PalArch's Journal of Archaeology of Egypt / Egyptology

THE EXTENT TO WHICH IRAQI ISLAMIC BANKS ARE EXPOSEDTO THE RISKS OF BANKING STUMBLING

Marwan Abdul Rasul Hammoodi[1] , Moamen Ahmed Hussein[2] , Bassam Ameen Sabri[3]

[1,2]College of Administration and Economy/University of Anbar.

[3]Department of Financial Affairs University Of Anbar.

Abstract
The study aims at investigating the levels and causes of banking stumbling of the Iraqi Islamic banks that are listed on the Iraq Stock Exchange by using Sherrod'smodel to measure the extent to which Iraqi Islamic banks face banking stumbling. The sample of this study includes 11 Islamic banks for the period (2016-2019). The study concludes that there are some Islamic banks with little exposure to the risks of banking stumbling and bankruptcy. Moreover, There is poor administrative efficiency at the administrative levels in the banks.

Introduction
Islamic banking institutions have emerged as institutions that support the financial stability of the country due to the nature of their work in compliance with Sharia law. The Islamic banks have shown good strength in facing the financial shocks after the global financial crisis of 2008 in addition to their role in attracting investment and directing attention towards projects that achieve better growth of the national economy. Researchers have paid great attention to banking stumbling issues due to its social and economic influence on the country. Bankruptcies and financial crises of many banks and companies have led to diversification in studying banking stumbling in several ways as it is with (Correia & McNichols, 2009; Jones &Peat 2014) and others.   Therefore, the study investigates the basis of the problem of banking

stumbling. It is a major problem and one of the important issues of banks and financial institutions. Due to the role that commercial banks play in general and Islamic banks in particular in any economy, it is important to identify the factors that affect their durability.Any bank aims to profit and increase its wealth. But, in the case of financial distress, the performance of the bank stumbles and thus its stability is affected.As time passes, it will have real effects on the economy. This is because of the limited resources and poor performance in the period that extends from the beginning offinancial distress to the liquidation period of the bank with low growth. Thus, the failures of Islamic banks raise real concerns for both administration, investors, and others. Consequently and depending on Sherrod's model, this study tries to predict the financial failure of Iraqi Islamic banks in order to help the internal and external parties in the banking industry to be able to respond to the risk immediately to avoid any financial failure. The research problem can be formulated through the following questions:

1- To what extent can the management of Iraqi Islamic banks be able to predict banking stumbling and face future risks?

2- Is it possible to predict the banking stumbling that the Iraqi Islamic banks listed on the Iraq Stock Exchange may face?

3- Does the administration of Iraqi Islamic banks use the early warning system to monitor any failure before it occurs?

This research is important because the prediction of banking stumbling using Sherrod's model is one of the main matters that the internal and external parties of the bank are interested in. It investigates the extent of losses and dangers faced by Iraqi Islamic banks and their impact on the Iraqi economy. In addition, it helps to make investment decisions by those who deal with these banks.It is also considered an early warning about the dangers that Iraqi Islamic banks may face. The research aims to identify the causes of banking stumbling, and also to assess and predict the levels of banking stumbling using Sherrod's model. Besides, it identifies the Iraqi Islamic banks that may face the risk of banking stumbling. To achieve these goals, it is hypothesized that predicting bank stumbling helps to know the extent to which Iraqi Islamic banks are vulnerable to the risks of stumbling and non-payment using Sherrod's model. The researchers depend on the scientific method in order to achieve the objectives and hypotheses of the research. The theoretical side is based on Arabic and foreign scientific books, university dissertations, and research published via the Internet. As for the practical side, it is based on the financial analysis of the data published by the Islamic banks on the Iraq Stock Exchange website for the years 2016-2019 to analyze and study the factor of Sherrod's model.A sample of 11 out of 19 Islamic banks listed in the stock were chosen for this study. The study excludes 8 banks as they were recently founded or they did not have financial data on the stock's website.

2- Theoretical Framework

2-1 The Islamic Banks

Generally, the Islamic bank is considered one of the investment banks. They make direct investment by establishing economic facilities to practice agricultural, industrial and commercial activities. This is done through either direct participation in the capital, speculation, Murabaha, or partnership that leads toownership (Ibrahim, 2016:29). Islamic finance relies mainly on the following three levels of individuals (El-Gamal, 2006:2):

1- Financial professionals who are familiar with traditional financial products, as well as the demand for those products within different Islamic societies around the world.
2- Islamic jurists or experts who help Islamic financial service providers find financial procedures following Islamic law.
3- Lawyers who assist financial professionals and Islamic jurists in structuring Islamic financial products.
The Islamic banks are defined as banking financial institutions that collect financial resources and employ them in areas that serve the national economy under the provisions of Sharia to achieve profit. It has a humanitarian message with an Islamic cultural dimension to society following Islamic law. These provisionsforbid immoral transactions and support social justice. This is ensured through the distribution of risks and returns, and the implementation of social investment in the context of economic globalization. Also, the message represents the behavior of banking operations under the principles of the Islamic religion (Stoika, 2019:2).

2-2 Objectives of the Islamic Banks
The Islamic banksare considered financial institutions that have the role of financial mediation between the owner of the funds and the demander for these funds according to the profit and loss sharing following Sharia provisions. According to (Awan, 2008:24), the Islamic banks have the following objectives :
1- appropriatenessof the banking transactions following the Islamic provisions.
2- Introducing ideological values in the field of banking.
3- Encouraging investment and saving awareness.
4- Obtaining capital to finance economic and social projects.
5- Rational use of financial resources to achieve sustainable development.

