Primary data, 2020

In the table 5.3 above, 41.1% of the respondent strongly agreed on

	Frequency	Percent
Strongly agree	34	12.6
Agree	210	77.8
Disagree	25	9.3
Strongly disagree	1	0.4
Total	270	100.0

concept that the Risk-Adjusted Measures of Performance of Asset performance measures increase the capacity of customers satisfaction of the commercial banks in Rwanda, 46.0% of the respondents agreed that the Risk-Adjusted Measures of Performance of Asset performance measures increase the capacity of customers satisfaction of the commercial banks in Rwanda,7.4% of respondents disagreed on concept while 2.5% strongly disagreed on the Risk-Adjusted Measures of Performance of Asset performance measures increase the capacity of customers satisfaction the commercial banks in Rwanda.

## IV.6. The effect of Prudential regulations on the Asset management stratégies and customers satisfaction of commercial banks in Rwanda.

This section focuses on the results of the research on moderating The effect of Prudential regulations on the Asset management strategies and customers satisfaction of commercial banks in Rwanda.

#### IV.6.1. The Prudential regulations well oriented is supporting the customers satisfaction of commercial banks

It is interesting to find out the perception of different respondents on the Prudential regulations well oriented in supporting the customers satisfaction of commercial banks.

Table 6.1: The Prudential regulations well oriented is supporting the customers satisfaction of commercial banks

	Frequency	Percent
Strongly agree	100	39.4

Agree	130	45.0
Disagree	25	9.3
Strongly disagree	7	7.4
Total	270	100.0

Source: Primary data, 2020

The data presented in the table 6.1 above indicate that 45% of respondents agreed that the prudential regulations well oriented is supporting the customers satisfaction of commercial banks, 39.4% disagreed that The Prudential regulations well oriented is supporting the customers satisfaction of commercial banks, 9.3% of respondents strongly disagreed that The Prudential regulations well oriented is supporting the customers satisfaction of commercial banks while 7.3% of respondents strongly disagreed that the Prudential regulations well oriented is supporting the customers satisfaction of commercial banks .

## IV.7.2. The strong Monetary Policy prescribed by the Central Bank regulate in the management of customers satisfaction of commercial banks

The researcher was also interested in finding out how the strong Monetary Policy prescribed by the Central Bank regulates in the management of customers satisfaction of commercial banks. The findings were summarized in the table below.

Table 7.2.: The strong Monetary Policy prescribed by the Central Bank regulates in the management of customers satisfaction of commercial banks

Source: Primary data, 2020

On the table 7.2, 77.8% agreed that The strong Monetary Policy prescribed by the Central Bank regulates the management of customers satisfaction of commercial banks, 34 responds or 12.6% strongly agreed that the strong Monetary Policy prescribed by the Central Bank regulates the management of customers satisfaction of commercial banks, 9.3% of respondents disagreed to the concept that the strong Monetary Policy prescribed by the Central Bank regulates the management of customers satisfaction of commercial banks while 0.4% of respondents strongly disagreed that the strong Monetary Policy prescribed by the Central Bank regulates the management of customers satisfaction of commercial banks.

# IV.7.3 The Monetary regulation under the Prudential regulations should stay the main component assisting in the realization of the customers satisfaction of commercial banks in Rwanda

The Respondents gave their view on areas of The Monetary regulation under the Prudential regulations should stay the main component assisting in the realization of the customers satisfaction of commercial banks in Rwanda

Table 7.3: The Monetary regulation under the Prudential regulations should stay the main component assisting in the realization of the customers' satisfaction of commercial banks in Rwanda

	Frequency	Percent
Strongly agree	35	12.7
Agree	205	75.0
Disagree	24	8.9
Strongly disagree	6	5.4
Total	270	100.0

Source: Primary data, 2020

The results from table 7.3 indicates that 75% of respondents agreed the statement that The Monetary regulation under the Prudential regulations should stay the main component assisting the realization of the customers satisfaction of commercial banks in Rwanda, 12.7% of respondents strongly agreed the statement

	Frequency	Percent
Strongly agree	32	11.6
Agree	205	75.8
Disagree	24	9.3
Strongly disagree	6	3.4
Total	270	100.0

that the Monetary regulation under the Prudential regulations should stay the main component assisting the realization of the customers satisfaction of commercial banks in Rwanda, 8.9% of respondent disagreed the statement while 5.4% strongly disagreed the statement that the Monetary regulation under the Prudential regulations should stay the main component assisting in the realization of the customers satisfaction of commercial banks in Rwanda.

