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ABSTRACT

Recently, the literature defines financial inclusion as the process of ensuring access to appropriate financial products and services needed by all sections of society including vulnerable groups such as weaker sections and low-income groups at an affordable cost fairly and transparently by mainstream institutional players. Financial performance is the company's financial condition over a certain period that includes the collection and use of funds measured by several indicators of capital adequacy ratio, liquidity, leverage, solvency, and profitability. Consequently, Insurance firms are very important for corporations, businesses and individuals because they protect them against any financial losses. It is therefore important for insurance policy makers to understand the relationship between financial inclusion and financial performance so that they can pursue either financial inclusion or financial performance as a policy objective or financial performance as an outcome variable of financial inclusion. Therefore, this study established the relationship between insurance accessibility, insurance usage and insurance technology on financial performance of insurance companies listed in the Nairobi stock exchange. The study further determined the moderating effect of insurance operating environment, and establishes the mediating effect of insurance size on the relationship between financial inclusion and financial performance of insurance companies listed in the Nairobi stock exchange. The study was supported by agency theory, finance growth theory, asymmetry information theory and diffusion of innovation theory. The target population was the 5 insurance companies listed in the Nairobi stock exchange. The study used secondary data collected from annual reports of the Central Bank of Kenya (CBK); Insurance Regulatory Authority (IRA) and Capital Market Authority (CMA) for the period between 2015 and 2020.

Key Words: *Insurance Firms, Financial Inclusion, Financial Performance*

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INTRODUCTION

Recently, the literature defines financial inclusion as the process of ensuring access to appropriate financial products and services needed by all sections of society including vulnerable groups such as weaker sections and low-income groups at an affordable cost fairly and transparently by mainstream institutional players (Anarfo, 2019;Chi Aloysius and Kesuh Jude, 2021). Financial inclusion, usually defined as the use of formal financial services, has become a subject matter of growing interest among researchers, policymakers and other financial sector stakeholders. It refers to the delivery of banking services to masses including privileged and disadvantaged people at reasonable terms and conditions. Hence, an inclusive financial system is required widely not only in the developed countries but has become a policy priority in the various income categories (Haddad and Hornuf, 2019; Tarazi, 2020). In another vein, financial inclusion is described as a situation where people and businesses access valuable and affordable financial products and services that they want, such as transactions, payments, savings, credit and insurance, which are carried out in a responsible and sustainable manner (World Bank Group, 2018). EFInA (2019) described it as the supply of a broad range of financial products of high quality that include credit, payments, savings, pensions and insurance that are affordable and suitable for the adult population, mainly the low-income group. In another definition by Timmermann and Gmehling (2017), financial inclusion refers to the pursuit of useful and affordable financial services access to all individuals and businesses world over. In line with the Seoul Summit, the G20 launched the Global Partnership for Financial Inclusion (GPFI) in December 2010.The GPFI mainly coordinates and implements strategies for the Financial Inclusion Action Plan (FIAP) and serves as a unifying platform for G20 countries, non-G20 countries and crucial stakeholders for peer learning, policy advocacy, knowledge sharing and coordination. World Bank Group (2018) was of the view that financial inclusion is a major enabler that would make extreme poverty decrease and as such encourage shared prosperity in order to attain the global goal of reaching Universal Financial Access (UFA) by 2020. In another definition by Beck (2016), financial inclusion is the establishment of efficient financial intermediaries and markets that would enhance economic growth in the economy. For him, financial development would bring reduction in poverty levels across the world since individuals gain directly by accessing different aspects of financial services. With financial inclusion, financial system performs intermediation function that helps the poor and/or excluded group (small-scale farmers in the case of this study) gain better access to savings and credit services that would help them move out of poverty (Beck, 2016).Financial inclusion has also been defined in terms of access and usage in financial inclusion literature. For instance, CBN (2015), Beck (2016), Timmermann and Gmehling (2017), EFInA (2019), among others, have defined financial inclusion in terms of credit access. For them, financial inclusion refers to access to inexpensive and suitable formal financial services that meet the needs of enterprises and households. Here, access to financial services has to do with geographic access and socioeconomic access. Financial inclusion aims at providing products to specific groups at bottom market end, such as small-scale farmers, utilizing a given technique of delivery and institutions (Beck, 2016).On the other hand, some studies have also defined financial inclusion in terms of usage. Hence, studies such as United Nations Economic and Social Commission for Asia and the Pacific, UNESCAP (2020) and World Bank Group (2018) have seen financial inclusion from the point of usage. For them, beyond having access to financial products and services, the frequency of use of the financial products and services can also be referred to as financial inclusion. Financial inclusion is a major issue that has gained much momentum in the last two decades globally is the extent of coverage of financial systems and institutions. This has been generally discussed under the term financial inclusion or financial exclusion (Bhanot et al., 2012;

