



















**Table 2: Response Rate**

Response rate	Frequency	Percent
<b>Returned</b>	80	88.8
<b>Unreturned</b>	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**

<b>KMO and Bartlett's Test</b>		
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**

		<b>Growth</b>	<b>CBK regulations</b>
<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**

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
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  $Y = 1.894 + 0.549 (\text{CBK regulations}) + e$ , is significantly fit. The model organizational Growth =  $\alpha + \beta (\text{CBK regulations})$  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.

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