EFFECT OF COVID-19 ON LOAN REPAYMENT OF SMALL BUSINESSES IN KENYA: A CASE STUDY OF EASTLEIGH BUSINESS COMMUNITY

Fidow, Abdikadir Noor

Strategy

IPRJB

INTERNATIONAL PEER REVIEWED
JOURNAL AND BOOK PUBLISHING

EFFECT OF COVID-19 ON LOAN REPAYMENT OF SMALL BUSINESSES IN KENYA: A CASE STUDY OF EASTLEIGH BUSINESS COMMUNITY

[1*]Fidow, Abdikadir Noor

United States International University (USIU)

afiidow@yahoo.co.uk, P.O. Box 16450-00610, Nairobi, Kenya

Abstract

Purpose: The aim of this research is to investigate empirically the effect of pandemic outbreaks on loan repayment of small enterprises in Eastleigh business community, with particular focus for those who used borrowed fund in starting and operating their businesses.

Design/methodology/approach: The target population of the study was the business community of Eastliegh, and samples of 50 businesses were randomly selected from the population. descriptive statistics were used to analyze the mean, mode, median, and the variance of the collected data. Regression and correlation were used to analyze the strength and the direction between the relationships of the different variable.

Findings: The research results indicated statistically significant negative relationship between pandemic outbreak and loan repayment ability of small businesses in Easteigh, r(-.54), with p value of 0.008.

Unique contribution to theory, practice, and policy: Pandemic outbreak affects business performance and survival in different ways. Small business owners, regulators, lenders, and the general public may benefit from this research by considering the impact of disruptions on small businesses. The study is one of the first to respond to the effect pandemic outbreak on small businesses after covid-19 pandemic eruption. Conducting this study was indispensable because of the importance of small businesses for the economy of any country and the current situation of covid-19 pandemic impact on them, specifically those who borrowed the fund they had invested.

Key words: *Pandemic Outbreak, Small Businesses, Loan Repayment.*

1. 0 INTRODUCTION

Pandemic is a kind of epidemic that spreads across a wider geographical area than epidemic and affects significant number of the population (Qiu, Rutherford, Mao, & Chu, 2017). Since the beginning of this century, there have been a number of pandemic outbreaks like Spanish flue of 1918, flue pandemic of 1957, H1N1 2009, and COVID-19 of 2019/2020 (Sohrabi, et al., 2020). Since the 16th century, pandemics have occurred regularly every 30 to 40 years. The Spanish flue killed more than 50 million worldwide, because there were no cure for influenza and other complications like pneumonia, while antibiotics were not invented. The fact that there was no centrally enforced lockdowns to curb the spread of the infections complicated the matter.

Covid-19 is severe acute respiratory syndrome that has the capability to transmit between the animals and humans (Gorbalenya, 2020). The government has taken actions to enforce closure of bars, restaurants, down-to-dusk curfew, and 'social distancing' in order to contain or slow the spread of the coronavirus pandemic. Most, if not all, small businesses don't have the resources to survive this kind of curfew and quarantine without the government assistance.

According to recent survey by Central Bank of Kenya (2018), small businesses (firms that employ between one to 200 employees) constitute 98% of all business population in Kenya, create 30% of jobs annually, and contribute 80% of the income for low and middle class citizens in Kenya (Maengwe, & Otuya, 2016). As the government contemplates broader and stronger measures to comprehend and contain the spread of the COVID-19 pandemic, the economists and financiers are warning that the ever-important sector of small businesses will collapse in large numbers. Yet, the government so far has neither issued any significant help for the businesses to survive under unending quarantine and curfew, nor passed any laws suspending or lessening the burden of maturing debt obligations. In few months, the Coronavirus epidemic has changed the ways almost all businesses operate in unprecedented approach. The outbreak has delivered an indiscriminate blow to all businesses from large Airlines to small shops, and has been forced a change of how they work amid a series of closures ordered by the government to contain the tide of the virus.

The economic stagnation and the casualty of three million-plus small businesses in the country will not only obliterate those jobs created by the bars, shops, restaurants, and service providers, but also will destroy the down stream jobs that depend on them. Many small businesses in Eastliegh (the largest market in sub Saharan Africa) started reporting that the process of mass layoffs, and closing businesses is ongoing. When I sampled ten restaurants in Eastliegh, they told me that they are operating half capacity and sent 50% of their employees on unpaid leave. The SME performance index 2019, further indicated that only half of small businesses survive longer than three years, and one of the key challenges is liquidity. Business start-ups have truncated revenue due to lack of market share, loyal customers, and known brand. But the overhead cost like rent and payroll are fixed, which leave very little liquid cash to owners.

