# The Impact of Securitization on the Financial Performance of Banking Sector in Iraq

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## ABSTRACT

Securitization is one of the most important tools of financial engineering, because of its great importance in raising the efficiency of the financial performance of banks, which lies in providing liquidity reducing the risks of external financing, getting rid of bad debts, attracting local and foreign savings and other roles that reflect a positive image on economic development.

Despite the important role of securitization, the banking sector in Iraq as far as it is known, ,have not yet used it and thus investors and capital owners have not dealt with it as well. Hence, the study . aimed to analyze the impact of securitization of banking assets on the efficiency of the financial performance of the Iraqi banking sector. In order to achieve this objective , this study used a questionnaire distributed on employees from various positions working in Rafidain Bank during the year 2022 -2023.and the data was analyzed using the SPSS program. The study also used the quantitative method by analyzing the accounts of the bank's general budget.

The study found that large percentage of the employees agreed that securitization should be used in the bank because of its benefits in achieving profits and paying risks for the bank. They also confirmed that securitization gives the bank the ability to monetize its assets easily, and supports the bank's capital, raises its efficiency and improves its financial performance in the future.

The study recommends developing solid ,risk management plans, improve capital raise asset quality digitize and automate processes, enhance and facilitate digital processes and procedures, develop a culture of training and continuous development of employees, and eliminate waste.

KEYWORDS: Securitization, Bank Assets, Financial performance, Efficiency, Banking sector

## 1. INTRODUCTION

Following the huge and significant expansion taking place in various areas of life in general and the banking field in particular, there is an urgent need to find ways and ways to keep pace with that development. It invents and creates new tools that increase the efficiency of banking performance, facilitate and simplify banking business and make it more flexible and useful, in addition to updating old tools to keep pace with progress in various aspects of life.

Securitization is one of the tools of financial engineering (lqbal, 1999). It is a new financial tool that indicates that a financial institution mobilizes a set of homogeneous and secured debts as assets. It puts them in the form of a single credit-enhanced debt, and then presents them to the public through a specialized facility to subscribe in the form of securities, to reduce risks, and to ensure the continuous flow of cash liquidity to the bank (Singh, 2008).

Securitization "is an important tool that contributes to attracting domestic and foreign savings, trying to address the problems of indebtedness and financial default, and providing a financial source for investment expansions and replacement, which has a positive impact on national income and economic

development" (Sheng, 2015). In addition, it "achieves the target rates of capital adequacy in accordance with the standards of the Basel International Committee, as this system allows the transfer of these debts along with capital in their budgets" (Angelini, Di Tollo, Roli, & finance, 2008).

From the above, we find the great importance of securitization, but the Iraqi banking sector still does not use it, and confess that this tool is still limited. In view of the great and effective role played by banks and the banking sector in general in the economy of countries, it was necessary to address the issue of securitization as one of the relatively modern financial engineering tools and that the knowledge of specialists of its nature, role and impact on the efficiency of the performance of banks is superficial.

## 2. PURPOSE OF THE STUDY

- Securitization has been used all over the world, yet the banking sector in Iraq has ne yet used it to improve its financial performance, as a result investors have not been dealing with securitizing as well. Given the importance of this tool, this study intended to shed lights on the importance of using securitization in order to enhance the efficiency of banks.
- Reviewing the literature, there are no studies, to the best of the authors knowledge, that have examined the impact of bank assets securitization on the efficiency and financial performance of banking sector in Iraq. This has revealed a gap in the literature that should be tackled.
- The study highlights an important and effective tool to help decision-makers in the banking sector learn about the securitization methodand how to effectively use it.

## 3. PROBLEM STATEMENT

What is the impact of securitization of banking assets on the efficiency of the financial performance of the Iraqi banking sector?

The problem depends largely on the extent of the ability of the Iraqi banking sector to manage its banking assets and securitization of those assets. It also relies onoffering them for investment and benefit from the liquidity resulting from that process away from risking its assets to raise and improve the efficiency of the banking, sector, and the exploitation of that liquidity in the correct and proper manner. It should be noted that there is a delay in repaying loans granted by the bank which negatively affects the efficiency of its financial performance .

