



The Effects of Risk Management System on Financial Performance of Commercial Banks in Rwanda: A Case of Cogebanque Ltd.

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ABSTRACT

This research study entitled an Assessment of the Effect of Risk Management System on Financial Performance of Commercial Banks in Rwanda aimed at assessing risk factors that performance of commercial banks like credit risk, embezzlement, theft and among others. Three specific objectives were formulated namely; to analyze the effect of directive control system on Financial Performance of Cogebanque Ltd; to establish the effect of preventive control system on Financial Performance of Cogebanque Ltd; to examine the effect of detective control system on Financial Performance of Cogebanque Ltd. The study examined risk management system and financial performances in Cogebanque Ltd located in Kigali City for a period of four years from 2011-2014. The study used descriptive design. A sample size of 40 staff of Cogebanque Ltd, participated in the study. SPSS software (version 22) was used to process the data and analysis were made by use of frequency/percentages, mean and standard deviation. The relationship between the variables was established by use of Pearsons correlation. The study established that different risk management systems which consist of directive control system, preventive control system and detective control system. The study revealed that risk management system has improved Cogebanque bank's *return on investment, profitability, liquidity, return asset and return on equity and loan returns* by 72.7%.

Keywords: Risk Management, Internal Control Systems, Financial Performance, Commercial Banks, Rwanda

INTRODUCTION

The world over, the Financial sector has become the most important sector in promoting economic growth and development around the globe. To maintain its relevance, it requires innovativeness to meet the rising demand for financial services. As a result, financial products have increased, operational borders have expanded, and new financial markets have emerged. These developments have increased and diversified the risks that the banking sector has to manage (Daniel, 1999). The global financial crisis highlighted the importance of well-functioning and healthy banking sector for macro stability (Chance, 2004). One of the main reasons for banking failures is poor risk management system which resulted in major financial loss and even bankruptcy to financial institutions across the globe. The lack of an internal control system which is to keep the risks under control or major break downs within an existing internal control system poses a threat to the success of the banking sector (Manasseh, 2004).

Internal control system allows banks to foresee potential problems which may cause financial losses and thereby prevent or minimize any future losses. Researches on the causes of bank failures mainly concluded that an efficient and effective internal control system might prevent financial cost around the world and instead promote their financial performance (Merton, 1993).

The main focus of risk management has mainly been on controlling and for regulatory compliance, as opposed to enhancing financial performance (Banks, 2004).

However, risk management often leads to enhanced financial performance as regulatory compliance and control of risks enables the organization to save on costs. Banks (2004) further suggests that by risks, the managers are able to increase the value of a firm through ensuring continued profitability of the firm. Standard and Poor's (2013) identifies poor liquidity management, underpricing and under-reserving, a high tolerance for

investment risk, management and governance issues, difficulties related to rapid growth and/or expansion into non-core activities as main causes of financial distress and failure in banking institutions. It is important that these factors be managed efficiently by banking institutions, to avoid financial failure and bankruptcy to the firm. Babbal and Santomero (1996) note that bankers should assess the various types of risks they are exposed to and devise ways of effectively managing them. They further suggest that bankers should accept and manage at firm level, only those risks that are uniquely a part of their services.

Stulz (1984) suggested that risk management is a viable economic reason why firm managers, might concern themselves with both the expected profit and the distribution of firm returns around their expected value, hence providing a rationale for aligning firm objective functions to avoid risk.

Like other financial institutions around the world even financial institutions in Rwanda is affected by the crisis and even up to date some commercial Banks are faced by various risks which is affecting their performance. This has made commercial Banks to merge or even sell of their shares to compete favorably with other commercial Banks. For example Commercial Bank of Rwanda (BCR) merged and changed its name to I & M bank which is believed to be due to the various risks the bank was exposed to.

