



**EFFECT OF CBK REGULATIONS ON MONEY REMITTANCE COMPANIES IN THE  
GROWTH OF KENYA'S FINANCIAL SECTOR**

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**ABSTRACT**

The aim of the study was to establish the effect of CBK regulations of money remittance companies on the growth of the financial sector in Kenya, this study adopted a descriptive research design. The population of this study consisted of all the 18 money remittance companies operating in Nairobi as of 31<sup>st</sup> December 2019. SPSS software version 21 was used for the process of data analysis and report processing. Quantitative data were presented through statistical techniques such as tables and bar charts while descriptive data was be presented descriptively. The results showed that CBK regulations of money remittance companies affected the growth of the financial sector in Kenya ( $\beta = 0.549$ ; P-value < 0.05). It was recommended that CBK should put in place regulations regarding limits on and requirements for the amount of money transferred in protecting against fraud and capital flight. CBK may choose to limit the amount of money a person (physical or juridical) can bring into or take out of a country.

**Keywords:** *CBK regulations, Money remittance & Growth*

## 1.0 INTRODUCTION

### *Background of the study*

Central bank regulation are a form of government regulation which subjected the banks to certain requirements, restrictions and guidelines. This regulatory structure creates transparency between banking institutions and the corporation with whom they conduct business, among other factors. Regulations aimed at ensuring the safe and sound operation of financial institutions, set by both state and federal authorities. Given the inter-connectedness of the financial industry and its reliance on national and global economy, it is important for regulatory agencies to maintain control over standardized practice of these financial institutions. Supporters of such regulation often hinge their arguments on the 'too big to fail' notion. This holds that many financial institutions hold too much control over economy to fail without enormous consequences (Alice, 2014).

Well established banking systems are important factors of functioning financial systems. These have been vividly proven by recent developments around the world. When banking or more generally, financial systems temporarily break down or operate ineffectively. The capacity of these firms to obtain funds necessary for ongoing existing projects and pursuing new endeavors is curtailed. Severe interferences in the intermediation process can even lead to financial crisis and in some cases, undo years of economic and social development. Since 1980 more than 130 countries have experienced banking problems that have been costly to resolve and disruptive to economic development. This troublesome situation has led to calls for banking reform by national governments and such international organizations as the World Bank and the International Monetary Fund (Mniwasa, 2019).

Central bank is widely regarded as a vital part of the public safety net supporting the stability of the banking system and financial markets. A central bank that is financially independent and has a sizeable portfolio of securities can provide large amounts of liquidity to institutions on very short notice. Indeed, central bank lending has been a prominent part of regulatory assistance to troubled financial institutions for a long time. The Central Bank of Kenya (CBK), like most other central banks around the world, is entrusted with the responsibility of formulating and implementing monetary policy directed at achieving and maintaining low inflation as one of its two principal objectives; the other being to maintain a sound market-based financial system. The CBK was established under the Central Bank Act (CAP 481) in 1966. The Act assigned to the CBK the statutory objectives to assist in the development and maintenance of a sound monetary and credit, banking system in Kenya, conducive to the orderly and balanced economic development of the country and the external stability of the currency among other functions. During the early years, the CBK relied mainly on moral persuasion. It enlisted the support of banking institutions through regular meetings with the chief executives of banks to explain the thrust of monetary policy initiatives. Being the regulator of commercial banks and non-bank financial institutions, the CBK had some influence in this regard (Discua et al., 2019).

Central bank regulatory requirements for banking institutions refer to regulations and guidelines issued by the Central Banks which subject banks to certain requirements, restrictions and guidelines. Central bank regulatory requirements can also be defined as legal framework for financial operations. The regulations are a significant contributor to preventing or minimizing financial sector problems. The objectives of these regulations are: 1) to reduce the level of risk to which bank creditors are exposed (i.e. to protect depositors) 2) systemic risk reduction-to reduce the risk of disruption resulting from adverse trading conditions for banks causing multiple

or major bank failures, 3) avoid misuse of banks to reduce the risk of banks being used for criminal purposes, such as laundering the proceeds of crime and to protect banking confidentiality Credit allocation to direct credit to favored sectors hence to provide the best customer service in this competitive edge (Siegel, & Fransen, 2013).

Evidence shows that the absence of Central bank regulatory requirements in some key areas can lead to bank failures and systemic instability. Establishing sound, clear and easily monitored rules for financial activities both encourage managers to run their institutions better and facilitate the work of supervisors. A major weakness of some financial systems is the fact that various financial institutions, especially cooperatives and intermediaries in rural areas, operate completely outside prudential regulations. Some countries have one single general banking law, which tries to assemble all regulations, but in many countries the operational issues are left to statutory notes, circulars or even simply the routine decisions of the supervisory institution. Various other laws can have an impact on the operation of financial institutions, e.g. company laws, securities laws, debt recovery laws and laws on liquidation and bankruptcy (Akanda, 2018).

