

**HOUSEHOLD FINANCIAL HEALTH AND SCHOOL RESUMPTION POST COVID-19
IN KENYA**

By

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DECLARATION

This project is my original work and has not been presented for a degree in any other University.

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This research project has been submitted for examination with my approval as the university supervisor.



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DEDICATION

I dedicate this project to my family and friends who have always supported me in all my endeavours.

I also dedicate this project to all industry professionals, scholars, and researchers in the field of Economics, who never tire in their quest to make sound policies using meaningful research.

ABSTRACT

This paper seeks to understand the housing financial health and school resumption post COVID-19 in Kenya. The key objectives are; to determine the effect of the ability to meet daily expenses on school resumption post COVID-19 in Kenya, to determine the effect of the ability to cope with risks on school resumption post COVID-19 in Kenya and to determine the effect of the ability to invest in future on school resumption post COVID-19 in Kenya. The data utilised for the study is Financial Access Survey 2021, which is a secondary data. The findings of the study indicates that households were affected by the COVID-19 pandemic in terms of financial health and school resumption, which contributed to about 5% of the households that were not able to return their respective learners to school post-pandemic. From the analysis, it is evident that pandemics do disrupt the financial health of households, which trickles down to learners resuming to school. Arguably, households that were well prepared for shocks/unforeseen events and set aside finances for future investments in terms of securing education insurance and old age were less likely to be affected by the pandemic. Policy recommendations include; more awareness of households on the need to set aside money for education financing should such shocks occur and investment in terms of education insurance and old age.

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CHAPTER ONE

INTRODUCTION

1.1 Background

The SARS-CoV-2 virus is an emerging virus of Coronavirus that was first new in December 2019. It has since spread rapidly across the globe, causing respiratory illness in those it infects. The virus can lead to heart problems, pneumonia, respiratory failure, and death in severe cases. The virus is highly contagious and transmitted via droplets from the mouth or nose. The severity of the disease and the ease with which it is spread make it a hazardous virus. Governments were forced to take stringent measures that would ensure that safety and wellbeing of their citizens. One of the sectors to be immensely affected was the education sector where schools were forcefully shut down to keep children safe.

The World Health Organization (WHO) declared COVID-19 a pandemic on March 11, 2020. At this point, nobody would have predicted the chain of events that would follow including the closure of schools for a long period. It is estimated that in the first year of the pandemic, up to one and half billion students worldwide did not have access to schools in person thus causing a lasting effect in the education sector. The UNICEF study for the period 2020 to 2022 estimated that more than 147 million children missed more than half of them in-person schooling. Those who were most affected are the vulnerable and pupils from less privileged backgrounds. The situation was particularly dire in the Sub-Saharan Africa region. In Uganda, children stayed out of school for two years and when the school reopened, around 10 % of the students were missing from classes. The situation deteriorated further along gender lines whereby girls were immensely affected.

According to UNICEF (2022), there was a 48% increase in school dropout rate among girls in secondary education between 2020 and 2021.

Developing nations, Kenya being one of them, carried the heaviest burden of the schools' closure at the height of the pandemic. The first case of COVID-19 infection in Kenya was recorded in March 2020. Within the first week, the infection spread rapidly among the population and the government was forced to put stringent measures to minimize the spread of the infection. These measures included strict curfews and lockdowns that had schools closed. Even though these measures were effective in saving lives, they had detrimental effects on school children. Children from poor backgrounds were immensely affected as they could not access any means of learning.

The lockdown measures had adverse effects on the most vulnerable children who experienced various barriers to accessing education before the pandemic. The vulnerable children include children residing in the urban slums, those who had disabilities, children from the remote locations, the informal settlements, asylum seekers and refugees. Added to this list were children who come from homes where parents lost their source of livelihoods because of retrenchment. The government had an obligation to provide all these children quality education as envisaged in the Kenyan Constitution. Every child has the fundamental right to attain the highest available quality education.

Facility closures had far-reaching social and economic impacts, not just on students, teachers, and families. Institutional closures as a response to coronavirus had resulted in a range of economic and social issues, including digital learning, learner debt, homelessness and food shortages, day care, healthcare, internet, housing, and access to disability services. The impact was particularly acute for impoverished children and their families, with disruptions to schooling, nutritional and

childcare challenges, and economic burdens on households with disabilities. In response to the closure of educational institutions, UNESCO and other governments were lobbying for the introduction of distance learning programs and open education software and platforms that institutions and educators used to reach and prevent students from doing other activities other than education. This endeavour was already tarnished by several challenges.

Sustainable Development Goal_4 (SDG_4) advocates for universal primary and secondary education to all children, which forms the basis of basic learning for positive learning outcomes. According to World Bank, low-income countries still face the risk of low learning outcomes by 2030 with the learning poverty rate being estimated to be over 50%, with poor countries having a higher rate of about 80% pre-pandemic. COVID-19 pandemic resulted to an amplified, steepened learning curve, worsening the education disparities between the developing countries and upper-middle income countries. Azevedo et al. (2020) estimates that approximately 1.6 billion students to be out of school during the pandemic, whereas the more developed countries used alternatives to ensure the students learn remotely.

During the pandemic, government policies and involvement in education sector played a vital role in ensuring that learning gaps were minimal. As such, remote learning measures were introduced to ensure learners are within the stipulated learning program. As it was the case with COVID-19, most developed countries witnessed a rather smoother curve in adopting to remote learning as there were measures already put in place even before COVID-19. Whereas the developing countries struggled with adopting to the new norm, learners were majorly affected and the pandemic only worsened learning disparities between households. Whereas the more financially stable and non-poor households could easily access internet, Television programs, radio programs and home-schooling facilities, the poor households struggled to keep abreast with most learners relying on radio programs majorly (World Bank, 2021).

According to (Azevedo et al, 2020), there was a 0.6 loss of Learning-Adjustment Year of Schooling (LAYS), which estimates learning poverty to be reduced by 27% as opposed to 43% by 2030 in the developing countries as shown in Table 1 of the appendix. Pakistani had gone through a series of disasters before COVID-19, resulting to school closures. As such, Pakistani was among the first state to close physical schooling once the COVID-19 pandemic hit. Ideally, Pakistani put in place plans and contingencies to ensure that schooling continues even during pandemic, but this was not the case with COVID-19 (Geven & Hassan, 2020). On a study carried out in Pakistani to determine learning losses during COVID-19, it was estimated that LAYS for an average learner to be 0.3 to 0.8 years with the learning poverty level rocketing up to 79% from 75%.