COGEBANQUE was created by domestic Investors and started its activities in 1999 at Kacyiru (TELECOM HOUSE) with one branch located at its Headquarter. In 2000 the second branch was opened in the Kigali. currently the banks has 19 branches country-wide. At the beginning COGEBANQUE started with 665 million of Rwandan francs, to promote competition among commercial banks, BNR (National Bank of Rwanda) decided to increase the minimum of share capital from 1.5 billion in 2001, 3billion between 2002 and 2006, preceded by 5 billion in 2008. To achieve the BNR demand, COGEBANQUE made recourse to the foreign investors namely (Shorecap International/USA, Bio/Belgique et AfricInvest/Tunisie); and ceded 40% of its shares. After the divestment of these shareholders in December 2012 (Shorecap) and March 2014 (Bio and AfricInvest). Currently, the Bank is 100% locally owned with a RSSB(30%) and 70 % of the shares are held by institutions and individuals, initial promoters of COGEBANQUE. COGEBANQUE has got various risk management strategies in place to promote organization performance. The strategies range from direct control, preventive control and detective control which involve various activities performed by the board of directors, senior managers, auditors and operational managers basing on the policy, rules and regulations guiding the Bank operations.

STATEMENT OF THE PROBLEM

The past decade has seen dramatic losses in the banking industry around the world, banks that had been performing

well suddenly announced large losses due to credit exposures that turned sour, interest rate positions taken, or derivative exposures that may or may not have been assumed to hedge balance sheet risk (World Bank, 2012).

Hakim and Neaime (2001) tried to examine the effect of liquidity, credit, and capital on bank performance in the banks of Egypt and Lebanon; they found that there was a sound risk management actions and application of these banks rules and laws. Hosna Manzura and Juanjuan (2009) found that Non-performing loans indicator affected on profitability as measured by (ROE) more than capital adequacy ratio, and the effect of credit risk management on profitability was not the same for all the banks included in their study.

Njanike (2009) found that the absence of effective credit risk management led to the occurrence of the banking crisis, and inadequate risk management systems caused the financial crisis. Aruwa and Musa (2012) investigated the effect of the credit risk, and other risk components on the banks' financial performance. They found a strong relationship between risk components and the banks' financial performance. In the early 2000s, Rwanda experienced liquidity crisis that highlighted the limitations of its liquidity regulation and led to the redesign of the regulatory framework. With the new regulatory framework in place, some banks are still making losses; others have closed or merged with other banks for efficient operations. For example it is believed that Commercial Bank of Rwanda (BCR) was acquired by I & M bank due to risk exposure (Rwangobwa, 2014). Although studies have been conducted on risk management and financial performance, it still remains unclear as to why banks with sound risk management practices and risk management knowledge still experience performance challenges.

The above background informed the basis for this study. Specific Objectives of the study are:

- To analyze the effect of Directive Control System on Financial Performance of CogeBanque Ltd
- To establish the effect of Preventive Control System on Financial Performance of CogeBanque Ltd
- To examine the effect of Detective Control System on Financial Performance of CogeBanque Ltd

RESEARCH METHODOLOGY

Research design

The study adopted descriptive design based on qualitative and quantitative approaches. The target population was 40 staff working with CogeBanque Ltd under Internal audit, risk management & compliance, credit department, and Finance units. Since the population was small, a census of the population was captured as the sample size.

Data collection and analysis

A questionnaire and documentary review were used to collect. Frequencies, percentages, mean and standard deviation were the major descriptive statistics while Pearson correlation was used established co-relational relationship between the independent variable and dependent variables.

RESULTS AND DISCUSSIONS

Documentary review focused on the period 2011- 2014, and the figures were used for comparison between the years.

A total of 40 questionnaires were distributed but only 31 were returned. Data analysis was therefore based on 31 respondents.

Effect of Directive Control System on financial Performance of Cogeбанque Ltd

Analysis below shows the effect of Directive Control System on financial Performance of Cogeбанque Ltd

Assessing Directive Control System of Cogeбанque Ltd

Table 1 shows the respondents perception on the Directive Control System of Cogeбанque

Table 1: Respondents view on Directive Control System in Cogeбанque Ltd

Directive Control System of Cogeбанque Ltd	Mean	Std. Deviation	Comments
Top management ensures that rules, policies and procedures in Cogeбанque is followed	4.5161	.56985	Very strong heterogeneity
Staffs performance is regularly reviewed according to the policy	4.5484	.62390	Very strong heterogeneity
Assets are well protected and safe guarded as stipulated in the bank policy	4.4839	.62562	Strong heterogeneity
The bank practices segregation of duties stated in the policy and procedures	4.5161	.56985	Very strong heterogeneity
Information system is well protected through different security measures design in the security policy	4.4839	.56985	Strong heterogeneity
Valid N (list wise)	31		

Source: Primary data, 2015

Table 1 shows the respondents perception on the Directive Control System of Cogeбанque Ltd and their responses were analyzed in details as below; Top management ensures that rules, policies and procedures in Cogeбанque Ltd are followed: This was indicated by a Very strong mean of 4.5161 and heterogeneity standard deviation of .56985. Furthermore, the research wanted to ascertain whether staffs performance is reviewed regularly according to the policy: This was indicated by a Very strong mean of 4.5484 and heterogeneity standard deviation of .62390.

