

International Journal of Finance and Accounting (IJFA)

Relationship between Asset-backed Securities and Financial Performance of Listed Commercial Banks in Kenya

Stephen Ndungu, Paul Gichohi and Fredrick Mutea



RELATIONSHIP BETWEEN ASSET-BACKED SECURITIES AND FINANCIAL PERFORMANCE OF LISTED COMMERCIAL BANKS IN KENYA

¹*Stephen Ndungu

Postgraduate Student: Kenya Methodist University

*Corresponding Author's E-mail: ndungumwanzia1992@gmail.com

²Paul Gichohi

Kenya Methodist University

³Fredrick Mutea

Kenya Methodist University

ABSTRACT

Purpose: The purpose of this study was to establish the relationship between asset-backed securities and financial performance of listed commercial banks in Kenya.

Methodology: Descriptive survey research design was used. The target population was the listed commercial banks that are in Kenya. Census technique was applied in the study. Data was collected from 11 listed commercial banks in Kenya using closed-ended questionnaire. The required information was provided by all risk managers, finance managers, compliance managers and operations managers. To ensure validity and reliability, questionnaires were pre-tested with non-listed commercial banks in Kenya. The coded data was analyzed quantitatively where mean, percentage and standard deviation were computed while linear and multiple regression analysis were used to test the hypothesis, and information presented using Tables.

Results: The findings showed that many banks either generally agreed with the statements on the questionnaires. The influence of asset-based securities on financial performance was at a mean 3.8227 and standard deviation of 1.38128. The adjusted R square value of 0.824 implied that asset backed securities predicted 82.4% of the variability in the financial performance. Therefore, asset backed securities could be used to predict financial performance.

Unique contribution to theory, policy and practice: This study contributed the outcome of the relationship between asset-backed securities and financial performance of listed commercial banks in Kenya. Banks will be able to use securitization to free up with-held bank's capital in loans hence re-investing the capital in other ventures leading to improved financial performance. Commercial banks are recommended to issue more asset backed securities and there should be policies developed to guide commercial banks on asset backed securities This is because asset backed securities can partake in improving the capital structure of business banks in Kenya, thus, improving benefit and avoiding the base capital guideline edge.

Keywords: *Asset backed securities, financial performance, listed commercial banks*

1.0 INTRODUCTION

Financial performance is the degree of organization's overall financial fitness through fluctuations in its business economic periods (Makkar & Singh, 2017). The financial performance of a bank is crucial towards the stability of the financial sector which has a potential effect on economic growth. The economic aspect of any nation is strengthened more by a well-regulated and managed banking sector. Failure of the banking sector in an economy was the main cause of the financial crisis in 2008 which caused banks' performance globally to decline (Kanwal, 2014). There have been low post crisis net profit margins and return on equity as compared to pre-crisis levels in America (Weigand, 2016). Inadequate auditing, misstated regulatory reports, operational shortages, congestion, interest rates that are low and weak capital base of less than 19.5 percent relative to the risk-weighted assets had affected Asian banks such as Nepal banks and Japan banks; European banks such as Deutsche Bank in Germany and Banco Espirito Santo in Portugal (Economist, 2018; Weigand, 2016; Weigand, 2015). This led to formulation of laws that allowed banks to transfer risks to depositors. These laws allowed banks default on deposit insurance when a systematic crisis arose and even looked for protection from creditors. This eventually caused financial failure that exposed banks to huge risks (Deloitte, 2019).

Regionally, low income levels in many African countries caused uneven distribution of revenues generated by banking sectors. This made banks in African nations like South Africa, Nigeria, Egypt, Angola, and Morocco account for 68 percent of total Africa banking revenue pool, while, the remaining 49 countries represented only 32 percent (International Monetary Fund (IMF), 2014; African Development Bank Group (AfDB), 2014). Commercial banks in African nations like South Africa, Nigeria, Tunisia, Ethiopia and Rwanda turned to financial innovations such as trade financing, mobile banking, debit and credit card banking and ATM banking (Nguena, 2019; AfDB, 2017). This was done with an aim of boosting their performance and facilitated improvement of income levels among African nations (AfDB, 2017). Ninety percent of commercial banks in East, North, and West Africa were actively engaged in trade finance. South African banks while Central Africa commercial banks accounted for 87 and 82 percent respectively (AfDB, 2017).