2-3 Risk and Measurements of the Islamic Banking Industry
Risk is defined as the probability of obtaining a return less than desired (Abbas, 2015:53). According tothe viewpointof Islamic banks, risk can be defined as the probability of fluctuating financial returns, facing unexpected losses, or financing or investing in projects that may not respect the rules and provisions of Sharia.According to(Dalal, 2017:197), risks of the Islamic banks are divided into:

1- Risks of the External Environment
They come from the environment surrounding the Islamic bank, on which the bank has no power to influence or control. Their effect is on the long term. These risks are associated with the customer. Theyare due to the lack of integrity and dishonesty of the customer's financial center, and non-payment of debts owed by the customers in addition to other reasons. Besides, they represent the risks associated with the banking market arise due to the great competition of traditional banks and risks associated with the prevailing laws and regulations.

2- Risks of the Internal Environment
There are reasons behind the formation of these risks. Some of them are internal that may relate to the quality of services, administrative and financial decisions, such as the risks of financial engineering, lack of human resources, weak Sharia supervision, risks of partnership contracts, speculation contracts, and others.Some fundamentals and standards define and highlight the nature of the Islamic banking industry. As (Alshamari,2011:32) states, they are :

a- Standard Measurement of Speculation
It is represented by the paid-in capital of the first party and the work from the other, as
money is not invested without work.

b- Standard Measurement of Contracting
All business and activities, whether industrial or agricultural, are based on
professionalism.

c- A Standard Measurement of Circulation
It represents circulating commodities and goods from the hand of the seller to the
hands of the buyer.

d- Standard Measurement of Paid-in Capital or Partnership
It is represented by the two parties in addition to the work.

3-1 Banking Stumbling
Banking stumbling occurs as a result of problems related to the inability of the banks
to pay for theircommitment to others or due to successive losses for several years,
which makethem compelled to stoptheir activities (Alsaidi: 2016:22).Banking
stumbling is defined as the emergency and unexpected situations facing the bank
leading to its inability to make an economic return sufficient to pay off its
commitments in the short term. It is also called hardship, which, if not addressed
promptly, causes financial failure that leads the bank to bankruptcy and liquidation
(Altaweel, 2008:55). The financial failure is a decrease in the company's assets
between two specific periods. It is the inability to pay the due debts or make a deal
with the creditors to reduce the debts. This leads to bankruptcy and liquidation as
requested by the creditors or incursthree-year losses or stops production due to a
financial crisis (Ocal, et.al, 2015:189). As for banking stumbling, it is the debt whose
calculated returns do not go to the bank's revenues, but rather to be putin independent
accounts (Kawther, 2019:8). It is also defined as the situation in which the bank is
vulnerable to a state of liquidity shortage and the accumulation of losses as a result of
wrong administrative and financial decisions that have accumulated over years. Or, it
occurs due to the bank's inability to adapt to the laws and decisions that regulate its
activity (Abbas, 2019:363).

3-2 Reasons behind Banking Stumbling
According to bankruptcy represents the last stage of the company's life due to the
continuous financial hardship that occurs for the following
reasons:(Almurshidi,2018:259) and (George, Lydia,2003:38)
1- The use of illegal or fraudulent methods by the administration in achieving profits
when it is unable to achieve an immediate internal cash flow from its investment
projects.
2- Inefficiency that occurs as a result of good administrators leaving their positions or
being preoccupied with private interests.
3- Lack of financial flexibility.
4- Loss of major markets by the firm.
5- Administration's weakness in attracting good planning skills.
6- Poor performance of the system of the administrative information, and the firm's
inability to obtain long-term financing.
7- The demand for cash capital in addition to the expansion of projects.

As declared by(Gilbert et al) there are the main causes of financial hardship, which may lead to the possibility of bankruptcy. They are :,(mamo, 2011:4)

a- Mix of Assets: It is the improper distribution of assets. Assets are usually production-specific and a company may face bankruptcy if resources are not allocated efficiently. The resource mix between long and short-term assets is crucial in an efficient market.

b- Financial Structure: Bankruptcy of companies is financial. The company may have the correct asset structure but its financial structure is not appropriate and thus leads to liquidity restrictions.

c- Corporate Governance: This may lead a company to face financial hardship if there is a conflict of interest between the administration and owners.

3-3 Stages of Banking Stumbling

Researches have shown that failure is a dynamic process, which can be analyzed over time (Eric & Philippe, 2011:2). Banking stumbling is not done in one go, but rather all levels of administration are involved. It occurs through several stages. These stages, according toare:(Alkhafaji, 2019:61), (Mamo,2011:5), and (Altaweel,2008:57),

1- The occurrence of the effect stage: It is the stage of the occurrence of the obstacle and the cause of the company's economic hardship. The causes may be external, such as those related to intense competition and the emergence of a strong competitor, economic policy and monetary policy, or internal related to internal policy or administration of the company.

2- Low cash flow stage: This stage is related to the inability of the bank to pay off its current liabilities. It is, in this case, in dire need of cash despite the assets it has that exceed the value of its total commitments towards others. So, the problem lies, at this stage of low liquidity, in its technical sense and not in its absolute sense.

3- The stage of temporal financial hardship: It represents the inability of the bank to use its normal policy to get and use the cash required to pay off its due liabilities and meet its required growth.At this stage, the administration of the bank often imposes many strict measures.

4- Absolutehardship stage: the bank here is unable to pay off its due liabilities. Moreover, the value of its assets is less than the value of its liabilities, i.e. it is the case of complete failure to pay even if the bank is granted a period to re-correct its conditions.

5- Legal failure stage: It is a stage where the bank cannot control stumbling, which requires taking legal measures to declare bankruptcy or liquidation.