Hasnol et al., 2013). Generally, the term “financial inclusion” is concerned with how an economy’s financial services incorporate the vulnerable and low-income earners in such way that they are not marginalized from gaining access to financial products and services (Sinclair, 2013). Equally a growing literature shows that financial inclusion has significant benefits for poor individuals and households. The benefits include access to savings instruments (Ouma et al., 2017), spending on education and health-care (Dupas and Robinson, 2009), greater consumption Turvey and Xiong, (2017), easy access to credit (Hendricks and Chidiac, 2011), encouraging individuals to set up their own businesses (Ozili, 2018b), low-cost financial services through digital finance apps Ozili, (2018b) and empowering women to become financially independent Demirgüç-Kunt, (2014). There is also evidence that the financial policies, instruments and structures created to improve access to finance have had positive effects for financial inclusion (Donovan, 2012; Beck et al., 2014; Ozili, 2018b). The expectation is that financial inclusion will give poor people the tools the rich have used to acquire their great wealth. When poor individuals and households have access to credit, they will feel empowered to start their own businesses and to meet their personal expenses. Financial inclusion also has other benefits to the economy such as greater financial stability, a reduction in the level of unemployment and greater economic growth (Morgan and Pontines, 2014; Neaime and Gaysset, 2018; Ozili, 2018b, 2020a). According to Raychaudhury (2017) every sector and industry in the economy can contribute to the promotion of financial inclusion. The policy-making institutions and the authorities like the NABARD, RBI, IRDA, Pension Fund Regulatory and Development Authority (PFRDA) have made many efforts in terms of framing suitable regulations and guidelines for strengthening financial inclusion. Policies towards financial inclusion have received global attention including developed financial markets. There are concerns about those excluded from the financial/formal banking system even in developed financial markets. According to MAPFRE 2020, in recent years, one of the tools that has been associated with the process of financial inclusion in insurance is micro insurance which refers to insurance for low-income populations, another tool is inclusive insurance intended for groups generally excluded or under-served by the insurance market. The third tool is mass market insurance which encompasses products designed for sale through far reaching distribution channels, in terms of the target population, and standardized products that are easily understandable by their target audience. For example, health insurance designed for distribution through electronic markets in the United States known as exchanges. According to Milana and Ashta (2020), the key aim of financial inclusion is to eliminate the deprived from poverty and put them into main stream financing. Financial inclusion empowers individuals and families, especially the deprived sections of the society, both communally and economically and helps in plummeting scarcity by providing expected and reliable sources of finance Sulong and Bakar, (2018). Financial inclusion influences the demand factors, including the dimensions of accessibility and usages of the formal financial instruments and services through various pathways Ganti and Acharya, (2017).

Financial performance is the company's financial condition over a certain period that includes the collection and use of funds measured by several indicators of capital adequacy ratio, liquidity, leverage, solvency, and profitability. Financial performance is the company's ability to manage and control its resources (IAI, 2016). Salim (2018) conducted a study to examine the financial performance of the insurance companies in Bangladesh during the period of 1983-2012. The study was conducted on the data gathered for profitability measures before, during and after a period of financial liberalization. According to his results financial reform did not have significant effect on the return on asset (ROA) or return on equity (ROE) however, net interest margin (NIM) has increased. Further, it was stated that capital and asset should be maintained through reliable policies as they are the important drivers of profitability. However, the focus of this study was limited to analyses of the effect of financial liberalization. Anila (2017) evaluated the financial performance of Insurance industries in regards with the impact experienced by intellectual capital. The research is based on the data and information extracted from the reports of various Insurance. Structural capital, human capital, return on assets and other financial instruments are used to measure the financial performance of Pakistani Insurance through applying the technique of multiple regressions.

The Insurance industry is regulated, supervised and developed by Insurance Regulatory Authority (IRA), which is a statutory government agency established under the Insurance Act (Amendment) 2006, CAP 487 of the Laws of Kenya. It is governed by a Board of Directors which is vested with the fiduciary responsibility overseeing operations of the Authority and ensuring that they are consistent with provisions of the Insurance Act. According to IRA (2021), insurance companies in Kenya comprises; 56 insurers. Insurance companies listed in the NSE, Kenya include; Jubilee, Britam, CIC, Liberty and Sanlam There are two types of insurance business namely; long-term and general insurance. 5 of the insurance companies listed in the Nairobi stock exchange (NSE); form part of the biggest market share by gross premium income long-term insurance at 74.1% and general insurance at 41.8, hence indicating that the Kenyan insurance business is dominated by a few players.

Table 1: Long term insurance market share by gross premium income

	Long Term Insurers' Market Share by Gross Premium Income			
		2020 Q4	2019 Q4	2018 Q4
	Company	Market Share (%)	Market Share (%)	Market Share (%)
1	BRITAM LIFE ASSURANCE	22.8	24.5	23.6
2	ICEA LION LIFE ASSURANCE	14.5	13.4	13.9
3	JUBILEE INSURANCE COMPANY	13.0	14.4	14.4
4	KENINDIA ASSURANCE COMPANY	7.2	5.7	6.4
5	SANLAM LIFE ASSURANCE	5.8	4.6	5.1
6	CIC LIFE ASSURANCE COMPANY	5.8	6.2	7.0
7	LIBERTY LIFE ASSURANCE COMPANY	5.0	5.2	5.2
8	OTHERS	25.8	26.0	24.4
	Total	100.0	100.0	100.0

IRA 2020

5 out of insurers that control a market share of at least 5% each of the total Gross Premium Income (GPI) under long term insurance business segment by the end of Q4 2020 are listed in NSE.