In Kenya, low financial performance due to capital, liquidity deficiencies and fraudulent activities was experienced among commercial banks in Kenya (Kamande, Zablon and Ariemba, 2016). This was even further emphasized by (Kaneza, 2016) who indicated that quality of assets had immensely deteriorated the financial results of many commercial banks in Kenya. Return on equity and return on assets decreased significantly in many banks due to increase in non-performing loans (Kaneza, 2016). These issues among others were found to have been compelling banks into replacing traditional banking methods with alternative financial innovations such as securitization of assets to improve their financial performances (Ngari & Muiruri, 2014). An asset backed security is a type of marketable security issued through notes which are secured by predictable future cash movements from revenue generating pool of underlying assets that were small, illiquid and unable to be sold individually to disperse risk (Giron & Chapoy, 2012; Loutschina & Strahan, 2009).

Business banks have had the option to designate capital successfully, get to various cost agreeable financing sources and oversee credit hazards through utilization of securitization. Non-banks firms, for example, speculative stock investments have given rivalry to business banks as they draw in banks' pieces of the pie and benefit in credit protections making banks to embrace a portion

of their practices which are testing and unsafe. This weight put on financial industry to securitize increasingly through starting credits however much as could be expected, puts the business on center to obviously comprehend the advantages and intrinsic dangers related with securitization (Comptroller's Handbook, 1997).

1.2 Statement of the problem

An effective and regulated asset backed security structure usually motivates commercial banks to improve their financial performance (Banco de España, 2015). This is through true sale of illiquid assets such as long-term loans packaged into tradable securities in the capital markets. By trading illiquid assets, commercial banks held-up capital in the long-term loans is freed to offer more credit to clients (Deloitte, 2018). When there is adequate capital, liquidity is enhanced leading to improved financial performance in commercial banks (Musyoka, 2017).

Unlike that, listed commercial banks' profitability has been low despite presence of asset backed securities sales taking place in Kenya (Banking Act chapter 488, 2015). In 2017, banks such as Standard Chartered Bank profit after tax deteriorated by 38 percent to Ksh4.73 billion. Co-operative bank of Kenya's profit after tax was Ksh 9.57 billion from Ksh 10.54 billion, which was a decline of 9.5 percent, Equity bank's profit after tax was Ksh14.6 billion which was three percent fall. KCB's total profit after tax was the same as the previous year which was Ksh15.072 billion (CBK, 2017).

Likewise, many studies have linked financial performance to various asset-backed securities, however, most of them have shown inconsistencies. For instance, (Kozubovska, 2016; Mawutor, 2014; Shin, 2009) supported that there was financial stability in commercial banks while others like (Jiangli, Pritsker & Raupach, 2007; Demarzo, 2005) complained of financial fragility in commercial banks as a result of introduction of asset-backed securities. Locally, there were no studies done in relation to the topic necessitating this study to look at what influence did asset backed securities have on financial performance of listed commercial banks in Kenya.

1.3 Purpose of the study

To establish the relationship between asset-backed securities and financial performance of listed commercial banks in Kenya.

1.4 Hypothesis

H₀: Asset backed securities do not significantly influence financial performance of listed commercial banks in Kenya.