3-4Indicators of Reducing the Risks of Banking Stumbling

Many economists believe that the financial failure is due to high-interest rates, recession earnings, and large debt burdens. Some studies conducted on the patterns of banking stumbling in the United Kingdom, the United States, Canada, and Australia have found that newly established small and private companies with ineffective control measures or with poor cash flow planning are more vulnerable to the financial crisis than large, well-established,and public companies (Charalambous & Charitou, 2004:466). According tosome measures can reduce the risk of banking stumbling. They are:(Kawthar, 2019:17) (Abada& Abu Dalu,2016:267).

First: Indicators related to customers and bad loans:

1- The indicator of customer float, lift,and revitalization: In this method, we deal with bad debts in three stages:

1-1The indicator of customer float or stumbling activity: It is the situation where the bank allows the customer to improve his situation by giving him a grace period during which the repayment of the debt and its interest is postponed from one to three years. The floatation process may include either rescheduling the payment date, assigning interest or part of it, or waiving a percentage of the debt, according to the customer's circumstances, which are appropriate with the customer. In this case, the customer can be revitalized to restore his ability to pay off the bad debt.

2-1 Customer lifting indicator: The bank here participates directly in managing the customer's activity according to a work plan agreed upon between the bank and the customer to achieve a balance between the cash inflows and outflows. This leads to an increase in revenues over the costs of the customer's project.

3-1 Customer revitalization indicator: Different conditions are to be there. These are:
1- The financial returnsof investment are to be higher than the interest rate that the bank will add over the facilities granted to the customer in order to provide sufficient liquidity or sufficient surplus for the customer to pay his existing liabilities.

2- The stage of stagnation and recession in the economic cycle that caused the customer's insolvency is to be near its end, or hasalready ended. Or, the cause of sudden disturbance that occurred to the customer has been identified and solved.

4-1 Rescheduling Indicator: the bank here gives the company an opportunity by giving it a grace period during which the payment of the debt and its interest is postponed. This solution is considered one of the best ways to settle bad debts. For this solution to be effective, the scheduling installments must be in line with the organization's activity cycle and its capabilities. Also, short-term loans can be converted into long-term loans that can be repaid at intervals in line with liquidity expectations.

Second: Indicators related to the stumbling banks
This refers to merging the stumbling bank with other banks. The banking merger is defined as the union of two or more banks under government or regulatory supervision by the monetary authorities. Or, it is an agreement that leads to the union and merger of two or more banks under one banking administration, so that they will be more able and effective to achieve their goals.
Third: Sectoral diversification of the investment fields
Fourth:Diversification of investment terms over some time.
Fifth: Diversification of investment markets internally and externally.
Sixth: Entering into symbiotic systems of mutual insurance.
There are other indicators of banking stumbling. According to (Octal et al ,2015:190), they are:
1- Quality indicators: they include the condition of the market in which shares are traded, the company's ownership is transferred to supervision by the financial market, the company is delisted from the market, asking to declare bankruptcy, or declaring bankruptcy.
2- Quantity indicators
▪ Indicators based on the carrying amount: include incurring losses for three consecutive years, negative stocks, the decrease in the value of assets, the decrease in capital, and the decreasein retained earnings by a certain percentage.

▪ Indicators based on the market value: they include a decrease in the market value of the bank's shares greater than the change in the index in which shares are traded during a specific period. In addition, they refer to the decrease in the market value of the company's shares is greater than the return of other shares in the same market and during a specific period, and the decrease in the net value of the share below the net carrying value.

3-5 Measurement methods used to determine banking stumbling
The nature of banking is subject to risks. Banks are subject to many risks when carrying out their operations. These risks must be carefully administrated in order not to threaten the existence of the bank (Çabuk A, Kılıç S, 2005:528). Many measurements are easily and widely used. They are, according to (Alsaidi,2016:25),:
1- Sherrod'smodel: this model has two goals (Almurshidi, 2018:262):
a- Assessing the risk of credit as it is used by the bank to assess credit risk when granting loans for economic projects.
b- Financial failure: it is used to verify and identify the extent to which the bank can conduct its activity in the future. The models used in predicting stumblinghave something in common like ratios, but they are different in the value of each ratio (liquidity ratios, profitability ratios, and financial leverage ratios). This is because of the different nature of the sectors. The industrial sector focuses on the static productive assets that are used in the manufacture of products. As for the banks, the model focuses on the movement of money and the volume of lending to those dealing with the bank. Based on this model is based, the experiments carried out by financial analysts showed how successful the assumptions are.If the value of Z is (5 or less), the company does not suffer from financial stumbling. If the value of Z is greater than 25, then the company does not face financial stumbling. The researchers adopt this model to demonstrate the extent to which Iraqi Islamic banks, which are listed in the Iraq Stock Exchange, are subject to the risks of banking stumbling. This model, according to (Babela&Mohammed ,2016:36),is formulated according to the following equation:

$$Z = 17X1 + 9X2 + 3.5X3 + 20X4 + 1.2X5 + 0.10X 6$$

X1= Net working capital / total assets
X2= Liquid assets / total assets
X3= Total equity of shareholders / total assets
X4= Net profit before tax / total assets
X5= total assets / total liabilities
X6= Total equity of shareholders / static assets

According to the results of Z, companies are classified into five main classes. These are:

Class	Risk degree	Z indictor
First	The company is exposed to bankruptcy risk	$Z \geq 25$
Second	Low likelihood of the company being exposed to bankruptcy risk	$25 \geq Z \geq 20$
Third	The risk of a company's bankruptcy is difficult to predict	$20 \geq Z \geq 5$
Fourth	The company is exposed to bankruptcy risk	$5 \geq Z \geq -5$
Fifth	The company is highly exposed to bankruptcy risk	$Z < -5$

Reference: it is prepared by the researchers depending on different resources.