Kenya is currently using most aspects of Basel II; however, it is worth noting that the CBK has decided to incorporate certain features of Basel III in the Prudential Guidelines, particularly in relation to capital adequacy. Kenya is not a member of the Basel Committee on Banking Supervision, but the CBK does adopt and incorporate Basel standards when possible. The government of Kenya through its regulatory body, the Central Bank of Kenya, has introduced prudential regulations to guide commercial banks in conducting their business while cultivating a culture of fair competition in the industry.

### ***Statement of the Problem***

Remittance flows to Kenya constitute about 3.0% of the nation's GDP based on 2018 estimates (CBK, 2019). They are Kenya's largest source of foreign exchange, ahead of tea, horticulture, and tourism. Remittances in Kenya averaged \$79,815,980 from 2004 until 2017, reaching an all-time high of \$185503870 in October 2017 and a record low of \$25,154,000 in January 2004 (CBK, 2017). Unfortunately, in 2020, lockdown measures instigated in many countries due to the COVID -19 pandemic initiated many migrants to lose their jobs, subsequently reducing remittance flows to developing countries. In 2020, the World Bank estimated a historical deterioration in global remittances of about US\$110 billion, with subSaharan Africa (SSA) expected to experience a decline of about 23.1% (Ouyang et al., 2018). Previously, remittances in Kenya have been on the rise over the years. According to CBK regulations, the number of outlets in place, the volume of transactions, and money laundering issues remain some of the factors that influence the performance of the sector ((Asongu & Asongu, 2018).

There is limited transparency in the informal remittance market and informal transfers are very difficult to track. Thus, informal remittance statistics are based on questionnaires and surveys as a basis for projections, which vary widely depending on the source of estimations and the underlying assumptions. The World Bank Group's suggestions are somewhat in the middle of other assessments and indicate that the informal sector is about half the size of the formal remittance sector in 2016 (Asongu et al., 2019). The formulation of new rules on anti-Money Laundering and Financing of Terrorism standards by the CBK is in most cases seen as part of the regulator's effort to curb money laundering, require operators of cash remittance firms to register with CBK and pay an Sh5 million licensing fee in addition to maintaining a minimum core capital of Sh20 million (CBK 2014). However, trading using the money remittance systems

remains informal and this raises questions regarding the safety and intended nature of transactions that are conducted therein, some of which might have sinister motives such as money laundering and financing of terrorist activities. The informal nature of the system also translates to the lack of appropriate legislation which leaves the sector unregulated.

### ***Research Hypothesis***

The study sought to test the following hypothesis:

*H<sub>01</sub> CBK regulations of money remittance companies do not have a significant effect on the growth of the financial sector in Kenya.*

## **2.0 LITERATURE REVIEW**

### ***Theoretical Review***

#### ***Public Interest Theory of Bank Regulation***

Public interest theory lies with Pigouvian welfare economics, which portrayed the state as an omnipotent, yet benevolent, maximizer of social welfare that could efficiently correct market failures (Pigou, 1932). It was first developed by Arthur Cecil Pigou who holds that regulation is supplied in response to the demand of the public for the correction of inefficient or inequitable market practices. Regulation is assumed initially to benefit whole society rather than particular vested interests. The regulatory body is considered to represent the interest of the society in which it operates rather than the private interests of the investors. The origins of this approach may be found in the writings of Bentley (1870–1957). Bentley argued that groups capture control of regulatory agencies to advance their interests. He dismissed the idea of public interest as a fiction that represented only the interests of group (Okello et al., 2020).

Public interest approach is a conventional view of regulation rooted on welfare economics of Pigou's (1932). Samuelson (1947) responded to the deficiencies and unfitted market by focusing on interest of consumers' regulations in response to demand of relief from inequitable and inefficient market. The main focus of Public interest approach is public good from which group or some citizen will benefit. Under public interest approach bank regulation exist for exclusive benefit of depositors and investors. Public interest theory is usually contrasted with public choice theory that is more cynical about government behavior and motives and sees regulation as being socially inefficient.

Moreover, Stiger (1972) argued that regulation can be captured by incumbent firms to protect market from entry to competitors. Critics believe that this will only occur when the public demands a better allocative efficiency. This "theory" has no verified predictions or outcomes; therefore it is not viewed as a valid theory, Criticism does not mean that Public interest theory should be abandoned because it does explain well about bank regulation. Pigou's, (1938) classic treatment of regulation argues where market is imperfect, Adam smith invisible hand will not work. In addition He further argued that monopoly power, externalities, and informational asymmetries create a constructive role for finance and growth, and the strong helping hand of government to help offset market failures and thus enhance social welfare.

The growth of regulation in 1930's was simply a functional response to the changing public needs and interests of an evolving industrial society. Despite its romantic appeal, the public interest theory has been theoretically and practically discredited for its inability to take into

account competing conceptions of the public good, its ascription of heroic and unrealistic attributes to regulators, its underestimation of the power of organized interests, and its failure to explain why regulation often fails to deliver public interest outcomes (Baldwin & Cave, 1999). The public interest theory of regulation also holds that firms require regulations in order to guarantee the choice theory of regulation, which rests on the premise that all individuals, including public servants, are driven by self-interest (Hantke-Domas, 2003).