Although many ward and county representatives suggest more businesses will begin to close very soon under the weight of the government dogmas, the experts are reluctant to predict the precise number that the curfew and quarantine may cause their closure. Currently, the long distance transport is 80% down in revenue; bars, restaurants, and hospitality industry, 85%, while manufacturers are down to 50% due to different business disruptions (Kagwaini, et. al,

2020). Based on this trend, 40% of small businesses will close within the next 25 days of curfew and quarantine, and 70% of them will close permanently within two months.

Currently, some business owners have already begun closing, while others are reaching out their personal pockets and burning their savings in order to survive. If the government doesn't take major steps to rescue small businesses, the economy should expect a wave of permanent closures and loss of jobs, thus causing insecurity and economic downturn. Visualize a bar or restaurant with overhead of rent, matured debt, salaries and wages, to pay, yet the government reduced its operation time by half without any support. The business will live day by day for some time before closing down completely.

According to Wheat, and Farrell (2017) research, 50% of small businesses have enough cash on hand to survive only 27 days, and if there is no cash flow income within that period, the business will close shop. The bars, restaurants, and hospitality industry are particularly vulnerable because they have to maintain high overhead costs like rent, fixtures, debt, taxes, service contracts, payrolls, and many more that add up to a budget, which is very tough to accumulate during difficulty periods. When the government indefinitely shuts down a business, which has liquid cash to survive only 27 days, there is little chance that it will reopen again. Large and multinational companies have resources and reserves to cover those expenses during crises because they can take advantage from economies of scale to outperform smaller competitors, and earn resources to survive in a recession periods, due to the fact that they have access to superior lending options both from local and outside of the country. This will enable them access to easier and cheaper cash to pay bills during quarantine and curfew times.

This paper examines small businesses in Eastleigh and empirically tests hypothesis that business disruptions like cash flow shortages, supply flow interruptions, high cost of supplies, missing sales targets, and short operating periods have no significant effect on loan payments of small businesses in Eastleigh. Because of small businesses concentration in Eastleigh, the study will generate a result that can be generalized to Nairobi, Kenya, and to the whole world. Apart from being a home for many small businesses, Eastleigh is segregated from other party of the city due to COVID-19, which created a situation where thousands of small business cannot get enough customers, stock supply, and cash flow to enable them pay their outstanding loans.

The rest of the paper will proceed as follows: section two will present theoretical framework by reviewing previous research. Section 3 will present methodology and sampling, section four will deal with results of the study, and section five will discuss the finding of the research, concluding, and recommendations.

Statement of the Problem

There is no doubt that most countries in the world depend on their small businesses in driving their economies forward (Love, & Roper, 2015). According to recent survey by Central Bank of Kenya (2018), small businesses constitute 91% of all business population in Kenya, create 30% of jobs annually, and contribute 80% of the income for low and middle class citizens in Kenya (Maengwe, & Otuya, 2016). A survey conducted by Kenya Bureau of Statistics (2017) divulged that 400,000 small businesses in Kenya did not celebrate their second anniversary in the last five years (Douglas, Douglas, Muturi, & Ochieng, 2017). Although different factors contribute these failures, pandemic outbreak is a major one due to the fact that it disrupts supplies, increases the cost of availing inputs, reduces purchasing power of the customers,

reduces cash flow, reduces human capital, and affects every aspect that contributes the profitability of the business.

However, pandemic outbreak of this magnitude that caused the closure of many businesses in different sectors of the country never happened in Kenya. Compounding the problem, 82% of small businesses borrowed the fund that they started with their businesses (Mwangi, & Muturi, 2016). On the other hand, Central Bank of Kenya (CBK) removed capping of interest rate and gave lenders free hand to charge as they wish, while the pandemic disrupted all profit generating aspects. Citing a study conducted in April by (Aluga, 2020), CBK Governor Patrick Njoroge said that small businesses surveyed, 75% indicated that without help such as credit buffers and other resources to cushion against the slowdown caused by the Coronavirus, they would close by the end of June. The pandemic disruptions of business operations has caused the acceleration of business failures, thus causing unemployment, insecurity, and loss of government revenue in terms of income and excise duties.

