Effects of Reduced Cash Flows During COVID-19 Pandemic on Loan Repayment at Exim Bank Limited in Moshi Municipality, Tanzania

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Abstract
COVID-19 pandemic affected businesses and organizations in their daily operations. Banks were also very much affected especially with regards to loan repayments as clients were not able to make enough revenues resulting in less capabilities to repay the loans. This study sought to assess the effects of cash flows during COVID-19 Pandemic on loan repayment of commercial banks in Tanzania, a case of EXIM Bank Ltd in Moshi Municipality. The study was informed by the Theory of Planned Behaviour (TPB). The population for the study was327 bank clients who have taken loans between 2019 and 2022. The study used a sample of 180 respondents determined by Yamane (1964) formula. Respondents were randomly selected from the study area. Both quantitative and qualitative data was collected. Tools validity was ensured using content validity using the literature related to loan repayment and cash flows and also by discussion with research experts at the University. Reliability was tested using Cronbach alpha coefficient where a value of 0.733 was obtained. Data was collected using a structured questionnaire and key informant interview guide. Descriptive statistics and inferential statistics were both used for data analysis. The study found that, cash flows have effects on loan repayment statistically significant at p-value less than 0.05 while also key informants said that COVID 19 had effects on clients' cash flows. It is concluded that, cash flow of borrowers' businesses has effects on loan repayment. It is recommended that; Exim Bank Ltd should maintain good relationship with clients as it gives confidence through the services rendered to them.

Keywords: COVID -19, loan repayment, cash flows, loan repayments

1. Introduction

The World Health Organization estimates that there were more than 200 million verified COVID-19 cases and nearly 5 million fatalities worldwide (WHO, 2021). The epidemic has affected several nations, businesses and working organizations. Governments implemented mitigating measures based on travel restrictions, lockdowns, social isolation, and the shutdown of non-essential activity in order to control the spread (Mayala, 2021). As it is known worldwide, COVID-19 pandemic originated and struck China to begin with. In response to the pandemic, Chinese government enforced stringent regulations have worked extremely hard to stop the outbreak and reduce the economic and human toll (Jia et al., 2021).

The American government administration, in contrast to China, did not farewell in combating the coronavirus outbreak (Zamarripa et al., 2020). So far, SARS-CoV-2 (COVID-19) has caused approximately 730,000 fatalities and more than 45 million infections in the US (WHO, 2021). The terrible coronavirus pandemic has sparked extremely different responses in the United States and China including the banking sector where loan repayment was vividly noticed, and this divergence is altering the global competition between the two largest economies (Shalal, 2020).

Despite being the first nation to experience COVID-19, China tried to contain the disease and aid in the recovery of its economy (Jia et al., 2021; Love et al., 2021). Due to this, China is the only major economy that experienced major economic growth towards the year 2022/2023 (Luo et al., 2023; Liu, 2021). In contrast, as a result of the COVID-19 pandemic's suppression of consumer spending and company investment, millions of Americans lost their jobs and fallen into poverty (Mutikani, 2021). According to Fofack, (2021), the U.S. economy shrank at its fastest rate since World War II and GDP decreased at 3.5% in 2020.

Commercial banks on the other hand often act as financial intermediaries that are set up to lend, borrow, issue, exchange, and take deposits, safeguard, or handle money of a particular country (Grossley (2021). The primary service that banks offer to prospective business owners as a means of generating income through the transfer of resources from surplus to deficit economic units within the economy is credit provision. As they transfer money from savers to investors and business owners, banks primarily make money from interest on loans but also credit management systems' efficacy is the main factor determining their success and performance. Existing research findings shows that banks face high risks when it comes to credit provision as some borrowers tend to delay payment of their debt while others even end up defaulting. Some research findings during COVID-19 have shown that loan defaulting in commercial banks have even become serious (Flögel and Gärtner, 2020; Najaf et al, 2022; Igan et al., 2022).

According to Hietalahti(2017), loan repayment is the ability to repay the loan in accordance with the loan agreement, and loan defaulting was defined as the inability to repay the loan through either neglecting to complete the loan in accordance with the loan agreement or failing to service the loan. According to Hietalahti (2017), inability to pay back a loan frequently results in Non-Performing Loans (NPL), which are challenges encountered during loan repayment. NPLs prevent the bank from receiving interest revenue that would have been received, which results in missed opportunities to invest in return-earning securities and affects the stream of earnings in the future. They also have an effect on banks' liquidity since they place restrictions on the banks' access to cash. Most crucially, there is a danger to a bank's reputation, which can hurt its credit rating and reduce its ability to co-finance and syndicate with other banks (Islam, 2015).