2- Altman's Model
Researchers believe that Altman's model not only provides a basis for forecasting corporate failure, but it is also a tool used in credit evaluation, internal control guidelines and it is also a guide to choosing a portfolio (Appiah % Abor, 2014:433). It is called the Z-model, as it measures the value of Z based on the sum of the relative values of five financial ratios. These ratios are the working capital ratio to total assets (1,2), theretained earningsratio to total assets (1.4), the profits before taxes and interest ratio to total assets (3.3), the market value ratio to total liabilities (0.6), and the sales ratio to total assets (1.0). Here, the value of Z is calculated. As a result, the company is considered a failure if the value of Z is less than (1.81) and it is not if the value of Z is higher than (2.99) (Alsaidi, 2016:25).

3- Kida's Model.
This model showed a high ability (about 90%) in predicting the risk of financial stumbling a year before its occurrence (Matar, 2003:67). It is based on five financial ratios and its results are divided into two sides: either a result is a positive number, which indicates that the organization distant from financial failure in the near term, or the organization is close to financial failure if the result is a negative number. As declared by (Akhatib & Al Bzour, 2011), if the value of Z is less than 0.38, then the organization is subject to a potential risk of financial failure. This model, according to (Alsafrani et al ,2020:3-4), is formulated as:

$$Z=1.042X1+0.42X2+0.461X3+0.463X4+0.271X5$$

where:
Z= the indicator by which the organization is predicted to fail financially or not.
X1= Net Income / Total Assets
X2= Total Equity / Total Liabilities
X3= Total current assets / total current liabilities
X4= Revenue / Total Assets
X5= Monetary / Total Assets

4- Fulmer et al Model (1984)
Fulmer used 40 financial ratios and used discriminant analysis to present the statistical model, and the accuracy of the model was 98%. The model contains the following variables:
Retained earnings / total assets, sales / total assets, earnings before interest and taxes/equity, cash flow / total liabilities, debt / total assets, current liabilities / total assets, natural logarithm, total assets, working capital / total assets, the natural logarithm of EBIT / earnings (Mahdi, 2014:100).

4- Practical Framework
Islamic banks are financial institutions that attract individuals to put their savings in these banks and direct these savings to those who invest them. It also provides many banking services, which are based on Islamic Sharia. Because they are the same as other banks, they are also subject to many risks, including the risks of banking stumbling. These risks must be studied to face them. To achieve this, Sherrod's model is used as it is one of the important models that reveal the extent to which banks are exposed to banking stumbling. Using this model, the bank liquidity ratios, profitability, and financial leverage are investigated. When studying the financial indicators of Sherrod's model, the value of Z will be found, which shows the

exposure of the banks to the risk of stumbling and bankruptcy. This is according to
the following equation:

$Z = 17X1 + 9X2 + 3.5X3 + 20X4 + 1.2X5 + 0.10X6$

This measure shows an inverse relationship of risk. The higher the Z value is, the
lower the risk is, and vice versa. This model also helps in making administrative
decisions regarding long-term bank loans. By applying this model to the data of the
banks, the research sample, separately, we found the following:

1- Al Arabiya Islamic Bank: the bank was established in 2016 with a capital of 100
billion dinars. Table No. (1) shows an analysis of the bank's indicators, where X1 (the
second column) shows the extent of the ability of the bank to operate its available
funds and its ability to pay its current liabilities. It indicates a liquidity of (17) value,
according to the previous equation. X2 (the third column) shows the degree of bank
liquidity needed to meet its quick liabilities. It indicates a liquidity of (9) value. X3
(the fourth column) shows the extent of the dependence of the bank on its own
sources of total assets and indicates the index of financial leverage of (3.5) value. X4
(the fifth column) is the extent of the ability of the bank to achieve returns from its
various investments and indicates the profitability index (20) value. X5 (the sixth
column) represents the volume of the assets of the total equity. It indicates the index
of financial leverage of (1.2) value. X6 (the seventh column) shows the extent of the
contribution of the shareholders to obtain stable assets. It refers to the financial
leverage index. Its value is (0.10). As for Z (the eighth column), it is the result of the
analysis that presents the extent to which the bank is exposed to the risk of
bankruptcy. The ninth column (class) shows the rank of the bank according to the
classification of banking stumbling. Finally, the tenth column represents the degree of
risk that the bank may face, and the degree of its exposure to bankruptcy.

Table (1) Results of the analysis of the financial ratios and Z-value of Al Arabiya
Islamic Bank

Class	Z	X6	X5	X4	X3	X2	X1	Year
1	2115.14	9.24	36.95	-0.006	100	0.99	100	2016
1	44.50	22.15	12.84	-0.010	0.92	0.56	0.88	2017
1	26.88	18.30	3.67	0.011	0.73	0.56	0.69	2018
1	25.28	19.69	2.81	0.005	0.64	0.71	0.61	2019

Prepared by the researchers based on the bank's financial statements
The value of X1 in 2016 was the highest and reached (100), which indicates the
bank's ability to invest its money and pay its liabilities. The lowest value was in 2019,
which was (0.61). As for the value of X2, it was the highest in 2016 which reached
(0.99). It indicates the large liquidity of the bank and its ability to meet its quick
liabilities. The lowest value of it was (0.56) in (2016-2017) respectively. As for the
value of X3, which shows the extent of the bank's dependence on self-financing
sources from the total assets, it was the highest in 2016 and amounted to (100). This
confirms that the bank has sufficient liquidity and its ability to pay its current
liabilities. Its lowest value was (0.64) in 2019. As for the value of X4, which indicates
the value of return on investment and the bank's ability to achieve profits, it reached
the highest value in 2018, which was (0.011). Its lowest value was in 2017 which
reached (-0.010). This means that the bank is unable to achieve profits. It suffers from
losses. This also occurred in 2016. X5 showed the highest value in 2016 which was
(36.95). In other words, the total assets are equivalent to (36.95) of the total equity.