Table 2: General insurance market share by gross premium income

	General Insurers' Market Share by Gross Premium Income				
		2020 Q4	2019 Q4	2018 Q4	Annual change (2020/2019)
		Market Share (%)	Market Share (%)	Market Share (%)	(%)
1	UAP INSURANCE COMPANY	8.1	8.1	7.9	0.0
2	CIC GENERAL INSURANCE COMPANY	7.8	7.1	7.2	0.6
3	APA INSURANCE COMPANY	7.3	7.1	7.4	0.1
4	JUBILEE HEALTH INSURANCE	6.4	-	-	6.4
5	BRITAM GENERAL INSURANCE	6.3	5.0	4.7	1.3
6	GA INSURANCE COMPANY	6.0	6.3	6.2	-0.3
7	OTHERS	58.2	66.3	66.6	-8.1
	Total	100.0	100.0	100.0	0.0

IRA 2020

Six (6) insurers had a market share of at least 5.0% of total general insurance market, out of which 3 insurers are listed in NSE. These insurers jointly controlled 41.8% of total gross premium income under general insurance business. Everyone around the world expose to possibility of any loss through accident fire, or business and any disaster like death. People need protection against these risks. Insurance firms are very important for corporations, businesses and individuals because insurance firms protect them against any financial losses. In financial services industry the insurance sector is very important in almost all developing and developed countries. It also contributing in reduction of transaction costs, economic growth, efficient resource allocation, facilitation of economies of scale in investment, creation of liquidity, and spread of financial losses Das, U., et al (2003).

Problem Statement

According to IRA 2019 report, the financial services sector in Kenya is one of the six priority sectors under the economic pillar Vision 2030 blueprint. IRA 2018 -2022 strategic plan aims to align the objectives of the insurance industry in Kenya with the national development objectives as set out in the Big Four Agenda, Medium-Term Plan (MTP III) and the Vision 2030. In order to effectively meet policyholders and insurance beneficiaries' expectations, the Authority has engaged a number of strategies which will enable policyholders and the general public to have increased access to insurance services in a fair, safe and stable environment. These strategies are further aimed at ensuring financial inclusion is achieved. In 2019, Nairobi County accounted for 83.2% of the total gross direct premium. The County has consistently accounted for the highest industry premium since 2015, IRA (2019). This indicates an opportunity for insurance companies to achieve higher inclusion through ensuring increased total gross direct premium the other 46 counties. The performance ratios as per IRA 2020 report indicated a downward trend; Return on Equity (ROE) was 38% in 2013, 30% in 2014, 21% in 2015, 20% in 2016, 19% in 2017, 11% in 2018 and 7% in 2019 (Deloitte 2020). Return on assets (ROA) reduced from 2.30% in 2018, to 1.75% in 2020.The Shareholders' funds to Total Assets, reduced consistently from 24.26% in 2018, 23.23% in 2019 and 22.22% in 2020 (IRA 2020). These negative impact has been attributed to Squeezed margins in the sector, continued cases of fraud, premiums that have grown at a slower rate than the economic growth and large loss events such as COVID-19 which has impacted negatively on insurance premiums and performance due to loss of livelihoods, restrictions on travel, reduced returns from the capital markets, premium reduction as well as increase in insurance claims in some classes of insurance business. It will take transformative changes in insurers' strategy and operating models to withstand the waves of change that are threatening to disrupt the future of insurance. The outlook on long-term impacts and recovery from the pandemic is still uncertain as it will take time for businesses to recover. With growth in premiums already constrained in 2021, insurers need to immerse themselves into transforming their businesses. This requires that products and services are designed to meet the identified customer groups, provision of clear product information and prompt handling of customer claims and complaints, Delloite (2020). This promotes financial inclusion. Studies have been carried out on Financial Inclusion and performance including; Jordan, Shihadeh, Hannon, Guan, Haq and Wang (2018); Chen, Feng and Wang (2018); Ondabu and Oranga (2018); Omwansa and Waema (2014) however these studies focused on banks. Insurance policy makers need to understand the relationship between financial inclusion and financial performance so that they can pursue either financial inclusion or financial performance as a policy objective or financial performance as an outcome variable of financial inclusion. This study investigated the relationship between financial inclusion and financial performance of insurance companies listed in the Nairobi stock exchange.

Objectives of the study

The objective of the study was to investigate the relationship between financial inclusion and financial performance of insurance companies listed in the Nairobi stock exchange. The specific objectives were;

- To establish the relationship between insurance accessibility and financial performance of insurance companies listed in the Nairobi stock exchange.
- To analyze the relationship between insurance usage and financial performance of insurance companies listed in the Nairobi stock exchange.
- To determine the relationship between insurance technology and financial performance of insurance companies listed in the Nairobi stock exchange.
- To determine the moderation effect of insurance operating environment on the relationship between financial inclusion and financial performance of insurance companies listed in the Nairobi stock exchange.
- To establish the mediating effect of insurance size on the relationship between financial inclusion and financial performance of insurance companies listed in the Nairobi stock exchange.

The study was guided by the following hypothesis;

- $H0_1$. Insurance accessibility has no significant relationship with financial performance in insurance companies listed in the Nairobi stock exchange.
- $H0_2$. Insurance usage has no significant relationship with financial performance in insurance companies listed in the Nairobi stock exchange.
- $H0_3$. Insurance technology has no significant relationship with financial performance in insurance companies listed in the Nairobi stock exchange.
- $H0_4$. Insurance operating environment has no significant moderating effect on the relationship between financial inclusion and financial performance of insurance companies listed in the Nairobi stock exchange.
- **H05.** Insurance size has no significant mediating effect on the relationship between financial inclusion and financial performance of insurance companies listed in the Nairobi stock exchange.