Although few studies have been done about covid-19 effects on different business sectors like Kimani, et.al (2020), and (Ogenga, & Baraza, 2020), this study is the first to focus how covid-19 affected loan repayment of small businesses in Eastleigh, Kenya, which is the biggest market for small businesses in East and Central Africa. Since majority of businesses are repaying a very expensive loans, the study will focus how covid-19 disruptions affected the repayment of these loans. Using the result of this study, the government will be able to establish policies safeguarding the wellbeing of small businesses and avoid the consequences of their collapse to the economy, labor market, security, and the society in general. The lenders would be able to understand objectively the root cause of their dwindling revenue from small businesses during pandemic outbreaks, and come up with counter productive measures against the disruptors of their clients. Finally, since this market is a hub for different business sectors and sizes, the outcome of this study could be generalized to the rest of Kenyan small businesses.

Objective of the Study

The objective of this study is to establish the effect of Covid-19 disruptions on loan repayment of small businesses in Kenya. To examine the effect of supply disruption, supply cost, reduced cash flow, reduced operating period, and missed sales target on loan repayment of small businesses in Kenya.

2.0 LITERATURE REVIEW

Bartik, et.al (2020) researched *"The impact of COVID-19 on small business outcomes and expectations in USA."* They surveyed 5800 small businesses to explore the disruptions caused by COVID-19 on the operations of their businesses. They found that, few weeks into the crises, mass layoffs of the 48% Americans employed in small businesses sector had already struck. The result showed that the risk of closures was negatively correlated with the expected length of the pandemic. At the time of the survey, the study found that the median businesses with more than $10000 monthly expenses had enough cash to survive only two weeks, while small businesses were more fragile and had cash to survive only one week. The study also found that more than 70% of the businesses planned to seek funding from Coronavirus Aid, Relief, and Economic Security (CARES), though many anticipated problems in accessing the funds.

Antonescu (2020) investigated a topic titled *"Supporting small and medium size enterprises through the COVID-19 crisis in Romania."* They indicated that small and medium businesses in Romania were one of the hardest hit by COVID-19 pandemic globally and the government must take urgent measures to keep the sector afloat. The study found that four out of every ten companies are in the red zone of collapsing, with more expenditure than income from the operations of their businesses. There were also mass layoffs of 850,000 employees, (one-fifth of private sector employees in Romania) during first three months of the pandemic outbreak. He recommended Supplementing financial programs for SMEs, national Program for supporting industrial parks, and creation of support centers at regional level.

Turner, and Akinremi (2020) Studied the impact of COVID-19 on Chinese small and medium firms. China was the epicenter of the pandemic and the effect was severe due to the unpreparedness of the government. The study used data from 2000 small businesses across the country and in February 2020 they found that 30% of respondents reported cash shortage due to the pandemic outbreak and would not be able to sustain their businesses more than three months, while another 30% reported that they will not be able to sustain their businesses more than six months. Additionally, 30% reported that their income had dropped by more than 50%. Although many employees were working from home, 75% of the businesses reported that they are no longer working at full capacity. About 70% of the businesses also stated that their supply was disrupted and trying to fix it. Finally, the study found that each ten day period of the pandemic, Chinese economy reduces quarterly GDP growth by 0.39 to 0.46 percent.

Lakuma, Sunday, Sserunjogi, Kahunde, and Munyambonera (2020) studied how COVID-19 impacted small and medium enterprises in Uganda. Although Uganda adopted serous measures of containment to curb the spread of the pandemic like closing schools, restricting the movement of people in and out of the country, and social distancing, the virus took its toll among the population and affected businesses of different sectors. The study showed that three-quarters of businesses surveyed laid-off employees in the last three months due to reduced business activities caused by COVID-19. Agriculture businesses have experienced the largest constraints in accessing markets due to transport restrictions, quarantine, and sanctions of weekly markets. More than 51% of the respondents indicated that if the current restriction persists, they would close their businesses within three months, while 34% indicated that they would be able to survive up to six months. About 35% of the respondents also stated that the pandemic affected their loan repayment ability.

Wanjala (2020) investigate *"The Economic Impact Assessment of the Novel Coronavirus on Tourism and Trade in Kenya."* Citing central bank survey report of 2019 before the outbreak of the pandemic, about 51% of Kenyans are living hand to mouth. This statistics stressed that huge percentage of the society risk hunger incase of lockdown, restriction of movement, or taking containment measures that can cause unemployment. The study found that tourism and hospitality industry were the most hit hard by the -19 pandemic. The surveyed businesses from this industry stated that they laid off 47% of employees, and 61% of them indicated they would not be able to survive beyond three months if the current situation does not change. The study concluded that the leaders and policy makers in Kenya have to learn from the countries that contained the pandemic and prioritize health matters from other development programs. The literature signposted lack of proper research about the effect of COVID-19 on loan repayment in Kenya.