Non-performing loans (NPLs) are significant because they have an impact on commercial banks' ability to act as financial intermediaries, which is the primary source of income for banks, and, ultimately, the financial stability of an economy (Hans, 2016).Because of this, NPLs have drawn more attention as people realize that having a lot of NPLs in the banking system might lead to bank failure and a slowdown in the economy (Isa, 2015). There is strong evidence that high levels of non-performing loans caused by COVID 19 preceded the financial and banking crises worldwide (Flögel and Gärtner, 2020; Najaf et al, 2022; Igan et al., 2022).

For instance, non-performing loans made up roughly 75% of the overall loan portfolios in Indonesia, where over 60 financial institutions failed during the global crisis and Pandemic disease (Fajri et al., 2022). The Sub-Saharan African countries e.g. in the Bank of Uganda that had a banking crisis in the 2019 also experienced a significant buildup of non-performing loans at the same time (Tom, 2020).Additionally, during the past few years, banks operating in Tanzania have dramatically increased their level of bad and doubtful debt provision, both financially and in terms of the percentage of non-performing loans (Kessy et al., 2021). Several banks, including TWIGACORP and National Bank of Commerce (NBC), as well as non-banking institutions like savings and loans, microfinance, and credit unions, have failed in Tanzania's banking industry, with NPL serving as the precursor to these financial institutions' final demise (Vina, 2019).

From this background, commercial banks have been experiencing sharp drops in revenue and rising costs, and households are at risk of losing their employment and seeing their wages shrink (Nigmonov and Shams, 2021). As a result, there is a possibility that businesses and households won't be able to pay off their debts, raising the risk of default These consequences may trickle down to the banks, resulting in a decline in income and a rise in non-performing loans, which will harm the earnings, solvency, and capital of the banks (Beck & Keil, 2020). A fall in non-interest income may also result from the decreased demand for financial services, which would lower banks' profitability (Ozili& Arun, 2020). As a result, banks may encounter more credit risks, which increases systemic fragility (Duan et al., 2021).

Because banks are the primary provider of liquidity insurance for economies (Barattieri, et al., 2020), a healthy banking system promotes economic growth by allocating credit and ensuring that there is adequate liquidity. There have been significant worries about the financial sector's ability to continue playing the expected intermediation role throughout the COVID-19 outbreak (Cecchetti & Schoenholtz, 2020).

2. Statement of the problem

Non-performing loan percentages at some Tanzanian banks, including local and foreign-owned banks, have increased to levels exceeding the Bank of Tanzania's indicated ceiling of 5% (Denyo, 2021).An increase in the NPL rate is a sign that the credit policy has failed, which has led to poor bank performance and financial crises in both emerging and wealthy nations. Nonperforming loans as a percentage of total loans in Tanzania was 9 percent in 2017, 10 percent in 2018, and 13 percent in 2019 (Kipembela, 2019). Thus, the profitability of the banks is negatively impacted by this situation. This is owing to the fact that every commercial bank's financial performance is evaluated in terms of profitability, and NPLs have a direct negative impact because of the provisions that the banks are required to make in response to the NPLs (Swaibu et al., 2021).Cash flows of the businesses that has been facilitating business operations are important to see that loans are repaid on time. One of the reasons that were explained during the pandemic for increase of NPLs was less cash flows of the clients for them to repay back the loans (Swaibu, 2021). The trend not only jeopardizes the sustainability and viability of commercial banks, but it also has an effect on their capacity to extend credit to the unbanked and close the funding gap. As banks were among the business groups that were affected by COVID 19 pandemic, there is a need to assess the effects of cash flows during COVID-19 pandemic on loan repayment of commercial banks in Tanzania. The study used a case of Exim Bank Tanzania limited in Moshi Municipality.

2.1 Research Objective

The objective of the study was to examine the effects of reduced cash flows during COVID 19 pandemic on loan repayment at Exim Bank in Moshi Municipality.

2.2 Research Question

What are the effects of reduced cash flows during COVID-19 on loan repayment in Exim bank in Moshi Municipality?