LITERATURE REVIEW

Theoretical literature

Agency Theory

Agency theory was developed by Jensen and Meckling (1976). They suggested a theory of how the governance of a company is based on the conflicts of interest between the company's owners (Shareholders), its managers and major providers of debt finance. According to Moldoveanu, M & Martin, R. (2001), in many cases, the application of right managerial decisions, which are considered the lifeblood of any organization, are not being practiced and applied therefore causing inefficiencies on the part of the company and its people. There is always a separation in terms of control and ownership in all corporations. However, this separation is what almost always causes conflict and is most often the root cause of all other problems and issues in the organization. Ideally, the design or framework of a corporation is well-defined in a way that control and ownership of the company's assets are clearly identified and distinguished among the people within the organization. In a usual company setting, control over a corporation's assets is delegated to the people assigned in the managerial posts while the ownership of company assets is being handed over to the company's shareholders. Therefore, both the managers and shareholders within the organization are responsible and accountable for each of their deliverables and assigned functions Moldoveanu M & Martin, R., (2001).Given that both the shareholders and managers perform very specific and highly-critical functions in an organization, it is but natural for the two to develop a specific kind of relationship. The development of this kind of relationship is indeed critical for the success of the corporation. Nevertheless, out of this manager-shareholder relationship also stems the many issues and problems which often result or cause negative impact on the corporation's assets. This special kind of relationship that exists between the shareholders and the managers is called an "agency relationship". In a typical corporate set-up, managers are given the right to control and manage the assets of the company which are owned by the shareholders. The function of the managers is therefore highly significant as their decisions and moves may potentially cause a positive or a negative impact on the company and its total assets Economy Professor (2004).

Financial Growth Theory

This theory was proposed by Bagehot (1973). The theory upholds that the presence of financial development creates a conducive and productive economic growth environment. The theory also explains that inability to easily access affordable financial products by a majority of the population leads to persistent income inequality and imbalances. Demirgüç-Kunt and Levine (2008) posit that financial accessibility is important for economic growth and development of any nation. As such, they suggested that countries should motivate policy makers to prioritize financial sector policies. They should devote attention to factors that influence financial development as a mechanism for promoting an all-inclusive growth. This can be achieved through financial inclusion. According to Bagehot (1973) this theory explains that a well-functioning financial institution can promote overall economic efficiency, create and expand liquidity, mobilize savings, enhance capital accumulation, transfer resources from tradition (non-growth) sectors to the more modern growth inducing sectors. Sparatt and Stephen (2013) argue that the success of economic growth depends on the level of financial inclusion, the composition and stability of the financial institutions. This underpinned this study that insurance size is critical for efficiency and financial performance. This also promotes a competent entrepreneur response hence promoting economic growth and development. According to Serrao *et al.* (2012), the finance growth theory advocates that access to financial services leads to a good environment for economic growth brought about by supply push leading to demand pull effect. The theory further perceives lack of affordable financial products to all as a critical determinant responsible for increased income inequality and imbalance resulting to slow economic growth. Consequently, access to safe, easily available and affordable finance has been identified as a pre-condition for accelerating income and economic growth and hence reducing the disparity in income and poverty. Such a situation will further create equal opportunities and economically encourage the people who were socially excluded. It will also integrate them better into participating in economic development actively hence preventing themselves from economic shocks Aduda & Kalunda (2012). This slows down the pace of economic growth and development. This theory underpins the study variables that comprise dependent variable financial performance; it is a condition where the insurance are able to perform their intermediation functions smoothly. It also explains how the independent variable financial inclusion, assists a country in forming an inclusive insurance industry. The finance growth theory advocates that access to insurance services leads to an improved financial performance brought about by supply push leading to demand pull effect. The theory further perceives lack of affordable insurance products to all as a critical determinant responsible for decreased insurance usage.

Asymmetric Information Theory

Information asymmetry arises where one person in a financial debt contract seems to be more knowledgeable or better informed about the subject matter than the other person. The theory was proposed by Akerlof in 1970 and observes that in marketing of financial services, it may be a challenge to differentiate between good and bad borrowers. Richard (2011) observed that asymmetric information may result into adverse selection and moral hazard problem. The theory further states that in making a financial contract, the person who possesses more information on a specific item to be transacted is better placed to negotiate optimal terms for the transaction than the counterpart. The person who knows less about the same specific item to be transacted is therefore disadvantaged in making right or wrong decisions concerning the contract, Hence, affecting insurance usage. Financial inclusion is characterized by entry of new, inexperienced and numerous customers into the formal financial sector including commercial banks Hansen & Jansen (2010). Information asymmetry models assume one party possesses some information that other parties have no access. Some asymmetric information models can also be used in situations where at least one party can enforce, or effectively retaliate for breaches of, certain parts of an agreement, whereas the other(s) cannot. In adverse selection models, the ignorant party lacks information while negotiating an agreed understanding of or contract to the transaction, whereas in moral hazard the ignorant party lacks information about performance of the agreed-upon transaction or lacks the ability to retaliate for a breach of the agreement. Moreover, in the model of monopolies of knowledge, the ignorant party has no right to access key information about a situation for decision making. An example of adverse selection is when people who are high-risk are more likely to buy insurance because the insurance company cannot effectively discriminate against them, usually due to lack of information about the particular individual's risk but also sometimes by force of law or other constraints. An example of moral hazard is when people are more likely to behave recklessly after becoming insured, either because the insurer cannot observe this behavior or cannot effectively retaliate against it, for example by failing to renew the insurance. Moral hazard creates a challenge in the insurance because they have difficulties in determining whether the customer intentions are as per contract. An example of monopolies of knowledge is that in some enterprises, only high-level management can fully access the corporate information provided by a third party, while lower-level employees are required to make important decisions with only limited information provided to them. This effects on financial inclusion hence underpin the objectives of this study including insurance accessibility and insurance usage.