### ***Empirical Review***

Regulations that restrict, limit or authorize institutions to carry out foreign currency transfers include those regulating foreign currency management and authorizing institutions to perform foreign currency transactions. The decision to allow a particular institution to perform international money transfers is instrumental to expanding financial access for remittance senders and recipients. Authorized paying institutions African countries primarily authorize banks, and secondarily foreign exchange bureaus, to perform international foreign currency payments. Of the 50 countries reviewed, eight authorize banks only, and 32 authorize banks and foreign exchange bureaus (Alice, 2014).

Six countries allow banks, foreign exchange bureaus, and MFIs to pay out directly, and four allow the above plus retail locations to pay remittances. For countries with a low number of banks, this restricts access to international payments and creates an incentive to use informal methods of money transfer. Currently, 80 percent of the banks in 39 African countries pay remittances, but the percentage jumps to 90 percent in countries where only banks are allowed to pay. This situation strongly discourages other market actors from entering the market. In countries where only banks are authorized to perform money transfers, there are fewer places to withdraw remittances. Market entry is complicated further when only a limited number of MTOs have effective control of the available bank agents paying remittances. In countries where only banks are authorized to pay remittances, half are agents of Western Union. The combination of exclusivity agreements and restrictive regulation leads to the concentration of payments in a few MTOs. Several countries have banned such exclusivity agreements, including Nigeria (Mniwasa, 2019).

Discua et al. (2019) estimate from forecasts, from regression analyses and taken from economic intelligence units, that global money laundering amounts to more than 2.0 to 2.5 trillion US\$ annually or about 5-6% of World GDP in 2006 (44,444 trillion US\$ in 2006) to be contrasted against an observed figure of US\$ 500 billion to one trillion in 2004 within the banking sector only. Recent IMF estimates on money laundering by the drug traffickers who “introduce” the proceeds gained through the role of drugs into the legitimate financial market amount to between 2-5% of the world’s GDP, about 600 billion annually. The IDB (2004) reaches the conclusion that for Latin America a rough estimate appears to be somewhere between 2.5 and 6.3 % of the annual GDP of Latin American countries. A great deal of the money derives from drug dealing, with total revenue of 338 Billion USD in 2017.

Regulations regarding limits on and requirements for the amount of money transferred are important in protecting against fraud and capital flight. States may choose to limit the amount of money a person (physical or juridical) can bring into or take out of a country. These regulations can, however, hinder migrants from investing in their home countries if they are overly restrictive. Only Botswana, Burundi, Morocco, and Tunisia limit inbound transfers, requiring amounts under US\$10,000 to be reported to government authorities through customs or banking

channels. Additionally, a handful of countries require proof of a beneficiary for any amount of money transferred into the country (Siegel, & Fransen, 2013).

Most countries covered in this report have liberal requirements for inbound transfers but are more restrictive for outbound transfers. Because of the significance of intra-regional migration, restrictions on outbound money transfers create demand for the use of the informal sector. While about half the countries have the same limits on and requirements for both inbound and outbound transfers, 23 countries require outbound amounts of less than US\$10,000 to be reported to the central bank. In more than half the African countries studied, proof of a beneficiary is also required to make an outbound transfer. In some more extreme cases, such as those of South Africa and Zimbabwe, money may only be transferred out to relatives whose need for the money has been proven to the central bank. Countries with more restrictions on outbound payments often belong to monetary unions, such as the Central African Monetary Union (UMAC) and the West African Economic and Monetary Union (UEMOA), or have legislation dating from before 1998 (Lababidi, 2020).

A large portion of Africa's money transfer infrastructure operates beyond state regulations and has been caught up in debates about the role of the informal economy in development. Diagnosed by neo-liberal policy makers in the 1980s as the result of market distortions, the informal economy was by the late 1980s hailed as exemplary barefoot capitalism and popular resistance to the failures of the state, and then from the 1990s increasingly associated with corruption, criminality, conflict, and extremism. In particular, there has been great interest in how extra-state economic activities, often with a significant global reach, become part of the endogenous dynamics that protract conflict in parts of Africa (Akanda, 2018).