2.1 Theoretical framework

Austrian Business Cycle Theory (ABCT) is a subset of Financial Crises Theories. The theory originated from Austrian school of economics in 1930 by Friedrich Hayek and Gunner Myrdal (Cachanosky, & Lewin, 2016). The theory states that business cycles are the consequences of excessive growth of bank credits due to low interest rate set by the central bank of the state. The advocates of the theory believe that low interest rate stimulates borrowing by businesses, which lead an increase of capital spending funded by the bank credits. Availability of inexpensive funds enables the entrepreneurs to invest in capital goods rather than basic consumer goods such as clothing and food. But Credit Frictions and Market Freezes proponents state that the problem in the financial sector is exogenous, because the quality of loans is in equilibrium by the behavior of the borrowers and the banks. The moral hazards of the borrowers, which can lead friction in the flow of credit in the economy, affect the amount of credit available for borrowers and the return for the lenders. Chan, Kuo, Lin, and Lin (2020) stated that trustworthiness is very important because, when entrepreneur borrows money in order to finance a project, he/she can take activities that can reduce the value of the project by increasing his/her own benefits. To avoid this, the lender needs to make sure that the entrepreneur has enough incentives to improve the quality of the project and enable the repayment of the loan.

The empirical researches about the theory were inconclusive, with different schools of thought arriving at different conclusions. Friedman (1969) found the theory inconsistent with the empirical evidence, and 25 years later, he reanalyzed the theory using newer data and confirmed the previous findings. But Keeler (2001), an Austrian economist argued that the theory is consistent with empirical evidence. Ismans, and Mougeot (2009) arrived at the same conclusion with Keeler in 2009. According to Gorbatenko (2017), pandemic outbreaks will inevitably wreak havoc on small businesses, people, communities, and countries that are not strong enough to withstand the shock, and every country must set aside resources to contain the outbreak and shield small businesses from these shocks to safe guard the economy as well as employment. There is a vivid justification why the theory of Austrian Business Cycle Theory (ABCT) is relevant to this study as it provides crucial information on unanticipated crises as well as pandemic outbreaks.

2.2 Empirical Review

Rebmann, Wang, Swick, Reddick, and delRosario (2013) researched *business continuity and pandemic preparedness in USA*. They administered restructured questionnaire to human resources professionals during May-July 2011. Linear regression was used to analyze factors associated with business continuity and pandemic preparedness scores. The determinants used for business continuity were (1) type of business (2) business size (3) risk perception (4) having human resources professionals. The study used Fisher Exact Test and chi-square to compare health care vs non-health care businesses on preparedness indicators. They found that the preparedness of health care businesses ranged from 0.5 to 27, while non-health care businesses ranged from 0 to 15, with average of score of 13.2 and 7.3 respectively.

Fernandes (2020) researched the *Economic effects of coronavirus outbreak (COVID-19) on the world economy*. The sample contained 30 countries under different scenarios. Although at the date of this report, the extent of the lockdown as well as the recovery period is unknown, the report indicated the GDP growth would take a hit ranging between 3-6% depending the

specific country. The study found a median decline of -2.8% in the GDP of the sampled countries with 2.5-3% further additional decline in each month of this crises and countermeasures. The report projected a GDP fall of up to 15% in some countries with severe outbreak and economic lockdown. Service oriented economies and those who depend foreign trade will be extremely affected by these crises with more job losses. The study concluded that the sampled countries are underestimating this pandemic due to over-reliance on historical data of previous outbreaks and the economic consequences.

Ivanov (2020) studied *predicting the impacts of epidemic outbreaks on global supply chains.* He used simulation-based methodology with logistic simulation and optimization software to examine and predict the impact of epidemic outbreaks on the supply chain functioning. The study found that the timing of opening and closing the business has more impact on supply chain performance than the upstream disruptions. The study also found other factors that impede supply chain as lead-time, speed of pandemic spread, and the duration of the disruptions.

 Sinagl (2020) studied *Cash-flow Risk and Industry Response to COVID-19 Outbreak.* The objective of the study was how US industries react to long-term cash-flow risk caused by covid-19 disruptions. Since different industries may react differently to cash flow risk, the researcher used March 25, 2020 as the cut-off date for the analysis of cash-flow risk during covid-19 crises. The study found that the industries which deal goods with low demand elasticity to price shocks is associated with low cash-flow risk. This means that the industries, which produce assets with less substitutes or produces necessities rather than luxuries, are more insulated in cash-flow shocks than their peers who produce goods with elastic demand. Firms in oil, steel works, and construction were found to have the highest systematic risk levels, mostly caused by reduced cash flow. There is negative relationship between the industry cash flow and the duration of the pandemic outbreak.