### IV.8 . The importance of the customers satisfaction on Commercial Banks in Rwanda

This section focuses on the results of the research on moderating the importance of the customers satisfaction on Commercial Banks in Rwanda

### IV.8.1. The customers satisfaction has an importance role on performance of Commercial Banks projection

It is interesting to find out the perception of different respondents how the customers satisfaction has an importance role on performance of Commercial Banks projection.

Table 8.1.: The customers satisfaction has an importance role on performance of Commercial Banks projection

•	Frequency	Percent
Strongly agree	109	40.4
Agree	135	50.0
Disagree	25	9.3
Strongly disagree	1	0.4
Total	270	100.0

Source: Primary data, 2020

The data presented in the table 8.1 above indicate that 50% of respondents agreed that The customers satisfaction has a contribution role on performance of Commercial Banks projection,40.4% strongly agreed on same statement, 9.3% disagreed that The customers satisfaction has an importance role on performance of Commercial Banks projection while 0.4% of respondents strongly disagreed that The customers satisfaction has a contribution role on performance of Commercial Banks projection.

## IV.8.2. The Satisfaction Rate (SR) is a strong indicator of customers satisfaction in contribution of the performance of commercial banks

The researcher was also interested in finding out how the Satisfaction Rate (SR) is a strong indicator of customers satisfaction to make the performance of commercial banks. The findings were summarized in the table below.

## Table 8.2: The Satisfaction Rate (SR) is a strong indicator of customers satisfaction to realize the performance of commercial banks

Source: Primary data, 2020

On the table 8.2, 75.8% agreed that The Satisfaction Rate (SR) is a strong indicator of customers satisfaction to realize the performance of commercial banks, 34 responds or 11.6% strongly agreed to the concept that The Satisfaction Rate (SR) is a strong indicator of customers satisfaction to realize the performance of commercial banks 9.3% of respondents strongly disagreed the concept that The Satisfaction Rate (SR) is a strong indicator of customers satisfaction to realize the performance of commercial banks, while 4.4% of respondents strongly disagreed the concept that The Satisfaction Rate (SR) is a strong indicator of customers satisfaction to realize the performance of commercial banks

## IV.8.3 The Customer Effort Score (CES) is a strong indicator of customers satisfaction make the realization of performance of commercial banks

The Respondents gave their view on areas of The Customer Effort Score (CES) is a strong indicator of customers satisfaction make the realization of performance of commercial banks.

Table 8.3: The Customer Effort Score (CES) is a strong indicator of customers satisfaction make the realization of performance of commercial banks,

	Frequency	Percent
Strongly agree	37	13.7
Agree	208	77.0
Disagree	24	8.9
Strongly disagree	1	0.4
Total	270	100.0

Source: Primary data, 2020

The results from table 8.3 above indicates that 77% of respondents agreed the statement that The Customer Effort Score (CES) is a strong indicator of customers satisfaction make the realization of performance of commercial banks, 13.7% of respondents strongly agreed the statement that The Customer Effort Score (CES) is a strong indicator of customers satisfaction to realize the performance of commercial banks while 0.4% strongly disagreed the statement that The Customer Effort Score (CES) is a strong indicator of customers satisfaction to realize the performance of commercial banks.

IV. Inferential Statistics on Analyze the Contribution of Assets Management Strategies on the Customer Satisfaction of Commercial Banks in Rwanda The researcher used this module to provide his contribution based on the findings and the module given in the Methodology.

4.9.1. Joint Model Summary: Analyze the Contribution of Assets Management Strategies on the Customer Satisfaction of Commercial Banks in Rwanda in term of Satisfaction Rate (SR)

Regression analysis was used to establish the Contribution of Assets Management Strategies on the Customer Satisfaction of Commercial Banks in Rwanda in term of Satisfaction Rate (SR) Precisely, the following linear model was used:

Y Satisfaction Rate  $(SR) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$ 

Where; Y stands for Satisfaction Rate (SR) while  $\beta_0$  is the intercept (a constant),  $\beta_1$ ,  $\beta_2$  and  $\beta_3$  are the slopes associated to the independent variables  $X_I$ ,  $X_2$ , and  $X_3$ ) and  $\epsilon$  is the error term which is assumed to be independent, identical and normally distributed random variable with a zero mean and a constant variance. In this study,  $X_I$  denotes **Asset Portfolio Risk**,  $X_2$  denotes **Risk management strategies**, and  $X_3$  denotes and **Asset performance measures**. The findings were tabulated as shown in Table 4.21