2.0 LITERATURE REVIEW

2.1 Theoretical Review

The study was guided by regulatory arbitrage theory. This theory was propagated by Frank Partnoy in 1997. Partnoy recommended that any managed establishment exploits the contrast between its business hazard and the administrative position. That is, there ought to be money related exchanges drafted to decrease costs brought about by laws. It should be an obligation of any association to decrease costs as most minimal as could reasonably be expected and increment returns while watching the law. Since laws are uniform to all organizations, foundations ought to consistently

guarantee that they think of advancements inside the law that can be utilized by the establishment to have a serious market edge over other comparable foundations. The theory was embraced in guiding investigation in this study since, asset backed securities can partake in improving the capital structure of business banks in Kenya, thus, improves benefit and dodges the base capital guideline edge. Generally, commercial banks with lower capital requirement issue more asset backed securities (Acharya and Schnabl, 2010). By issuing the ABS, commercial banks gain more benefits, which have no influence on their investment decisions. With regards to this investigation, the theory held that the inspiration for business banks to securitize resource supported protections isn't to move chance however to keep away from related guideline (Leland, 2007).

2.2 Empirical Review

Initially, securitizations in resources sponsored via car loans and credit card were first evolved by business banks in America in 1980s while credit card securitization developed before the 2008 financial crisis (Xingyun, 2015). As toward the end of 2007, the exceptional obligation balance was 323 billion dollars (Diamond Hill Capital Management (DHCM), 2018). Mastercard issuance was most noteworthy with 95.7 billion dollars in 2007. In 2008, Visa issuance was 55 billion dollars declining to 51.5 billion dollars in 2009 (DHCM, 2018). In 2010, 6.5 billion dollars Visa issuance was the lowermost situation since 1980s (DHCM, 2018). Accessible writing demonstrated that credit card industry has since recuperated and developed. An ongoing report from DHCM (2018) indicated that an issuance normal of 36.7 billion dollars from 2013 to 2017. By September 2018, it had an issuance of 25.8 billion dollars. Mastercard securitization has started to lead the pack in all classes of benefit sponsored protections with 108 billion dollars remarkable parity as at September 30, 2018 (DHCM, 2018). The Study by Dong in 2017 on impacts of securitization on the activity of business banks in America, Europe and Asia, discovered that normal default rate had critical relationship with securitized resources. This caused banks not to report default rates which in the end came about to methodical hazard.

Studies, for example by World Bank (2017) and European Banking Authority (2017) completely harped generally on the board of benefit sponsored protections neglecting at low issuance of advantages that supported them; for example, charge cards and vehicle credits levels. In Africa, the idea of securitizing vehicle advances and charge cards receivables among other sponsorship resources is as yet developing with certain nations like Ghana not rehearsing it by any stretch of the imagination (Ngwu et al., 2017). This is ascribed for the most part due to non-performing loans hindering development of new loans and low use of charge cards bringing low market for resource sponsored protections in many creating countries (Ngwu et al., 2017). An investigation by Malak (2014) on the impacts of money related development on the budgetary presentation of business banks in South Sudan which is in East Africa, built up that business banks were building up Visas among other current installment frameworks. The absence of legitimate administration of money related developments by banks, illiquidity and unsafe resources in Kenyan market influenced its development. For instance, few matchings of offers and offers coming about to high value-based expenses constrained CMA to give new rules that guarantee chance moved from vender to purchaser was shared to lessen pool of negative associated resources (CMA, 2018; Mbugua, 2014).

3.0 RESEARCH METHODOLOGY

This study adopted descriptive survey research design. It was based at the headquarters offices of listed commercial banks present in Kenya. This is because asset securitization process in a commercial bank is coordinated between accounts department, operations department and risk department (Deloitte 2018; CMA 2018). Most of these departments are only found at the headquarters offices and not at branches (CBK, 2018). Data was provided by all heads of department in risk finance, compliance and operations departments from each of the 11 commercial banks listed at NSE as at 1st September, 2019 through census technique. Due to fairly small population, all listed commercial banks participated in the study.