2.3 Research Hypothesis

H_0– There is no significant effects of business cash flows of bank borrowers on loan repayment.
H_1– There is significant effects of business cash flows of bank borrowers on loan repayment.

2.4 Theoretical Framework

The Theory of Planned Behaviour (TPB)

The theory of the planned behaviour is used to determine factors influencing effective loan repayment behaviour. According to the theory of planned behaviour, human action is guided by three factors. These include behavioural beliefs, normative beliefs and control beliefs which are considered as borrowers' behaviour (Ajzen, 2006). The study identified the relationship between the theory of planned behaviour on one hand and borrowers' behaviour on the other so as to show clearly the specific factors that influence the whole process of loan repayment by the loan borrowers to the financial institutions. Basically, the loan repayment process is the function of borrowers' behaviour, business characteristics, financial institutions' characteristics and policy and regulatory issues.

The main strength of the theory of planned behavior is that an elicitation study forms the basis for developing questions to assess the theory's variables in a specific population. The elicitation study enables a practitioner to determine the specific beliefs for a specific population. TPB also takes into account the influence of peers (subjective norms) which is significant in both the beginning of the behavior and its maintenance.

As a weakness for the theory, TPB does not account for other variables that factor into behavioral intention and motivation, such as fear, threat, mood, or past experience. While it does consider normative influences, it still does not take into account environmental or economic factors that may influence a person's intention to perform a behavior. However, the relevance of the theory is that, the borrowers' behaviour, business characteristics, financial institutions' characteristics and policy and regulatory issues are believed to influence the whole loan repayment process. For the borrowers to affect the financial institutions' loans, there must be a conducive and predictable business environment in terms of profit generated, less business risks, business training given to the loan borrowers, competitive and reasonable interest rates charged by the financial institutions, well-regulated taxes, and a fair grace period and constant power supply as stated by Kuzirwa, (2002).

2.5 Empirical Literature Review

According to a number of researchers, cash flows during COVID 19 pandemic, the characteristics of the borrower and the loan all significantly affected the borrower's ability to repay the loan as presented in different scholarly works in the subsequent section.

Effects of Cash Flows on Loan Repayment

Kunt and Pedraza (2019) in the study of the impact of financial sector policy announcements on bank stocks around the world during the onset of the COVID-19 crisis using descriptive statistics and correlation analysis found that business failure/market failurewas discovered to be the leading reason for loan default during COVID-19. Due to a business failure in Covid-19, the borrower's income ceased, but they still have a lot of other significant liabilities, making them feel unable to make their loan payments. The second significant factor is income drop as a result of COVID-19. Many borrowers rely on a variety of income streams, including rental income, family income, salary income, business income, and self-employment, but many of them have either dried up or been curtailed. Findings of the study showed that this is the primary reason for bank clients not repaying back their loans. The current study is not examining stock market clients but rather the on-counter Exim Banl Ltd clients in Moshi, Tanzania.

Antonescu(2020), in the study that investigated support of small and medium size enterprises through the COVID-19 crisis in Romania. The study collected data through a questionnaire and key informant interview. Descriptive statistics and regression data analysis was used. Findingsof the study indicated that small and medium businesses in Romania were one of the hardest hits by COVID-19 pandemic. The findings showed that the government has to take urgent measures to keep the sector afloat so that the effects could not spill-over to the financial sector through NPLs due to low income earned out of the businesses which is to be used to service the loans. 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. Further findings of the study indicated that there were mass redundancies of 850,000 employees which is one-fifth of private sector employees in the country during the first three months of the pandemic outbreak. The study recommended that, supplementing financial programs for SMEs, national Program for supporting industrial parks, and creation of support centers at regional level would improve NPL for the commercial banks if SMEs improve their cash flows. The current study is done in Tanzania and to a mix of bank clients ranging from large to small clients regarding the effects of reduced cash flows on loan repayment during COVID 19.

Wanjala (2020),in the study of the economic impact of the novel coronavirus on tourism and Trade in Kenya. Citing the central bank survey report of 2019 before the outbreak of the pandemic, about 51% of Kenyans were living hand to mouth. The statistics stated that a huge percentage of the society risk hunger in case of lockdown, restriction of movement, or taking containment measures that can cause unemployment. The study found that the tourism and hospitality industry were the most hit hard by the Covid-19 pandemic. Findings of the study for 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 situation would 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 findings of the study signposted that one of the effects of COVID-19 will be on loan repayment in Kenya. However, these findings by Wanjala (2020) did not tell if the study was done to all commercial banks in Kenya or only one bank. The current study is using primary data to assess the effects of reduced cash flows on loan repayments during COVID 19 pandemic in the study area.

