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# RELATIONSHIP BETWEEN CREDIT APPRAISAL AND LOAN PERFORMANCE BY COMMERCIAL BANKS IN UASIN GISHU COUNTY, KENYA

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**Abstract:**
Commercial banks play a very important role in economic growth of nations as they channel financial resources from savers (surplus units) to lenders (deficit units). The aim of this paper is to explain the relationship that existed between loan policy of credit appraisal and loan performance by commercial banks located in Uasin Gishu County, Kenya. Theoretically, this paper is anchored on moral hazard theory developed by Akerlof (1970). The population of study comprised of all credit officers working in commercial banks in Uasin Gishu County. According to figures from banks, there are 189 credit officers in 39 commercial banks that are located in the county and thus formed the target population. A sample size of 128 was chosen for this study. Research result showed that 78.1% of commercial banks conducted credit appraisal through use of 5Cs credit appraisal technique, credit-scoring model and through credit reference bureaus. The research also found out that there existed significant positive relationship (r=0.206 and p=0.035) between credit appraisal and loan performance by commercial banks in Uasin Gishu County, Kenya. The paper recommends that there is need for commercial banks to consider using mobile telephony company's financial statements for an individual borrower to check on the cash flow before awarding a particular loan.

**JEL:** G21, E51, E51

**Keywords:** credit appraisal, loan, performance, commercial banks

 

## 1. Background Information

The banking industry plays a major role in economic growth and development through provision of credit to execute economic activities (Owino. 2013). For commercial to survive and spur economic growth, they have to issue loan to its clients. The success of commercial banks largely depend on the effectiveness of their credit management system because these institutions generate most of their income from interest earned on loans extended to small and medium entrepreneurs (Njeru, Mohammed & Wachira, 2016). This revenue can be enhanced through proper execution of lending policies that if well implemented influences financial profitability and performance (Kenya Bankers Association, 2014). Therefore, commercial banks develop lending policies that guide them in issuing loans to their customers. What contributes to financial performance for commercial banks is that lenders employ various lending policies to increase efficiency and coordination of asset investment operations (Ogora & Onditi, 2016).

Lending practices in the world could be traced to the period of industrial revolution that increased the pace of commercial and production activities thereby bringing about the need for large capital outlays for projects. Many captains of industry at this period were unable to meet up with the sudden upturn in the financial requirements and therefore turn to the banks for assistance (Ezirim, 2005 in Okoye & Eze, 2013). This paper looks at the influence of credit appraisal lending policies adopted by commercial banks and its influence on loan performance.

According to Misati and Kamau (2015), credit appraisal remains at the heart of the decision making process leading to the granting of credit to a borrower. Credit appraisal is mainly carried out to determine whether to accept or reject the proposal for credit. It involves evaluating the loan application to find out the borrower's repayment capacity. The appraisal process involves an evaluation of credit worthiness of the borrower and future expected stream of cash flows with the amount of risk attached to a specific borrower (Njeru, Mohammed & Wachira, 2016). In another perspective, Faizan and Ali (2015) inform that the aspect to be focused in appraisal includes purpose of the client, need genuineness, repayment capacity of the borrower, quantum of loan and security.

To improve loan losses, commercial banks should assess the customer's credit worthiness with the help of 5Cs namely: Character, Capacity, Capital, Collateral and Conditions (Byusa & Nkusi, 2012)). This indicates that each type of loan application must go through loan appraisal process, preferred maturity period, indication on maximum allowable amount, and provide an insurance cover. The loan should generally be protected by collateral and the channel of approval should be documented and approved by the Board of Directors. This is because poor loan lending policies and short-sighted credit analysis can have a big negative impact on the commercial banks profitability and hence performance (Ogoro & Onditi, 2016).

Research evidence reveals that commercial banks usually experience challenges with non-performing loans (NPLs) due to weak credit analysis. The aim of credit appraisal is to determine the ability and willingness of the borrower to repay a requested loan in accordance with the terms of a loan contract (Karumba & Wafula, 2012). Hasty credit appraisal will not only jeopardise the bank, but depositors and investors (Mumbi & Omagwa (2017). Therefore, Chavan and Gambacorta (2016) noted that when properly applied, credit risk appraisal methods have the potential of increasing commercial banks profit over a period by minimising losses.