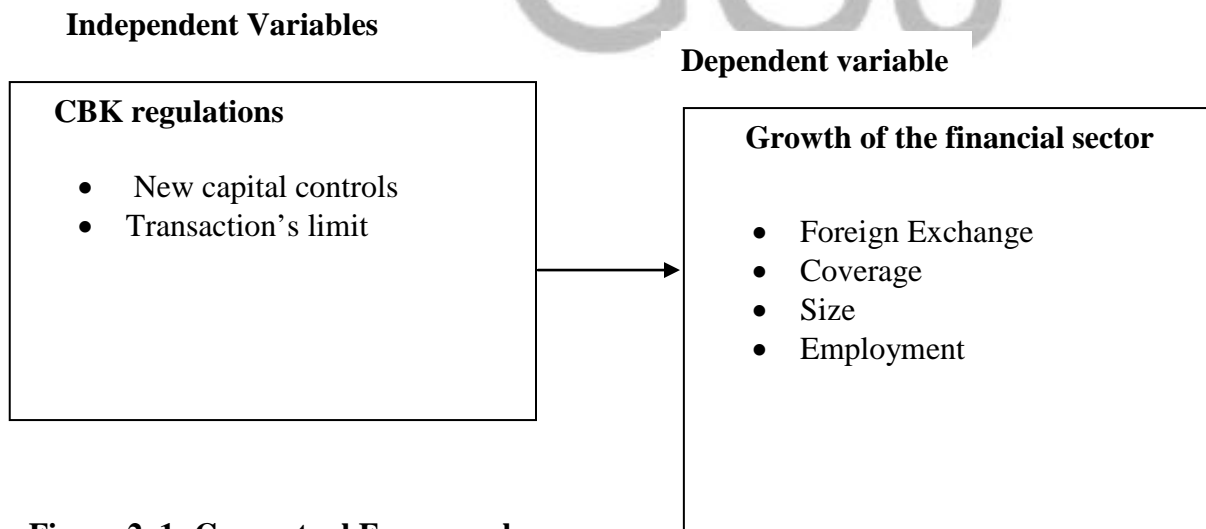
At first, as the trade-based method of remitting funds was slow and easily disrupted by the violence, hand-carrying money or delivering cash via quad flight operators became commonplace. But these rather risky methods were soon superseded by a more ingenious and reliable mechanism. Haviland was the Somali rendering of the Arabic word *hawala*, meaning 'transfer of debt', referring to a system of value transfer that has facilitated long-distance trade in the eastern Mediterranean, the Red Sea, Mesopotamia, and Iran since the early medieval period of Islam and is still popular in the Middle East, Asia, and their trading and migrant diasporas. In its simplest version, the customer gives money to an agent who contacts a second agent with the instruction to pay the recipient. The value or debt is transferred rather than actual money. The debt is settled at a later point, via reverse transactions, trade transactions, multilateral transfers, or consolidation of debts involving other agents. Hawala agents are independent actors transacting with a loose network of contacts. This soon took off amid the Somali civil war, as high-frequency radios, which formerly only the military and police were authorized to use, fell into the hands of private individuals, and imported radios also flooded in. Radio operators (*taar*) would relay payment instructions to operators elsewhere in the region, usually clans' people or trusted business associates (Asongu & Asongu, 2018).

One of the most well-known economists doing macro estimates of the size and development of money laundering is Walker (1999). His model of global money laundering is based on standard economic theory; in which he tries to develop an international input-output model. The Walker model relies on estimates of the extent of various types of crimes in single countries around the world, estimates of the proceeds resulting from these crimes, and the probability of those proceeds being laundered. Walker determines the laundering pathways by an "attractiveness index", which is based on a range of factors that express the opportunities and risks presented by the financial sectors/institutions in each country. He claims that his approach to quantify money laundering is arguably superior to those based on analysis of financial transactions since there is

no potential for the double-counting inherent in the layering and placement stages of money laundering processes.

According to a study by Okello et al. (2020) bank regulations were an increasing concern in the banking sector due to speedy changes in the business environment. The study aimed to test the influence of Central bank of Kenya regulations on the financial performance of commercial banks listed at the Nairobi Securities Exchange (NSE). The study indicated that despite an assessment of bank regulations in 2013 by the Central Bank of Kenya for the performance development, some bank such as Chase Bank, Imperial Bank, and CFC Stanbic bank run into financial difficulties in the year 2015 and 2016 while during the same time National Bank shocked its investors by recording a loss of 1.2 billion in the year 2015 which was almost the same as the profit of 1.3 billion they made in the previous year. Similarly, other banks such as KCB, Cooperative Bank of Kenya, and NIC bank had revealed positive growth since the review of regulation by CBK in the year 2013. Secondary data which was collected from the eleven (11) listed commercial banks in Kenya for a period between 2012 and 2016 were analyzed. The descriptive statistics mean and median were very close indicating that the data did not suffer from any outliers. The results of the study indicated that liquidity management regulation had an insignificant positive relationship with the performance of the listed commercial banks in Kenya while credit risk management regulation had an insignificant negative relationship. Capital adequacy regulations had a noteworthy negative relationship with banks' performance for the period studied. The results of the study revealed that there is a need for CBK to enhance its commercial bank regulations in Kenya for better performance. All-inclusive and cohesive regulatory policy methods should be adopted to reinforce market regulations to guarantee the achievement of Kenyan vision 2030 of Kenya being the financial center in Eastern and Southern Africa.