## 4. HYPOTHESES

Hypothesis: Securitization has an impact on the efficiency of financial performance in the Iraqi banking sector

The following sub-hypotheses emerge from this hypothesis:

- The first sub-hypothesis: Securitization is an alternative plan that the banking sector resorts to when it is exposed to financial problems and crises.
- The second sub-hypothesis: The banking sector can develop and improve its work and financial performance by relying on the securitization method .

## 5. THE IMPORTANCE OF THE STUDY

- 1. In light of the scarcity of studies on this subject in Iraq, the current studattempts to reduce this research gap.
- 2. It Contributes to the enrichment and development of the scientific content of the problem subject of research and be one of the specialized references resorted to by researchers.
- 3. The need for those in charge of managing the banking sector in Iraq to identify the advantages of this important tool, which provides the necessary liquidity to continue the work of banks to the

fullest, in addition to supporting the investment sector and investors and providing them with financing by banks without confusion or difficulty in providing funds.

4. This research contributes to those in charge of managing the banking sector in Iraq, whether the Central Bank of Iraq or in the Ministry of Finance or in banks to introduce this important tool and the possibility of its application in Iraqi banks as a tool and method not applied in Iraq.

## 6. LITERATURE REVIEW

As a result of the great and rapid development that the global economy is going through now, attention has shifted to the banking sector as it represents the pillar on which the economies of countries are based, and the most important focus on in the banking sector is financial engineering and its tools, and one of its valuable tools is the securitization tool. Due to the importance of this tool, researchers are still looking at securitization and trying to address all its aspects:

The study of Ghazi and Mohammed (2022) confirmed that securitization is the link between financial markets and banks, as it converts illiquid assets into liquid, and the research aims to demonstrate the importance of financial engineering for the banking sector and the possibility of measuring the financial stability of Iraqi banks. The research sample consisted of five banks within the banks listed on the Iraq Stock Exchange and the researcher used Excel Calculates the model variables and the value of the dependent variable. The found out that financial engineering enabled Iraqi banks to measure financial stability and recommended the researcher to adopt models to evaluate the financial performance of banks, including the SCORE -Z model to ensure their financial stability and that they are in good financial condition.

The study conducted by Karim (2021) showed that securitization tool is one of the most important financial engineering tools. The study included thirty banks in Erbil, and the sample consisted of (81) managers. The researcher used the simple correlation coefficient (Spearman) to determine the correlation between variables. Add to that, a questionnaire tool was used and the data was analyzed using SPSS program. The most important conclusions of the study were showing the availability of large and high indicators of securitization in the banks of the study sample, while the most important recommendations were that it is necessary for the management of banks to use the securitization tool to get rid of the balance sheet constraint, as well as to achieve high and large profits and reduce credit risk.

Gzyl(2022) stated that diversification mayreduce the risk of bank failure but at the expense of increasing systemic risk. Also, securitization brings back the dark side of diversification, and he also explained how different securitization strategies can affect the increase and amplification of risk between banks when trust crises occur among them. Mohammed(2023) showed that financial engineering enables the banking sector to measure its financial stability. He recommended expanding the use of financial engineering tools to exploit its funds in the right way that increases its profits.

This study analyzes the impact of securitization, specifically bank assets, on the efficiency and financial performance of Iraqi banking sector.

#### 7. METHODOLOGY

This research adopted the descriptive approach. T his approach describes the data that help the researcher to display and study them based on a set of studies and statistics that enable him to obtain clear and accurate results.

The quantitative descriptive research method was also chosen, as an effective method in analyzing and measuring data in addition to studying the relationship of the independent and dependent variables logically.

The data was collected using a closed-ended questionnaire.

## 7.1 POPULATION AND SAMPLE

The population of the study is the Iraqi banking sector, as the banks concerned lend billions of dinars to their customers annually. The employees of Al-Rafidain Bank of Iraq were selected as a samplefor the study as it is the oldest and largest bank currently present in Iraand owns branches inside (164) ,Iraq and (7) branches outside it, namely Beirut, Abu Dhabi, Jabal Amman, Cairo Sana'a, Manama Amman.