This study adopted a self-administered questionnaire which had closed-ended questions which were in a Likert scale as recommended by Ngumi (2013). The questionnaires were pre-tested on eight respondents who were officers in risk, finance, compliance and operations departments from non-listed commercial banks in Nairobi. In addition, secondary data was obtained through data collection sheets from the listed commercial banks' financial reports. These reports were readily available from each of listed commercial bank's website. The researcher searched over the internet the name of the bank, proceeded to download the reports such as balance sheets and income statements for analysis. Analysis of documents such as financial statements was done using horizontal analysis. Horizontal analysis was a method used to compare an organization's two or more year's financial data and expressed in percentage form (Lakada et al., 2017). Linear regression was used to test each hypothesis while multiple regression analysis was used to measure the influence of asset backed securities and financial performance.

4.0 FINDINGS

4.1 Reliability statistics

To ensure the reliability of the instrument, Cronbach's Alpha was used on the proposed questions. The acceptable alpha coefficient should be at least 0.70 (Cooper & Schindler, 2014). Pre-test of this study gave the alpha values of all variables which were above 0.70 as shown in Table 1.

Table 1: Reliability Test Statistics

Cronbach's Alpha	N of Items
.967	8

The general reliability result is of 0.967 alpha. This indicates a strong internal consistency among measures of variable items. This implied that the data collection instrument was therefore reliable and acceptable for the purposes of the study.

4.2 Response rate

A total of 44 questionnaires were distributed to the heads of department in risk finance, compliance and operations departments at each of the 11 commercial banks listed at NSE as at 1st September, 2019. All the 44 questionnaires were given back when fully filled by the respondents. This signified 100% on response. This was directly attributable to a high level of confidence and professional rapport that the research assistants created with the head of departments in the listed commercial banks. The note book gifts given to the respondents also partly played towards this

high response. These results are concurrent with Raychaudhuri et al. (2010) who collected 332 responses out of the intended 332 from students. The results were as a result of issuing gifts to the students after responding to the survey. Mugenda and Mugenda (2003) pinpointed results above 70% were termed to be very good, 60% is good and above 50% is adequate for a descriptive study.

4.3 Background profiles of the respondents

The study sought to establish how long the respondents had worked in the listed commercial banks in Kenya. The study considered this information relevant given that the longer the period they had worked, the more they would be able to understand the relationship between asset securitization and financial performance. The work duration (in years) information is given in Table 2.

Table 2: Work Duration

Years	Frequency	Percent	Cumulative Percent
Less 10	18	40.9	40.9
11-20	14	31.8	72.7
21-30	8	18.2	90.9
Above 30	4	9.1	100.0
Total	44	100	

The results as presented in Table 2 showed that 18(40.9%) of staff had worked for less than 10 years, 14 (31.8%) for a period between 11-20 years, 8 (8.2%) for 21-30 years while only 4 (9.1%) had worked for more than 30 years. This implies that majority of the respondents had worked less than 10 years due to continuous job shifting in the banking sector. The second category which was 14 (31.8%), had worked more than 10 years. This showed that they were experienced due to their long service in the commercial banks having worked for more than 10 years. It was therefore expected that the respondents had in-depth information regarding the research topic and would be able to rate the variable under consideration effectively. Similar results were also reported by Obiero (2014) who established that high job shift was due to control, freedom, conducive environment to attain targets, salary and job satisfaction.

4.4 Descriptive analysis of asset-backed securities

The main purpose of the study was to establish the relationship between asset-backed securities and financial performance of listed commercial banks in Kenya. Head of departments were asked through various statements and measured by establishing the extent of agreement. The rating scale was 5; Agree symbolized by 4; Neutral symbolized by 3; Disagree symbolized by 2; Strongly Disagree symbolized by 1, on the level of influence. The study was specifically interested to know how asset backed securities had impacted on gross profit, net income, cost of credit, total equity capital, and total assets of the bank. The results obtained are presented in Table 3.