Application of credit appraisal strategies varies from bank to bank and county. for instance, Byusa and Nkusi (2012 established that banks had adequate credit policies which are reflected in their banks' mission, goals, credit responsibility, collection policy and credit evaluation policies in Rwanda. In Kenya, Njeru et al. (2016) found out lending placed much reliance on use of past information and thus credit referencing and credit history were applied more in credit appraisal. In addition, Njeri (2016) found out that credit policy guidelines define the official operational model that a commercial bank operates when making all transactions related to the lending services. The above studies show that lending policies are critical to performance of commercial banks. This paper therefore looks at the relationship that exists between credit appraisal and loan performance by commercial banks in Kenya.

### 1.1 Statement of the Problem

Kenya banking industry has experienced rise in the rate of non-performing loans over the last couple of years. To some banks, tight regulation by the central bank of Kenya has resulted to others being put under receivership while others liquidated. The CBK 2016 report (published in 2017) showed high incidents of credit risk reflected in the rising levels of non-performing loans by the commercial banks in the last 10 years, a situation that has adversely influenced banks profitability. For instance, non-performing loans ratio stood at 8.9% in December 2017 compared to 8.8% in December 2016. Further, 2017 report showed that NPLs increased by 45.5 percent to KShs 214.3 billion in December 2016 from KShs 147.3 billion in December 2015. Similarly, the ratio of gross NPLs to gross loans increased from 6.8 percent in December 2015 to 9.2 percent in December 2016 (CBK, 2017). This state of affairs motivated the research to conduct an investigation on the relationship that existed between credit appraisal and loan performance by commercial banks in Uasin Gishu County, Kenya.

### 1.2 Theoretical Framework

This research is anchored on moral hazard theory and its relation with lending policies on information sharing across commercial banks. The theory of moral hazard originated from Akerlof 1970 paper 'The Market for Lemons' (Wangari, 2017) during the time he introduced the concept of quality ambiguity in financial studies. According to Akerlof, moral hazard refers to a risk parameter that becomes significant after the financial contracted is agreed and signed by two parties. According to Gehrig and Stenbacka (2013), ex post one contract party is in a position to evaluate and observe the outcome but not the action taken by the other party to attain this outcome. Moreover, one party in the contract may not check if the outcome is connected to the actions conducted out by his contractual counterpart or if the outcome is merely the result of external impact factors that are beyond the contract partner influence. The moral hazard issue suggests that a loan borrower has the incentive to default unless there are consequences for this future application for credit (Cincinelli & Piatti, 2017).

Commercial banks are faced with moral hazard issues during lending out loans. Moral hazard results from failure by the lender to identify actions of those seeking loans that automatically influences the chances of loan repayment as observed by Pagano and Jappeli (2013). In this model, borrowers repay their loans because they know that defaulters would be blacklisted in credit reference bureaus reducing external finance in future (Hoffmann, 2011). Credit information sharing improves borrowers' incentives to repay their loans and assist to overcome moral hazard of those borrowing (Wangari, 2017). This means that through going on with moral hazard theory, sharing of credit information between commercial banks would have significant positive influence on loan performance by commercial banks in Uasin Gishu County.

## 2. Literature Review

Credit appraisal is the basic stage in the lending process by commercial banks. Thisika and Muturi (2017) describe it as the heart of a high quality portfolio. This involves gathering, processing and analyzing of quality information as way of discerning the client's creditworthiness and reducing the incentive problems between the lenders as principals and the borrowers as agents. The bank's credit policy, procedures and directives guide the credit assessment process. In a research study, Sheilah (2011) commented that the ability of commercial banks to promote growth and financial performance depends on the extent to which financial transactions are carried out with trust, confidence and least risk. This requires sound and safe loan appraisal to assess and unearth the financial character of the loan applicant before any step is undertaken. This will dictate on the conditions to be applied on the loan covenant to help curb bank customer relationship that may have positive influence on financial performance of the commercial banks. Owino (2012) indicates that includes credit loan appraisal is the process of assessing the borrowers needs and financial conditions that identifies the borrowers character, capacity, collateral, capital etc. Interested lenders will expect the loan applicant to have contributed from their own assets and to have undertaken personal financial risk to establish the business before advancing any credit. This research focuses on the empirical studies that have been conducted with regard to credit appraisal processes and loan performance by commercial banks from different parts of the globe.