## 7.2 DATA COLLECTION, PROCESSING, AND ANALYSIS:

T he researcher relied in the analysis of information and data on the program (SPSS) and is considered statistical software packages used in data management and analysis in an advanced manner and , through it the results of the stability coefficient of Crowe Nabach alpha were obtained. ,I n addition to obtaining the results of exploratory factor analysis and confirmatory factor analysis in addition to using the ool (Amos) attached with the (SPSS) program to confirm the results.

In addition to the following analyzes based on the bank's general budget:

i.Static analysis based on the bank's annual data at the end of the year.

- ii.Dynamic analysis is based on researching and studying the bank's financial flows during a certain period, based on the work of the cash flow statement and a schedule of financing.
- iii.Horizontal analysis: In this analysis, each item of the budget or financial statements is compared with the same item for different periods
- iv.Vertical analysis: The mechanism of action of this analysis depends on dividing each item of the budget or financial statements by the target item of the same budget

v. Liquidity ratios

vi. Activity ratios

vii.Debt ratios

## 8. FINDINGS AND RESULTS

The results from the questionnaire and its analysis) (tables and graphs), in addition to the outputs of the (SPSS) program were as follows:

## 8.1 Analyzing the main questions in the questionnaire

8.1.1 A large percentage of employees, amounting to 82%, agree on the use of securitization, and this indicates that the securitization tool is accepted by most employees, as shown in Table (8-1).

The b	The bank's choice of securitization instrument over other financial instruments.						
	Frequency Percent Valid Percent Cumulative Percent						
Valid	I completely agree	16	28.60	31.40	31. 40		
	l agree	26	46.40	51.00	82. 40		
	neutral	9	16. 10	17.60	100. 00		
	Total	51	91.10	100.00			

Table No. (8-1) Results of the first question (securitization) in the questionnaire

8.1.2 The majority of the Bank's employees who participated in the survey agree 88% that the Bank has the ability to manage interest rate risk when dealing with securitization, as shown in Table (8-2).

The Bank's ability to manage interest rate risk increases when dealing with securitization.							
	Frequency Percent Valid Percent Cumulative Percent						
	I completely agree	6	10. 70	11.80	11.80		
Valid	l agree	39	69.60	76. 50	88. 20		
valiu	neutral	6	10. 70	11. 80	100. 00		
	Total	51	91.10	100.00			

Table No. (8-2) Results of the second question (securitization) in the questionnaire

8.1.3 The percentage of employees who agreed that securitization distributes risk to the parties involved in the securitization process was (94.1%), as shown in Table (8-3).

Table No. (8-3) Results of the third question (securitization) in the questionnaire

Secu	Securitization allocates the risks to the parties involved in the securitization process.						
	Frequency Percent Valid Percent Cumulative Percent						
Valid	I completely agree	15	26.80	29. 40	29. 40		
	l agree	33	58.90	64. 70	94. 10		
	neutral	3	5.40	5.90	100. 00		
	Total	51	91.10	100.00			

8.1.4 As for the impact of securitization on the stability of the financial system and the economy, the results were mostly neutral, which means that the participants in the questionnaire are not sure that securitization may or may not affect the financial system and the economic situation, as shown in Table (8-4).

Table No. (8-4) Results of the fifth question (securitization) in the questionnaire

Securitization has an impact on the stability of the financial system and the economy.						
Frequency Percent Valid Percent Cumulative Percent						
Valid	I completely agree	1	1.80	2.00	2.00	
	l agree	22	39.30	43.10	45.10	
	neutral	28	50.00	54.90	100.00	
	Total	51	91.10	100.00		

8.1.5 The results of the questionnaire show 98% of the participants that securitization avoids the risk of default or default by borrowers. This means that most employees agree to adopt the securitization tool with the bank's work, as in Table (8-5).

Table No. (8-5) Results of the tenth question (securitization) in the questionnaire

Securitization avoids the risk of default or default by borrowers.						
Frequency Percent Valid Percent Cumulative Percent						
I completely agree	22	39.30	43.10	43.10		
Valid I agree	28	50.00	54.90	98.00		
Total	51	91.10	100.00			

8.1.6 The percentage of neutrals exceeded 47% about the seriousness of the bank to seek to securitize financial assets (loans) and convert them into negotiable financial assets (shares and bonds), which means that employees have faced difficulty in making a decision because they are not sure of the seriousness of the bank in this regard, as in Table (8-6).