### *Conceptualization of Variables*



**Figure 2. 1: Conceptual Framework**

**Source: Author (2021)**

### 3.0 METHODOLOGY

#### *Research Design*

This study adopted both exploratory and correlation research designs. Exploratory research is conducted for a problem that has not been clearly defined. Through exploratory research design, the hypothesis was tested, definitive conclusions were drawn with extreme caution. Correlation research design was used to show relationships between two variables thereby showing a cause-and-effect relationship, predictions of a future event, or outcome from a variable (McDonald, 2017).

#### *Target Population*

The population of this study consisted of all the 18 money remittance companies operating in Kenya as of 31<sup>st</sup> December 2019 as shown in appendix I. The headquarters of all the money remittance companies was in Nairobi. The population consisted of all the Money remittance companies licensed and governed by the CBK Act CAP (491) 2013. A census of the 18 money remittance companies will be conducted. Five respondents were picked per company as the target population who included the firm owners, finance managers, operation managers, customer care, and tellers to reduce bias that would have been caused if one respondent is to be picked per Remittance Company. This made the total target respondents' population 90 as shown in Table 1.

**Table 1: Sample Size**

	<b>MRP</b>	<b>Unit of observation</b>	<b>Unit of analysis</b>
<b>1</b>	Amal Express Money Transfer Ltd	11	5
<b>2</b>	Amaana money Transfer Ltd	10	5
<b>3</b>	Bakaal Express Money Transfer Ltd	7	5
<b>4</b>	Continental Money Transfer Ltd	15	5
<b>5</b>	Dahabshill Money Transfer Ltd	8	5
<b>6</b>	Flex Money transfer Ltd	9	5
<b>7</b>	Global Money Transfer Limited	8	5
<b>8</b>	Hodan Global Money Remittance and Exchange Ltd	10	5
<b>9</b>	Iftin Express Money Transfer Ltd	11	5
<b>10</b>	Juba Express Money Transfer Ltd	8	5
<b>11</b>	Kaah Express Money Transfer Ltd	6	5
<b>12</b>	Kendy Money Transfer Ltd	9	5
<b>13</b>	Real Value Money Transfer Ltd	8	5
<b>14</b>	Safaricom Money Transfer Services Ltd	10	5
<b>15</b>	Tawakal Money Transfer Limited	8	5
<b>16</b>	UAE Exchange Money Remittance Ltd	11	5
<b>17</b>	Upesi Money Transfer Ltd	12	5
<b>18</b>	Mobex Money Transfer Services Ltd	9	5
	<b>Total</b>	<b>170</b>	<b>90</b>



### ***Data Collection Instruments***

Primary data was collected through a questionnaires that was administered to senior management of the money remittance companies. The questionnaire had both open-ended and closed-ended questions. The close-ended questions provided more structured responses to facilitate tangible recommendations. The open-ended questions provided additional information that was not captured in the close-ended questions.

### ***Methods of Data Analysis***

Smith (2015) defines data analysis as a systematic manipulation, processing, arrangement, and organization of data to produce meaningful information. Data gathered using the questionnaires were analyzed quantitatively using analyzed by both descriptive statistics and inferential statistics. SPSS version 26 which generates both descriptive and inferential statistics were employed. Descriptive statistics including the mean and standard deviation were used to capture the characteristics of the variables under study. Descriptive analysis is defined by Nachmias and Nachmias (2008) as statistical procedures that are used to describe the population one is studying. They also contended that descriptive statistics use graphical and numerical summaries to give a picture of a data set. Inferential statistics were used in the study.

### ***Effect of CBK regulations on financial sector growth***

To test the effect of CBK regulations on the growth of the financial sector, inferential statistics namely; regression analysis and correlation analysis were used. The following linear regression model was used in the determination of coefficients of the predictor variable (CBK regulations) in relation to the dependent variable (growth of the financial sector).

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon$$

Where: Y = Growth of the financial sector;  $X_1$  = CBK regulations; and  $\varepsilon$  = Error term

In the model,  $\beta_0$  = the constant term while the coefficient  $\beta_i$  was used to measure the sensitivity of the dependent variable (Y) to a unit change in the predictor variable while  $\varepsilon$  is the error term that captures the unexplained variations in the model. Results were presented in form of tables. T-test and F- Statistic at 5% level of significance were used to examine the significance of the model.

## **4.0 RESULTS**

### ***Response Rate***

The number of questionnaires, administered to all the respondents, was 90. A total of 80 questionnaires were properly filled and returned from the respondents. The results were presented in Table 2. The results represented an overall successful response rate of 88.8%. According to Mugenda (2008), a response rate of 50% or more is adequate. Babbie (2004) also asserted that return rates of 50% are acceptable to analyze and publish, 60% is good and 70% is very good. Therefore the researcher accepted the response rate as being appropriate for further analysis.