Table 9.1: Analyze the Contribution of Assets Management Strategies on the Customer Satisfaction of Commercial Banks in Rwanda in terms of Satisfaction Rate (SR)  Dependent Variable: working capital of commercial banks in Rwanda in terms of Current Asset (CA)								
Sample: 270	Sample: 270							
Included Observations: 270								
I. Variable: AMS	Coefficient		Std. coefficient	t-tatistics	Prob.			
	В	Std. Error	Beta					
1(Constant)	1.999	0.721		2.584	0.000			
Asset Portfolio Risk	0.531	0.053	0.312	4.76	0.001			
Risk management strategies	0.623	0.062	0.032	0.527	0.040			
Asset performance measures	0.721	0.063	0.092	1.353	0.180			
R	0.737		Mean dependent variable	3.52				

R-squared	0.708	S.D. dependent variable	2.132
Adjusted R-squared	0.704	<b>Durbin-Watson statistics</b>	0.162
F-statistics	13.991	Standard Error of Estimate	0.65
Prob (F-statistic)	0.002		

Source: Survey Data 2020

- a. Predictors: (Constant), Asset Portfolio Risk; Risk management strategies and Asset performance measures systems
- b. Dependent Variable: Satisfaction Rate (SR)

A	N	O	V	A	a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	83.683	3	22.421	13.971	.002 <sup>b</sup>
	Residual	401.732	259	1.521		
	Total	491.406	269			

- a. Dependent Variable: Satisfaction Rate (SR)
  - Predictors: (Constant), Asset performance measures systems, Risk management strategies and Asset Portfolio Risk

Source: Survey Data 2020

Table 9.1. displays the summary of the model used which assessed its best fit to the data and its coefficient estimates in an attempt to investigate the effect between financial leadership and working capital in terms of Satisfaction Rate (SR). From table 9.1, column 2, it is observed that R² which is the models goodness of fit for the regression line obtained is 0.708 which means that 70.8% of variation in the dependent variable- Satisfaction Rate (SR) is being explained by the variation in independent variable-financial leadership with only 29.2% of the variation in dependent variable being attributed to the error-term introduced in the theoretical model or other variables other than financial leadership explaining working capital of commercial banks.

 $Y_{\text{ Satisfaction Rate (SR)}}\!\!=1.999+0.531X_1+0.623X_2+0.721X_3+0.002E$ 

Where Y as a Satisfaction Rate (SR),  $X_1$  is Asset Portfolio Risk;  $X_2$  is Risk management strategies  $X_3$  is Asset performance measures systems. From the above equation, it can be observed in column 2 that there is a positive unstandardized beta coefficient.

From the above equation, it can be observed in column 2 that there is a positive unstandardized beta coefficient of 0.531 for  $X_I$  (Asset Portfolio Risk), 0.623 from  $X_2$  (Risk management strategies) and 0.721 for  $X_3$  (Asset performance measures systems).

This indicates that a unit change in Asset Portfolio Risk should increase in mean the working capital in terms of Satisfaction Rate (SR) of the performance of Commercial Bank in Rwanda by 0.531 units from 1.999 when keeping Risk management strategies and Asset performance measures systems constant; A unit change in Risk management strategies should increase in mean the customer satisfaction in terms of Satisfaction Rate (SR) of the Commercial Bank in Rwanda by 0.623 units from 1.999 when keeping Asset performance measures systems and Risk management strategies constant lastly A unit change in Asset performance measures systems should increase customer satisfaction in terms of Satisfaction Rate (SR) of the Commercial Bank in Rwanda by 0.721 units from 1.999 when keeping Asset Portfolio Risk and Risk management strategies constant

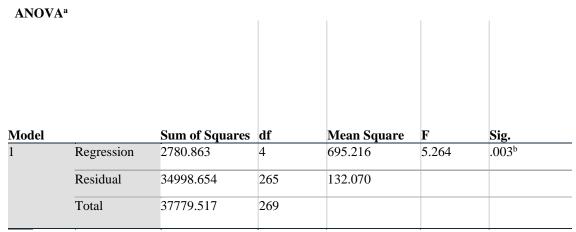
However, the model indicates that Asset performance measures systems ( $\beta$ =0.721) contributes more, followed by Risk management strategies ( $\beta$ =0.623) and lastly Asset Portfolio Risk ( $\beta$ =0.531) respectively in contributing to the increase of the customer satisfaction of commercial banks in Rwanda. With a p-value of 0.002< 0.05, This indicates that the model used is a best

fit for the data used, given all assumptions of normality underlying the model, in the column 6, it can be concluded by said that the Asset management strategies has a statistically contribution on customer satisfaction of commercial banks in Rwanda (F=13.991,  $R^2 = 0.708$ , Sig=0.002 at  $\alpha$ =0.05).