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 are associated with low cash-flow risk. This means that the industries, which produce assets with less substitutes or produce necessities rather than luxuries, are more insulated in cash-flow shocks than their peers who produce goods with elastic demand. These businesses were more responsive to their long-term liabilities like loan repayments than the later. Firms in oil, steel works, and construction were found to have the highest systematic risk levels, mostly caused by reduced cash flow. There is a negative relationship between the industry cash flow and the duration of the pandemic outbreak. However, the current study is not looking at the long-term cash flow risks but rather at the effects of reduced cash flows during COVID 19 pandemic on loan repayments.

Agosto and Giudici (2020) in the study of contagion monitoring for establishing the impact of COVID-19 on digital finance in the first country affected by COVID-19, China. The study highlighted that in the first week of February, the cases of COVID-19 accelerated the contagion and the Shanghai Stock Exchange (SSE) composite index plummeted. They observe a negative but weak correlation between SSE returns and reported COVID-19 cases at a later stage of the epidemic. Banks that are mostly listed in the SSE seemed to be doing well. However, this study did not indicate any effects with regards to loan repayments for the studied commercial banks. The current study does not look into impact of COVID 19 on stock market, but rather on bank clients in Exim Bank Tanzania Ltd in Moshi Municipality.

Demirguc-Kunt et al. (2020a), analyzed bank stock prices worldwide to assess the impact of the COVID-19 pandemic on the banking sector. The study used a multidimensional interlinkage between economic agents to create a multi-layered network where the exposure to credit risk transfers to the non-bank private financial sector.They highlight that bank stocks underperform their domestic markets and other non-bank financial firms during the COVID-19 crisis. Banks are expected to play a countercyclical lending role that put them under significant stress. At the same time, banks interact with the rest of the global financial system via multiple linkage types which particularly increases the risk of distress during the contagion. The study at hand used descriptive statistics, correlation and regression analysis to show the magnitude and direction of the effects of reduced cash flows on loan repayment.

Li et al. (2021), in the study of the effects of COVID 19 pandemic in the banking sector showed that the COVID-19 crisis adversely affected banking stability and makes it more prone to risk-taking specifically with the credit facilities rendered to their clients. They also highlight that the COVID-19 outbreak and government capital injections harm the efficiency gain from shadow banking. As a result, commercial banks are more affected as they are dependent on the capital invested in the business and circulation of the business. The findings are also supported by Najaf et al. (2021) who find a significant increase in FinTech loans among the US peer-to-peer lending market. However, they highlight that this increase was accompanied by a hike in unverified loans, loan terms and interest rates. The study at hand assessed the effects of reduced cash flows on loan repayment by Exim Bank Ltd clients in Moshi Municipality, Tanzania.

Summary of the Literature and Research Gap

According to the literature reviewed, there is enough evidence that COVID 19 affected the banking sector in a different way (Li *et al.,* 2021; Demirguc-Kunt et al., 2020a). the effects ranged from reduced stock values, markets and even profitability and liquidity (Agosto and Giudici, 2020; Sinagl, 2020). The key issue however, has been on reduced cash flows of the bank clients which has also reduced their capacity to repay back the loans advanced to them by the banks for operations (Antonescu, 2020; Wanjala, 2020). These studies however dealt with some general aspects of the effects of COVID 19 in the banking sector and even places. The current study was directed at the effects of reduced cash flows on loan repayment for the Exim Bank Ltd clients in Tanzania, Moshi Municipality.

3. Methodology

In this study, a concurrent research design with a mixed research approach was used as the design is useful in understanding inconsistencies between quantitative results and qualitative findings. The population of this study included those clients who had loans between 2019 to 2022 (the period which had acute pandemic effects) who were 327 (Exim Bank Annual Report, 2022). Yamani (1964) formula was used to determine the sample size of 180 participants for the study.As this category of bank clients comprised different bank clients, a stratified proportionate sampling techniques was used to select participants between the different groups of borrowers in Moshi Municipality.