In assessing whether assets are well protected and safe guarded as stipulated in the bank policy, a Strong mean of 4.4839 was indicated and heterogeneity standard deviation of .62562.

The bank practices segregation of duties stated in the policy and procedures: This was indicated by a Very strong mean of 4.5161 and heterogeneity standard deviation of .56985. Information system is well protected through different security measures design in the security policy: This was indicated by a Strong mean of 4.4839 and heterogeneity standard deviation of .56985.

Table 2: Effect of Directive Control System on financial performance of Cogeбанque Ltd

Effect of Directive Control System on financial performance	Mean	Std. Deviation	Comments
Directive Control System has improved on Cogeбанque return on investment	4.4516	.50588	Strong heterogeneity
Directive Control System has improved on Cogeбанque profitability	4.3871	.49514	Strong homogeneity
Directive Control System has improved on Cogeбанque liquidity	4.4516	.50588	Strong heterogeneity
Directive Control System has improved on Cogeбанque equity and loan returns	4.2581	.44480	Strong homogeneity
Directive Control System has improved on Cogeбанque return on asset	4.2903	.46141	Strong homogeneity
Valid N (list wise)	31		

Source: Primary data, 2015

Table 2 shows the respondents perception on the effect of directive Control System on financial performance of Cogeбанque Ltd and their responses were analyzed in details as below; Directive Control System has improved on Cogeбанque return on investment: This was indicated by a Strong mean of 4.4516 and heterogeneity standard deviation of .50588. Directive Control System has improved on Cogeбанque profitability: This was indicated by a Strong mean of 4.3871 and homogeneity standard deviation of .49514. This implies that Directive Control System has improved on Cogeбанque profitability. Directive Control System has improved on Cogeбанque liquidity: This was indicated by a Strong mean of 4.4516 and heterogeneity standard deviation of .50588. This implies that Directive Control System has improved on Cogeбанque liquidity. Directive Control System has improved on Cogeбанque equity and loan returns: This was indicated by a Strong mean of 4.2581 and homogeneity standard deviation of .44480. This implies that Directive Control System has improved on Cogeбанque equity and loan returns. Directive Control System has improved on Cogeбанque return on asset: This was indicated by a Strong mean of 4.2903 and homogeneity standard deviation of .46141. This implies that Directive Control System has improved on Cogeбанque return on asset.

Relationship between Directive Control System and financial performance

Table 3 shows the relationship between Directive Control System and financial performance in Cogeбанque Ltd

Table 3: Relationship between Directive Control System and Financial Performance

Relationship		Directive control system	Financial performance
Directive Control System	Pearson Correlation	1	.769**
	Sig. (2-tailed)		.000
	N	31	31
Financial performance	Pearson Correlation	.769**	1
	Sig. (2-tailed)	.000	
	N	31	31

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

Table 3 is shows the relationship between Directive Control System and Financial performance in Cogeбанque whereby the respondents N is 31 and the significant level is 0.01, the results indicate that independent variable has positive high correlation to dependent variable equal to .769** and the p-value is .000 which is less than 0.01 and when p-value is less than significant level, therefore researchers conclude that variables are correlated and null hypothesis is rejected and remains with alternative hypothesis. This means that there is a significant relationship between Directive Control System and financial performance in Cogeбанque. In conclusion therefore, Directive Control System contributes to positive financial performance in Cogeбанque Ltd of this research project by 76.9%.