Diffusion of Innovation Theory

Diffusion of Innovation (DOI) Theory, developed by E.M. Rogers in 1962. It originated in communication to explain how, over time, an idea or product gains momentum and diffuses (or spreads) through a specific population or social system. This theory explains how new ideas and Innovations are spread and adopted by new cultures. The theory seeks to examine critical factors in diffusion of innovations. They are what qualities make an innovation spread, the importance of peer-peer conversations and peer networks. Diffusion of Innovations takes a radically different approach to most other theories of change. Instead of focusing on persuading individuals to change, it sees change as being primarily about the evolution or reinvention of products and behaviors so they become better fits for the needs of individuals and groups. In Diffusion of Innovations it is not people who change, but the innovations themselves. The theory gives reasons why certain innovations spread more than others and others fail. These reasons include the Relative advantage of the innovation in comparison to the others, the innovations compatibility with existing values and practices; Simplicity and ease of use; Trial ability and Observable results. Purposive dissemination, or designing for diffusion, means taking additional steps early in the process of creating an innovation to increase its chances of being noticed, positively perceived, adopted, adapted, and implemented and, thus, successfully crossing the research to practice Dearing (2010). In purposive dissemination, external validity the innovation’s ability to achieve positive outcomes across a diversity of sites needs to be assessed, ideally on the basis of theory as well as data from the vantage points of stakeholders who will implement the innovation. According to Leviton 2017, other measures of readiness also should be assessed, including how potential adopters perceive the attributes of the innovation and the availability of implementation support in anticipation of demand from providers and patients. Formative assessment of advice-seeking networks among potential adopters of an innovation is an important key to the stimulation of diffusion. Such data can statistically and visually identify which few potential adopters are particularly influential when the vast majority of others are deciding whether or not to adopt, as illustrated in the work of the Translating Research in Elder Care group, based at the University of Alberta. A recent formative study by this group assessed advice-seeking ties across 958 nursing homes in nine of Canada's eleven provinces and territories. The results identified opinion leaders within each jurisdiction, as well as advice-seeking ties across provinces, so that future resources can be focused on intervention with small proportions of influential individuals and organizations for eventual system change.56 Getting off on the right foot in the stimulation of a diffusion process is important. Diffusion processes often exhibit path dependence, whereby initial conditions determine how rapidly and to what extent an innovation will spread Flay (2005). Relatedly, the timing of dissemination can be critical to diffusion. According to Dearing 2017, if potential adopters are attending to a different type of problem than the innovation addresses, waiting to disseminate can be the right decision. Formative evaluation along the entire supply chain that needs to coordinate for the dissemination, supply, delivery, and support of an innovation can reduce barriers before launch Greve (2015). The theory is relevant to this study as it can make a valuable contribution to insurance companies as they can help identify weaknesses to be addressed when improving products designs because the success of insurance technology products and services rests on continuous improvement. The theory emphasis on the importance of understanding the needs of different users, process involved in adoption and diffusion of financial inclusive products such as insurance technology products that enhance efficiency and inclusivity of supply of insurance services.

Empirical Review

Demirguc Kunt and Levine (2008) posit that financial accessibility is important for economic growth and development of any nation. As such, they suggested that countries should motivate policy makers to prioritize financial sector policies. They should devote attention to factors that influence financial development as a mechanism for promoting an all-inclusive growth. This can be achieved through financial inclusion. A study on effect of improving access in Kenya at district level by Allen et al.(2013). Bank presence was found to increase access to credit. The study also established that branch networks increased in Kenya between 2006 and 2009. However, the study used Equity Bank only as a case study, making it a weak research design. The current study addressed that gap by employing a panel multiple regression analysis, involving the entire banking sector in Kenya. This and most studies used only bank financial inclusion and ignored the insurance which is area of interest in the current study. According to Recently, the government of many countries have introduced several supply side initiatives and policies to promote financial inclusion Demirguc-Kunt et al., (2017); Ozili,(2020a); Prastyo et al., (2018); Markose et al., (2020), but these efforts are being forestalled by weak demand for such services, particularly a declining demand for basic financial services after a few years, which gives rise to a typical "excess supply – low demand" economic problem, and the risk of loss to providers of financial services Markose et al. (2020). Financial inclusion is a subject of growing interest among policymakers, scholars and development economists. Financial inclusion is defined as access to, and the use of, formal financial services Allen et al. (2016). MAPFRE (2020) unsuitable business models prevent effective access to target populations. Business models for traditional commercial insurers, mutual and cooperatives, and even micro-insurers and new participants in insurance markets need to adapt to the specific conditions of markets where they want to expand levels of inclusion. Even though this suitability must comply with the particular conditions of each market, as well as the specific strategy of the companies that hope to address these markets, there seems to be a set of basic aspects to consider: first, the individual profile of the client (low level of available income, low level of awareness regarding the risks they face and how to protect themselves against them, the nature of their consumption expenses, location difficulties, informal work schemes, irregular income sources, etc.), which differs from traditional consumers that are already served by the insurance industry. Secondly there is need to use non-traditional distribution channels. The particularities of the inclusive insurance product cycle, which differs from traditional products. Will enable cut operating and transaction costs hence lead to improved financial performance of insurance companies.