Further, a study conducted by (Osman & Keevy, 2021) on Commonwealth states on how COVID-19 affected education systems highlighted that about 60% of learners were impacted by the pandemic internationally. As such, it advocates for three key points to be considered and addressed to curb such adverse effects on education, which include leadership and inequality, communication between school and home and resources.

1.2 Overview of Kenyan Education sector

In Kenya, the government was thoroughly involved in shifting the physical classroom to online mode of learning. As such, Kenya Institute of Curriculum Development (KICD) introduced Radio programs, Television programs and Digital Learning programs. Media partnership with the government was part of the policy guidelines to ensure learning, with the backup of the Competency Based Curriculum (CBC) that ensured parents/guardians had a basis to develop a home-based learning (eLimu, 2020). The media aided in channelling gender-based learning, to minimize the effect of gender-based issues that arose while the learners were at home.

Education, research, and training were vital stages for socioeconomic reforms in countries around the world. As a result, the Kenyan government, like other governments around the world, believes

that education and training for all is crucial to achieving Kenya's Vision 2030 and serving as a steppingstone to the Big 4 agenda. Achieving national development goals requires adequate and quality education and training to meet the civil development demands of a rapidly changing and increasingly diverse economy. On the other hand, enormous problems arise in relation to improving and ensuring the quality, equity, access and relevance of education and training. The current challenge in the industry is the global outbreak of the 2019/2020 coronavirus pandemic.

In relation to response to the pandemic, The Kenyan government developed three approaches to make it easier for learners to continue their education. This approach was formulated in adherence to the international and national guidelines for handling the pandemic and cautioning children against long term repercussions of the pandemic. Essentially, such mitigation strategies were pivotal for nobody knew when the pandemic would end and normalcy resume. The Kenyan ministry of education (MoE) reverted to offer online classes that were in tandem with the COVID-19 preventative measures of self-isolation, social distancing, and quarantine. The ministry developed online contents that were accessible to students who could access the internet. Besides, this content was spread across different platforms to be accessed by the learners uninterrupted while they were at home. However, this approach suffered numerous challenges as it was not accessible to all the learners.

From above discussion, it is evident that the discussion about education vis a vis pandemic has been discussed before. The question, then remains, how well do the government mitigate any risks related to learning outcomes? What measures are put in place to establish that there are no educational gaps should there be a global pandemic like COVID-19? Several countries took several measures, with most focusing their efforts of home-based learning. In a developing country like Kenya, the idea of home-based learning could be great, but how effective is it? How efficient

is it in poor households? How well can the seriousness of learners be implemented and measured to ensure that they did not lose any learning year? How should the government prepare in case of a global emergency in future? Different tools, policies and measures have been put in place in Kenya to ensure that every child access education, even during pandemics (Ministry of Education, 2017). Ministry of Education, The Constitution of Kenya 2010 and The Vision 2030 align in ideas and policies stipulated to ensure free and accessible education for all, with more emphasis on Disaster Risk Reduction (DRR) which advocates for a national curriculum and building safe schools for every learner in Kenya.

The Safety Standard Manual was later improved in 2018 from the existing Manual developed in 2008. It was aimed at improving the policies that were put in place few years earlier, with more emphasis on the physical school environment. The manual was an extension of (Ministry of Education, 2017), which elaborated on measures to take to mitigate and minimize effects of a disaster.

Evidently, the two articles were put in place to strengthen disaster managements in school, with focus on immediate disasters. As such, global pandemics were left out as they fail to discuss long-term measures upon a disaster. Arguably, Kenya needs to re-evaluate the policies put in place for pandemics to ensure that Education is constant even during unforeseen infirmities. This paper, therefore, will adopt on the measures and policies put out by the Kenyan government during COVID-19 pandemic on education (eLimu, 2020), the survey conducted by (World Bank, 2020) and serve as an extension to the existing studies in determining housing financial health and school resumption post COVID-19 in Kenya.

1.3 Statement of the Problem

In Kenya, the first COVID-19 case was reported on 13th March 2020, with cases steadily rising through 2020 to late 2021. As a result, government put out directives via the Ministry of Health (MoH) to curb the spread of COVID-19 within the country. Some of the measures put in place included lockdown within counties that were adversely affected, compulsory use of masks in public places, social distancing, among others. On the other hand, the Ministry of Education (MoE) closed all schools and learning institutions from 16th March 2020, in line with the MoH guidelines. This was the beginning of ten months school closure, although schools were partially re-opened after seven months. During this period, arguably, learning disparities were more evident per households, as the more marginalized households witnessed more difficulty in learning, in addition to the already existing education disadvantage the marginalized were experiencing pre-pandemic. According to Rapid Response Phone Survey (RRPS) conducted by World Bank in January 2021, it is reported that only one out of ten household could access their teachers during the wake of COVID-19 in Kenya, largest share being a household from an urban set up.

From the RRPS, it is evident that learners per household are divided into two; non-poor households and poor households, which consisted of normal-poor households and refugees. Arguably, refugees are special in this study as they are already marginalized group in Kenya and learning as an activity has proven to be minimal as compared to normal poor households who can access amenities that surround them. The RRPS conducted estimates that about 70% of learners in normal household set-up were able to engage in learning activities during COVID-19 pandemic, whereas 2 of every 10% households in refugee camps were able to engage in learning activities in rural camps and 5 out of 10% in urban camps. While the economy faced a lot of changes during the pandemic, the policies stipulated by the government played a vital role in ensuring that households are cushioned from unexpected shocks.

The onset of COVID-19 necessitated the near complete closure of schools globally which affected the education sector significantly. From 26th April 2020, about 1.8 billion students were affected due to closure of institutions. The closure not only affected the learners, households and instructors but was consequential to the society at large (Ngwacho, 2020). Cessation of institutions brought with it a wide array of challenges like surge in learner drop- out rate, psychological health issues and income losses.

Various individuals have discussed the impact COVID-19 has had on various economies, with some arguing that proper measures should be put in place lest the disparities widen with time since each household will try to recover using their own mechanisms, which is risky for the economy (Hill & Narayan, 2020). From this school of thought, government should come up with recovery plans that aim to improve the status of the more marginalized and poor households of a country, which in turn ensures that capital accumulation in the long run will not be compromised.