Table 3: Descriptive Analysis of Asset Backed Securities

Statements N=44	Mean	Std. Dev
Asset backed securities improved gross profit of the bank	3.8864	.96968
Asset backed securities Automobile securities had a positive effect on increasing net income of the bank	3.8636	1.19283
Asset backed securities lowered cost of credit	3.7273	1.22690
Asset backed securities led to overall total equity capital growth of the bank	3.8409	1.03302
Asset backed securities expanded total assets of the bank	3.7955	1.26821
Aggregate Mean& Std dev	3.8227	1.38128

The findings in Table 3 show a mean of 3.8227 and standard deviation of 1.38128. The listed commercial banks concurred significantly that asset backed securities improved gross benefit. This result had the most elevated mean of 3.8864. The banks nearly differ that asset backed securities reduced expense of credit which had the least mean of 3.7273 in this segment. Most reactions in Table 3 indicate that, they either firmly concurred or concurred with the entirety of the sentiments. These outcomes showed that sales of securities had assumed an essential job in upgrading gross benefit; were financially savvy and had less consumption ascribed to them, subsequently improving the net benefit. Recorded business banks had the option to accomplish their objective of guaranteeing that the investor's riches were augmented; and recorded business banks were guaranteed of their banks a going worry for a considerable length of time to drop by selling vehicle securities. Past examination, for example, Dong (2017) additionally settled that income of business banks expanded because of banks participating in securitization of vehicle loans. Abdikadir (2017) comparatively found that when banks put resources into territories that developed their financial performance, this came about to improved ownership values and higher dividend installments.

4.5 Financial performance indicators

The study assessed the financial performance of listed commercial banks. The financial performance indicators such as return on equity, return on assets and net interest margin rates for a period between 2014-2018. The rates were analyzed and their means derived as indicated on Table 4.

Table 4: Financial Performance Indicators

Variable	N	Mean	Std Dev
Return on equity	11	3.6246	1.9038
Return on assets	11	2.9872	1.7284
Net interest margin	11	3.1544	1.7761
Average	4	3.2554	1.8028

The findings demonstrated that the financial performance pointers had a normal mean of 3.2554 and a standard deviation of 1.8028. Return on equity had the most elevated mean of 3.6246 while return on assets had the least mean of 2.9872. The outcomes showed that recorded business banks execution lied between low to medium performance. The results are consistent with Muia (2017)

and Irungu (2019) who got comparable outcomes when the investigation found a low profit for resources, return on equity and a normal exhibition on net premium edge.

4.6 Hypothesis testing

In establishing the relationship between asset-backed securities and financial performance of listed commercial banks in Kenya, the hypothesis WAS tested accordingly. The study hypothesized that asset-backed securities did not significantly influence financial performance of listed commercial banks in Kenya. The results in Table 5 show R value of .910 which indicates a strong positive correlation. The P value of constant is insignificant (.128), hence the adjusted R square value was used instead as indicated in Table 6. The adjusted R square value of 0.824 implied that asset-backed securities predicted 82.4% of the variability in the financial performance. The rest of the variability can be explained by factors beyond the asset-backed securities.

Table 5: Asset Backed Securities Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.910 ^a	.828	.824	.48338

a. Predictors: (Constant), Asset backed securities

The finding therefore indicates that there is a very strong positive relationship between asset-backed securities and financial performance in listed commercial banks in Kenya. A report by African Development Bank Group (2014) indicated that it has always been a concern for any bank to have reliable operational activities, innovations, resources and finances that would place them into a road-map of always being in business throughout the economic cycles. In the report, African banks were highly advised to originate asset-backed securities in order to have more income.

4.7 ANOVA for linear relationship between asset-backed securities and financial performance.

The output in Table 5 indicates that the *p*-value was 0.000 which was less than 0.05 significance level. This implied that the relationship between the asset backed securities and financial performance was statistically significant and the model could be used to predict the dependent variable. The study therefore rejected the null hypothesis and concluded that asset backed securities are an important determinant of financial performance in listed commercial banks.

Table 6: ANOVA for Asset-Backed Securities and Financial Performance.

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	47.368	1	47.368	202.730	.000 ^b
1	Residual	9.813	42	.234		
	Total	57.182	43			

a. Dependent Variable: Financial performance

b. Predictors: (Constant), Asset backed securities

This finding in Table 6 is consistent with the study by Capital Market Authority (2018) and Mbugua (2014) noted that by investors accepting to buy asset-backed securities in the Nairobi securities exchange, there was more provision of new loans in future that would be used to issue

more securities in the capital market. In the long run, this would positively affect financial performance of the banks.