Table 9.2: Analyze the Contribution of Assets Management Strategies on the Customer Satisfaction of Commercial Banks in Rwanda in term of The Customer Effort Score (CES)

			ment Strategies on the Customer Customer Effort Score (CES)		
Sample: 270					
Included Observations: 270	)				
I. Variable: WC	Coefficient		Std. Coefficient	t-Statistics	Prob.
	В	Std. Error	Beta		
1(Constant)	17.035	7.795		14.386	0.000
Asset Portfolio Risk Management systems, X <sub>3</sub> is Management capacities	0.510	0.510	0.185	2.631	0.031
Risk management strategies	0.655	0.723	0.057	0.972	0.040
Asset performance measures systems	0. 768	0.566	0.112	1.697	0.019
R	0.711		Mean dependent variable		1.796
R-squared	0. 711		S.D. dependent variable		0.678
Adjusted R-squared	0.642		Durbin-Watson statistics		1.776
F-statistics	5.259		Standard Error of Estimate		0.2416
Prob(F-statistic)	0.003				

- a. Predictors: (Constant), Asset Portfolio Risk; Risk management strategies and Asset performance measures systems
- b. Dependent Variable: The Customer Effort Score (CES)



- a. Dependent Variable: The Customer Effort Score (CES)
  - Predictors: (Constant), Asset performance measures systems, Risk management strategies and Asset Portfolio Risk

Source: Survey Data 2020

Table 9.2 displays the summary of the model used which assessed its best fit to the data and its coefficient estimates in an attempt to investigate the contribution between Asset management strategies and customer satisfaction in terms of the Customer Effort Score (CES). The correlation coefficient, denoted in table 9.2, column 2 by R squire, between the variables under study, precisely between Asset management strategies and customer satisfaction of commercial banks is 0. 711 From statistical point of view, since Rsquire =71.1% is quite close to 1, this finding suggests that there is a positive and indeed strong association between the variables studied. Same column 2, it is observed that R<sup>2</sup> which is the models goodness of fit for the regression line obtained is 0. 711. This means that 71.1% of variation in the dependent variable-The Customer Effort Score (CES) is being explained by the variation in independent variable- Asset management strategies with only 28.9% of the variation in dependent variable being attributed to the error-term introduced in the theoretical model or other variables other than asset management strategies explaining customer satisfaction of commercial Banks.

The Concretely, this suggests that any input in terms of Asset management strategies would lead into more customer satisfaction of commercial Banks of Rwanda. From table 9.2, column 2, it is observed that the computed F statistic (2, 270) is 5.259 and in column 2, the p-value for the overall regression effect is (p = 0.003), which is less than 0.05 the level of significance. This indicates that the model used is a best-fit for the data used, given all assumptions of normality underlying the model; The Durbin-Watson statistic of 1.776 < 2 which indicates that there is a positive serial of correlation among the observation. Same table illustrated that the regression equation deduced to understand this effect which was:

 $Y \ \ \text{the Customer Effort Score (CES).} = 17.035 + 0.510 X_{1} + 0.655 X_{2} + 0.768 X_{3} + 0.003 E$ 

Where Y on the Customer Effort Score (CES) illustrates the imvolvement of  $X_1$  as Asset Portfolio Risk,  $X_2$  as Risk management strategies and,  $X_3$  as Asset performance measures systems. From the above equation.

This indicates that a unit change in Asset Portfolio Risk should increase in mean the customer satisfaction in terms of the Customer Effort Score (CES) of the Commercial Bank in Rwanda by 0.510 units from 17.035 when keeping Risk management strategies and Asset performance measures systems constant; A unit change in Risk management strategies should increase in mean the customer satisfaction in terms of the Customer Effort Score (CES) of Commercial Bank in Rwanda by 0.655 units from 17.035 when keeping Asset Portfolio Risk and Asset performance measures systems constant and finally a unit change in Asset performance measures systems should increase in mean the customer satisfaction in terms of the Customer Effort Score (CES) of the Commercial Bank in Rwanda by 0.768 units from 17.035 when keeping Asset Portfolio Risk and Risk management strategies.