Long term effects of COVID-19 in Kenya are likely to be felt by the marginalized community, which include the refugees, asylum seekers, urban slums residents, informal settlements, learners with disabilities and residents of remote location (Hill & Narayan, 2020). As such, learners from these marginalized society are likely to have more difficulty in learning during the pandemic, thus, lowering the chances of these learners to resume to school after the pandemic, following factors such as health, finance, gender-based violence during the stay at home, socio-economic attitudes of households that are impacted by the pandemic.

Based on the argument above and advocacy of the Constitution of The Republic of Kenya Constitution, (RoK, 2010) that advocates for the right of every Kenyan citizen to acquire the highest form of standard education, this paper will seek to analyse the overall effects of the pandemic on education in Kenya, more so on school resumption outcomes. Additionally, the paper

will discuss in detail how measures should be put in place during related unforeseen infirmities to avoid the case of school closure as with the case of COVID-19.

1.4 Objectives of the Study

The general objective of this study is to analyse the effect of household financial health on school resumption post COVID-19 in Kenya.

The specific objectives are.

- i. To determine the effect of the ability to meet daily expenses on school resumption post COVID-19 in Kenya.
- ii. To determine the effect of the ability to cope with risks on school resumption post COVID-19 in Kenya.
- iii. To determine the effect of the ability to invest in future on school resumption post COVID-19 in Kenya.
- iv. To provide policy recommendations.

1.5 Significance of the Study

COVID-19 is still an ongoing pandemic in the world. However, a lot of measures have been put in place, about two years down the line, to reduce its spread and minimize its impact. To the best of my knowledge, most literatures fail to cover the impact COVID-19 had on school resumption per households. As an extension of two literatures, Ngwacho (2020) which analyses impact COVID-19 had on school learners and World Bank (2021) RRPS that analyses socio-economic impact of COVID-19 on Households in developing countries, this paper will seek to analyse impact COVID-19 had on school resumption in Kenya. This follows the limitations of these two literatures, as they fail to discuss and capture the dynamics that COVID-19 had on education financing, and thus, school resumption post COVID-19 in Kenya.

This study will extend to the existing body of literature by verifying results from Ngwacho (2020) and the RRPS done by World Bank (2021). In line with the SDG 4, this study will capture all dynamics that translate to quality and equitable learning. Since this research will be specific to Kenyan households, the findings will be important to policy makers aiming to ensure Education Sector readiness and response to ensure full school resumption post pandemic and in future related unforeseen events.

1.6 Organization of the Paper

This paper is organized as follows: Section two provides a review of literature on impact COVID-19 had on education financing measures on school resumption in Kenya. Section three discusses the methodology used in this study, the data, and descriptive statistics. The results and discussion are presented in section four and section five has the conclusion and policy recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This section seeks to explore literary materials that delve into the happenings of COVID-19 as narrated by different scholars in varying perspectives. The section creates a foundation and aims at giving an in depth understanding of the subject. It highlights findings relevant to the study and considers gaps of earlier works. This segment seeks to fill in those gaps as well as provide new insights which help in fortifying the focus of research. Additionally, the chapter is inclusive of the theoretic framework and the empirical review oriented to provide relevance to existing knowledge and establish a sense of structure which acts as a justification for the study. Basically, it addresses the various scholarly works related to impact COVID-19 had on education financing measures on school resumption in Kenya

2.2 Theoretical Review

Albeit contentious, technology use in learning institutions is on the rise. The world is still recovering from the reeling effects of the COVID-19 pandemic, which disrupted every sector of routine life, education inclusive. The stringent measures introduced by various authorities, such as the stay-at-home policy, had all schools closed. There was so much uncertainty, and nobody knew when normalcy would resume. Therefore, schools had to devise mechanisms to facilitate learning, including virtual learning. Online education demanded teachers to adapt to online teaching and accept educational technology quickly, an already enthused and existential yet controversial issue in early education. The use of computerized learning had been questioned way before the pandemic.

2.2.1 Maslow's Theory of Motivation on Hierarchy of needs

The theory provide that human beings tend to satisfy their needs depending on their urgency and therefore tend to focus on needs on a hierarchal nature. Maslow further gave an illustration on how needs are divided and came up with five groups of needs, that is: psychological, safety, love and belongingness, esteem, and self-actualization needs. He presented these in a pyramid with the psychological needs being at the bottom and self-actualization needs at the topmost and narrow bit of the pyramid (Maslow & Lewis, 1987).

Based on the pyramid set by Maslow, it is evident that a human being will be moved to fulfil the most basic needs before moving to “other needs” that individuals consider less priority. This is majorly psychological, which explains the consummatory behaviour of the individuals, and may vary from one individual to another. In retrospect, the psychological needs comprise of the most necessities of life like food, clothing, warmth, and shelter, all of which one cannot survive without (Kenrick, 2010).

Ajzen (1991) elaborates the role of human mind, perception, and attitude towards a certain behaviour, dependent on the circumstances. He further argues that motivational factors behind the “why” form a good basis for carrying out the behaviour, although this notably depends on the opportunities and resources available as well.

In this theory education is presented as a safety need since it only provides security to an individual in the social sphere. Further, the theory notes that the primary needs must be fulfilled first before proceeding to other needs up the pyramid. However, Maslow stated that the pyramid was not a rigid presentation, and the needs of an individual could vary in the level they are at depending on externalities like money availability and possible external shocks.

During the wake of COVID-19, most households characteristics were key determinants of the nature of household expenses and what a household considered a priority. Household were forced to adopt to changes, which majorly depended on their abilities to finance the changes, the opportunities to do so and attitude. While schools were closed, it was witnessed that some household adopted the online learning system, while some voluntarily opted to wait on government directives. The RRPS by World Bank (2020) conducted estimates that about 70% of learners in normal household set-up were able to engage in learning activities during COVID-19 pandemic, whereas 2 of every 10% households in refugee camps were able to engage in learning activities in rural camps and 5 out of 10% in urban camps. This can be attributed to the fact that household differ in terms of opportunities, ability, and attitudes towards education as a priority.

