



RESEARCH ARTICLE

The Impact of Inflation on Banking Stability in Iraq for (The Period) 2004-2020

Nawfal Yahya Sahib^{1*}, Houda BenMabrouk²

^{1,2} IHEC of Sousse Tunisia GFC Laboratory, University of Sfax University of Sousse, Tunisia

ARTICLE INFO

ABSTRACT

Received: Apr 24, 2024

Accepted: June 10, 2024

Keywords

Inflation

Banking Stability

Iraq

***Corresponding Author:**

fin.post01@qu.edu.iq

The research aimed to show the impact of inflation on Iraqi banking stability indicators for the period)2004-2020(, which are)capital adequacy, asset quality, profitability, exchange rate risk, liquidity(. Due to the small sample size, we relied on quarterly data and using the statistical program SPSS.rr. 24 and the research reached a set of conclusions and , recommendations, the most prominent of which was the absence of a relationship with the effect of inflation on some indicators of banking stability, as well as the presence of a direct relationship with the effect of inflation on profitability, while the relationship with inflation in liquidity was an inverse effect relationship, and the study recommended seeking to achieve the banking By addressing the phenomenon of inflation through the interest rate and exchange rate, as well as monetary policy tools by the Central Bank, which will reflect positively on banking stability in Iraq

INTRODUCTION

Prepare the relationship between inflation and stability The banker issue is important and complex, where the effect is reciprocal between inflation and stability Banking in Iraq, so impact inflation Growing on stability Drains through prices, where its level in a way fast and surprising This can cause people's confidence in the currency Local and the system The banker In a way General, as much as possible to increase individuals from their deposits Cash And he withdrew it in a way Suddenly in an attempt to get on power Buy it, which is perhaps that impact on stability Drains Therefore, it leads to crises Liquidity And deteriorates the system Banking in Iraq, as well as inflation may be Lead to more cost Finance And therefore the benefits Cut loans And investment And slow growth Economic In a way General, and that is Turn impact on capacity Banks on to grant loans And support activities The economic

Research problem:

The following questions represented the research problem.

- 1- Is there an impact of inflation on the capital adequacy of the Iraqi (banking sector for the period)2004-2020?

2- Is there an impact of inflation on the quality of assets of the Iraqi banking (sector for the period)2004-2020?

3- Is there an impact of inflation on the profitability of the Iraqi banking (sector for the period)2004-2020?

4- Is there an impact of inflation on exchange rate risks and the capital (adequacy of the Iraqi banking sector for the period)2004-2020?

5- Is there an impact of inflation on the liquidity of the Iraqi banking sector(for the period)2004-2020?

The importance of the research:

This issue is of great importance due to the negative and undesirable effects of inflation on various economic aspects, especially on the country's financial and banking sector and its impact on banking stability indicators.

1- research aims:

- 1- Explaining inflation and knowing the extent of its impact on banking stability indicators.
- 2- Analysis of both inflation and banking stability indicators in Iraq for the (period)2004-2020.
- 3- Identify the size of the impact of inflation on banking stability indicators (in Iraq for the period from)2004-2020.

Research hypothesis:

- 1- There is no effect of inflation on the capital adequacy of the Iraqi banking (sector for the period)2004-2020.
- 2- There is no effect of inflation on the quality of assets of the Iraqi banking (sector for the period)2004-2020.
- 3- There is no effect of inflation on the profitability of the Iraqi banking (sector for the period)2004-2020.
- 4- There is no effect of inflation on exchange rate risks and the capital (adequacy of the Iraqi banking sector for the period)2004-2020.
- 5- Is there an impact of inflation on the liquidity of the Iraqi banking sector (for the period)2004-2020.

Spatial and temporal limits of research:

- 1- Spatial boundaries: The Iraqi economy is represented by inflation and the banking sector.
- 2- Time limits: The study period included the year 2004 to the year 2020.

The first topic: The theoretical and conceptual framework of inflation and banking stability

First: The concept of the inflation rate:

Inflation is an economic phenomenon suffered by the Iraqi economy because of the security conditions at the time. This, in turn, led to market instability, changes in the exchange rate, and an imbalance between supply and demand because of the rise in the general price level and the increase in the money supply, which in turn led to a decline in domestic production.