The lowest value was (2.81) in 2019. The value of X6 equals (22.15) times, which is the highest value of the bank in the studied years. This is because the shareholders 'equity contributes to obtaining fixed assets at a value of (22.15) times. Besides, the bank relies on its own resources to obtain the fixed assets in addition to the extent of its ability to pay its external liabilities. While the lowest value was (9.24) times in 2016. The value of Z, which indicates the bank's exposure to stumbling risk, was excellent in 2016 and reached (2115.14). According to this result, the bank is not exposed to the risk of stumbling nor bankruptcy, but in the other years, the value of Z decreased. Yet, it is less likely to go into bankruptcy. The bank occupied the first class during the years of study, which is that the bank is not exposed to bankruptcy risk.
2- Trust International Islamic Bank: The bank was established in 2016 with a capital of 100 billion dinars. Its financial analysis is shown in Table (2)

Table (2): the results of the analysis of the financial ratios and the Z-value of the Trust International Islamic Bank

Class	Z	X6	X5	X4	X3	X2	X1	Year
1	394.65	2.26	17.18	0.011	100	0.99	0.56	2016
1	80.01	11.20	36.18	-0.042	0.97	0.77	0.89	2017
1	45.86	9.02	15.74	-0.014	0.94	0.47	0.83	2018
1	25.76	8.32	3.58	0.006	072	0.69	0.63	2019

Prepared by the researchers based on the bank's financial statements
The value of X1 was high in 2017. It reached (0.89), which indicates the ability of the bank to seriously operate its available funds. It decreased in 2016 and reached (0.56). As for the value of X2, which indicates the amount of liquidity it has to meet its quick liabilities, it increased in 2016 and reached (0.99). It decreased in 2018, reaching (0.47). While the value of X3 was the highest in 2016 and amounted to (100). It tells that the bank relies on its own resources from the total assets and its ability to pay its current liabilities. It decreased to (0.72) in 2019. The highest value of X4 was recorded in 2016 and reached (0.011), and the lowest value reached (-0.042) in 2017 which indicates the inability of the bank to achieve profits. The highest value of X5, which shows the size of the total assets out of the total equity, was (36.18) in 2017 and the lowest value was (3.58) in 2019. While the highest value of X6 reached (11.20) times in 2017. This means that the shareholders' equity contributes to fixed assets at a rate of (11.20) times. But, the value decreased to (2.26) times in 2016. As for the value of Z, which indicates the extent to which the bank was exposed to stumbling and bankruptcy risks, it showed the highest value in 2016 and reached (394.65). This shows that the condition of the bank is excellent and it is not subject to bankruptcy.But, this value decreased during the years of study and was the lowest in 2019 and reached (25.76). It tells that the bank is not exposed to the risks of banking stumbling and bankruptcy and remained in the first class according to the classification of banking stumbling.
3- Al Qabedh Islamic Finance and Investment Bank:The bank was established in 2016 with a capital of 100 billion dinars. Table No. (3) shows the financial analysis of data that shows the extent to which the bank is exposed to banking stumbling and bankruptcy risks.

Table (3): The results of the analysis of the financial ratios and the Z-value of Al Qabedh Islamic Finance and Investment Bank.

Class	Z	X6	X5	X4	X3	X2	X1	Year
1	41.37	81.13	8.80	-0.054	0.89	0.34	0.88	2016
1	55.65	199.07	9.86	-0.016	0.90	0.68	0.90	2017
1	64.68	194.85	14.71	-0.031	0.93	0.52	0.93	2018
1	67.83	205.90	16.88	-0.016	0.94	0.33	0.94	2019

Prepared by the researchers based on the bank's financial statements
The value of X1 in 2019 reached (0.94), and the lowest was (0.88) in 2016. As for the value of X2, which increased in 2017 and reached (0.68), it indicates the ability of the bank to meet its quick liabilities. The value of X3, which increased gradually from year to year, was the highest in 2019, reaching (0.94), and the lowest value was in 2016, reaching (0.89). The value of X4, which shows the size of the profits made from the investment, refers to the losses during the years of study, and the lowest loss value was in (2017-2019) which reached (-0.016). The highest loss was in 2016 reaching (-0.054). As for the value of X5, its highest value was (16.88) in 2019 and the lowest value amounted to (8.80) in 2016, which shows the volume of the assets out of the total equity.The value of X6 was (205.90) times in 2019, which is the highest rate for shareholders' equity out of the total fixed assets, while the lowest value was (81.13) times in 2016.As for the highest value of Z, it was (67.83) in 2019. This means that the bank occupies the first class according to the classifications of banking stumbling. Thus, it is not subject to the risk of stumbling and bankruptcy. The lowest value was (41.37) in 2016.
4- Iraq Noor Islamic Bank: The bank was established with a capital of 100 billion dinars in 2016. As mentioned in Table No. (4), the highest value of X1 in 2019 reached (0.84) and the lowest value was in 2018 which amounted to (0.76).The highest value of the value of X2 in 2017 was (0.77) and the lowest was in 2019, which was (0.57). The value of X3, which represents the volume of the bank liquidity and its ability to pay its current Liabilities, was the highest in (2017-2019) and reached (0.91). The lowest value was in 2018 when it reached (0.83). And the value of X4, which shows the size of returns from investment, was the highest in 2017, reaching (0.026), and the lowest value was in 2016, reaching (0.009). As for the value of X5, its highest value was in 2019 amounting to (11.09) and the lowest value was in 2018 which amounted to (5.91). X6 represents the share of shareholders 'contribution to fixed assets, and its highest value in 2019 was (13.60) times and the lowest value in 2016 amounted to (4.39) times. The analysis showed that the Z-value was good in the years of study. The highest value was in 2017 and reached (41.82), meaning that the bank is not exposed to the risk of banking stumbling. Regarding the lowest value in 2018, it was (33.04), which indicates that the bank obtained the first class in terms of the degree of risk of banking stumbling during the studied years.