From this example, the disparities in opinions and what is considered a need for every household was witnessed, with the head of the household majorly determining the needs financing. Whereas some households still considered education a priority, still, there were households who were struggling to get the basic needs and switched to “survival mode”, making education a lesser priority. Arguably, head of households who were prepared in terms of setting money aside for emergencies and/or investing money for future use were less affected, since they already had the basic needs and thus priorities did not shift as such. This, as well, varied from the non-poor households, as some were considerably fighting for security and safety while others focused on love and belonging in the period of COVID-19. This, however, depicts the households who were considered non-poor, forming the larger percentage of households whose learners had no difficulty in returning to school post COVID-19. This is further explained by the research done by (Noad, 1979), which explains the learners’ outcome based on attitudes, self-concept, and motivation, in this case based on students and teachers. This study depicts the role teachers have in ensuring that the most basic needs of students are met for them to have a better class performance. Relating this

to the COVID-19 period, parents were the one forced to take charge of learning through education financing, with the help of teachers and government.

To this end, this theory is paramount to this research since it provides a basis of evaluating the necessity of education or rather school attendance in the context of COVID-19 prevalence and financial capability of households in Kenya.

2.2.2 Organizational Theory

The organizational theory attempts to relate the performance of an organization to the setup of its structure. Essentially, the concept implied is on how the behaviour of staff and other individual groups in an organization are attributed to the success of an organization and its overall performance (Jones, 2013).

In context of this study, schools are institutions with a defined structure and a series of pre-specified activities, which classifies them as organizations. Relatively, the performance of a school is highly attributed to how the operations run and the general interaction between and among groups in the school which are staff, students, and parents. Interactions between staff, students and parents can be seen during class activities and learning sessions, all which are tailored by the institution before being launched into action.

This theory shall be employed in this study to identify the relationship between how school activities are structured and their influence on the attendance of students in the context of COVID-19 from a household perspective as an institution.

2.3 Empirical Review

According to The State of Global Learning Poverty (2022), COVID-19 pandemic deepened the crisis in learning sector, arguably, widening the learning poverty gap. The study indicates that even before COVID-19 pandemic, between 2015-2019, there was already a blooming learning crisis and no change in learning gap, especially in the middle-income and low-income economies. It is

estimated that 7 out of 10 children in the middle- and low-income countries suffer from learning poverty, with the curve leaning more towards South Asia and Latin America economies because schools took even longer to resume despite economies being opened and vaccines introduced. Arguably, the article advocates for children's right to learn and to do away with the violation of children's rights towards education that was there even before the pandemic.

Addae (2021) argues that the exacerbated effects of COVID-19 on health systems resulted to measures being adopted to prevent the spread in SSA. As a result, school closure as a measure exposed adolescents to potential health risks and adoption of social vices as a survival tactic. As of June 2020, it is estimated that over 230,000 cases were reported in SSA, with wider spread across South African countries and West African countries (Danquah, Schotte, & Sen, 2020). Arguably, the impact of COVID-19 was felt about six months down the line, with drastic measures taken to avoid SSA recession that had never been witnessed for over 25 years. As a result, the ripple effect on institutions was felt, with over 95% schools closed in all education levels, 32% public transport systems were closed and/or prohibited, 66% work closures combined with working from home and about 43% adopted curfews as a stringent measure to curb COVID-19 spread, an analysis from 44 SSA countries.

Amidst the crisis, Kenya was not left behind in quest to curb the spread of COVID-19. The schools were locked down and children forced to go home earlier than the expected term dates. Resultatively, the schools who were quick to adopt the changes that came with the paradigm shift, did not have their students on hold for long. With initiatives like remote learning using virtual communication applications, they kept things moving. The Ministry of Education upon realizing that the pandemic would have a severe effect on the period that students would stay out of school gave a directive that allowed schools at different education levels to adopt other methods of teaching among them, distance learning. This proved to be of tremendous help since most schools especially in the urban centres went ahead with their syllabuses.

Unfortunately, combining the rise in poverty levels and frugal living by most Kenyan households in the middle- and low-income classes, some of the students missed out on the chances. A good example is seen presented by the number of students in refugee camps who attended any learning activities during that period being 20% and the highest numbers being attributed to children in urban centres and in private schools (World Bank, 2021).

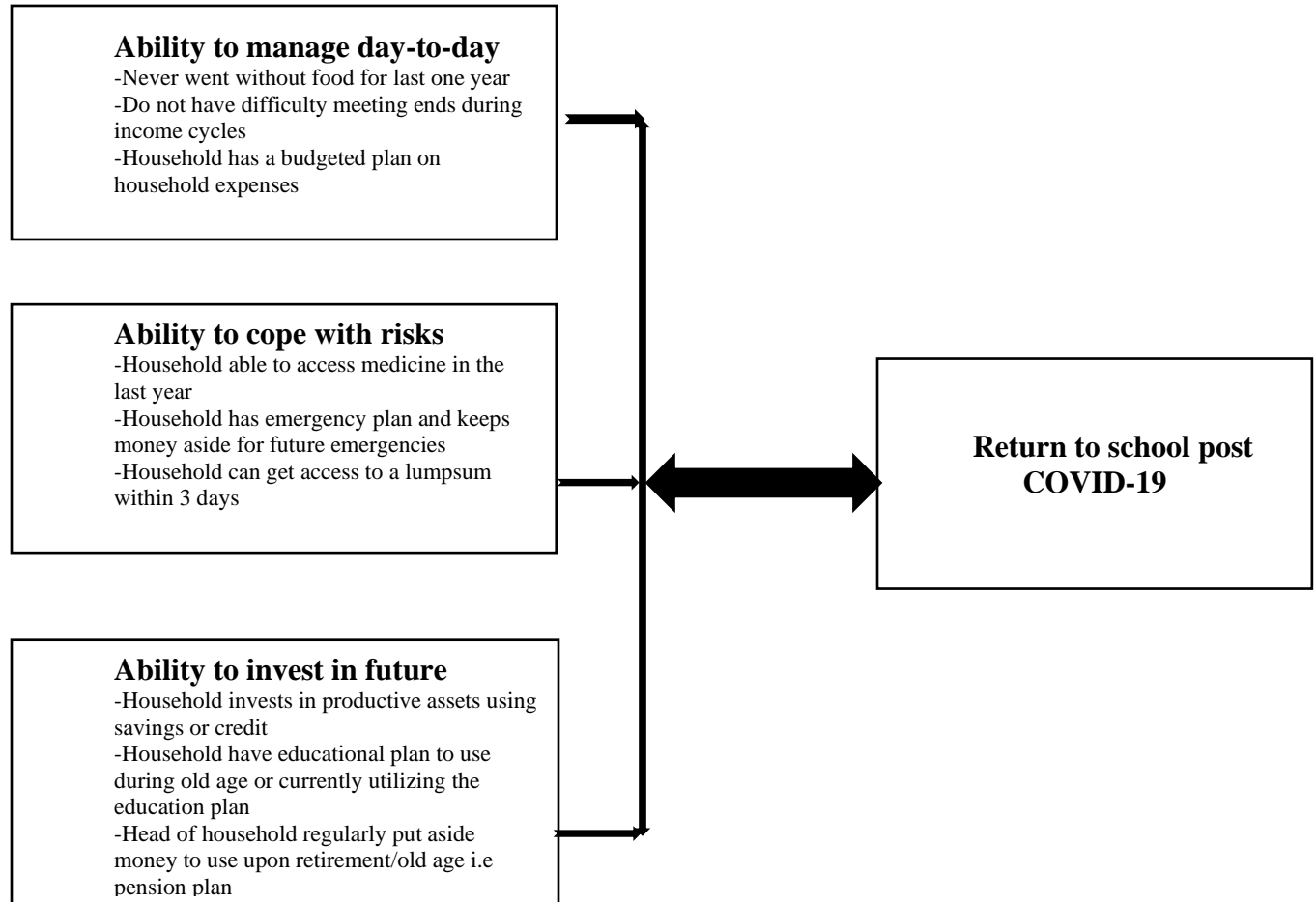
Moving on to the most recent national examinations, 11,523 students did not sit for the Kenya certificate of primary education (KCPE) examinations compared to 5,530 who never sat for the examinations back in 2019 even with prior registration. Aside from that, in the recent form one admissions, among the 1,225,597 children who sat for the examinations and 38,789 qualified for secondary school (Ministry of Education, 2022). However, with recent news parents have complained of the struggles in getting their children to school owing to financial deficiency. In the current year 2022, the country is still facing high inflation rates of 6.47% compared to 5.7% in 2019, still indicating the fact that it is still in recession (KNBS, 2022). A recession triggered by the pandemic. Households are still struggling to find their grounding after recent opening of organizations and businesses that were closed and for a long time operating on limited human capital and working hours. With this pending imbalance of income and expenditures in homes, competition, and prioritization of needs still possess as a challenge which is seriously limiting activities of individuals such as studying.