Usage of insurance is mostly discussed under banking sector, most research was done on banking however there was limited literature on usage in insurance companies where the literature mainly dealt with usage based insurance. Rejikumar (2013) collected data on client perceptions about usage-based pricing in India and tried to identify statistically significant linkages among perceived individual and social benefits, value or easiness to understand and acceptance intentions. The study concluded that clients are likely to accept the concept of usage based pricing once implemented. Derikx et al. (2016) conducted a discrete choice experiment to evaluate the interplay of privacy concerns, monetary compensation, and the intention to use usage-based insurance services. Tselentis et al. (2018) tried to identify the parameters that affect users' willingness to pay for alternative usage-based motor insurance pricing schemes such as PAYD and PHYD in Greece. A simultaneous decrease in technology costs creates favorable conditions for more economically and practically feasible market implementation of UBI Śliwiński & Kuryłowicz, (2020). According to Beck et al. (2006), a mere ownership to a bank account does not mean that one is actively using the financial service. This causes the need to measure the extent of usage. The measures of usage include demographic loan penetration, loan-income ratio, demographic deposit penetration, deposit-income ratio, deposit-GDP ratio and cash deposit ratio Beck et al. (2013). According to MAPFRE 2020 the design of the inclusive insurance product should consider certain special characteristics that do not necessarily exist in the design process of traditional value propositions. In this regard, inclusive insurance products require special treatment, which includes, among other things: a complex rate establishment process due to a lack of sufficient information to measure the risks of the target population; another is the determination of well-defined and limited coverage, as well as a reduction of the number and type of product exclusions this allows for simplification and deals with the issue of low financial education; also, flexible premium-payment mechanisms to deal with the issue of seasonal avail-able income, and the establishment of simple, fast processes for the payment of indemnification derived from the product. Innovation plays a crucial role in the design of inclusive insurance products, as these are products that cannot necessarily be adapted from traditional products; rather, they require new formulas suitable for a target population with different features. This will impact on the insurance usage and consequently financial performance of insurance companies. Also, greater financial inclusion requires new distribution mechanisms. Until quite recently, the distribution channels used by the insurance industry were rather traditional agents and brokers. Recently, however, the incorporation of other channels (banc-assurance, agreements with commercial entities and nonfinancial service providers, as well as the introduction of digital channels) has had the effect of reinforcing the multi-channel concept. In terms of inclusive insurance, it seems necessary to go even further. The multi-channel concept should be expanded with other distribution methods (use of micro-finance institutions, cooperatives, rural savings banks, pawnshops or pawnbrokers, banking and non-banking correspondents, agreements with client service providers, NGOs, public utility companies such as gas and electricity, among others) that better suit the conditions of the target population MAPFRE (2020). All of this seeks to reduce transaction costs and allows usage of products as they are affordable for the target population.