5.6 Regression coefficients

The regression coefficients presented in Table 7 indicate that asset backed securities statistically and significantly influenced financial performance of listed commercial banks in Kenya ($\beta = 0.910$, $t = 14.238$, $p < .05$). The study used standardized coefficients beta score and not the unstandardized coefficient because the P value of constant is insignificant (.128).

Table 7: Asset-Backed Securities Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	-.258	.166		-1.554	.128
Asset backed securities	.962	.068	.910	14.238	.000

a. Dependent Variable: Financial Performance

The beta values of asset = 0.910 indicated that asset backed securities positively influenced the financial performance of the listed commercial banks in Kenya. This finding indicates that, for every increase of one unit of asset backed security, there was a statistically significant increase of financial performance by 0.910. Chen (2018) also got similar outcome when the study realized that loans that had less risks when securitized proved to be efficient and effective.

5.0 SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary of the findings

The main objective was to assess if asset backed securities had any influence on financial performance of listed commercial banks in Kenya. The findings showed that many banks either generally agreed with the statements on the questionnaires. The influence of asset-based securities on financial performance was at a mean 3.8227 and standard deviation of 1.38128. The adjusted R square value of 0.824 implied that asset backed securities predicted 82.4% of the variability in the financial performance. Therefore, asset backed securities could be used to predict financial performance.

5.2 Conclusion

The study established a positive relationship and statistically significant between that asset backed securities and financial performance. That meant that listed commercial banks in Kenya were able to achieve their goal of ensuring that the shareholder's wealth is maximized and assurance of their banks a going concern for years to come by selling asset backed securities. Continuous sale of asset backed securities in the capital markets by banks makes their profitability improve hence placing them at a significant position towards developing the economy.

5.2 Recommendations and Contributions of the Study

The relationship between asset-backed securities and financial performance of listed commercial banks in Kenya is vital in ascertaining the future of economic growth in the banking sector. Understanding the relationship has implications on establishing of policies that will guide and protect the quality of asset backed securities issued by banks in Kenya. This paper has shown the extent of the impact that asset backed securities have on financial performance of listed commercial banks in Kenya. This point out need for more customized asset-backed securities in order to boost financial performance in listed commercial banks in Kenya. Commercial banks are recommended to issue more asset backed securities and there should be policies developed to guide commercial banks on asset backed securities This is because asset backed securities can partake in improving the capital structure of business banks in Kenya, thus, improving benefit and avoiding the base capital guideline edge.. The study suggests future studies to focus on customized asset-backed securities, such as, how bancassurance securities can be incorporated to improve financial performance in the listed commercial banks in Kenya. The study also suggests that future researcher can focus on challenges of operationalizing asset backed securities in the listed commercial banks in Kenya.

REFERENCES

- Abdikadir, A. H. (2017). *The relationship between investments and financial performance of commercial banks in Kenya* (Master's thesis). University of Nairobi, Kenya.
- African Development Bank Group (2014). *Summary of bank group operations, resources and finance, 2005-2014: Annual report*.
https://www.afdb.org/fileadmin/uploads/afdb/Documents/Generic-Documents/Annual_Report_2014_-Full.pdf
- Banco de españa (2015). *Securitization and banks' capital structure*.
<https://pdfs.semanticscholar.org/9680/f65ae135ac2f88c3a3f3121418efc0c224e5.pdf>
- Banking Act chapter 488 (2015). *Laws of Kenya*. <https://www.centralbank.go.ke/wp-content/uploads/2016/08/bankingactoct2015.pdf>
- Capital Market Authority (2018). *Study on low uptake of capital markets products in Kenya*.
https://www.cma.or.ke/index.php?option=com_phocadownload&view=category&download=435:cma-study-on-low-uptake-of-capital-markets-products&id=56:publications&Itemid=206.
- Central Bank of Kenya (2018). *Annual report and financial statements 2017/18*.
https://www.centralbank.go.ke/uploads/cbk_annual_reports/665458124_annual%20report%202917%2018%20low%20resolution.pdf
- Central Bank of Kenya (2017). *Annual report and financial statements 2016/2017*.
https://www.centralbank.go.ke/uploads/cbk_annual_reports/665458124_annual%20report%202917%2018%20low%20resolution.pdf