Lederman, Kurnia, and Lederman (2009) studied *designing supply chain systems to cope with catastrophes.* The objective of the study was whether the processes used currently in supply chain management are equipped with supply continuity in times of crises. The study used two stages. The first stage was to identify strategies of supply chain used in the industry, and the second stage was concerned exploring how different technologies and approaches could reduce supply disruptions. Lee and Billing model of minimizing stock outs was used to analyze the data. The study found that the usage of IT by food dealers reduced the problem of maintaining supplies during crises. The cost of supply increases with the increase of the pandemic duration, due to the fact the demand will exceed the supply.

Ntsomboh-Ntsefong, Shariati, Khan, and Karapetkovska-Hristova (2017) researched *the Incidence of avian flu shocks on poor household livelihoods of poultry farmers in Africa.* They said that many businesses developed continuity plan for the potential disruptions that the pandemic may cause. The study applied System Dynamics Framework to evaluate the mechanisms that amplify risks and the proposed solution. The study found that pandemic outbreaks disrupt supplies, customers and their purchasing power, cash flow, and the expected profits of the business. Lenders also increase interest rate due to risk increase in the economic environment. The study concluded 5-point recommendations in order to survive pandemic outbreaks, which are: review business continuity strategy, communicate with your employees, contact local hospitals, and prepare physical workspace.

3.0 RESEARCH METHODOLOGY

3.1 Research Design

In this study, Causal Design was applied, and the data will be collected using structured questionnaire from a sample of 50 small business owners. The study used; supply flow, cash flow, sales, cost of supply, and operation period as the independent variable, while 'loan repayment' is the dependent variable. The data is collected within Eastleigh business community in Nairobi Kenya in the period April-May2020. These respondents are suitable because managers of SME have significant influence on firm's direction, and are the main decision makers (O'Regan, Sims, & Gallear, 2008). The questionnaire focused the general environment that affects their operations and profitability.

3.2 Main characteristics of Eastleigh

Eastleigh was established in 1921 by the colonial administration and formerly called Nairobi East Township, mostly populated by Somalis who had moved from Ngara plains. Eastleigh is the biggest market in East and Central Africa hosting 40% of small businesses in Nairobi. Apart from the general economic slowdown of the world caused by Covid-19, Eastleigh is separately ghettoized from the rest of the world. This caused partial or total shutdown of the majority of businesses, causing employment and profit loss in this vast district of Nairobi.

3.3 Models

To evaluate the relationship between loan repayment and business disruptions, the study used equation (1) and conducted regression and correlation analysis, in which loan repayment was used as the dependent variable and business disruptions as the independent variables.

$Loanrepayment = \beta_0 + \beta_1 supplycost = \beta_2 supplyflow + \beta_3 cashflow + \beta_4 salestarget + \beta_5 operating\ period + e.$

To measure independent variables against loan repayment, we asked the respondent to rank the questionnaire statements into five-point Likert scale (1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree). Descriptive statistics is used to summarize the collected data, while regression and correlation were used to measure the strength and the direction of the relationship between the dependent and independent variables with 95% confidence level. The results of the analyzed data were then presented in tables.

4.0 FINDING AND PRESENTATIONS

4.1 Descriptive Statistics

The majority of the respondents were business owners (76%), while 24% were employees for the businesses. 68% of the respondents were females, while 32% were males. 78% of the respondents were between 20-39-age brackets, which shows that small businesses involve people who are in the prime of their lives. 74% of the respondents have up to secondary education level, while 20% have either certificate or diploma. Only 6% were found to be graduates. In business sector, 32% were retailers, 26% merchants, 14% lodging and restaurants, 6% hawking, 5% transport, 4%wholsale, and 1% each from manufactures and agriculture. In terms of fund-source, the study found that 30% of the respondents sourced their funds from SACCOs, 26% personal saving, 22% bank loan, 14%, family, friends 6%, and venture capital 2%.

www.iprjb.org

4.1.1 Effects of pandemic disruptions on loan repayment

The respondents were asked to give their opinion about the extent of how different business disruptions affect their operations. Results show that 63.3% of the respondents agreed or strongly agreed that supply was disrupted by the COVID-19, while 72% indicated an increase of supply cost during the pandemic outbreak. Some 45% of the respondents also indicated that they missed their sales target, while 78% reported a reduction of cash flow. Majority of the respondents, 66% of them confirmed that the operating period of their businesses was reduced. Table 1 shows the result.