A study conducted in the United States of America by Murray (2011) found out that through loan appraisal; management can gauge its ability to generate earnings from the bank's total pool of assets, that if not well done could lead to decline on asset returns thus financial performance of commercial banks in U.S.A. The thorough loan appraisal of the loan applicant before loan advancing with an aim of assessing their suitability for a particular loan. The study recommended that there was need for commercial banks to enhance their client loan appraisal policy to influence positively on financial performance. The study by Murray was done in USA while this research will be among Kenyan commercial banks to determine existence of similarities or differences. In Pakistan, Faizan and Ali (2015) evaluated the influence of credit risk management practices on loan performance (LP) while taking the loan limit terms and policy (CTP), client appraisal, collection policy (CP) and credit risk control (CRC) as the dimensions of the credit risk management practices. The results of the analysis showed that the client appraisal methods had positive and significant impact on the LP, while the CP and CRC had positive but insignificant impact on LP. Faizan and Ali study was conducted in Pakistan while this study was among Kenyan commercial banks. In Rwanda, Kagoyire and Shukla (2016) study sought to determine the effect of credit management on the financial performance of commercial banks. The study adopted a descriptive survey design. The target population of study consisted of 57 employees of Equity bank in credit department. Entire population was used as the sample giving a sample size of size of 57 employees. The study found that client appraisal; credit risk control and collection policy had effect on financial performance of Equity bank. The study established that there was strong relationship between financial performance of Equity bank and client appraisal, credit risk control and collection policy. The study established that client appraisal, credit risk control and collection policy significantly influence financial performance of Equity bank. The study collected data from one commercial bank while this study involved 31 banks.

In Kenya, Ochieng (2012) did a study to assess determinants of financial performance among the commercial banks found out that loan appraisal was very important in influencing financial performance of commercial banks. Ochieng concluded that proper appraisal by the bank management and its entire staff on effective interest rates on loan assets let to customers and effective asset allocation will probably influence financial performance through increased income interest margin, return on equity, and dividend pay-out ratio to the shareholders and consequently financial performance. The gap created by this study is that it was looking at financial performance while this study interest is on loan performance. In another study, Owino (2012) studied effects of lending policies on loan defaults on commercial banks. Owino said that the purpose of loan appraisal was to assess the likelihood that the loan asset to be offered to customers has higher interest margin that drives increased return on assets hence financial performance of the commercial banks. The study identified that the hindrance of loan appraisal is information asymmetry that spells doom on the success of fully assessing the loan applicant due to hidden information and history of the borrower that could have helped in proper appraisal of the client before loan advancement to avoid loss of returns on loan assets offered to the market. The study by Owino occurred before new CBK regulations came into place and therefore may not be relied to provide direct linkage with loan performance.

Chepkoech (2014) determined the impact of credit assessment process on loan repayment. The methodology employed in the study was a census survey. The study targeted all the 43 commercial banks registered in Kenya as at December 2013. Data collection was by means of a self-completion questionnaire that was filled by credit assessment officers. Secondary data was obtained from the annual reports from the publications by the Central Bank of Kenya. The study revealed that no one-credit appraisal technique was used in isolation, with the banks opting to use more than one of each of the credit appraisal techniques. The most commonly used process was the 5C's followed the use of financial ratios. Jerop (2015) determined the effects of client appraisal on loan repayment by microfinance institutions in Nakuru CBD, Kenya. The target population was 32 credit officers drawn from four (4) licensed microfinance institutions in Nakuru CBD. The findings of the study show a strong relationship between credit assessment and loan repayment. A correlation coefficient of 0.74 was found out between credit assessment and loan repayment. The study concluded that credit assessment significantly influenced loan repayment in MFIs in Nakuru CBD.

Kisaka (2016) determined whether historical background of customers, capacity to pay loans, credit reference report for each customer, collateral for the loan and credit rationing influence the performance of the loan book in commercial banks of Kenya. The population of the study comprised of all the 44 commercial banks in Kenya. The results indicated a positive relationship between credit rating practices and performance of the loan book in commercial banks of Kenya. The regression analysis revealed that all credit rating variables had positive impacted on the performance of the loan book of commercial banks in Kenya. The most influential variable was capacity to pay loan followed by credit reference report. Historical background, collateral for the loan and credit rationing were also considered important in credit risk assessment by the commercial banks. Ogoro and Onditi (2016) analysed the influence of loan lending policies on financial performance of commercial banks in Kenya. For this, a descriptive research design is adopted. Data of 18 selected commercial banks in Kisii town is used. The study finds a positive relationship between commercial banks' financial performance and loan lending policies. Moreover, banking sector regulation policies, competition and technology also have significant effects on the banks' financial performance.