As promised, inflation is an economic problem that you face communities humanity and countries on limit whether where it follows their antiquities negative political and social and economic, so the

authorities seek cash to take measures necessary to focus on rates inflation with a purpose investigation stability in prices on Term Long, so he is that the goal final that the authority seek cash to achieve it)Shendi and Abd Dhaidan, 2021: 429(where there are reasons inflation in Iraq to many factors and from these factors Home (Saqr, 1977: 431: Rashid et al., 2023).

- 1- Lack in supplies and Production The interior
- 2- impact factors Political And economic Troubles in the country.
- 3- He was also affected in Iraq by challenges, wishes, and disturbances. Political Than Effect on stability Economical and it increased from Inflation the prices, since the height Continuous in the prices that it is not merely changing in level the prices between two cases, but rather the continuity more the prices on Bezel the time.
- 4- may be a description of Inflation That is practical dynamism, where no is there stability in the prices, And it can Expression on Sharpness Inflation In a way quantitative on the road an average more the prices in Standards Specific during a period Temporal Certain.

Since inflation is one of the intended monetary variables, it occurs when the central bank buys a large and sudden amount of government bonds, causing their prices to rise and the holders of these bonds to rush to sell them and profit from the price rise. Replacing bonds with cash balances leads to an increase in the additional cash balances they hold and a fall in bond prices, causing them to rise. Additional reserves held by banks: Banks use these reserves to buy bonds on the open market and grant loans on favorable terms to borrowers, who use them to buy goods and services and repay debts.

as the changes also change in prices exchange resulting in changes in the supply and demand the local and the foreigners on money and goods, In addition to the changes The others in variables cash, while, Various responses actions The audience after the occurrence of the changes cash where looking some they are to adjust their balance cash of while markets goods and services, while standing up others By adjusting it of while markets stocks and bonds, As lead to transition balances to markets Other (Badawi, 2013: 25.; Kanval et al., 2024)

Second: The concept of banking stability

was defined as the main objective of avoiding and preventing financial and banking crises and avoiding all serious risks arising from financial problems that may occur from time to time .(Miguel & Charles, 2009:4) defined it as the situation in which the value

Total debt at the end of the period is less than the market value of the assets held by the banking sector at the end of the same period. If the opposite is the case, the sector is in a state of distress and instability, as defined by the European Central Bank as the system's stability with all its components in the face of shocks without major disruption to intermediation. Finance and successful allocation for productive investment (Hirwa & Nasir, 2015:39) are among the banking indicators of stability in Iraq:

1- Capital adequacy index:

Capital adequacy explains the method used by a bank's owners and management to achieve a balance between the amount of capital and the expected risks. From a technical point of view, capital adequacy means capital that can cover risks, attract deposits, and lead the bank to profits (and growth) (Al-Masoudi, 1999: 140).

The capital structure has an important influence on the value of any investment, which is mainly reflected in the expected future cash flows and the cost of capital (Alexander, 2008: 173). Capital adequacy is one of the most important tools for identifying banks and their ability to withstand losses or insolvency because the lower a bank's insolvency, the greater its degree of financial adequacy and vice versa (Al-Afandi, 2013: 308).

2- Liquidity index:

Liquidity is a relative term that expresses... About the relationship between cash and assets that can be easily converted into cash without loss and the financial obligations that a person or institution must fulfil. Accordingly, it is difficult to determine the degree of liquidity of a bank or person except within the scope of its financial obligations. Assets that can be transferred quickly and without loss include cash and deposits that can be withdrawn immediately, as well as financial obligations that must be fulfilled, bills due, loans and other future obligations if they exceed the obligations. The available financial level of assets that can be quickly converted into cash poses a challenge to the ability to meet obligations quickly and without losses (Abdul Hamid, 2002: 230); therefore, banks and individuals should carefully manage liquidity and maintain an adequate level of assets that can be easily converted into cash to ensure their ability to realize maturing financial obligations when needed. Changing economic and financial factors must also be considered as they may affect the level of liquidity in the future.

3- Indicators for measuring profitability:

Profitability has been defined from an accounting perspective as the increase in total revenues over total costs for a given period of time, and profitability has been defined from an economic perspective as an increase in wealth that involves an increase in revenues realized over costs plus opportunity costs. This means that the accounting profit is greater than the economic profit due to the added costs (Abu Hamad and Qaddouri, 2005: 333), and profitability represents the important matter and the main objective for the continuation of the work of any institution and the basic objective of shareholders. Profitability in the form of retained earnings is an important source of capital generation, and therefore profitable banks that have large and sufficient capital are considered the backbone of a sound banking (system) (Hammad, 2005: 477).