2.4 Conceptual Framework

In retrospect, school attendance post COVID-19 can be majorly attributed to financial related ties per household, which form the basis for this research's framework.

Independent variables

Dependent variable



CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter seeks to analyse the relationship between school resumption and COVID-19 per household. This section will capture the theoretical framework, empirical framework, define variables and the expected sign. Diagnostic tests, data types and sources will be discussed in the last sections of the model.

3.2 Econometric Model

Based on the FinAccess Household Survey 2021, COVID-19 impacted Kenyan households in various dimensions, more so financially. The Survey aims to understand the impact COVID-19 had on financial usage, financial access, financial quality, and financial impact. From this, education financing can be deduced to be majorly facilitated by financial health index, with three key main factors; ability to sustain day-to-day needs, ability to cope with risks and shocks and the ability to invest in future.

Financial Health Index focuses on weighted average of three key pointers, which summarize the priorities of a household, attitude towards spending on specific items such as food and education, household's preparation when shocks happen and curb unforeseen emergencies and household's ability to plan for future. Generally, it is estimated that 17.1% of household were considered financially healthy in 2021 as compared to 21.7% in 2019 and 39.4% in 2016 (FinAccess Data, 2021).

According to FinAccess Data, (2021), cumulative priority of the household was estimated to be 31.8% whereas education came second with 30.2%. From this, it is evident that meeting daily

needs by a household was considered much important before investing or saving. Meeting day-to-day needs vary from getting food, ensuring that the needs cycle of the household is met on a daily and planning for the expenses that are required in a household. Failure to which, household would rather try and do the bare minimum, which inhibits the learners from this specific household to access other important amenities such as education, thus affecting learners school resumption post COVID-19.

Ability of a household to deal with shocks, such as COVID-19 pandemic serves as a key indicator of how the household treat finances. On the onset of COVID-19, it is estimated that 67.1% of the household experienced the shock and inhibited the normal finance cycle of the household, according to FinAccess Data, (2021). As such, 43.1% of this population had to cut back on household expenses, which, arguably, had a trickling down effect on education financing, medical emergencies and meeting future expenses on these households. As such, it is key to understand household's preparation for any unforeseen shock, as it will either render the household able to meet the daily needs and priority or not.

Ability of a household to invest in future is vital as it also indicates the ability of household to plan for any changes anticipated in future. According to FinAccess Data, (2021), 39.5% of household put money aside as a form of savings and/or invested to cushion them from external and unforeseeable shocks. This was a rise from study conducted in 2019, with the average of household saving for future being estimated to be 21.8%. This can be attributed to the fact that COVID-19 pandemic changed the perceptions of household on matters savings/investments. This is measured using the ability and feedback of household on educational policies, money put aside for old age and investments made within the year of the data collection.

Arguably, characteristics of a household and head of household play a vital role in determine the priorities and expenditure pattern of the household as described in Maslow's Theory of Planned

Behaviour. As such, the household characteristics will be incorporated as control variables and will be measured to determine its impact on Financial Health Index of Household.

From the discussion above, it can be deduced that education financing in Kenya during COVID-19 period majorly depended on Financial Health Index of households, which can be modelled as below.

Financial Measures on Resumption to School post COVID-19=f (Ability to manage day-to-day, Ability to cope with risks, Ability to invest in future, Household characteristics).

$$y = f[x_1, x_2, x_3] \dots \dots \dots \text{equation 3.1}$$

Where;

y is resumption to school post COVID-19

x_1 is ability of household to meet day-to-day needs

x_2 is ability of household to cope with risks

x_3 is ability of household to invest in future.

Forming a linear regression equation, we have equation 3.2 as below.

$$y = \alpha + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 \text{ Controls} + u$$

Where;

y represents the dependent variable, which is resumption to school post COVID-19

$\beta_1 x_1$ = household's ability to manage day-to-day needs

$\beta_2 x_2$ = household's ability to cope with risks and shocks.

$\beta_3 x_3$ = household's ability to invest in future

β_4 *Controls* represents the vector of household's characteristic including gender of the head of household, household size, dependency ratio, education level of the household, priorities of household based on the head of household opinion.

u = error term.

A study by Booth et al. (2002) shows an Index of Inclusion questionnaire to families on matters education. The Index of Inclusion aims to come up with an index to analyse the qualitative response from questionnaire from a self-report tool that using a three-point scalar. This will be adopted to analyse the FinAccess (2021) Questionnaire, with the scalar points being 1=agree, 0=otherwise.