Njeru, Mohammed and Wachira (2016) assessed the effectiveness of credit appraisal on loan performance in commercial banks in Kenya. The population comprised of 86 respondents. That is, one credit manager and one credit officer from one branch of each of the 43 commercial banks registered with central bank of Kenya as at this year. Credit appraisal was found to be very important in influencing performance of commercial banks. Findings revealed that lending placed much reliance on use of past information and thus credit referencing and credit history were applied more in credit appraisal. Mumbi and Omagwa (2017) study sought to determine the impact of loan appraisal process, lending requirements and credit policies on financial performance of selected commercial banks in Kenya. The study employed descriptive research design while probability method of sampling was used to obtain a sample of 42 respondents from five banks. Data was collected using questionnaires. The study found out that loan appraisal process, lending requirements and credit policies were found to have a significant effect on bank performance. The study concluded that the banks need to maintain credit risk exposure within acceptable parameters to maximise a bank's risk adjusted rate of return.

Thisika and Muturi (2017) examine the relationships between loan appraisal and non-performing loans. A cross sectional survey design was employed. A case study of respondents comprising of all the credit department staff from the commercial banks in Bungoma town; Co-operative bank (k) limited, Kenya commercial bank, Barclays bank, Equity bank, Standard chartered bank, National bank, Diamond trust bank, Bank of Africa and K rep bank. The target population constituted 70 respondents drawn from the nine commercial banks in the town. The study established that there existed a statistically significant relationship between credit appraisal and non-performing loans. The relationship between credit appraisal and non-performing loans was found to be positive, strong and statistically significant.

### 2.1 Materials and Methods

This study adopted a correlation research design strategy. The population of study comprised of all commercial banks operating in Uasin Gishu County, Kenya. The respondents targeted were 189 credit officers from 31 commercial banks that are operating in Eldoret town, Uasin Gishu County. From the target population of 189 credit officers, Yamane formular (cited by Kothari, 2014) sample size formula was used to select a sample size for this study. Through the formular, 128 credit officers formed the sample size for this research. To select credit officers who participated in this research, the study used simple random sampling method. The selection of credit officers was proportional to their population from each commercial bank. The primary data was obtained from questionnaires and secondary data from CBK annual supervision reports and commercial banks annual audited results. Data was analysed both quantitatively. Data coding, entry and analysis was facilitated by use of SPSS (Statistical Package for Social Science) Computer package. Descriptive statistics such as frequency distribution, percentages, means and standard deviations was used to answer research question. Karl Pearson correlation was used to estimate the relationship that existed between the independent variable on dependent variable.

## 3. Results and Discussion

### 3.1 Credit Appraisal and Loan Performance by Commercial Banks

The research question for the study investigates how credit appraisal by commercial banks influence loan performance. At first, the respondents were asked to indicate the credit appraisal techniques that their organisation used. Results are given in Table 1.

**Table 1:** Credit Scoring Techniques used by Commercial Banks

| Models | Frequency | Percent |
|---|---|---|
| 5C's credit appraisal model | 8 | 7.6 |
| Credit scoring model | 3 | 2.9 |
| Credt reference bureaus | 9 | 8.6 |
| All three | 82 | 78.1 |
| 5C's credit appraisal mode and credit referencing bureaus | 3 | 2.9 |
| **Total** | **105** | **100.0** |

Results (Table 1) shows that majority 82 (78.1%) of commercial used the three model criteria; 5Cs credit appraisal, credit scoring and credit reference bureau models to scrutinize loan application and loan appraisals. The result shows that all commercial banks keenly scrutinize loan application forms by customers through use of the above mentioned techniques. Further, the respondents said that the strength of security given by the borrower as a guarantee for the loan is assessed well before approval is made for a particular loan. Further, the credit officers were asked to indicate the extent to which their institutions used credit appraisal and assessment techniques mentioned above. The results are given in Figure 1.