Table 1: pandemic disruptions

Response	Agree	Strongly Agree	Neutral	Disagree	Strongly disagree	Total
Supply flow	13	18	5	7	6	49
%	26.5	36.8	10.2	14.3	12.2	100
Supply cost	16	20	3	3	8	50
%	32	40	6	6	16	100
Sales target	12	10	8	10	9	49
%	24.5	20.5	16.2	20.5	18.3	100
Cash flow	17	22	4	3	4	50
%	34	44	8	6	8	100
Op. period	24	9	7	4	6	50
%	48	18	14	8	12	100

4.2 Correlation Analysis

Correlation analysis was conducted to test the relationship between supply flow, supply cost, sales target, cash flow, operating period, and loan repayment ability. The correlation coefficient for supply flow on loan repayment was 0.25 with p value=0.009. The value indicates the existence of strong association between business supply and its ability to repay loan. There is weak association between supply cost and loan repayment (r=0.24, p=0.07). Similarly, there is weak but significant association between sales target and loan repayment (r=0.235, p=0.8). There is also moderate association between cash flow and loan repayment (r=0.49, p=0.41). Furthermore, there was weak association between operating period of the business and the ability of loan repayment. The below table summarizes the results.

Table 2 correlations

		Supply flow	Supply Cost	Sales Target	Cash Flow	Operating Period	Loan Repaymet
Supply flow	Pearson correlation	1	0.074	-0.188	-0.3	0.261	0.25
	Sig. (2 tailed)	-	0.61	0.19	0.838	0.67	0.09
	Covariance	1.408	0.096	-0.278	-0.43	0.348	0.102
Supply cost	Pearson correlation	0.074	1	0.14	-0.131	-0.007	0.24
	Sig. (2 tailed)	0.61	-	0.333	0.366	0.963	0.07
	Covariance	0.96	1.194	0.19	-0.173	-0.008	0.027
Sales target	Pearson correlation	-0.188	-0.14	1	-0.042	0.018	0.235
	Sig. (2 tailed)	0.19	0.333	-	0.366	0.963	0.07
	Covariance	0.96	1.194	0.19	-0.173	-0.008	0.27
Cash flow	Pearson correlation	-0.38	-0.131	-0.042	1	-0.116	0.49
	Sig. (2 tailed)	0.838	0.366	0.773	-	0.42	0.041
	Covariance	0.043	0.173	-0.063	1.48	-0.159	0.002
Operating Period	Pearson correlation	0.261	-0.007	0.018	-0.116	1	0.431
	Sig. (2 tailed)	0.067	0.963	0.901	0.421	-	0.107
	Covariance	0.48	-0.008	0.025	-0.159	1.264	0.264
Loan Repayment	Pearson correlation	0.085	0.02	0.235	0.002	0.231	1
	Sig. (2 tailed)	0.559	0.87	0.1	0.991	0.107	-
	Covariance	0.102	0.027	0.298	0.002	0.264	1.04

The overall correlation between covid-19 and the ability of the business to repay loan was -.54, $p < 0.05$. This means that higher the spread of covid-19, the lower the ability of the business to repay the loan. This result is shown in the following table.

		Loan repayment
Covid-19	Pearson correlation	-.54
	Sig. (2 tailed)	0.008

4.3 Regressions analysis

The study conducted a regression analysis of supply flow, supply cost, cash flow, operating period, and sales target on loan repayment ability.

4.3.1 Model Summary

www.iprjb.org

In the model, 82% of the variations can be explained by the independent variables (R^2=0.82), while the remaining 18% is explained by factors beyond this study.

Table 3: Model Summary

Model	R	R^2	Adjusted R^2	Std. error of the estimste	Change statistics				
					R^2change	F change	df1	Df2	Sig.
1	0.901	0.812	0.791	1.022	0.812	38.89	5	45	0.008

4.3.2. ANOVA

The study also conducted Analysis of Variance (ANOVA). The model is statistically significant, f(5,45)=38.889, p=0.000, implying that the model was statistically significant and good fit for the data. The below table summarizes the result of ANOVA.

Table 4: ANOVA

Model	Sum squares	df	Mean square	f	Sig.
Regression	203.017	5	40.603	38.889	.000
Residual	46.983	45	1.044		
Total	250.000	50			

Dependent variable: loan repayment ability

Predictors: Supply flow *Supply cost *Cash flow *Operating period *Sales target

4.3.3 Regression of Coefficient

The multiple linear regression results showed that the model, pandemic effect, was significant in predicting loan repayment, β = .681, t(49) = 2.46, p <.05. This result is shown in table.