Effect of Preventive Control System on financial Performance of Cogeбанque Ltd

This sections analyses Preventive Control System and its effect on Cogeбанque Ltd

Assessing Preventive Control System of Cogeбанque Ltd

Table 4 shows the respondents perception on the Preventive Control System of Cogeбанque Ltd

Table 4: Respondents view on Preventive Control System in Cogeбанque Ltd

Preventive Control System of Cogeбанque Ltd	Mean	Std. Deviation	Comments
Management ensures that there is separation of duties to make staffs do defined activities	4.4194	.50161	Strong heterogeneity
Management ensures that there is proper authorization and approval in the bank avoid bank from being involved in risks	4.4516	.50588	Strong heterogeneity
Management ensures that there is adequate documentation of all transactions in the bank	4.3871	.49514	Strong homogeneity
Management ensures that there is physical control over assets of the bank	4.4194	.50161	Strong heterogeneity
Valid N (list wise)	31		

Source: Primary data, 2015

Table 4 shows the respondents perception on the Preventive Control System of Cogeбанque Ltd and their responses were analyzed in details as below:

Management ensures that there is separation of duties to make staff perform defined activities: This was indicated by a Strong mean of 4.4194 and heterogeneity standard deviation of .50161. This implies that Management ensures that there is separation of duties to make staffs do defined activities. Management ensures that there is proper authorization and approval in the bank to avoid bank from being involved in risks: This was indicated by a Strong mean of 4.4516 and heterogeneity standard deviation of .50588. This implies that Management ensures that there is proper authorization and approval in the bank avoid bank from being involved in risks. Management ensures that there is adequate documentation of all transactions in the bank: This was indicated by a Strong mean of 4.3871 and homogeneity standard deviation of .49514. This implies that Management ensures that there is adequate documentation of all transactions in the bank. Management ensures that there is physical control over assets of the bank: This was indicated by a Strong mean of 4.4194 and heterogeneity standard deviation of .50161. This implies that Management ensures that there is physical control over assets of the bank.

Table 5: Effect of Preventive Control System on financial performance of Cogeбанque Ltd

Effect of Preventive Control System on financial performance	Mean	Std. Deviation	Comments
Preventive control system has improved on Cogeбанque return on investment	4.4194	.56416	Strong heterogeneity
Preventive control system has improved on Cogeбанque profitability	4.3871	.61522	Strong heterogeneity
Preventive control system has improved on Cogeбанque return on asset	4.5161	.50800	Very Strong heterogeneity
Preventive control system has improved on Cogeбанque equity and loan return	4.5806	.50161	Very Strong heterogeneity
Preventive control system has improved on Cogeбанque liquidity	4.5484	.56796	Very Strong heterogeneity
Valid N (list wise)	31		

Source: Primary data, 2015

Table 5 shows effect of Preventive Control System on financial performance of Cogeбанque Ltd and their responses were analyzed in details as below:

Preventive Control System has improved on Cogeбанque return on investment: This was indicated by a Strong mean of 4.4194 and heterogeneity standard deviation of .56416.

This implies that Preventive Control System has improved on Cogeбанque return on investment as seen in the financial statement analysis in section 15. Preventive Control System has improved on Cogeбанque profitability: This was indicated by a Strong mean of 4.3871 and heterogeneity standard deviation of .61522. This implies that Preventive Control System has improved on Cogeбанque profitability. Preventive

Control System has improved on Cogeбанque return on asset: This was indicated by a very strong mean of 4.5161 and heterogeneity standard deviation of .50800. This implies that Preventive Control System has improved on Cogeбанque return on asset.

Preventive Control System has improved on Cogeбанque equity and loan return: This was indicated by a Very strong mean of 4.5806 and heterogeneity standard deviation of .50161. This implies that Preventive control system has improved on Cogeбанque equity and loan return. Preventive Control System has improved on Cogeбанque liquidity: This was indicated by a Very strong mean of 4.5484 and heterogeneity standard deviation of .56796. This implies that Preventive control system has improved on Cogeбанque liquidity.

Relationship between Preventive Control System and financial performance

Table 6 shows the relationship between preventive Control System and financial performance in Cogeбанque Ltd

Table 6: Relationship between Preventive Control System and financial performance

Relationship		Preventive control system	Financial performance
Preventive control system	Pearson Correlation	1	.656**
	Sig. (2-tailed)		.000
	N	31	31
Financial performance	Pearson Correlation	.656**	1
	Sig. (2-tailed)	.000	
	N	31	31
**. Correlation is significant at the 0.01 level (2-tailed).			