Insurance, a critical tool for not only reducing poverty but also for helping those who have emerged from poverty to manage their risk and avoid falling back into it. Significant technological advancements over the past decade have improved the design, selling, and servicing of insurance products. All these significant changes provide opportunities to low income group and marginalized sections for accessing insurance and to improve financial inclusion. Jonathan Dixon (2014). Over the years, African countries have made much effort and progress towards advancing financial inclusion. The feat of some innovative financial instruments such as mobile money in Africa offers more opportunities mostly for the poor, youth, rural dwellers and small and medium enterprises (SMEs) to be financially included for poverty reduction Abor et al. (2018). Information Technology (IT) encompasses the whole world. It has directly or indirectly affected each and every aspect of life. The insurance sector is no exception Bataineh AQ (2015). Computerization has provided a great help in speed of work, uniformity, accuracy, quality, efficiency, etc. Earlier, it took months to transfer a policy from one branch to another. Now you can pay your policy premium anywhere. Detailed information about various policies, their rules and regulations, benefits is available at our fingertips. Earlier, even the agents took a long time in getting information of the policies. Now, information about newly declared policies by various insurance companies is easily available not only for agents, but also prospective policy holders at a speedy rate. Policyholders get their doubts cleared instantly because of e-mail, voicemail, websites, toll-free numbers, mobile Application etc. Jhawar A, Tungare V (2014). Many alerted on the negative impact on the insurance growth and innovation. Since the launch of new and heavier requirements, the opportunity for the industry to endorse the digital revolution has been jeopardized. These requirements include, but are not exhaustive and dependent of country maturity, the type of licenses to market, advise, sale and how to promote insurance products and the data management such as data storage, data flow, data ownership and access Pirotte (2016) Bernard and Yang (2015) gave a macro overview and a comparison from year to year of the evolution of the supply and demand of the insurance industry in France. It showed that while the number of players may vary slightly, the premium collected increased yet the offer and service remained constant. No new and innovative approaches have clearly affected positively the industry. When it comes to the customer demand, nothing has been observed to change the notion of engagement and trust, offer and price, service and support. Yet, when it comes to purchasing behavior, customer satisfaction and value perception of a product and the service are significant predictors of customer loyalty especially and willingness to pay in insurance. Insurance companies must understand that they need adopt innovation as a constant change. The danger for them will be to endorse innovation as a defensive rather than an offensive strategy Plsek and Wood (2015). It should be done from a disruptive and aggressive way rather than passive journey. It is a matter of survival in a world that is affected at all level by the uberisation of the economy Fruchard (2016). The internet plays very important role for promoting sales of the insurance products and it also provides detailed information regarding the company’s policy, products and future plans. Internet has proved to be one of the low cost channels compared to other channels. The policy holders can purchase products through online and also get a receipt to his payment through an e-mail Odoyo F S, Nyangosi R (2011). Technology facilities easier customer interaction with improved service, humans select, interpret or information based on their existing attitudes and information technology has lowered the capital costs of insurance through the unbundling of insurance products and through the risk management movement Gulati K, Kumar A, Ravi (2012). Reduction in such costs consequently lead to improved financial performance of insurance companies. According to MAPPRE 2020, there are numerous innovation and financial inclusion in insurance initiatives through what are called insurance technology (Insurtechs). The information supplied along these lines by the Centre for Financial Regulation and Inclusion (CENFRI) provides an up-to-date view, through its tracker, of the different initiatives that are active in emerging markets in Africa, Asia and Latin America. Numerous examples of Insurtechs can be found in this dynamic information, and they are continuously increasing. One particularly noteworthy organization is the Swedish company BIMA, which developed a mobile insurance platform in 16 countries, allowing for mobile phone access to insurance policies, including health micro-insurance. Clients can sign up through the platform, and deductions can be taken from a prepaid credit in order to pay for premiums. In Kenya, Hello Doctor, in collaboration with CBA and Cannon Assurance, offers a health solutions package for Safaricom M-Pesa clients, called Semadoc, which is based on a cellphone subscription service. In this case, the hospital coverage underwritten by Cannon Assurance is supplemented with 24-hour access to doctors by text message or phone call, and clients can obtain prescriptions over the phone. Twice a day, clients receive health advice via text message. Through M-Pesa, a health account is opened when individuals sign up with Semadoc for health-related savings. This account is used to pay the monthly Semadoc subscription fee and to make payments at health centers. Individually, people registered with Semadoc can apply for healthcare loans, which have favorable re-payment conditions and can be paid directly at the facility. Hospital coverage is provided digitally via cellphones, through which information on benefits is provided, as well as the terms and conditions of coverage.

According to chizoba 2018 Within insurance, there is life insurance penetration which considers premiums from life insurance policies only as a percentage of GDP and non-life insurance penetration which considers premium from other than life insurance policies like auto insurance, health insurance, etc. Chude and Chude (2015) states that Inflation could be defines as a continuous rise in prices as measured by an index such as the consumer price index (CPI) or by the implicit price deflator for Gross National Product (GNP). Inflation is frequently described as a state where “too much money is chasing too few goods”. When there is inflation, the currency losses purchasing power. Jahromi and Goudarzi (2014) investigated the casual relationship between macroeconomic variables i.e. gross domestic production (GDP), Inflation, and national per capita income with the insurance penetration ratio. To study the relationship and causality between the selected variables, the study applied the Johansen and Juselius co-integration and Granger causality methodology. The required data were collected from Iranian Central Bank, Statistics Center and Central insurance for the period of 1981-2011. Ex-post facto research design was used. The study was analyzed using Johansen and Juselius co-integration and Granger causality. The study found that the underlying macroeconomics variables and insurance penetration ratio are co-integrated and in short term; there is Bi directional causal relationship between national per capital income and the insurance penetration ratio. The results further demonstrate that there is unidirectional causal relationship from the insurance penetration ratio to the gross domestic product (GDP). In the case of inflation and insurance penetration ratio, the study found no causal relationship between them. Finally through the use of combined test, the results suggest a causal relationship between inflation, national per capita income and GDP, and insurance penetration ratio in the long-run. Epetimehin and Fatoki (2011) used the Insurance Industry to show that the persistent high rate of inflation in the Nigeria economy is creating serious problem for the rapid growth of the Insurance Industry. This study focused on the Life Insurance product of the Industry which provides a unique product of Insurance Protection and the effect on the product over the years. The study was based on Ex-post facto research design and regression method was employed. The study covered the period from 2003-2007. It was found that with the inherent risk in default in premium payment for a particular year, given the large claims due to the high rate of inflation, the industry may make a loss. The study recommended the Insurance Industry should design cash surrender value insurance products which will provide at least a reasonable partial hedge against inflation.