Table No. (8-6) Results of Question Nineteen	(Securitization)	in the questionnaire
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The Bank seeks to securitize financial assets (loans) and convert them into negotiable financial assets (shares and bonds).

		Frequency	Percent	Valid Percent	Cumulative Percent
	I completely agree	4	7.10	7.80	7.80
	l agree	16	28.60	31.40	39.20
Valid	neutral	24	42.90	47.10	86.30
	Disagree.	7	12.50	13.70	100.00
	Total	51	91.10	100.00	

8.1.7 Most of the bank's employees have taken neutrality in the bank's ability to count securitizable assets in aggregates according to the type of asset by 75%, which means that the bank's employees are not sure of its ability to count its assets in aggregates and divide them in the form of financial portfolios, as in Table (8-7).

Table No. (8-7) Results of the second question (performance) in the questionnaire

The bank's ability to inventory securitizable assets in aggregates according to the type of asset.					
	Frequency	Percent	Valid Percent	Cumulative Percent	
Valid I completely agree	5	8.90	9.80	9.80	
l agree	8	14.30	15.70	25.50	
neutral	38	67.90	74.50	100.00	
Total	51	91.10	100.00		

8.1.8 The Bank's employees agree 100% that the securitization instrument increases the Bank's ability to manage its balance sheet and improve its capital, as shown in Table (8-8).

Table No. (8-8) Results of the seventh question (performance) in the questionnaire

Securitization has an impact on the Bank's ability to manage its balance sheet and improve its capital structure.

	Frequency	Percent	Valid Percent	Cumulative Percent
I completely agree	9	16.10	17.60	17.60
ValidI agree	42	75.00	82.40	100.00
Total	51	91.10	100.00	

8.1.9 The percentage of employees who have selected (I strongly agree, agree) 100% indicates that securitization has an impact on the future growth of the Bank's revenues, as in Table (8-9).

Table No. (8-9) Results of the twelfth question (performance) in the questionnaire

The success of the Bank's securitization strategy contributes to achieving the desired financial performance objectives in the future.

	Frequency	Percent	Valid Percent	Cumulative Percent
I completely agree	8	14. 30	15. 70	15. 70
Valid I agree	43	76.80	84. 30	100. 00
Total	51	91.10	100.00	

## 8.2 Alpha coefficient (Cro NabaX) Stability and validity of the resolution:

After entering the data into the SPSS program and analyzing it, it turned out that the alpha coefficient (Cro Nabach) is equal to 0.893, and this is a very good result that indicates the stability and truthfulness of the tool, as is clear in the table resulting from the (SPSS) program:

Table No.	(8-10)	Reliability	Statistics
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Reliability Statistics				
Cronbach's Alpha	N of Items			
.893	42			

#### 8.3 Exploratory factor analysis:

The analysis of the exploration factor includes evaluating the percentage of variance between the variables to determine their suitability for statistical analysis, as well as this technique evaluates the extent to which the variables are related to each other.

The results of this analysis as shown in the SPSS program were (0.799), which is an acceptable result according to the Bartlett test (Kaiser-Meyer-Olkin) (KMO).

As for the result of measuring the adequacy and efficiency of sampling (Sig), its result was equal to (0.00), which is a good result as it should be less than (0.05).

The following table illustrates these results:

KMO and Bartlett's Test									

#### Table No. (8-11) Measurement of Sample Adequacy

#### 8.4 mean:

Its value is derived by adding all the values of a data set and dividing the result by the number of that data, and sometimes the result is unfair with respect to large and very low numbers as it does not show them realistically.

#### 8.5 median:

The middle value of a number of numbers is considered to be in order, whether these numbers are in descending or ascending order, as this value divides those numbers into two equal halves and is in the middle of them.

## 8.6 mode:

The term mode refers to the value that is most frequent within a data set.