From study conducted by (Fernández-Archilla, et al. 2020), the study adopts Booth & Ainscow on using Index of Inclusion. However, the study incorporates Confirmatory Factorial Analysis (CFA) to determine the validity and reliability of the Index of Inclusion measure using Comparative Fix Index, Incremental Fit Index, Root Mean Square Error of Approximation, Confidence Interval and Standardized Root Mean Square Residual.

$\beta_1x_1, \beta_2x_2, \beta_3x_3$, will adopt the Index of Inclusion as a measurement instrument, whereas β_4 *Controls* will be combined as nested data and tested for invariance analysis using the maximum likelihood ratio.

3.3 Data Sources

This study sought to explore and analyse Secondary data conducted in Kenya for the year 2021. The Financial Access Survey (2021) targeted population of the households in Kenya in both urban and rural sectors as well as formal and informal settings according. The data summarizes response from the 47 Counties in Kenya, with a standard survey issued to each household to ensure uniformity and comparability amongst the households.

3.4 Definition of Variables

Table 1: Variable Definition, Measurements and Sources

Variable	Definition	Expected Sign
Dependent Variable Return to School	1 = learners returned to school and 0 was otherwise.	
Independent Variables Ability to manage day-to-day needs	Calculated using an Index of Inclusion scale, 1 = household was able to manage day to day needs and 0 = otherwise.	Negative (-)
Ability to deal with risks/shocks per household	Calculated using an Index of Inclusion scale, 1 = household was able to deal with socks and unforeseen events and 0 = otherwise.	Negative (-)
Ability to invest in future per household	Calculated using an Index of Inclusion scale, 1 = household was able to invest in future and 0 = otherwise.	Positive (+)
Control Variables Head of Household Gender	Calculated using an Index of Inclusion scale, 1= Male, 0=Female	Positive (+)
Household Priority	Calculated using an Index of Inclusion scale, 1=Education as priority, 0=otherwise	Negative (-)
Household dependents	Number of people sleeping and feeding under the same roof	Negative (-)
Highest education level of head of Household	Calculated using an Index of Inclusion scale, 1=Minimum of secondary education, 0=otherwise	Positive (+)
Marital status of Household head	Calculated using an Index of Inclusion scale, 1=Married, 0=otherwise	Positive (+)
Poverty Index of Household	Calculated using an Index of Inclusion scale, 1=Can access over 2500 Kshs per month, 0=otherwise	Negative (-)

3.5 Econometric Issues

3.5.1 Multicollinearity

From the data used, Variance Inflation Factor was employed to determine if there existed multicollinearity. However, the mean VIF index was 1.118 which is less than 10, which indicates that there is no multicollinearity from the data as shown in Appendix

3.5.2 Heteroskedasticity

Heteroskedasticity happens when standard deviation of variables is non-constant, thus, no constant error term on the variance. Tests such as Breusch Pagan Test, White's General Tests and Goldfeld-Quand Test will be employed to determine heteroskedasticity as shown in Appendix 3.

From the data, Breusch-Pagan / Cook-Weisberg test for heteroskedasticity was employed and showed that there is the issue of heteroskedasticity. To clear this, the data was clustered according to county to clear the heteroskedasticity issue.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.0. Introduction

This section covers descriptive statistics and presents the results of housing financial health and school resumption post COVID-19 in Kenya.

4.1. Descriptive Statistics

Table 2. Summary Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Return to School post COVID-19	22024	0.957	0.202	0.00	1.00
Household never went without food	22024	0.138	0.345	0.00	1.00
Household do not have difficulty meeting ends	22024	0.668	0.471	0.00	1.00
Household has budgeted plan	22024	0.328	0.470	0.00	1.00
Household has gone without medicine/treatment when needed	22024	0.121	0.326	0.00	1.00
Household can access emergency money within 3 days	22024	0.141	0.348	0.00	1.00
Household keeps money aside for future	22024	1.000	0.190	0.00	1.00
Household invest in productive assets	22024	0.894	0.307	0.00	1.00
Household has education plan	22024	0.002	0.045	0.00	1.00
Household puts money aside for old age/retirement	22024	0.792	0.406	0.00	1.00
Male head of Household	22024	0.424	0.494	0.00	1.00
Female head of Household	22024	0.576	0.494	0.00	1.00
Household priorities	22024	0.319	0.466	0.00	1.00
Number of Household dependents	22024	4.178	2.408	1.00	23.00
Highest Education level for Head of household	22024	0.294	0.455	0.000	1.00
Age of head of Household	22024	38.897	17.212	16.00	116.00
Marital status of head of household	22024	0.545	0.498	0.00	1.00
Financial Index of household	22024	0.855	0.352	0.00	1.00

Source; Based on Author's Calculations

Table 2 shows the average number of learners returning to school is estimated to be 95.74% during the period 2020-2021. In terms of ability to cope with day-to-day needs, the results show that 13.79% of households never went without food, 66.83% can meet ends during income cycles and 32.83% have budgeted plan during the year 2020-2021. In terms of ability to deal with shocks and unforeseen events of the future, 12.09% of the households have had difficulty accessing medicine/treatment that was needed, 14.13% of the households can access money within three days when there is an emergency and 99.96% of the households keep money aside for future emergencies. In terms of households' ability to invest in future, the results show that 89.44% of the households have invested in productive assets using savings or credit, 0.99% of the households have education plan and 79.16% of the households regularly put money aside to use upon retirement/old age.

Head of household is likely to be one, a cumulative of both the male and female household. From the data, for every 10 households surveyed, about 6 are female head of house and 4 are male head of house. Household priorities affect about 31.9% decision on learners returning to school. During the pandemic, there was a shift as some households struggled to manage day to day. Larger percentage of the households were able to prioritise education. It is estimated that a household has an average of 4 dependants per house. An increased number of dependents is more likely to affect the learners returning to school. Educated head of households are more likely to prioritise learning and plan for future shocks and investment on matters education. About 29.4% of educated head of household prioritised return to school. Head of households are estimated to be about 39 years of age. Nearly half of the household surveyed had spouses/were married and living together, whereas about 85.5% of the household were above the poverty index line/considered to be non-poor.