Table (4): The results of the analysis of the financial ratios and Z-value of the Iraq Noor Islamic Bank.

Class	Z	X6	X5	X4	X3	X2	X1	Year
1	33.65	4.39	6.33	0.009	0.84	0.74	0.82	2016
1	41.82	11.89	10.59	0.026	0.91	0.77	0.83	2017
1	33.04	12.34	5.91	0.023	0.83	0.74	0.76	2018

| 1 | 40.83 | 13.60 | 11.09 | 0.012 | 0.91 | 0.57 | 0.84 | 2019 |

Prepared by the researchers based on the bank's financial statements

5- South Islamic Bank for Investment and Finance: The bank was established in 2016 with a capital of 100 billion dinars. According to Table (5), the highest value X1 was in 2017 and reached (0.65). The lowest value was in 2019, which reached (0.47). The value of X2 was the highest in 2019 and reached (2.13), while the lowest valuewas in 2016 and reached (0.21). This refers toan increase in the volume of bank liquidity, respectively, during the years of study to meet the quick liabilities. The X3 value, which fluctuated during the studied years, was the highest in 2017, reaching (0.92), and the lowest was in 2019, reaching (0.72). The value of X4, which shows the size of the profits achieved, was the highest in 2016, amounting to (0.35), and it gradually decreased during the years of study. Its lowest value was in 2019, amounting to (0.005).The highest value of X5, which shows the volume of the assets out of total equity, was (12.04) in 2017 and the lowest was in 2019, which amounted to (3.53). As for the highest value of X6, which gradually decreased, it was (4.11) times in 2016, and the lowest in 2019, amounting to (2.88) times. Through these indicators, its activity was good and it obtained the first class for the risk degree of banking stumbling. The highest value was in 2017, reaching (39.87), and the lowest value was in 2016, reaching (31.26).

Table (5): The results of the analysis of the financial ratios and Z-value of the South Islamic Bank for Investment and Finance

Class	Z	X6	X5	X4	X3	X2	X1	Year
1	1074.72	4.11	5.70	0.35	0.82	0.21	0.62	2016
1	39.87	3.46	12.04	0.13	0.92	0.51	0.65	2017
1	38.91	2.92	6.35	0.03	0.84	1.80	0.55	2018
1	35.36	2.88	3.53	0.005	0.72	2.13	0.47	2019

Prepared by the researchers based on the bank's financial statements

6- Cihan Islamic Bank for Investment and Finance: The bank was established in 2009 with a capital of 250 billion dinars. Table (6) shows that the value of X1, which indicates the bank's ability to operate its money and pay its liabilities, was the highest in 2017, amounting to (0.52), and the lowest value was in 2018, amounting to (0.44). The highest value of X2 was in 2018 and was (0.60) and the lowest was in 2019, which was (0.48). X3, which indicates the extent to which the bank is dependent on its resources and its volume of assets, was the highest value in 2017, amounting to (0.52), and the lowest was in 2018, amounting to (0.44). While the value of X4 was the highest in 2019 and reached (0.094). Its lowest value in was 2017, as it reached (0.032). This shows a relative increase in investment returns. As for the value of X5, which shows the volume of the assets out of total equity, it was the highest value in 2017, reaching (2.09), and the lowest in 2018, reaching (1.79). X6 was the highest in 2018 and reached (229.11) times and the lowest value was in 2019 and it reached (101.13) times. Despite these indicators, the bank occupied the first class in terms of its exposure to banking stumbling. So, the highest value of Z was (41.56) in 2018 the lowest value was in 2019 amounting to (28.52).

Table (6): The results of the analysis of the financial ratios and the value of Z for Cihan Islamic Bank for Investment and Finance

Class	Z	X6	X5	X4	X3	X2	X1	Year
1	32.44	144.65	1.88	0.037	0.47	0.55	0.46	2016
1	37.70	187.60	2.09	0.032	0.52	0.50	0.52	2017
1	41.56	229.11	1.79	0.077	0.44	0.60	0.44	2018
1	28.52	101.13	1.85	0.094	0.46	0.48	0.46	2019

Prepared by the researchers based on the bank's financial statements

7- Zain Iraq Islamic Bank for Investment and Finance: The bank was established in 2016 with a capital of 250 billion dinars. It appears in Table (7) that the value of X1 increased in 2018 and reached (0.95), which is the highest value of X1 during the years of study and the lowest value was in 2017, which amounted to (0.76). The highest value of X2 was in 2016, amounting to (0.81), and the lowest was in 2018, amounting to (0.19). X3, which shows the extent to which the bank relied on its resources to fulfill its financial obligations, was the highest in 2016, amounting to (0.98) and the lowest was in 2017, as it reached (0.77). Concerning the investment profit ratio, X4 was the highest value in 2017, reaching (0.004), and the lowest was in 2019, reaching (-0.056). As for the value of X5, it was the highest in 2018, reaching (22.50), and the lowest value was in 2017, reaching (4.39), while the value of X6 increased gradually. It was the highest in 2019, reaching (18.08) and the lowest was in 2016, reaching (5.82). It is concluded that the bank owns the first class in terms of the degree of the risk of being exposed to banking stumbling. However, the highest value was (56.58) in 2018 and the lowest was in 2017, which amounted to (26.52).