#### 8.7 standard deviation:

It represents a value that measures the dispersion in the data relative to the average of that data, and the values of the arithmetic mean, median, mode and standard deviation were represented in the following tables resulting from the analysis of the (SPSS) program for questions from 1-42:

	Q 1	Q 2	Q 3	Q 4	Q 5	Q 6	Q 7	
Mean	1.9	2.0	1.7	2.07	2.5	1.6	2.3	Arithmetic mean
Median	2.0	2.0	2.0	2.0	3.0	2.0	2.0	Broker
Mode	2.0	2.0	2.0	1.0 <sup>a</sup>	3.0	1.0	2.0	Lines
Std. Deviation	.69	.49	.55	.91	.54	.69	.54	Standard deviation
Minimum	1.0	1.0	1.0	1.0	1.0	1.0	1.0	Minimum value
Maximum	3.0	3.0	3.0	4.0	3.0	4.0	3.0	Maximum value

	Q 8	Q 9	Q 10	Q 11	Q 12	Q 13	Q 14	
Mean	1.8	2.1	1.6	1.8	1.9	1.7	2.2	Arithmetic mean
Median	2.0	2.0	2.0	2.0	2.0	2.0	2.0	Broker
Mode	2.0	2.0	2.0	2.0	2.0	2.0	2.0	Lines
Std. Deviation	.54	.716	.53	.44	.58	.50	.69	Standard deviation
Minimum	1.0	1.0	1.0	1.0	1.0	1.0	1.0	Minimum value
Maximum	3.0	3.0	3.0	3.0	3.0	3.0	3.0	Maximum value

	Q 15	Q 16	Q 17	Q 18	Q 19	Q 20	Q 21	
Mean	2.6	2.0	2.3	2.0	2.7	1.9	2.1	Arithmetic mean
Median	3.0	2.0	2.0	2.0	3.0	2.0	2.0	Broker
Mode	3.0	2.0	2.0	2.0	3.0	2.0	2.0 <sup>a</sup>	Lines
Std. Deviation	.61	.45	.68	.53	.86	.71	.81	Standard deviation
Minimum	2.0	1.0	1.0	1.0	1.0	1.0	1.0	Minimum value
Maximum	5.0	3.0	4.0	4.0	4.0	3.0	3.0	Maximum value

	Q 22	Q 23	Q 24	Q 25	Q 26	Q 27	Q 28	
Mean	1.9	2.6	2.1	2.3	2.6	2.1	2.0	Arithmetic mean
Median	2.0	3.0	2.0	2.0	3.0	2.0	2.0	Broker
Mode	2.0	3.0	3.0	3.0	3.0	1.0 <sup>a</sup>	3.0	Lines
Std. Deviation	.54	.66	.84	.75	.66	.91	.84	Standard deviation
Minimum	1.0	1.0	1.0	1.0	1.0	1.0	1.0	Minimum value
Maximum	3.0	4.0	3.0	3.0	3.0	4.0	3.0	Maximum value

	Q 29	Q 30	Q 31	Q 32	Q 33	Q 34	Q 35	
Mean	2.7	2.6	1.8	2.2	2.2	2.2	1.8	Arithmetic mean
Median	3.0	3.0	2.0	2.0	2.0	2.0	2.0	Broker
Mode	3.0	3.0	2.0	2.0	2.0	3.0	2.0	Lines
Std. Deviation	.68	.78	.39	.67	.67	.85	.45	Standard deviation
Minimum	2.0	1.0	1.0	1.0	1.0	1.0	1.0	Minimum value
Maximum	4.0	4.0	2.0	3.0	4.0	4.0	3.0	Maximum value

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	Q 36	Q 37	Q 38	Q 39	Q 40	Q 41	Q 42	
Mean	1.8	2.3	2.0	1.6	2.6	1.8	1.9	Arithmetic mean
Median	2.0	2.0	2.0	2.0	3.0	2.0	2.0	Broker
Mode	2.0	2.0	3.0	2.0	3.0	2.0	2.0	Lines
Std. Deviation	.37	.62	.87	.54	.81	.63	.73	Standard deviation
Minimum	1.0	1.0	1.0	1.0	1.0	1.0	1.0	Minimum value
Maximum	2.0	4.0	3.0	3.0	4.0	4.0	4.0	Maximum value

## 8.8 confirmatory factor analysis:

This type of analysis is used to verify hypotheses regarding the existence or absence of a relationship between variables, as well as analysis is used to evaluate the effectiveness of the model related to factors (Godfrey, Merrill, & Hansen, 2009).