Table 6 shows the relationship between Preventive Control System and Financial performance in Cogeбанque whereby the respondents N is 31 and the significant level is 0.01, the results indicate that independent variable has positive high correlation to dependent variable equal to .656** and the p-value is .000 which is less than 0.01 and when p-value is less than significant level, therefore researchers conclude that variables are correlated and null hypothesis is rejected and remains with alternative hypothesis. This means that there is a significant relationship between Preventive control system and financial performance in Cogeбанque Ltd.

In conclusion therefore, Preventive Control System contributes to positive financial performance in Cogeбанque Ltd of this research project by 65.6%.

Effect of Detective Controls on Financial Performance of Cogeбанque Ltd

This section analyses the Detective Controls System and its effect on financial performance of Cogeбанque Ltd

Assessing Detective Controls System in Cogeбанque Ltd

Table 7 shows the respondents perception on the Detective Controls System on financial performance of Cogeбанque Ltd

Table 7: Respondents view on Detective Controls System in Cogeбанque Ltd

Detective Controls System of Cogeбанque Ltd	Mean	Std. Deviation	Comments
Internal audit detects loop holes in the policy	4.1290	.42755	Strong homogeneity
The bank ensures that theft of bank asset is detected	4.4839	.56985	Strong heterogeneity
The bank ensures that errors performed in the bank is detected	4.4194	.50161	Strong heterogeneity
Management ensures that there is compliancy with bank policy and procedures	4.3226	.54081	Strong heterogeneity
Valid N (list wise)	31		

Source: Primary data, 2015

Table 7 shows the respondents' perception on the detective controls system on performance of Cogeбанque Ltd and their responses were as analyzed in details below; Internal audit detects loop holes in the policy: This was indicated by a Strong mean of 4.1290 and homogeneity standard deviation of .42755. The bank ensures that theft of bank asset is detected: This was indicated by a Strong mean of 4.4839 and heterogeneity standard deviation of .56985. The bank ensures that errors performed in the bank are detected: This was indicated by a Strong mean of 4.4194 and heterogeneity standard deviation of .50161. Management ensures that there is compliancy with bank policy and procedures: This was indicated by a Strong mean of 4.3226 and heterogeneity standard deviation of .54081.

Table 8: Effect of Detective Controls on financial performance of Cogeбанque Ltd

Effect of Detective Controls on financial performance	Mean	Std. Deviation	Comments
Detective Controls System improved on Cogeбанque return on investment	4.3871	.71542	Strong heterogeneity
Detective Controls System improved on Cogeбанque profitability	4.4194	.67202	Strong heterogeneity
Detective Controls System improved on Cogeбанque return on asset	4.2903	.58842	Strong heterogeneity
Detective Controls System improved on Cogeбанque equity and loan return	4.3226	.65254	Strong heterogeneity
Detective Controls System improved on Cogeбанque liquidity	4.3548	.75491	Strong heterogeneity
Valid N (list wise)	31		

Source: Primary data, 2015

Table 8 shows the effect of Detective Controls on financial performance of Cogeбанque Ltd and their responses were analyzed in details below; Detective Controls System improved on Cogeбанque return on investment: This was indicated by a Strong mean of 4.3871 and heterogeneity standard deviation of .71542. This implies that Detective Controls System improved on Cogeбанque return on investment. Detective Controls System improved on Cogeбанque profitability: This was indicated by a Strong mean of 4.4194 and heterogeneity standard deviation of .67202. This implies that Detective

Controls System improved on Cogeбанque profitability. Detective Controls System improved on Cogeбанque return on asset: This was indicated by a Strong mean of 4.2903 and heterogeneity standard deviation of .58842. This implies that Detective controls system improved on Cogeбанque return on asset. Detective Controls System improved on Cogeбанque equity and loan return: This was indicated by a Strong mean of 4.3226 and heterogeneity standard deviation of .65254. This implies that Detective Controls System improved on Cogeбанque equity and loan return. Detective Controls System improved on Cogeбанque liquidity: This was indicated by a Strong mean of 4.3548 and heterogeneity standard deviation of .75491. This implies that Detective Controls System improved on Cogeбанque liquidity.