The study used a structured questionnaire and key informant interview guide to collect data. Structured questionnaires require a lower cognitive load on the respondents; they reduce the amount of thinking that a respondent needs to undertake to complete the task. Validity was ensured by reading the literature related to cash flows and loan repayment but also by discussion of the tool's contents with research experts at the University. Reliability done in a pilot study where duly administered questionnaire by fifteen (15) randomly selected respondents was done using a Cronbach Alpha Coefficient (Cronbach, 1951). An Alpha Coefficient of 0.733was obtained to indicate a strong reliability for the study to proceed. Then, descriptive statistics was used to present data characteristics while content analysis was used to analyze qualitative data where themes were developed. Inferential statistics including correlation and regression analysis was used to test the direction and strength of the heathenship between independent and dependent variables. As part of the ethical considerations, some cultural values and customs were carefully observed during the process of data collection. During data analysis, the researcher ensured that results are presented exactly as they happened.

4. Findings and Discussion

4.1 Demographic Characteristics of Respondents

Four demographic characteristics were assessed including age, gender, education level, and experience in business as presented in Table 1.

Table 1: Socio-demographic Characteristics Distribution of Respondents

Variable	Description	Frequency	Percentage

Age	18 -20 years	19	10.55
	21 – 30 years	34	18.89
	31 – 40 years	48	26.67
	41 – 50 years	41	22.77
	51 and above years	38	21.11
Gender	Male	100	55.55
	Female	80	44.44
Education level	No formal	00	00.00
	Education	42	23.33
	Secondary	27	15.00
	education	63	35.00
	Certificate	37	20.55
	Diploma	55	30.55
	Advanced Diploma	27	15.00
	Bachelor Degree		
	Master Degree		
Experience in Business	3 – 5 years	53	29.44
	6 – 10 years	52	28.89
	Above 10 years	67	37.22

Source: Field Data (2023)

Among the respondents as shown in Table 1, 100(55.55%) were males and 80(44.45%) were females. This indicated two things at the same time; one is that most bank borrowers were men as such businesses falling under this service of the bank are owned by men than their women counterparts. The explanation could be that, for women owned business they might not be big enough to acquire loan s from formal banks rather they may be getting loans from the informal microfinancing groups as found by Gorbatenko (2017) that, the outbreaks caused inevitably wreak havoc on small businesses, people, communities, and countries that are not strong enough to withstand the shock especially those owned by women who are not able to access form financing platforms.

Results from the study further indicate that, age distribution of the Exim bank clients ranged from 18 to above 51 years. Respondents 48(26.67%) were having ages between 31 and 40 years. The next age category was 38(21.11%) of whom were having age between 51 and above years followed with the age group of 21 - 30 and above years of age whom were 34(18.89%). The next age category was between 41 and 50 years of age, whom were 41 (22.77%) and the smallest group was that of 19(10.55%) with the age between 18 and 20 years. With this age distribution, the result indicates that, bank clients in the study area are dominated by mature people compared to their youth counterparts. The findings are supported by that of Lakuma, et al (2020) studied how COVID-19 impact small and medium enterprises in Uganda and found that, most of these businesses with bank accounts and ultimately those which had loans were owned by mature business operators.

Educationlevel was among the socio-demographic characteristic which indicated that 63 (35%) had Diploma education followed by those who had Bachelor Degree who were 55 (30.55%). Those with secondary school education were 42 (23.33%) while those with Advanced Diplomas were 37 (20.55%). Among the respondents, 27 (15.00%) had Master degrees while 27(15.00%) had certificates and non among the respondents had no formal education. The results indicate that, most of thebank clientsare educated enough to understand about cash flows and loan repayments. For that matter, they are able to understand the research questions and respond accordingly. Evidence from the literature suggest that, the more a business owner is educated, the more negotiations skills he has onbusiness operations including ways to seek for credit facilities (Wanjala, 2020).

Experience in business indicated that, those with 6 – 10 years in business were 101(40.20%) followed by those with above 10 years of experience who were 77(30.67%) and lastly those with experience between 3 -5 years were 73(29.08%). This may imply that, the bank clients have a good experience in business from which they are able to understand well their cash flows and gauge against their ability to service their loans obtained from the bank. Likewise, with this experience, respondents are able to understand well the questions asked for this particular study.