Antoun et al., (2018) conducted a study with the aim of investigating the financial performance of the Central and Eastern European insurance companies. Their research covered the period 2009-2014. The FPI was constructed based on CAMEL ratios and then rendered on computed index. They also used fixed-effect panel regression and found that the size has negative effect on asset quality, earnings of insurance companies, Capital adequacy and liquidity whereas, insurance concentration and economic growth have positive effect. Brand credibility and trust in the salesman have also both a significant impact on purchase and retention. Engagement and empathy of the company is also critical. It is sometimes more important than the product, as it creates the emotional stimuli of trust necessary in the willingness to pay for insurance Ioncica and Petrescu (2012). As the insurance is not a tangible asset, the customer has a different thinking purchasing process. The notion of advice from someone competent, trusted people are the main purchasing trigger. A prospect will shop for an advice rather than a product. PwC and Startup boot camp Insur Tech's report (2016) confirmed with a study made over 1,300 start-ups. It showed that in insurance more than engagement and offer or price, the value creation in insurance increase significantly when the company priorities trust of advice and service rather than product. Chen, Weng, and Huang (2013) focused on the Taiwan market and concluded also that the customer engagement and the notion of service in the insurance industry are strongly correlated. The revenue growth and the customer satisfaction increase of insurers came from the improvement of services, the empathy for relationships and the face to face interactions. While Insurers focus on cutting cost to reduce price, the consumer is searching for the opposite: appropriate product and services will initiate greater supply. Devlin (2013) highlighted that service and trust are two important factors, yet the package of the product is also critical. The opportunity to increase true value (ROI, net income) of a financial service provider by enhancing the financial offers should not be neglected.

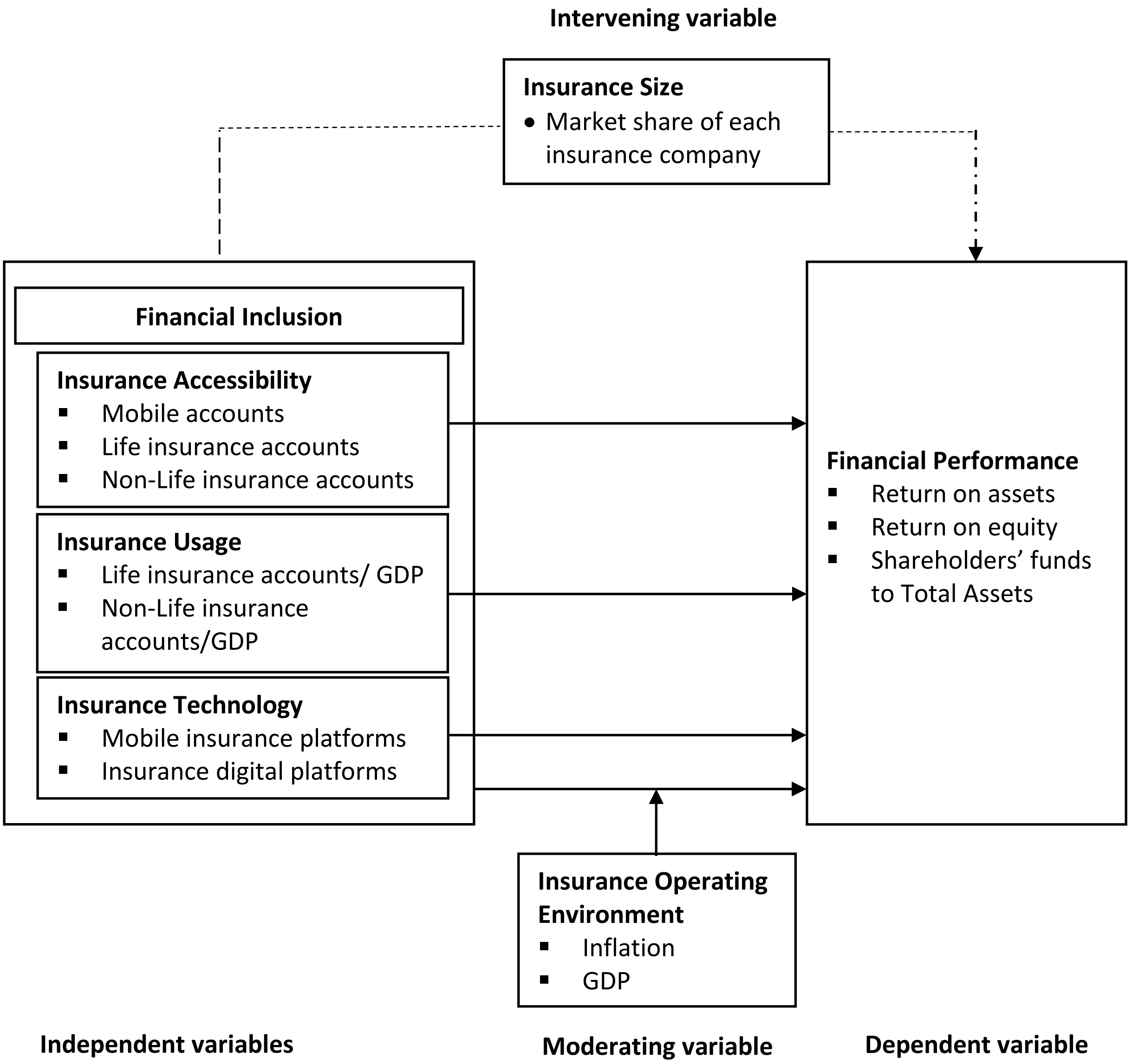
Intervening variable
Insurance Size
Market share of each insurance company
Financial Inclusion
Insurance Accessibility
Mobile accounts
Life insurance accounts
Non-Life insurance accounts
Insurance Usage
Life insurance accounts/ GDP
Non-Life insurance accounts/GDP
Insurance Technology
Mobile insurance platforms
Insurance digital platforms
Financial Performance
Return on assets
Return on equity
Shareholders' funds to Total Assets
Insurance Operating Environment
Inflation
GDP
Independent variables
Moderating variable
Dependent variable

Figure 1: Conceptual Framework

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