Table (7):The results of the analysis of the financial ratios and Z-value of Zain Iraq Islamic Bank for Investment and Finance

Class	Z	X6	X5	X4	X3	X2	X1	Year
1	33.27	5.82	5.73	-0.020	0.98	0.81	0.81	2016
1	26.52	9.98	4.39	0.004	0.77	0.36	0.76	2017
1	56.58	17.45	22.50	-0.007	0.96	0.19	0.95	2018
1	27.40	18.08	4.89	-0.056	0.80	0.35	0.79	2019

Prepared by the researchers based on the bank's financial statements

8- World Islamic Bank: The bank was established in 2016 with a capital of 250 billion dinars. The value of X1, as it is shown in Table (8), was the highest in 2016 reaching (0.69) and the lowest was in 2019 and it was (0.36). And the value of X2, which shows the degree of the liquidity of the bank needed to meet its quick liabilities, was the highest in 2016 and was (0.51). While the lowest value reached (0.24) in 2018.X3, which was relatively fluctuating, reached the highest value of (0.97) in 2016 and the lowest was (0.87) in 2017. The value of X4, which shows the volume of the earned profits of the bank, reached the highest profit value in 2016 and it was (0.032). The lowest value was in 2018. It reached (-0.004). And the value of X5 was the highest in 2016 which amounted to (32.19) and the lowest was in 2017 and amounted to (7.48). As for the extent of the contribution of shareholders to fixed assets, which is expressed in X6 value, its highest value was in 2016 and reached (3.44) times. The lowest value was in 2019, reaching (1.67) times. That affected the value of Z, which represents the degree of banking stumbling risk, and it was the highest in 2016,

reaching (68.98). So, it occupied the first class for the degree of bankruptcy risk and
also occupied the same class in 2018-2019. While the lowest value of Z, which
occupied the second class of exposure in 2017, amounted to (23.95). This means that
it is less likely to be exposed to the risk of banking stumbling and bankruptcy.

**Table (8): The results of the analysis of the financial ratios and the Z-value of the
World Islamic Bank**

Class	Z	X6	X5	X4	X3	X2	X1	Year
1	68.98	3.44	32.19	0.032	0.97	0.51	0.69	2016
2	23.95	1.79	7.48	0.004	0.87	0.33	0.38	2017
1	42.96	1.72	20.39	-0.004	0.95	0.24	0.40	2018
1	27.01	1.67	10.06	-0.002	0.90	0.28	0.36	2019

Prepared by the researchers based on the bank's financial statements
9- International Islamic Bank: The bank was established as a private shareholding
company in 2016 with a capital of 100 billion dinars. As shown in Table (9), the
highest value of X1, which indicates the bank's ability to operate its money and pay
its liabilities, was (0.69) in 2016, and the lowest was in 2019 which amounted to
(0.44). And the value of X2, which reached the highest value of (0.55) in 2016 and
the lowest value of (0.34) in 2019. While the value of X3, which decreased during the
years of study, was the highest in 2016 and reached (0.87). The lowest value was in
2019 amounted to (0.53). This shows a decrease in the bank's liquidity and its weak
ability to pay its liabilities. The value of X4 was the highest profit value achieved in
2016 and amounted to (0.075). The lowest value was in 2019 amounting to (-0.010).
As for the value of X5, it decreased during the studied years, which indicates a
decrease in total equity out of the total fixed assets. Its highest value was in
2016reaching (7.47). Moreover, its lowest value was in 2019, which was (2.12).The
value of X6 was the highest in 2018, reaching (5.91) times, and the lowest in 2017,
reaching (2.77) times.As for the value of Z, which shows the degree of exposure of
the bank to the risk of stumbling, it amounted to (32.93) in 2016 so that the bank
ranked first then. After that, the value of Z decreased indicating an increase in the risk
of stumbling. It was the lowest value in 2019 and amounted to (15.96) which put it in
the third class according to the classification of the bank's exposure to bankruptcy
risks. It also shows that it is difficult to predict bankruptcy risks.

Table (9): The results of the analysis of the financial ratios and the Z-value of the
International Islamic Bank

الفئة	Z	X6	X5	X4	X3	X2	X1	السنة
1	32.93	4.95	7.47	0.075	0.87	0.55	0.69	2016
2	23.79	2.77	4.73	0.010	0.79	0.35	0.50	2017
3	18.83	5.91	2.52	0.022	0.60	0.38	0.50	2018
3	15.96	5.86	2.12	-0.010	0.53	0.34	0.44	2019

Prepared by the researchers based on the bank's financial statements
10- The Iraqi Islamic Bank for Investment and Development: The bank was
established as a private joint-stock company in 1992, and its capital has increased
over the years, reaching 250 billion dinars. Table (10) shows the analysis of the
financial ratios and the Z-value of the bank. The highest value of X1 was in 2016 and

reached (0.54) and the lowest was (0.32) in 2019 which amounted to (0.32). The value
of X2, which shows the degree of liquidity needed to meet financial liabilities, was
the highest in 20.18, and it was (0.63). Its lowest value was in 2016, which was
(0.60).X3, which decreased during the studied years, was the highest in 2016,
reaching (0.58), and the lowest was in 2019, reaching (0.35). While the earned profits,
symbolized by X4, were the highest in 2016, reaching (0.020), and the lowest profit
value was in 2018, reaching (0.012). And the value of X5, which decreased during the
studied years, was the highest in 2016, reaching (2.40), and the lowest in 2019,
reaching (1.53). Regarding the value of X6, which shows the owners' contribution to
the bank's fixed assets, it was the highest in 2017, reaching (12.97) times, and the
lowest was in 2019, reaching (11.14) times. It is found that the value of Z took over
the second class of the bank's exposure to stumbling risk, which means that the bank
was less likely to be exposed to bankruptcy risk. The highest value was in 2016 and
reached (21.82) and the lowest was in the year 2019 which amounted to (15.94).
Therefore, the bank ranked the third class, which shows the difficulty in predicting
stumbling and bankruptcy risks.