4.2 Effects of Cash Flows on loan Repayment

4.2.1 Descriptive Statistics

To assess the effects of cash flows on loan repayment, the study used descriptive statistics to assess 10 statements by the respondents as far as loan repayment is concerned as a result of the effects of cash flows during COVID 19 pandemic.

To measure independent variables (cash flows) against loan repayment, respondents were asked to rank the questionnaire statements into five-point Likert scale (1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree). Descriptive statistics were used to make summary of the data collected.

Table 2: Level of Agreement on the Effects of Reduced Cash Flows on Loan Repayment (n=180)

Economic Motivational Factor	1 SA F	%	2 A F	%	3 N F	%	4 D f	%	5 SD f	%	Mean	Std Dev
I am satisfied with credit services that are provided by Exim Bank Ltd as a client.	51	28.4	51	32.4	25	3.5	29	8.1	24	5.9	3.01	0.91
This bank performed according to my expectations during the Covid -19 Pandemic.	57	41.9	44	29.7	27	5.1	32	5.9	30	7.4	2.92	0.72
Loan extension procedure were intended to help my	41	44.1	32	38.2	6	4.4	10	7.4	8	5.9	3.25	0.76

business cash flows.												
I think low level of bank support hindered bank clients from loan repayment	40	44.9	21	37.5	5	3.5	11	8.1	8	5.9	1.99	0.71
Bank loan conditions were intended to help customers repay loans easily during COVID -19 Pandemic.	38	42.6	34	39.7	8	5.9	8	5.9	8	5.9	3.11	0.65
Bank loan conditions were very easy to fulfill if borrowers have steady flow of income.	43	45.6	28	35.3	10	7.4	8	5.9	8	5.9	2.95	0.27
Bank loan conditions were difficult and unrealistic during COVID -19 Pandemic due to reduced cash flows.	39	44.8	40	37.6	9	4.9	11	5.8	10	6.9	2.55	0.33
Bank covenants are always very demanding and difficult to fulfill	32	41.2	42	38.2	9	6.6	9	6.6	10	7.4	3.01	0.41
During COVID – 19, my cash flows were very much disturbed to the extent of defaulting the loan I obtained from the bank	30	44.1	42	38.2	6	4.4	8	5.9	10	7.4	2.43	0.23
I disclosed all necessary information about my incomes during COVID 19 Pandemic	33	46.3	39	36.0	6	4.4	8	5.9	10	7.4	2.33	0.51

Source: Field Data (2023)

Table 2 of data results have shown that, loan extension procedures were extended to help business cash flows with a mean score of 3.25 and a standard deviation of 0.76. The mean score obtained being higher than average i.e 2.5 is indicative that respondents generally agreed with the statement. This implies that, if there were some arrangements of extension of time to loan repayment to help cash flows of the businesses, then COVID -19 had effects on loan repayments to an extent of loan extension procedures being in place. The results were also supported by the key informants where one of them said that:

'It was necessary during COVID 19 pandemic to revisit the loan procedures to allow clients to make good cash flows so that businesses are stabilized or injected with capital

> *such that businesses are able to repay their respective loans'. Key informant interview conducted on 4th April, 2023.*

The implication of the findings is that, both the borrowers and the bank officials agrees that, loan procedures were important to be flexed so that business can adjust themselves to make much of the business outcomes and be able to repay the loans. The findings are also in agreement with that of Li et al. (2021) who found that, cash flows of bank clients had an effect on loan repayments. Further findings of the studyby Li et al (2021) indicated that, COVID-19 crisis adversely affects banking stability and made it more prone to risk-taking specifically with the credit facilities rendered to their clients with specific effects on loan repayments where NLPs increased dramatically as a result of businesses inadequate cash flows.

Data results also have indicated that, respondents were satisfied with credit services that are provided by Exim Bank Ltd during COVID 19 pandemic with a mean score of 3.01 and a standard deviation of 0.91. The data result indicated a confession by the client that they were able to be satisfied with their bank services even in a difficult time. The implication of the results show that clients are loyal to the bank which may imply that, whatever the situation may be, at the end of the day clients will be able to repay back the loans advanced to them. The findings are in agreement with that of Demirguc-Kunt et al. (2020a) who found that even though bank stocks underperform their domestic markets and other non-bank financial firms during the COVID-19 crisis, still most clients were satisfied with the level of returns that clients obtained during the crisis. The effect to the respective banks is that, they do not lose the customer base but also, they maintain cash flows as a result of clients investing in stock. Banks are expected to play a countercyclical lending role that put them under significant stress. At the same time, banks interact with the rest of the global financial system via multiple linkage types which particularly increases the risk of distress during the contagion. As also presented by Avdjiev et al. (2019), the other effect of cash flows is created by multidimensional interlinkages between economic agents to form a multi-layered network where the exposure to credit risk transfers to the non-bank private financial sector which in turn make repayment to their respective banks.