4.2. Empirical Results

Table 3. Logit estimates of effect of financial health on school resumption post COVID-19

Return to school post COVID-19	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
Household Ability to manage day-to-day	-0.082	0.063	-1.290	0.196	-0.204	0.042	
Household Ability to invest in future	0.102	0.027	3.740	0.000	0.049	0.156	***
Household Ability to deal with shocks	-0.227	0.025	-9.060	0.000	-0.276	-0.178	***
Gender of Household head	0.054	0.039	1.370	0.170	-0.023	0.131	
Households Priority dependents	-0.031	0.045	-0.680	0.498	-0.119	0.058	
Household education level	-0.240	0.024	-10.210	0.000	-0.286	-0.194	***
Household education level	0.168	0.043	3.880	0.000	0.083	0.252	***
Age of Head of Household	0.001	0.002	0.770	0.439	-0.002	0.004	
Marital status of head of household	0.019	0.051	0.370	0.714	-0.082	0.119	
Poverty Index of Household	-0.244	0.059	-4.140	0.000	-0.360	-0.129	***
Constant	4.547	0.089	51.000	0.000	4.372	4.721	***
Mean dependent var	0.957		SD dependent var	0.202			
Pseudo r-squared	0.057		Number of obs	22024			
Chi-square	12796.001		Prob > chi2	0.000			
Akaike crit. (AIC)	7327.313		Bayesian crit. (BIC)	7415.311			

*** p<.01, ** p<.05, * p<.1

Source; Based on Author's Calculations

The results from Table 3 were clustered as per county. The ability of household to manage day-to-day needs has a coefficient of -0.082, meaning that ability to maintain day-to-day activity had 8.2% influence on the ability of learners to go back to school post the COVID-19 period. Ability to manage day-to-day is negatively related to return to school, meaning that if a household fails to sustain day-to-day needs, therefore, education becomes a lesser priority and thus affection return to school for learners in a household. From the results, for each 100 households that were surveyed, about 9 households were unable to return learners to school due to inability to cater for the daily household needs.

The coefficient of household's ability to invest in future post COVID-19 is 0.102, meaning that ability to invest for the future had 10.2% influence on the ability of learners to go back to school post the COVID-19 period. The ability of a household to invest for the future is positively related to return to school, meaning that, if a household secures its future in form of investments and/or savings, the household is more likely to cope significantly during shocks such as COVID-19, thus, learners from such households are less likely to be affected by the pandemic. From the results, for every 100 households surveyed, about 10 households invested/saved for the future.

The coefficient of household's ability to deal with shocks and unforeseen events is -0.227, meaning that ability to deal with shocks and unforeseen future events has 22.7% influence on the ability of learners to go back to school post the COVID-19 period. Ability to deal with shocks and unforeseen future events is negatively related to return to school. This means that if a household fails to cope with the shocks like COVID-19, the learners are likely to be affected and education becomes a lesser priority. From the results, for every 100 households surveyed, about 23 of the households had learners who failed to go back to school following the need to deal with COVID-19 as a priority.

From the z-scores, a unit decrease in the ability of a household to cope with day-to-day needs leads to an increase of learners not returning to school with about 8 units. A unit decrease in the household's ability to deal with shocks and unforeseen events increases the units of learners not returning to school by about 23 units. A unit increase of a household ability to invest in future increases the chances of learners returning to school during pandemic by about 10 units. Household's characteristics play a vital role in determining the learners' return to school, which adds up to about 41% of the learners going back to school.

On the effect household characteristics had on financial measures, household priorities were significantly affected during the pandemic, which resulted to a shift in priorities. 3.1% of the

households were affected by the pandemic, shifting their main life goal to getting the basic needs as opposed to education. Increased number of dependents results to minimised prioritization of education, as more finances are diverted towards providing necessities as opposed to facilitating learning. This resulted to 24.2% learners being affected due to increased number of dependents per household during the pandemic.

A higher poverty index implies less planning of finances and setting aside of the money for learning, as such households are more likely to struggle to sustain basic needs and explains the 24.4% of learners who were affected.

Table 4. Marginal Effect of financial health on school resumption post COVID-19

		Delta-method					
		dy/dx	Std.Err.	z	P>z	[95%Conf.	Interval]
Household	Ability to manage day-to-day	-0.003	0.002	-1.350	0.176	-0.008	0.001
Household	Ability to invest in future	0.004	0.001	3.710	0.000	0.002	0.006
Household	Ability to deal with shocks	-0.009	0.001	-7.580	0.000	-0.011	-0.007
Gender	of Household head	0.002	0.002	1.330	0.182	-0.001	0.005
Households	Priority	-0.001	0.002	-0.690	0.488	-0.005	0.002
Household	dependents	-0.009	0.001	-7.490	0.000	-0.012	-0.007
Household	education level	0.007	0.002	3.400	0.001	0.003	0.010
Age	of Head of Household	0.000	0.000	0.790	0.428	-0.000	0.000
Marital	status of head of household	0.001	0.002	0.370	0.712	-0.003	0.005
Poverty	Index of Household	-0.010	0.002	-4.480	0.000	-0.014	-0.005

Source; Based on Author's Calculations

From Table 4, return to school with respect to ability to manage day to day per household post pandemic was negatively related. A unit change in ability to manage day to day per household results to a minimised chance of a learner returning to school buy 0.3 units. Ability to invest/secure future was vital for learners to return to school post pandemic, as it was positively related to return to school. From the table, a unit change in ability of a household to invest in future resulted to an

increased chance of learners returning to school by 0.4 units. Ability of a household to deal with shock was negatively related to return to school, meaning, if a household was not able to deal with shocks, then the chances of a learner going back to school became minimal. A unit change in ability of a household to deal with shocks resulted to minimised chance of a learner returning to school by 0.9 units.

Number of household dependents, household education level and poverty index of the household determined return to school post COVID-19. However, age of the head of the household, marital status, and household priority were not significant

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND POLICY RECOMMENDATIONS

5.1. Introduction

This section covers the conclusion, policy recommendations and based on the finding of the study and further areas of further research.

5.2. Summary of Findings

The key objective of this study was to analyse housing financial health and school resumption post COVID-19 in Kenya. This was motivated by the measures that were taken by the Government of Kenya in relation to the risk of learners spreading COVID-19 and the measures Ministry of Education took in accordance with the Ministry of Health. From the Maslow Theory of Hierarchy needs, an individual/household will need to sort their most basic need before proceeding to finance other activities. From this study, it is evident that households considered COVID-19 a factor that forced them to adapt to the situation, at the expenses of learners.