**Table 2: Response Rate**

Response rate	Frequency	Percent
Returned	80	88.8
Unreturned	10	11.2
<b>Total</b>	<b>90</b>	<b>100.00</b>

**CBK regulations of money remittance companies and the growth of the financial sector**

**Sample Adequacy for CBK regulations Factors**

KMO and Bartlett's Tests were conducted to test sample adequacy for CBK regulations measures before factor analysis was carried out. Clark and Watson (2019) highlighted that Factor Analysis was necessary for research to test for construct validity and highlight variability among observed variables, and to also check for any correlated variables to reduce redundancy in data. The findings in Table 3 showed that the KMO statistic for CBK regulations factors measures was 0.700 which was significantly high; that is greater than the critical level of significance of the test which was set at 0.5 (Godsey et al, 2018). In addition to the KMO test, Bartlett's Test of Sphericity was also highly significant (Chi-square = 325.621 with 78 degrees of freedom, at  $p < 0.05$ ) and a significance level of 0.000. The results provided an excellent justification for factor analysis to be conducted.

**Table 3: KMO and Bartlett's Test for CBK regulations factors**

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.700
Bartlett's Test of Sphericity	Approx. Chi-Square	325.621
	df	78
	Sig.	.000

**Factor Analysis**

Factor analysis was conducted after successful testing of sampling adequacy and reliability using the KMO coefficient and Cronbach's alpha results. Factor analysis was conducted using Principal Components Method (PCM) approach. The extraction of the factors followed the Kaiser Criterion where an eigenvalue of 1 or more indicates a unique factor. Total Variance analysis indicates that the 8 statements on CBK regulations can be factored into 3 factors. The total variance explained by the extracted factor is 57.983% as shown in Table 4.

**Table 4: Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.769	28.993	28.993	3.769	28.993	28.993	3.244	24.955	24.955
2	2.219	17.071	46.064	2.219	17.071	46.064	2.368	18.215	43.171
3	1.550	11.919	57.983	1.550	11.919	57.983	1.926	14.812	57.983
4	.916	7.048	65.032						
5	.848	6.526	71.558						
6	.750	5.768	77.326						
7	.600	4.612	81.939						

8	.561	4.319	86.258						
9	.507	3.903	90.161						
10	.397	3.054	93.215						
11	.349	2.683	95.898						
12	.322	2.479	98.377						
13	.211	1.623	100.000						
Extraction Method: Principal Component Analysis.									

Table 5 shows the factor loadings for CBK regulations statements. Out of the thirteen statements, only twelve (12) attracted coefficients of more than 0.4. The statement CBKR13 was removed. The other 12 statements were retained for further analysis. According to Rahn (2010) and Zandi (2006), a factor loading equal to or greater than 0.4 is considered adequate. This is further supported by Black (2002) who asserts that a factor loading of 0.4 has good factor stability and is deemed to lead to desirable and acceptable solutions.

**Table 5: CBK Regulations Factor Analysis Component Matrix**

		<b>Factor loadings</b>
CBKR1	The CBK regulations restrict, limits, or authorizes institutions to carry out foreign currency transfers/transactions	.696
CBKR2	CBK regulations regarding limits on and requirements for the amount of money transferred have been put to protect against fraud and capital flight.	.641
CBKR3	CBK regulations limit the amount of money a person (physical or juridical) can bring into or take out of the country.	.567
CBKR4	CBK regulations provide that proof of a beneficiary for any amount of money transferred into the country is given before any transaction can take place.	.695
CBKR5	Because of the significance of intra-regional migration, restrictions on outbound money transfers create demand for the use of the informal sector.	.694
CBKR6	A large portion of Kenya's money transfer infrastructure operates beyond state regulations and plays a significant role in financial sector growth.	.571
CBKR7	CBK regulations are an increasing concern in the financial sector due to speedy changes in the business environment.	.428
CBKR8	CBK regulations entail that a particular institution should perform international money transfers to expand financial access for remittance senders and recipients.	.562
CBKR9	CBK regulations only authorize banks, and secondarily foreign exchange bureaus, to perform international foreign currency payments.	.645
CBKR10	CBK regulations restrict access to international payments and create an incentive to use informal methods of money transfer.	.626
CBKR11	CBK regulations strongly discourage other market actors from entering the market.	.539
CBKR12	Only banks are authorized to perform money transfers there are fewer places to withdraw remittances.	.561
CBKR13	Market entry is complicated as only a limited number of money remittance companies have effective control of the available agents paying remittances.	<b>.313</b>

***Descriptive results \_ CBK regulations in the financial sector***

From the assessment, the CBK regulation variable was measured using a five-point Likert scale where 1 indicated the lowest rating, highly disagree, and five the highest score, highly agree. A detailed assessment of the data confirmed that the respondents recorded a high rating on the various statements used to gauge CBK regulations. Table 6 presents:

**Table 6: Descriptive results \_ CBK regulations in the financial sector**

		SD	D	N	A	SA	Mean	STD
<b>CBKR1</b>	The CBK regulations restricts, limits or authorizes institutions to carry out foreign currency transfers/transactions	1.3%	7.5%	13.8%	41.3%	36.3%	4.0	0.96
<b>CBKR2</b>	CBK regulations regarding limits on and requirements for the amount of money transferred have been put to protect against fraud and capital flight.	1.3%	12.5%	18.8%	43.8%	23.8%	3.8	1.00
<b>CBKR3</b>	CBK regulations limit the amount of money a person (physical or juridical) can bring into or take out of the country.	2.5%	11.3%	11.3%	46.3%	28.8%	3.9	1.04
<b>CBKR4</b>	CBK regulations provide that proof of a beneficiary for any amount of money transferred into the country is given before any transaction can take place.	1.3%	10.0%	26.3%	35.0%	27.5%	3.8	1.01
<b>CBKR5</b>	Because of the significance of intra-regional migration, restrictions on outbound money transfers create demand for the use of the informal sector.	2.5%	7.5%	21.3%	38.8%	30.0%	3.9	1.02
<b>CBKR6</b>	A large portion of Kenya's money transfer infrastructure operates beyond state regulations and plays a significant role in financial sector growth.	1.3%	1.3%	13.8%	25.0%	58.8%	4.4	0.86
<b>CBKR7</b>	CBK regulations are an increasing concern in the financial sector due to speedy changes in the	0.0%	3.8%	15.0%	40.0%	41.3%	4.2	0.83

	business environment.								
<b>CBKR8</b>	CBK regulations entail that a particular institution should perform international money transfers to expand financial access for remittance senders and recipients.	0.0%	1.3%	16.3%	30.0%	52.5%	4.3	0.79	
<b>CBKR9</b>	CBK regulations only authorize banks, and secondarily foreign exchange bureaus, to perform international foreign currency payments.	0.0%	5.0%	21.3%	43.8%	30.0%	4.0	0.85	
<b>CBKR10</b>	CBK regulations restrict access to international payments and create an incentive to use informal methods of money transfer.	0.0%	3.8%	42.5%	33.8%	20.0%	3.2	0.87	
<b>CBKR11</b>	CBK regulations strongly discourage other market actors from entering the market.	8.8%	8.8%	31.3%	21.3%	30.0%	3.6	1.25	
<b>CBKR12</b>	Only banks are authorized to perform money transfers there are fewer places to withdraw remittances.	13.8%	17.5%	22.5%	38.8%	7.5%	3.1	1.19	
	<b>Composite Mean</b>						<b>3.9</b>		

Valid N (listwise) 80

The managers who responded rated a large portion of Kenya's money transfer infrastructure operates beyond state regulations, and plays a significant role in financial sector growth at 4.3 on the Likert scale; CBK regulations are an increasing concern in the financial sector due to speedy changes in the business environment at 4.2 on the Likert scale; A large portion of Kenya's money transfer infrastructure operates beyond state regulations, and plays a significant role in financial sector growth at 4.4; CBK regulations limit the amount of money a person (physical or juridical) can bring into or take out of the country at 3.9 on the Likert scale. These outcomes indicate that the majority of the managers believed CBK regulations addressed the external market requirements adequately. The lowest ratings included CBK regulations that restrict access to international payments and create an incentive to use informal methods of money transfer, CBK regulations strongly discourage other market actors from entering the market and lastly, only banks are authorized to perform money transfers there are fewer places to withdraw remittances.

***Relationship between CBK regulations of money remittance companies and the growth of the financial sector***

Table 7 shows the correlation results which indicate that there was a positive and significant relationship between CBK regulations and the growth of the financial sector. This reveals that any positive change in CBK regulations led to increased growth of the financial sector. The relationship has been illustrated by the correlation coefficient of 0.548, implying a positive relationship between CBK regulations and the growth of the financial sector in Kenya. This was also evidenced by the p-value of 0.000 which is less than that of critical value (0.05).

**Table 7: Relationship between CBK regulations of money remittance companies and the growth of the financial sector**

		Growth	CBK regulations
<b>Growth</b>	Pearson Correlation	1	.548**
	Sig. (2-tailed)		.000
	N	80	80
<b>CBK regulations</b>	Pearson Correlation	.548**	1
	Sig. (2-tailed)	.000	
	N	80	80

\*\* . Correlation is significant at the 0.01 level (2-tailed).

***Regression analysis\_ CBK regulations***

Regression analysis was conducted to empirically determine whether CBK regulation of money remittance companies was a significant determinant of the growth of the financial sector in Kenya. The coefficient of determination R<sup>2</sup> and correlation coefficient (r) shows that the degree of association between the independent variable and the growth of the financial sector. The results of the linear regression indicate R<sup>2</sup> = 0.301 and R= 0.548 as shown in Table 4.13. This is an indication that there is a significant relationship between independent variable CBK regulations and the dependent growth of the financial sector. From the model summary Table, 8 adjusted R<sup>2</sup> was 0.292 this indicates that CBK regulations explain 29.29% of variations in the growth of the financial sector. Therefore further research should be conducted to investigate these other factors that affect the growth of the financial sector in Kenya.