- Chen, Z. (2018). *Loan securitization, bank risk, and efficiency* (PhD thesis). University of Glasgow, Glasgow, Scotland.
<https://pdfs.semanticscholar.org/eff6/4c7c981b9a281b377449c7c70bbe93951b53.pdf>
- Comptroller's Handbook (1997). *Asset securitization*.
<https://www.occ.treas.gov/publications/publications-by-type/comptrollers-handbook/asset-securitization/pub-ch-asset-securitization.pdf>
- Cooper, D.R., & Schindler, P.S. (2014). *Business research methods*, (12th ed.). New York: McGraw-Hill/Irwin.
- Deloitte (2019). *Banking and capital markets outlook: Reimagining transformation*.
<https://www2.deloitte.com/content/dam/Deloitte/us/Documents/financial-services/us-fsi-dcfs-2019-banking-cap-markets-outlook.pdf>
- Deloitte (2018). *The new European framework for ABS transactions: The securitisation regulation and the CRR*. Available at:
https://www2.deloitte.com/content/dam/deloitte/de/documents/financial-services/deloitte_european%20regulatory%20framework%20for%20abs.pdf
- Diamond Hill Capital Management (2018). *The evolution of the asset-backed securities market. Fixed Income Perspectives*. https://www.diamond-hill.com/wp-content/uploads/1811_diamond-hill_fixed-income-perspectives.pdf
- Dong, Z. (2017). *Essays on effects of securitization on the operation of commercial banks* (Phd thesis). City University of Hong Kong, Hong Kong, China.
- Economist (2018). *Japanese banks' foreign exposure may threaten financial stability*.
<https://www.economist.com/finance-and-economics/2018/07/26/japanese-banks-foreign-exposure-may-threaten-financial-stability>
- European Banking Authority (2017). *Consumer trends report*.
<https://eba.europa.eu/documents/10180/1720738/consumer+trends+report+2017.pdf>
- Giron, A., & Chapoy, A. (2012). Securitization and financialization. *Journal of Post Keynesian Economics*, 35(2), 171-186. <http://doi:10.2307/23469989>.
- Irungu, A. M. (2019). *Effect of firm level factors on financial performance of listed firms in the Nairobi Securities Exchange* (PhD thesis). Jomo Kenyatta University of Agriculture and Technology, Nairobi, Kenya.
- Jayawardhena, C., & Foley, P. (2000). Changes in the banking sector- the case of internet banking in the UK. *Electronic Networking Application and Policy*, 10(1), 19-31.
<https://www.emeraldinsight.com/doi/abs/10.1108/10662240010312048>
- Kamande, E., Zablon, E., & Ariemba, J. (2016). The effect of bank specific factors on financial performance of commercial banks in Kenya. *International Journal of Sciences; Basic and Applied Research*, 15(11), 165-180.
- Kaneza, C. (2016). *Factors affecting the financial performance of commercial banks listed on the Nairobi Securities Exchange* (Master's thesis). United States International University, Nairobi, Kenya.