The result from household's ability to manage day-to-day shows that a few households struggled to satisfy their daily needs, making education a lesser priority. This means that a household that a household that is struggling to put food on their table, a household that has difficulty making ends and a household that has no budgeted plan are more likely to struggle to keep up with day-to-day needs. This indicates that a household will prioritize its basic needs first before considering other activities such as education, especially during a pandemic.

The result from household's ability to cope with shocks and unforeseen changes in future indicates that a household's preparation plays a vital role in ensuring the normal activities of the household during a pandemic. This means that a household that is prepared for such unforeseen events are

less likely to experience health/medicine access issues, access money during emergencies and can handle emergencies within the household. As such, learners return to school may not be affected by such shocks.

The results from household's ability to invest in future indicates that a household that invest in productive assets using savings/credit, a household that has educational plan and a regularly put aside money to utilize during old age or upon retirement are less likely to disrupt the activities of the learners during a pandemic. This follows the fact that a household is prepared, and education is not compromised.

Based on these findings, the study concluded that since learners are equally affected by pandemic, it trickles down to the household ability and willingness to help learners return to school. As such, households are encouraged to plan to cater for such emergencies.

5.3. Conclusion

To this end, this study sought to determine the impact COVID-19 had on learners, Moreso the financial impacts. Evidently, learners were affected in one way or the other, as there was a loss in time at the beginning before schools catching up to learning remotely. Various factors determine the ability of household to finance education post pandemic, as evident from the study. Whereas the less vulnerable were able to transition smoothly to remote learning, thus, resumption to school.

The government, the teachers and parents/guardians play a leading role in ensuring that learners are cushioned from such shocks in future. Whereas households' characteristics play a major role in determining if learners can resume to school post pandemic or not, it is also the duty of government to minimize the effects of the shocks on such households and encourage positive practice of finances such as setting money aside for learners in case of future shocks and emergencies and encourage insurance plans for the learners as well. This way, the effects will be minimised and less adverse, just like what China has done in the middle of the pandemic despite

being on lock-down for the longest time compared to any other state in the world post COVID-19 era (Hong et al., 2021).

5.4. Policy Recommendations

The study has concluded that unfortunate events/pandemic affect learners significantly. As such, the Government of Kenya in collaboration with the schools and households play a vital role in ensuring that learners are less affected by such unforeseen events.

Whereas there was about 95% of household learners returning to school after the pandemic, the 5% of the households depict the effect COVID-19 had on educational expenses. This means that for every 100 households surveyed, about 5 households failed to take back learners to school due to educational expenses. As such, no learner should be left behind during such unforeseen and government should ensure that funds are set aside for such households to ensure uniformity and no learning loss is experienced.

Learners of poor households were majorly affected by COVID-19. As such, there is the need to be intentional and purposeful in educating such households on the importance of investing in future and setting aside money for education purposes, should such unforeseen events re-occur.

More resources should be allocated to ensure remote learning is adopted and it is effective.

5.5. Suggestions for Further Research

This study therefore suggests that further research carried out with this data set to establish the financial health index and how it affects learners over a longer period. This will enable the study to establish the role household plays during pandemics to ensure that learners do not lose any learning years, in collaboration with the Government of Kenya.

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APPENDICES

APPENDIX I: PICTORIAL GRAPH ON LEARNING LOSSES EXPERIENCED DURING COVID-19 PANDEMIC

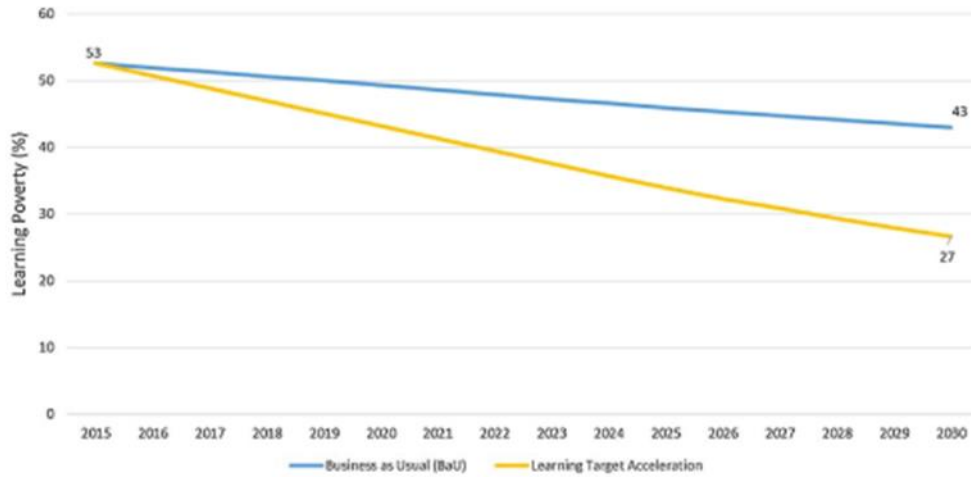


Figure 1; *The Global Target for Halving Learning Poverty Was Premised on Country Systems Tripling their Ability to Deliver Learning Source; Azevedo et al, 2020.*

APPENDIX 2: DIAGNOSTIC TEST 1

Variance inflation factor

	VIF	1/VIF
Head of household age	1.184	0.845
Household's head education level	1.182	0.846
Household's dependents	1.172	0.853
Poverty index of Household	1.151	0.869
Ability of household to invest in future	1.119	0.894
Head of household marital status	1.104	0.906
Household's Priority	1.097	0.912
Ability of Household to deal with shocks	1.088	0.919
Ability of household to manage day-to-day	1.06	0.943
Household's Head gender	1.026	0.975
Mean VIF	1.118	.

From Table 2, there is no multicollinearity issue from our data as the mean VIF<5. This indicates that there was no multicollinearity among the independent variables. Results are also supported by tolerance values above 0.1. This revealed that the correlation among the independent variables was within the acceptable levels.

APPENDIX 3: DIAGNOSTIC TEST 2

Breush-Pagan/Cook-Weisberg test for heteroskedasticity

Ho: Constant Variance

Variables: fitted values of Return to School Post COVID-19 in Kenya.

$\chi^2(1)=5127.87$

Prob > $\chi^2 = 0.0000$

From table 3 results, Prob > $\chi^2 = 0.0000$ which indicates that the data is heteroskedastic. However, when the data is clustered under county, Prob < χ^2 , with a significance greater than 0.05 which make the data statistically significant.