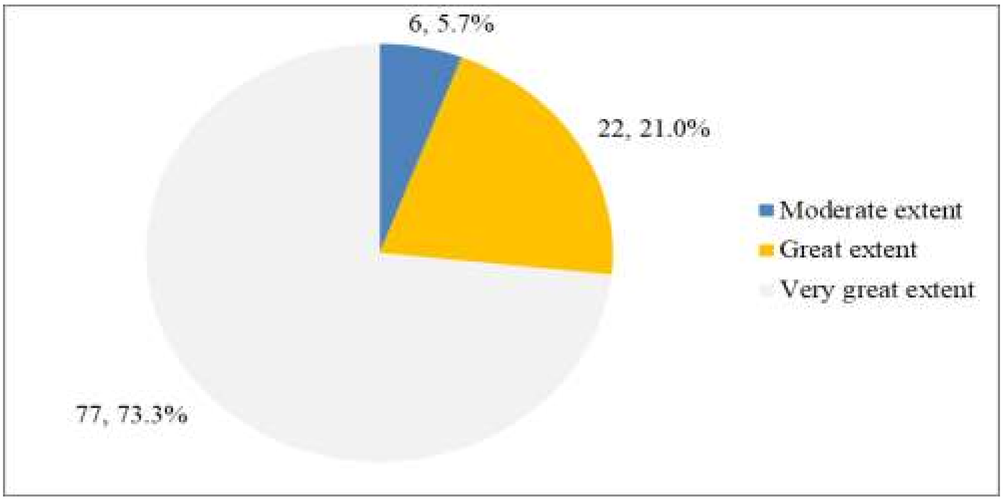


**Figure 1:** Extent of Use of Credit Appraisal and Assessment Techniques

The result shows that majority 77 (73.3%) of commercial banks used credit appraisal and assessment techniques to a very great extent, 22 (21.0%) said that it was done to a great extent while 6 (5.7%) said that it was to a moderate extent. This shows that credit appraisal and evaluation techniques are commonly used by commercial banks. Further, the respondents were asked to indicate extent to which they agreed or disagreed with several statements on credit appraisal and its influence on loan repayments by borrowers. The results are given out in Table 2.

**Table 2:** Perceptions on Influence of Credit Appraisal on Loan Repayment

| Credit appraisal | SD | D | U | A | SA | M | SD |
|---|---|---|---|---|---|---|---|
| There is strong test of accuracy and creditworthy of applicants which increases loan repayment rate | 4.8% | 7.6% | 5.7% | 13.3% | 68.6% | 4.3333 | 1.17397 |
| There is strict screening of information used to acquire loans | 0.0% | 5.7% | 11.4% | 22.9% | 60.0% | 4.3714 | .90146 |
| We check accurate past business financial performance before awarding any loan | 0.0% | 1.9% | 5.7% | 16.2% | 76.2% | 4.6667 | .67463 |
| We accept collaterals whose values are standard and not overstated/ impaired to ensure high loan repayment rate | 0.0% | 3.8% | 14.3% | 6.7% | 75.2% | 4.5333 | .87779 |
| Loan appraisal and subsequent approvals are based on borrower's capacity, character, condition, credit history and collateral | 0.0% | 1.9% | 9.5% | 7.6% | 81.0% | 4.6762 | .72716 |
| The bank considers characteristics of the borrower, capacity, conditions and Collateral/Security in credit scoring for business and corporate loans | 0.0% | 6.7% | 6.7% | 12.4% | 74.3% | 4.5429 | .88826 |
| Internal Appraisal Credit Rating Systems assist in reducing the levels of NPLs | 0.0% | 0.0% | 5.7% | 23.8% | 70.5% | 4.6476 | .58804 |
| The bank has a credit manual that documents and elaborates the strategies for managing Credit | 4.8% | 0.0% | 6.7% | 5.7% | 82.9% | 4.6190 | .97449 |
| **Composite scores** | | | | | | 4.5488 | 0.85073 |

Key: SD-Strongly Disagree, D-Disagree, U-Uncertain, A-Agree, SA-Strongly Agree, M-Mean and SD-Standard Deviation

The result (Table 2) shows that mot 72 (68.6%) of respondents agreed that through appraisal, there is strong test of creditworthy and accuracy of loan applications which increases loan repayment rate. This is because capacity of an individual to repay a particular type of loan can be determined effectively through this process. Research results also show that 63 (60.0%) of respondents said that there is strict screening of the information used to acquire loans by customer in banks. This implies that any information not relating to the applicants or wrong information can easily be identified through thorough screening processes.