**Table 8: Model Summary\_ CBK regulations**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.548 <sup>a</sup>	.301	.292	.80235

a. Predictors: (Constant), CBK regulations

The overall model significance was presented in Table 8, an F statistic of 33.531 indicated that the overall model was significant as it was less than the critical F value of 33.531with (1, 80)

degrees of freedom at the P=0.05 level of significance. The findings imply that CBK regulations were statistically significant in explaining the growth of the financial sector in Kenya.

**Table 9: ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21.586	1	21.586	33.531	.000 <sup>b</sup>
	Residual	50.214	78	.644		
	Total	71.800	79			

a. Dependent Variable: Growth

b. Predictors: (Constant), CBK regulations

Further, to test the significance of the regression relationship between CBK regulations and the growth of the financial sector, the regression coefficients ( $\beta$ ), the intercept ( $\alpha$ ), and the significance of all coefficients in the model were subjected to the t-test to test the null hypothesis that the coefficient is zero. The null hypothesis state that,  $\beta$  (beta) = 0, meaning there is no relationship between CBK regulations and growth as the slope  $\beta$  (beta) = 0 (no relationship between the two variables). The results on the beta coefficient of the resulting model in Table 9 show that the constant  $\alpha = -1.894$  is significantly different from 0 since the p-value = 0.000 is less than 0.05. The coefficient  $\beta = 0.549$  is also significantly different from 0 with a p-value = 0.000 which is less than 0.05.

This implies that the null hypothesis  $\beta_1 = 0$  is rejected and the alternative hypothesis  $\beta_1 \neq 0$  is taken to hold implying that the model  $Y = 1.894 + 0.549$  (CBK regulations) + e, is significantly fit. The model organizational Growth =  $\alpha + \beta$  (CBK regulations) holds as suggested by the test above. This confirms that there is a positive linear relationship between CBK regulations and the growth of the financial sector.

The findings agree with the KPMG (2013) survey in the United States of America that confirmed that regulations affected financial sector growth. According to Alice (2014), regulations that restrict, limit or authorize institutions to carry out foreign currency transfers include those regulating foreign currency management and authorizing institutions to perform foreign currency transactions. The decision to allow a particular institution to perform international money transfers is instrumental to expanding financial access for remittance senders and recipients.

**Table 9: Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.894	.383		4.946	.000
	CBK regulations	.549	.095	.548	5.791	.000

a. Dependent Variable: Growth

## 5.0 CONCLUSION AND RECOMMENDATIONS

In conclusion, this study provided a unique perspective on CBK regulations of money remittance companies in determining the growth of the financial sector in Kenya. It was established that CBK regulations of money remittance companies had a significant effect on the growth of the financial sector in Kenya. The study recommend that CBK should put in place regulations regarding limits on and requirements for the amount of money transferred in protecting against fraud and capital flight. CBK may choose to limit the amount of money a person (physical or juridical) can bring into or take out of a country.

## REFERENCES

- Akanda, M.A.I. (2018). Divergences in expatriating, remitting and investing remittances between semi-urban and rural Bangladesh, *International Journal of Development Issues*, 17(3), 288-304. <https://doi.org/10.1108/IJDI-12-2017-0208>
- Alice Y., M. (2014). Dirty money in Jamaica", *Journal of Money Laundering Control*, 17(3), 355-366. <https://doi.org/10.1108/JMLC-09-2013-0032>
- Asongu, S., & Asongu, N. (2018). The comparative exploration of mobile money services in inclusive development", *International Journal of Social Economics*, 45(1), 124-139. <https://doi.org/10.1108/IJSE-08-2016-0221>
- Discua Cruz, A., & Fromm, I. (2019). Understanding the emergence of a social enterprise by highly skilled migrants: The case of Honduras Global Europa", *International Journal of Entrepreneurial Behavior & Research*, 25(5), 801-818. <https://doi.org/10.1108/IJEBR-02-2018-0091>
- Lababidi, E.M.R. (2020). State and institutional capacity in combating money laundering and terrorism financing in armed conflict: The Central Bank of Syria, *Journal of Money Laundering Control*, 23(1), 155-172. <https://doi.org/10.1108/JMLC-04-2019-0033>
- Mniwasa, E.E. (2019). The financial intelligence unit and money laundering control in Tanzania: The law, potential, and challenges, *Journal of Money Laundering Control*, 22 (3), 543-562. <https://doi.org/10.1108/JMLC-07-2018-0043>
- Okello, C. B. G., Yourougou, P., & Munene, J.C. (2020), "Digital financial innovations in the twenty-first century: Do transaction tax exemptions promote mobile money services for financial inclusion in developing countries?", *Journal of Economic and Administrative Sciences*, 36(3), 185-203. <https://doi.org/10.1108/JEAS-01-2019-0007>