Table 5: Coefficients*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	Constant	3.678	2.697		1.397	.175
	Default risk	.681	.256	.281	2.462	.016

*Dependent variable: loan repayment

*Predictor variable: COVID-19

5.0 SUMMARY, CONCLUSION, AND RECOMMENDATION

5.1 Discussion/Summary

The study concluded that there is significant positive relationship between supply flow and loan repayment ability. The relationship between supply cost and sales target on loan repayment ability was weak but significant. The association between cash flow and loan repayment was strong and positive, while the one between operating period and loan repayment was significantly positive. In general, there was negative relationship between small business disruptions and their ability to repay loan on time.

5.2 Recommendations

Once those businesses disappear, it will take years to rebuild and acknowledge their presence in the economy again. The debt will continue to accumulate for those who borrowed even after closure, making difficult for the entrepreneurs to start the same business or new one again. But if the government provides adequately targeted stimulus, quick bounce back is possible. The most basic problem that majority of small businesses complain is about the unblinking interest rate and penalties on their loans. The government should compel the lenders to freeze the cost of finances; at least at these challenging periods, so that small businesses will have a space to breath and reduce their burden. The second problem is the mass layoffs of employees by small businesses, which will create high crime rate and insecurity. It will be prudent if the government can remove the payroll cost from the vulnerable businesses to avoid shedding their workforce during this downturn. Government help, such as sending money directly to the vulnerable households, may not support at all, when the shops and stores are closed, and the country is under lockdown. Stipends will not help when the people are fearful of receiving packages at their doorsteps?

Even at this time of hardship, a strong stimulus package won't prevent closures for the owners who depend their livelihoods on these businesses. A plan for rent, employees, and electricity payment during quarantine would not replace their income and profits they used to feed and educate their dependents, but could prevent widespread bankruptcies that may spread across the country. It will also lessen the burden and give opportunity for quick recovery. But so far, the stimuli of Kenya government for businesses on this phenomenon were a reduction of VAT from 16% to 14%, which is an affront to the business community. How sales tax reduction can help a business that is not selling in the first place? To make the matter worse, the curfew started at the end of the month when bills are due straining already stretched resources. Bars, shops, and restaurant owners are already contemplating whether to pay their cost of March and anticipate for a miracle or close the business while they have some money in their pockets.

The government should provide immediate cash stipend to the most vulnerable small businesses by at least covering their payroll. The information about SME employees will be very easily available for the government in the payroll tax of every business. To qualify for this fund, the condition will be that the business kept the same number employees after the pandemic. The study also suggested that small businesses should adopt ideas of dealing with unpredicted business disruptions like insuring against such incidents, and monitoring external and internal environment of the business.

5.3 Limitations/implications:

The current study is limited to investigating a sample from small businesses in Eastleigh covering a period between May to September 2020. Although the finding can be generalized to other areas of the country and the world, environmental differences can impact the result of this

study. further research in different industries, sectors, towns, counties, countries, and periods is recommended.

REFERENCES

Aluga, M. A. (2020). Coronavirus Disease 2019 (COVID-19) in Kenya: Preparedness, response and transmissibility. *Journal of Microbiology, Immunology and Infection*.

Antonescu, D. (2020). Supporting small and medium size enterprises through the COVID-19 crisis in Romania. *Central European Journal of Geography and Sustainable Development*, *2*(1), 38-57.

Bartik, A. W., Bertrand, M., Cullen, Z., Glaeser, E. L., Luca, M., & Stanton, C. (2020). The impact of COVID-19 on small business outcomes and expectations. *Proceedings of the National Academy of Sciences*, *117*(30), 17656-17666.

Bismans, F., & Mougeot, C. (2009). Austrian business cycle theory: Empirical evidence. *The Review of Austrian Economics*, *22*(3), 241-257.

Cachanosky, N., & Lewin, P. (2016). Financial foundations of Austrian business cycle theory. In *Studies in Austrian macroeconomics*. Emerald Group Publishing Limited.

Central Bank Of Kenya (2018). Commercial Banks and Microfinance Institutions in Kenya. www.cbk.go.ke accessed on 15th October 2018.

Chan, K., Kuo, W., Lin, C. Y., & Lin, T. C. (2020). Firm Trustworthiness and Bank Loan Pricing. *Available at SSRN 3535237*.

Farrell, D., & Wheat, C. (2017). Small business segments for research-based policymaking. *JPMorgan Chase Institute. https://www. jpmorganchase. com/corporate/institute/insight-mapping-smb-segments. htm*.