Most 80 (76.2%) of respondents also strongly agreed that at their bank, they regularly check accurate past business financial performance before they award any loan to a specific applicant or business. This involves asking for the past three to five years audited financial results to analyse business performance and establish performance trends (profit or loss). This will help the bank to know the amount of loan a particular business will be able to get from the analysis of financial report. Research also revealed that 79 (75.2%) of respondents strongly agreed that they do accept collaterals whose values are standard and not overstated. This is to ensure that the properties guaranteed against a particular loan are not impaired to ensure that individuals seeking loans will comply with repayment because of the property they attached as collateral.

Further, it was found out that most 85 (81.0%) of respondents strongly agreed that loan appraisal and approvals are based on individual/business credit history, character, capacity and collateral. This ensures that adequate information is collected and evaluated to ensure that the loan disbursed is likely to be repaid based on the outcomes of appraisal. It was evident from the study findings that by studying various characteristics of the borrower, it provides more information on the ability of the individual to receive a certain amount of loan and repay it back at an agreed timeline.

Research data also shows that 78 (74.3%) of respondents strongly agreed that their commercial banks considered characteristics of the borrower before issuing out loans. It was also revealed by 74 (70.5%) of respondents that internal appraisal credit rating systems is regularly used to reduce the level of non- performing loans in their individual bank. Lastly, 87 (82.9%) of respondents strongly agreed that the bank has a credit manual that documents and elaborates the strategies of managing credit. This helps the credit officers and borrowers to be aware of the responsibilities each side. The results show that credit appraisal techniques are followed to ensure high loan repayment rates.

To establish the effect of credit appraisal on loan performance, a Karl Pearson correlation analysis was computed at 0.05 significance level. Table 3 presents the results.

**Table 3:** Effect of Credit Appraisal on Loan Performance

| | | **Credit Appraisal** | **Loan Performance** |
|---|---|---|---|
| **Credit Appraisal** | Pearson Correlation | 1 | .206* |
| | Sig. (2-tailed) | | .035 |
| | N | 105 | 105 |
| **Loan Performance** | Pearson Correlation | .206* | 1 |
| | Sig. (2-tailed) | .035 | |
| | N | 105 | 105 |

*. Correlation is significant at the 0.05 level (2-tailed).

The research results shows that there exist significant positive effect ($r=0.206$ and $p=0.035$) of credit appraisal techniques and loan performance. This implies that increased efforts of appraising loan borrowers would automatically improve loan performance. This implies that credit appraisal technique is important for determining loan performance. In line with the study results, Njeru et al. (2016) found out that proper risk appraisal and identification has a direct influence on the loan performance by commercial banks in Kenya. Further, Moti et al. (2012) found out that client appraisal had significant effect on loan repayment rate. This implies that client appraisal has a significant positive relationship with loan performance by commercial banks.

## 4. Conclusions and Recommendations

The study found out that Seventy eight percent of commercial banks were found to use credit scoring model, credit reference model and 5Cs credit appraisal model to determine the suitability of a loan application to succeed in being issued with loan. Loan applicants were thoroughly scrutinized to ensure they met the minimum requirement to be issued with a loan facility. Further, collateral provided as a guarantee by the loan applicant was scrutinized for its market value and in some situations charged under a separate entity to protect shareholders funds from loss. Internal credit rating systems were also used by different commercial banks to measure individual / business creditworthiness to receive a particular loan. The procedure of credit appraisal was found to have significant positive correlation with loan performance. The study therefore concludes that there existed significant positive relationship between credit appraisal and evaluation techniques on loan performance by commercial banks in Uasin Gishu County. To address credit appraisal, there is need for commercial banks to consider using mobile telephony company's financial statements for an individual borrower to check on the cash flow before awarding a particular loan. Most borrowers are given inadequate credit facilities as majority of banks have not embraced the idea that most individuals and businesses nowadays operate on mobile money rather than cash or bank transactions.

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