Table (10): the results of the analysis of the financial ratios and the Z-value of the
Iraqi Islamic Bank for Investment and Development

Class	Z	X6	X5	X4	X3	X2	X1	Year
2	21.82	12.09	2.40	0.020	0.58	0.60	0.54	2016
2	21.79	12.97	2.33	0.019	0.57	0.62	0.53	2017
2	20.31	12.88	2.09	0.012	0.52	0.63	0.48	2018
3	15.94	11.14	1.53	0.019	0.35	0.61	0.32	2019

Prepared by the researchers based on the bank's financial statements
11- National Islamic Bank: The bank was established as a private joint-stock company
in 2005 with a capital of 25 billion dinars. The bank achieved the highest value of X1
in 2019, which amounted to (0.52), and the lowest was in 2017, which amounted to
(0.36). And the value of X2 was the most effective in 2016, and it was (0.26). Its
lowest value was in 2019, and it was (0.10). Regarding the value of X3, it was the
highest in 2019 and reached (0.54). This means that the bank relies heavily on its own
resources to finance its financial liabilities. The lowest value was in 2017, which was
(0.37). While the value of X4 showed an increase in 2018 which reached (0.155) and
the lowest was in 2019, amounting to (0.058). The value of X5, which fluctuated
during the years of study, was the highest in 2019, reaching (2.15) and the lowest in
2017, reaching (1.59). As for the value of X6, which decreased during the studied
years, it was the highest in 2016, reaching (52.75), and the lowest was in 2019,
reaching (38.25). These indicators were reflected in the value of Z, which was the
highest in 2018, reaching (20.95), and it came in the second class of the degree of
exposure to the risk of stumbling.This shows that the bank is likely to have little
exposure to banking stumbling and bankruptcy. For the rest of the years, the bank
occupied the third class where its lowest value was in 2017 and amounted to (17.99).

Table (11): the results of the analysis of the financial ratios and the Z-value of the
National Islamic Bank

Class	Z	X6	X5	X4	X3	X2	X1	Year
3	19.96	52.75	1.78	0.041	0.44	0.26	0.43	2016

3	17.99	51.63	1.59	0.039	0.37	0.25	0.36	2017
2	20.95	41.91	1.85	0.155	0.46	0.18	0.45	2018
3	19.84	38.25	2.15	0.058	0.54	0.10	0.52	2019

Prepared by the researchers based on the bank's financial statements

5- Conclusions and Recommendations

Conclusions
1- Islamic banks are important financial institutions in the national economy because of their essential role in attracting funds and employing them according to Islamic Sharia provisions.
2- The study of the risks of banking stumblingis one of the important topics in the financial and banking sector due to its great effects on the bank in particular and on the economic and social reality of the country in general.
3- There is a lack of awareness of the bank's external and internal parties about the importance of studying banking stumbling for its important role in determining the strengths and weaknesses of the bank.
4- Financial analysis using financial indicators to reach the value of Z helps to diagnose and judge the performance of the administration in Islamic banks, which contributes to taking the necessary measures to address banking stumbling cases.
5- The Islamic banks (Al Arabiya, International Trust, Al Qabedh, Noor Iraq, South, Cihan Investment and Finance, Zain Iraq) ranked the first class of exposure to banking stumbling risk during the years of the study (2016-2019). This means that these banks are not exposed to the risks of default and financial bankruptcy.
6- The World Bank ranked the first class of the degree of exposure to bankruptcy and banking stumbling risks during the years (2016-2018-2019).
7- The International Bank ranked the first category in 2016, which means that the bank was not exposed to the risks of bankruptcy and bank failure.
8- The World Bank, and the International Bank (in 2017), the Iraqi Islamic Bank (in 2018,2017,2016), and the National Bank in 2018 ranked the second class of exposure to the risk of default.This shows that these banks have little and limited exposure to bankruptcy risks.
9- The International Bank (in 2018-2019), the Iraqi Bank (in 2019), and the National Bank (in 2016-2017-2019) ranked the third class, which represents the difficulty in predicting the risk of banking default.
10- The reason for the exposure of the Iraqi Islamic banks (the research sample) to the risks of default is due to the weak administrative efficiency of the higher administrative levels and their failure to adapt to the economic, technological, and other developments taking place in the external environment.

Recommendations
1- Banks administrations must be aware of the risks of banking stumbling, its nature, causes, and methods of dealing with it.
2- Directing and monitoring the banks by the Central Bank focusing on the importance of training banks' members and improving their scientific and practical qualifications in banking work.
3- The Central Bank should issue the procedures and laws binding on banks concerning improving their financial and material resources to avoid the risks of default and bankruptcy.

4- Using modern financial models by the banks' administration in detecting the risks they may face in the future.

5- Banks are should implement a deposit insurance system to enhance the depositor's trust in the bank when the bank is exposed to bankruptcy.

6- Finally, they should implement banking governance that achieves transparency and disclosure of the financial statements, which helps to identify and enhance strengths and weaknesses and address them.

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