However, the statistic model indicates that Asset performance measures systems ( $\beta$ =0.768) contributes more, followed by Risk management strategies ( $\beta$ =0.655) and lastly Asset Portfolio Risk ( $\beta$ =0.510) respectively in contributing to the customers' satisfaction in terms of the Customer Effort Score (CES) of Commercial Bank in Rwanda. With a p-value of 0.003<0.05, This indicates that the model used is a best fit for the data used, given all assumptions of normality underlying the model. in column 6, it can be concluded that customers' satisfaction has an econometrics and statistically effect on customers' satisfaction of

commercial Bank (Asset Portfolio Risk) Rwanda (F=5.264, R<sup>2</sup> = 0.711, Sig=0.003 at  $\alpha$ =0.05).

#### V. Conclusion and Recommendation

#### V.1 Conclusion

From the findings it was observed that majority of respondents were from the Mixt Commercial Bank at 99.6%. The findings also revealed the majority of respondents being Female at 58.52%, the majority of 99.2%, have been in their positions between over 5 years. The highest level of education for the majority respondents is university degree with 83.3%, with each institution surveyed having a combined workforce was between 50 to 199 (78.2%); The study established a number of findings and they are summarized per objective.

The researcher findings demonstrate that Asset performance measures systems have strong effect where the econometrics and statistical analysis shows a strong effect on customers satisfaction of commercial banks in Rwanda with ( $\beta$ =0.721) on Satisfaction Rate (SR), ( $\beta$ =0.768) on the Customer Effort Score (CES). Based on these findings, the researcher approved the first hypothesis of this Study with the assumption of H<sub>00</sub> and reject the second ones of H<sub>03</sub>; The Same findings demonstrate that the Risk management strategies plays a positive effect on customers satisfaction of Commercial banks in Rwanda. The econometrics and statistical analysis shows the positive contribution of Asset management on customers satisfaction of Commercial banks in Rwanda with (β= 0.623) on Satisfaction Rate (SR) and ( $\beta$ =0.655) on Customer Effort Score (CES). The researcher approved the first hypothesis of this Study with the assumption H<sub>00</sub> and rejected the second one H<sub>02</sub>; The researcher findings demonstrate that the Asset Portfolio Risk has a good contribution on customers satisfaction of commercial banks in Rwanda where the econometrics and statistical analysis shows the ties contribution of Asset Portfolio Risk with ( $\beta$ =0.531) on Satisfaction Rate (SR), ( $\beta$ =0.510) on Customer Effort Score (CES). The researcher approved the first hypothesis of this Study with the assumption of H<sub>00</sub> and reject the second ones of H<sub>01</sub>.

#### V.2. Recommendation

The Researcher recommends that the competition and consumption protection policy in its nature, should promotes equality by providing fair business framework and with efficient and effective implementation in where economic operators are to get the same opportunities and chances to compete with each other.

Basing on the study findings, the study recommended that the banks should effectively implement and comply with prudential regulations imposed by the regulator due to the nature of the riskiness of the banking sector and its impact on the customer satisfaction of the Country.

The Researcher recommends that a Monitoring of Rwanda's Asset management strategies on a regular basis should be taken into consideration in order to understanding trends, patterns in Financial sector and provide an opportunity to highlight emerging issues on customers satisfaction of commercial banks.

The Rwandan Central Bank "BNR" should monitor and supervise Commercial Banks in Rwanda to ensure financial reporting, legal and regulatory requirements are met by the banks and transparent periodic reporting to stakeholders on Corporate

Governance, Risk Management and Internal Controls is undertaken.

The Researcher recommends that a Monitoring of Rwanda's asset management strategies on a regular basis should be taken into consideration in order to understanding trends, patterns in financial sector and provides an opportunity to highlight emerging issues on commercial banks. This is fundamental importance to achieve Rwanda's customers satisfaction of commercial banks in Rwanda.

#### **Areas for Further Research**

The period of time used which is 2011 to 2019 in the Researcher's opinion is not sufficient for such a study and would recommend for a similar study to be conducted in future that covers more years. This might yield more objective results.

The researcher also recommends a study to be carried out in these factors of macro-economic that can give information on the impact those factors on the financial performance of commercial banks in Rwanda. This would yield more objective results on the true impact of prudential regulations on commercial banks.

Another stream of research could be directed towards deep investigations of each constituent part of the conceptual framework, which would ensure a deeper understanding of the framework's contribution on free movement and cross-border financial cooperation as an element of the Asset management strategies research embedded in another context could address new issues and areas within the field of economic diplomacy, trade promotion, infrastructure development, intelligent growth or support for customers satisfaction of commercial banks market access.

In addition, a deeper understanding of local institutions would allow financial business actors to develop adequate strategies, foresee, and respond proactively to possible difficulties arising from the specifics of the institutional landscape.

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