Fernandes, N. (2020). Economic effects of coronavirus outbreak (COVID-19) on the world economy. *Available at SSRN 3557504*.

Friedman, M. (1969). *The optimum quantity of money, and other essays* (No. HG538 F866).

Gorbalenya, A. E. (2020). Severe acute respiratory syndrome-related coronavirus–The species and its viruses, a statement of the Coronavirus Study Group. *BioRxiv*.

Gorbatenko, D. (2017). A New Approach to Austrian Business Cycle Theory. *Available at SSRN 3055121*.

Ivanov, D. (2020). Predicting the impacts of epidemic outbreaks on global supply chains: A simulation-based analysis on the coronavirus outbreak (COVID-19/SARS-CoV-2) case. *Transportation Research Part E: Logistics and Transportation Review*, *136*, 101922.

Kagwaini, D. M., Marima, L., Kioko, M., Ronald, G., Mwaura, J., Odhiambo, D., ... & Chege, E. (2020). Financing & Investment Decisions Amid Covid-19 Lockdown: Interviews Conducted From Various Businesses In Nairobi.

Keeler, J. P. (2001). Empirical evidence on the Austrian business cycle theory. *The Review of Austrian Economics*, *14*(4), 331-351.

Kimani, J., Adhiambo, J., Kasiba, R., Mwangi, P., Were, V., Mathenge, J., ... & Becker, M. (2020). The effects of COVID-19 on the health and socio-economic security of sex workers in Nairobi, Kenya: Emerging intersections with HIV. *Global Public Health*, 1-10.

Lakuma, P. C., Sunday, N., Sserunjogi, B., Kahunde, R., & Munyambonera, E. F. (2020). How have the COVID-19 Pandemic Impacted Ugandan Businesses? Results from a Business Climate Survey.

Lederman, R., Kurnia, S., & Lederman, J. (2009). Designing supply chain systems to cope with catastrophes. *PACIS 2009 Proceedings*, 92.

Love, J. H., & Roper, S. (2015). SME innovation, exporting and growth: A review of existing evidence. *International small business journal*, *33*(1), 28-48.

Maengwe, J. O., & Otuya, W. I. (2016). A critical review on micro-financing of small businesses in Kenya. *Pyrex Journal of Business and Finance Management Research*, *2*(2), 006-011.

Maengwe, J. O., & Otuya, W. I. (2016). A critical review on micro-financing of small businesses in Kenya. *Pyrex Journal of Business and Finance Management Research*, *2*(2), 6-11.

Mwangi, B. W., & Muturi, W. (2016). Effects of credit risk management on loan repayment performance of commercial banks in Kenya. *International Academic Journal of Economics and Finance*, *2*(2), 1-24.

Ntsomboh-Ntsefong, G., Shariati, M. A., Khan, M. U., & Karapetkovska-Hristova, V. (2017). Incidence of avian flu shocks on poor household livelihoods of poultry farmers in Africa. *International Journal of Avian & Wildlife Biology (IJAWB)*, *2*(1), 7-11.

O'Regan, N., Sims, M. A., & Gallear, D. (2008). Leaders, loungers, laggards. *Journal of Manufacturing Technology Management*.

Ogenga, F., & Baraza, C. (2020). The Political-Economy of Covid-19 and Security in Western Kenya.

Qiu, W., Rutherford, S., Mao, A., & Chu, C. (2017). The pandemic and its impacts. *Health, culture and society*, *9*, 1-11.

Rebmann, T., Wang, J., Swick, Z., Reddick, D., & delRosario Jr, J. L. (2013). Business continuity and pandemic preparedness: US health care versus non health care agencies. *American journal of infection control*, *41*(4), e27-e33.

Sinagl, P. (2020). Cash-flow Risk and Industry Response to COVID-19 Outbreak. *Available at SSRN 3566511*.

Sohrabi, C., Alsafi, Z., O'Neill, N., Khan, M., Kerwan, A., Al-Jabir, A., ... & Agha, R. (2020). World Health Organization declares global emergency: A review of the 2019 novel coronavirus (COVID-19). *International Journal of Surgery*.

Turner, J., & Akinremi, T. (2020). The business effects of pandemics–a rapid literature review. *Enterprise Research Centre, available at: https://www. enterpriseresearch. ac. uk/wp-content/uploads/2020/04/ERC-Insight-The-business-effects-of-pandemics-%E2*, *80*.

www.iprjb.org

Wanjala, K. (2020). The Economic Impact Assessment of the Novel Coronavirus on Tourism and Trade in Kenya: Lessons from Preceding Epidemics. *Finance & Economics Review*, *2*(1), 1-10.