From Table (10-12) and Plan (10-1) below, we find that all (42) factors have been reduced to (8) main only, and the factors that result in less than (1) have been neglected. These eight factors explained more than (84%) of all other factors, noting that the first factor achieved (33.99%) of the total achieved by the rest:

Table No. (8-12)

			-						
	Initial Eiger	nvalues					Rotation	Sums	of
				Extraction \$	Sums of Squ	ared Loadings	Squared Lo	badings	
		% of	Cumulativ		% of			%	of
Component	Total	Variance	e %	Total	Variance	Cumulative %	Total	Variance	
1	14	34	34	14	34	34	8.43	20.1	
2	5	13	47	5	13	47	7.8	18.5	
3	4	10	57	4	10	57	4.02	9.6	
4	3	9	66	3	9	66	3.95	9.41	
5	2	6	72	2	6	72	3.8	9.02	
6	2	5	77	2	5	77	3.3	7.73	
7	1	4	81	1	4	81	2.2	5.22	
8	1	3	84	1	3	84	1.95	4.64	

#### Extraction Method: Principal Component Analysis.

Scheme No. (8-1) Factors sh



## 9. CONCLUSIONS

This study concludes the following:

1- Securitization gives banks the ability to liquidate their assets quickly and easily by converting those assets into negotiable securities.

2- Securitization reduces the risks to which the bank is exposed when granting loans, by distributing these risks to the parties involved in the securitization process.

3- Securitization can contribute to the growth of the economy by providing credit to companies and people, which helps in increasing and increasing the rate of investment in the country.

4- Securitization is characterized by combining assets with similar characteristics in one portfolio, for example, car loans have their own portfolio, mortgages with a second portfolio, and so on, which contributes to distinguishing between the profit-generating portfolio from the low-income portfolio.

5- Securitization contributes to the creation of new tools and means that did not exist to obtain profits, such as securities.

6- Securitization supports capital and makes it more efficient than before by reducing the costs associated with the bank's work.

7- Securitization helps to classify securities into securities with a high credit rating and lower risk, and securities with a low credit rating and high risk, which contributes to raising interest rates on those securities with a high credit rating.

#### **10. RECOMMENDATIONS**

This study recommends the following:

1- Developing a strong business plan for risk management: Effective risk management is important to achieve the financial efficiency of the bank. The bank must be keen when developing this plan to include paragraphs for credit risk management, market risk management, operational risk management, in addition to compliance with regulatory requirements.

2- Capital optimization: Banks must improve their capital by allocating resources to the regions that achieve the highest returns.

3- Raising the quality of assets: Banks must work to improve the quality of their assets by reducing nonperforming loans by ensuring the quality of the mortgages corresponding to those loans.

4- Facilitate operations: Banks should streamline and facilitate their operations to reduce costs and improve efficiency.

5- Monitoring key performance indicators: Banks must monitor key performance indicators to monitor financial performance and identify areas that need improvement, development and reform and work on them.

6- Adopting the methodology of eliminating waste: These methodologies enable banks to facilitate and facilitate their operations, reduce waste, and reduce errors, as banks' adoption of these methodologies improves and raises their efficiency and productivity.

7- Digitization and automation of operations: To improve the financial efficiency of banks, they must digitize and automate their operations.

8- Enhancing and developing customer service: Improving the customer experience is critical to the efficiency of the bank, as banks must focus on providing exceptional customer service.

9- Control of expenses: There must be an effective control by banks to manage their expenses effectively.

10- Increasing revenues: Banks can work to increase their revenues and find new ways to do so by expanding their customer base.

11- Technology adoption: Banks can improve efficiency by investing in technology, such as artificial intelligence, machine learning, and others. These technologies can help reduce tasks, reduce errors, and improve customer service.

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