Table 9: Relationship between Detective Control System and financial performance

Relationship		Detective Control System	Financial performance
Detective Controls	Pearson Correlation	1	.756**
	Sig. (2-tailed)		.000
	N	31	31
Financial performance	Pearson Correlation	.756**	1
	Sig. (2-tailed)	.000	
	N	31	31

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

Table 9 is giving the relationship between Detective Control System and Financial performance in Cogeбанque whereby the respondents N is 31 and the significant level is 0.01, the results indicate that independent variable has positive high correlation to dependent variable equal to .756** and the p-value is .000 which is less than 0.01 and when p-value is less than significant level, therefore researchers conclude that variables are correlated and null hypothesis is rejected and remains with alternative hypothesis. This means that there is a significant relationship between Detective control system and financial performance in Cogeбанque Ltd.

In conclusion therefore, Detective Control System contributes to positive financial performance in Cogeбанque Ltd of this research project by 75.6%.

Relationship between Risk Management System and financial performance

Table 10 shows the relationship between Risk Management System and financial performance in Cogeбанque Ltd

Table 10: Relationship between Risk Management System and financial performance

Relationship		Risk Management System	Financial performance
Risk Management System	Pearson Correlation	1	.727**
	Sig. (2-tailed)		.000
	N	31	31
Financial performance	Pearson Correlation	.727**	1
	Sig. (2-tailed)	.000	
	N	31	31

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

Table 10 shows the relationship between Risk Management System and Financial performance in Cogeбанque whereby the respondents N is 31 and the significant level is 0.01, the results indicate that independent variable has positive high correlation to dependent variable equal to .727** and the p-value is .000 which is less than 0.01 and when p-value is less than significant level, therefore researchers conclude that variables are correlated and null hypothesis is rejected and remains with alternative hypothesis. This means that there is a significant relationship between Risk Management System and financial performance in Cogeбанque. In conclusion therefore, Risk Management System contributes to positive financial performance in Cogeбанque Ltd of this research project by 72.7%.

SUMMARY OF CONTROL SYSTEM

This section provides summary on directive control system, preventive control system and detective control system on financial performance

Effect of Directive Control System on Financial Performance of Cogeбанque Ltd

In the findings, it was established that Directive Control Systems like rules, policies and procedures on review of Staffs performance, asset management, segregation of duties, information system security policy have improved Cogeбанque return on investment, profitability, liquidity, return asset and return on equity and loan returns by 76.9%.

Effect of Preventive Control System on Financial Performance of Cogeбанque Ltd

Further, the findings revealed that Preventive Control Systems such separation of duties to make staffs perform defined activities, proper authorization and approval in the bank avoid bank from being involved in risks, adequate documentation of all transactions in the bank and physical control over assets of the bank improved Cogeбанque return on investment, profitability, return on asset, equity and loan return and liquidity by 65.6%.

Effect of Detective Control System on Financial Performance of Cogeбанque Ltd

The findings revealed that detective control system and internal audit help in detecting loop holes in the policy, ensure that theft of bank assets is detected, errors performed in the bank are detected. Further, compliancy with bank policy and procedures have improved Cogeбанque return on investment, profitability, return on asset, equity and loan return and liquidity by 75.6%.

CONCLUSION

In conclusion it can be stated that Directive Control provides rules, policies and procedures on review of staff performance, asset management, segregation of duties, information system security policy. Preventive Control System enables separation of duties. This enables staff to perform defined activities,

ensure proper authorization and approval in the bank to avoid bank risks. Further adequate documentation of all transactions in the bank and physical control over assets of the bank enhance security and minimization of risk. The existence of risk management system has improved CogeBanque's return on investment, profitability, liquidity, return asset and return on equity and loan returns by 72.7%.

RECOMMENDATIONS

The study recommends the following;

- Assessment of the adequacy of the internal control process and its compliance with established policies and procedures has to be performed by the internal audit (inspection) unit and this will solve the issue of hacking into the system.
- Efficiency of the internal control process should be evaluated periodically. Such evaluation should be done by authorized personnel through self-assessments when personnel responsible for a particular function determine the effectiveness of controls for their activities.
- All levels of review must be adequately documented and reported on a timely basis to the appropriate level of management. This will solve the issue of complacency on the part of supervisors while performing their duties.

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