The statement that the bank loan conditions were very easy to fulfill if borrowers have steady flow of income with a mean score of 2.95 followed by the statement that bank performed according to clients' expectations during the COVID -19 Pandemic had a mean score of 2.92. The two statements are a confirmation by clients that loan conditions and expectations of the banks' performance during the pandemic had an effect on loan repayment. The findings were confirmed by the key informants where one of credit officers informed that:

> *'During the pandemic the conditions for borrowing and ultimately the loan repayment was easy to facilitate clients' requirements. Likewise, the bank did at its best to see that clients are saved to their expectation. The immediate effect to the clients was to get what they wanted at the meantime. On the other hand, as far as the bank is concerned, the immediate effect was the assurance of the clients' repayments of the loans they acquired as it was made convenient to them.*' Key informant interview conducted on 6th April, 2023 at 10:00hours.

The confirmation by the key informants is evidence that the bank conditions to support clients were in place to support them with the hardship of cash flows by flexing the conditions of borrowing.
Furthermore, results indicated that loan conditions were difficult and unrealistic during COVID -19 Pandemic due to reduced cash flows, cash flows were very much disturbed to the extent of defaulting the loan obtained from the bank; and that bank clients disclosed all necessary information about their incomes during COVID 19 Pandemicwith mean score of 2.55, 2.43 and 2.33. The three items tested indicated that, the first at least was on average while the two were under average i.e below 2.5. These implied that, bank clients were in disagreement with the last two statements. This means that cash flows were much disrupted to the extent of loan defaulting and that they disclosed their incomes in entirety. The effects to loan repayment are that some bank clients were in a position to comfortably repay their loans and that they did not need to disclose their incomes to the bank. The findings are also supported by Agosto and Giudici (2020) who found that in establishing the impact of COVID-19 on digital finance in China observe a negative but weak correlation between SSE returns and reported COVID-19 cases at a later stage of the epidemic. Which means the effects of returns to SSEs was not affected by cash flows. repayments for the studied commercial banks.

4.2 Correlation Analysis

Furthermore, the study used equation (1) and conducted regression and correlation analysis, in which loan repayment was used as the dependent variable and cash flows as the independent variables being triggered by supply costs, supply flows, sales targets and operating period. Regressionand correlation were used to measure the strength and the direction of the relationship between the dependent and independent variables with 95% confidence level.

Loan-repayment=β0+β1supplycost=β2supplyflow+β3salestarget+β4operating period +e. ………………………. Equation (1)

The study ensured that the necessary assumption for conducting a correlation analysis is observed. These included that data from both variables follow normal distributions, data have no outliers and that data is from a random or representative sample for the study. Thus, an expectation of a linear relationship between the two variables was to be obtained.

Table 3: Model Summary

Model	r	r^2	Adjusted r^2	Std. error of the estimates
1	.391[a]	.278	.073	2831.62

a. Predictors: (Constant); cash flows, supply cost, supply flow, sales targets and operating period.

b. Depended variable: loan repayment

Results in table 3 indicates that the r squared for the model was 0.278, implying that the four-predictor variable that were studied, explain 27.8% variance of loan repayment of the bank borrowers as represented by r^2. This therefore means that other factors related to loan repayment not studied in this study account for 72.2% of the variance in the dependent variable. The four variables have a weak relationship with loan repayment.

Table 4: Correlation analysis of Dependent and Independent Variables (n =180)

	Supply flows	Supply costs	Sales targets	Operating period	Loan repayment
Supply flows	1.0000				
Supply costs	0.4297*	1.0000			
Sales targets	-0.2021*		1.0000		
Operating period	-0.5956*	-0.2417*		1.0000	
Loan repayment	0.2978*	-0.4932*	-0.2973*	-0.2378*	1.0000

Notes: Only the values with a confidence level of 1% are visible.