- Kanwal, W. (2014). *Lehman brothers (financial case); Department of management sciences*.
<https://www.researchgate.net/publication/324808648>.
- Lakada, M. N., Lapian, S.L.H.V & Tumiwa, J.R. (2017). Analyzing the financial statement using horizontal- verticle analysis to evaluating the company financial performance period 2002-2016. *Journal of EMBA*, 5(3), 3985-3994.
- Leland H. E. (2007). Financial synergies and the optimal scope of the firm: Implications for mergers, spinoffs, and structured finance. *The Journal of Finance*, 62(2), 765–807.
<https://doi.org/10.1111/j.1540-6261.2007.01223.x>
- Loutskina, E., & Strahan, P. E. (2009). Securitization and the declining impact of bank finance on loan supply: Evidence from mortgage originations. *Journal of the American Finance Association*, 6(2), 861-889. <https://doi.org/10.1111/j.1540-6261.2009.01451.x>.
- Malak, M.P. (2014). *The effects of financial innovation on the financial performance of commercial banks in South Sudan* (Master's thesis). University of Nairobi, Nairobi, Kenya.
- Mbugua, C. W. (2014). *Feasibility study of asset-backed securities in Kenya (a case of NSE)* (Master's thesis). United States Intenational University, Nairobi, Kenya.
- Mugenda, O. M. & Mugenda, A. G. (2003). *Research methods: Quantitative and qualitative approaches* (Revised Ed). Nairobi: African Centre for Technology Studies
- Muia, S. (2017). *The effect of financial innovations on financial performance of commercial banks in Kenya* (Master's thesis). KCA university, Nairobi, Kenya.
- Musyoka, B. K. (2017). *The effect of capital adequacy on the financial performance of commercial banks in Kenya* (Master's thesis). University of Nairobi, Nairobi, Kenya.
- Ngari J. M. K., & Muiruri, J. K. (2014). Effects of financial innovations on the financial performance of commercial banks in Kenya. *International Journal of Humanities and Social Science*, 4(7), 51-57.
- Nguena, C.L. (2019). On financial innovation in developing countries: The determinants of mobile banking and financial development in africa. *Journal of Innovation Economics & Management*, 2(29), 69-94. doi : 10.3917/jie.029.0069.
- Ngumi, P. M. (2013). *Effect of banking innovations on financial performance of commercial banks in Kenya* (Phd thesis). Jomo Kenyatta University of Agriculture and Technology, Nairobi, Kenya. <http://hdl.handle.net/123456789/1238>
- Ngwu, F., Bavoso, V., & Chen, Z. (2017). Securitization in BRICS: Issues, challenges and prospects. *Research in International Business and Finance*, 42(1), 1219–1227.
<http://dx.doi.org/10.1016/j.ribaf.2017.07.060>
- Obiero, C.O. (2014). *Factors influencing high staff turnover in commercial banks in Kenya: A case of commercial bank of Africa* (Master's thesis). University of Nairobi, Nairobi, Kenya.
http://erepository.uonbi.ac.ke/bitstream/handle/11295/95247/Onyango,Collince%20O_Fac

- tors%20influencing%20high%20staff%20turnover%20in%20commercial%20banks%20in%20kenya%20a%20case%20of%20commercial%20bank%20of%20africa.pdf?sequence
- Partnoy, F. (1997). Financial derivatives and the costs of regulatory arbitrage. *The Journal of Corporation Law*, 22(1), 212-243.
- Raychaudhuri, A., Debnath, M., Sen, S & Majumder, B.G. (2010). Factors affecting students' academic performance: A case study in Agartala municipal council area. *Bangladesh e-Journal of Sociology*, 7(2),34-41.
- Ronoh, N. C. (2015). *Bank financial performance and customer satisfaction in Kenya* (Doctoral dissertation, University of Nairobi).
- Weigand, R. A. (2015). A tale of two banking systems: the performance of US and European banks in the 21st century. *Available at SSRN 2547758*.
- Weigand, R. (2016). The performance and risk of banks in the U.S., Europe and Japan post-financial. *Investment Management and Financial Innovations*, 13(4), 75-94.
- Demirguc-Kunt, A., Klapper, L., Singer, D., Ansar, S., & Hess, J. (2018). *The Global Findex Database 2017: Measuring financial inclusion and the fintech revolution*. The World Bank.
- Xingyun, P. (2015). *Financial Theory: Perspectives from China*. World Scientific.