The study conducted a correlation analysis to test the relationship between components of cash flows which include supply flow, supply cost, sales target and operating period on loan repayment ability by the bank borrowers. The correlation coefficient for supply flow on loan repayment was 0.24 with p value=0.008. 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=0.21, p=0.06). Similarly, there is weak but significant association between sales target and loan repayment (r=0.214, p=0.08). Furthermore, there was weak association between operating period of the business and the ability of loan repayment. The below table summarizes the results.
Results indicate supply costsis positively and significantly correlated with loan repayment. Sales targets is negatively and significantly correlated with loan repayments. Cash flow related to operating period is shown to have a negative and significant correlation with loan repayment and a negative and significant correlation with cash flow. Noticeably, cash flow for supply costs is the only component that is significantly correlated with loan repayment. Finally, cash flow shows a positive and significant correlation loan repayment, while with cash flow and sales targets there is a negative and significant relationship with loan repayment. Likewise, cash flow related to operating period also have a negative and significant relationship with loan repayment. Table 4 shows the result of the regression model for loan repayment performance.

Table 4: Regression Results (n = 180)

	Coef.	**Std. Error**	**t**	**p>(t)**	**VIF**
Supply flows	.4911	.6554	6.01	0.000	1.07
Supply costs	-.4323	.0674	-5.76	0.000	1.61
Sales targets	-1.0532	.0743	-11.45	0.001	1.35
Operating period	-.5432	.1901	-2.98	0.000	1.11
Constant	-.0023	.0058	-3.76	0.100	

Adj. R^2	.05127				
F	54.71				

Notes: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

An additional test for multicollinearity was conducted by estimating the variance inflation factors (VIF). Using a fairly conservative cut-off value of VIF = 3, relative to recommended values of 5 or 10 (Senaviratna& Cooray, 2019). Results indicated that, there was no multicollinearity among predictors detected across the model. In order to highlight a possible presence of multicollinearity among the regressors, linear regressions were performed with the regressor as a dependent variable and all the other regressors as independent variables.
According to Table 4 of results with reference to the study hypothesis (H_0), the study found that the sign of the cash flow coefficient remains negative except supply flows. This is interpreted that, cash flows through borrowers' businesses cash flows brings about possibilities of loan repayments to the bank. Eliminating this component, through the use of cash flow residues, which exclude the relationship with loan repayment, essentially remains the negative effect of indebtedness, or rather, its onerousness manifested by the interest expense deriving from which brings about interest income to the bank which enhance banks' capacity to sell more assets (loans).
Interpreting the signs and values of the coefficients of the regressors, it is noted that the clients cash flow has a positive influence on supply flowsshowing that, the cash flow relating to loan repayment of the bank clients has a positive coefficient of 0.49 and to follow that, it is observed a positive impact on loan repayment (supply flows represents the ability of the clients businesses to have ongoing concern in terms of stock-turn to generate cash which are important for loan repayment and business performance).
The findings of the study are in line with the assumptions and findings of other scholars who found that cash flows are important for loan repayment and a better predictor of lenders to recover their money from borrowers (Antonescu, 2020; Kunt & Pedraza, 2019; Wanjala, 2020; Sinagil, 2020; Li et al, 2021). It is clear these findings that, loan repayment is dependent borrowers cash flows. For that case, the null hypothesis is rejected and the alternative hypothesis being accepted.

4.3 Conclusions and Recommendations

4.3.1 Conclusions

Basing on the study findings, respondents gave their evaluative assessment of the statements asked according to their understanding of loan repayments regarding cashflows in the COVID-19 pandemic period. It is concluded that, cashflows during the pandemic were disrupted. However, Exim bank clients agreed that the bank was in a position to understand and assist clients in the process of servicing their loans with an exceptionlow level of bank support hindering bank clients from loan repayment which had the lowest mean score below average at 1.99.
The study also concluded that, there a positive significant relationship between loan repayment and cash flows of businesses of the clients as the result indicated a positive confident result.

4.3.2 Recommendations

Out of the conclusions made out of the study findings, it is recommended that, Exim bank Ltd should maintain the good relationship with customers especially during crisis. As clients are at the heart of the business, the bank should ensure that, good services to clients is much more improved by making sure that, the bank understands the well the issues and trends happening in the market.

It is also recommended that; bank clients should be exposed to different loan packages that stimulate business operations. This will ensure that, the bank is having more assets being sold out there to diversify banks' income flows but at the same time cash flows of the clients.

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