4- Asset quality index:

The determination of the financial soundness of the bank underlines the importance of the quality of assets. The quality of loans is the most important element affecting the quality of assets, as they represent the majority of the bank's assets, which are high-risk. Therefore, the overall risks that threaten the solvency of the bank are the result of the deterioration of the value of assets(loans), which is reflected in the deterioration of the financial soundness of borrowers and the deterioration of their profits (Hussein, 2020: 12).

5- Exchange rate risk index:

Institutions are exposed to various risks arising from the nature of their activities. Foreign exchange risk can be described as an event faced by the institution that results in one of two things, either a gain or a loss (Marois, 1991: 55). It is also defined as the totality of foreign currency obligations whose value changes when the exchange rate against the local currency changes (Jura, 1999: 142). When institutions are exposed to foreign exchange risk, it means that exchange rates are constantly changing and adjusting (Al Maydani, 1999: 284). It is also referred to as the risk associated with changes in the exchange rate between two currencies (Gitman, 2000: 83). However, the precise explanation of exchange rate risk is the extent to which the share prices of companies denominated in the national currency are affected by changes in the value of the currency (Solnik, 2000: 176).

The second topic

Analysis of the reality of inflation and banking stability in Iraq for (The period)2004-2020

(First: Analysis of inflation in Iraq for the period)2004-2020

(Table)1 shows the inflation rates and the general price level during the reporting period. The table shows that the inflation rates and the general price level in the years)2004, 2005 with rates of)27.0, 37.0 and 53.2(. (% respectively. The reason (2006 for this increase in inflation rates is mainly the

deterioration in the security situation, in addition to the increase in consumer spending and the increase in demand for imports due to the reduction in tariffs on imported goods. The other reason is increased public spending due to increased wages and salaries.

Inflation rates fell by 30.8 percentage points in 2007, 2008, and 2009. This decline is a good (8.3, 2.7, 1 indicator of the success of monetary policy in controlling movements in the money market through an increase in the exchange rate. The Iraqi dinar is appreciating foreign currencies through the central bank's optimal use of the exchange rate and interest rates, as well as improving the security situation.

(While inflation rates rose again in)2010-2011-2012, the general price level in 2012 was (140.1 throughout Iraq because of the increase in the money supply and the low flexibility of the production system) Al-Ghalbi, 2017: 446(, after which the inflation rate declined again (2014, 2015, 2016) with rates of)2.2 and 1.4 respectively. The reason for this decline is the role of .%29.6 monetary policy in achieving stability in the general price level. However, in the period (2017, 2018, 2019), the inflation rate continued to decline, reaching (0.2, 0.4, 0.2)%, and the main reason for this is decline is due to the use of the currency auction method by monetary policy, as it is one of the indirect instruments of the central bank, as it is one of the new methods to keep the exchange rate stable and also to maintain inflation. The price level during that period was between 104.3 and 104.5%. In 2020, inflation rose slightly and reached 104.6. Table 1 shows the development of inflation rates in Iraq in the period 2010-2020:

Table 1: The development of the inflation rate in Iraq for the period)2004(202)

% Inflation rate	The general level of prices	the years
27.0	36.4	2004
37.0	49.9	2005
53.2	76.4	2006
30.8	100	2007
12.7	112.7	2008
8.3	122.1	2009
2.4	125.1	2010
5.6	132.1	2011
6.1	140.1	2012
1.9	142.7	2013
2.2	145.9	2014
1.4	148.0	2015
-29.6	104.1	2016

0.2	104.3	2017
0.4	104.7	2018
-0.2	104.5	2019
0.09	104.6	2020

Source: Central Bank of Iraq, General Directorate of Statistics and Research, annual (bulletins for different years)2010-2020

Second: Analysis of the reality of banking stability in Iraq for (the period)2004-2020

1- Capital adequacy index:

Based on Table (2), we find that there is a discrepancy between high and low in the capital adequacy ratio of banks. the capital adequacy ratios were found to fluctuate, resulting in an increase and decrease in percentage changes during the study period. In the base year 2010, the recorded capital adequacy ratio decreased to (89%) in 2011, the capital adequacy ratio in 2011. (%130) was the lowest during the study period and is an excellent ratio overall compared to the Central Bank of Iraq's ratio of (12%). In (2014 and 2015), the capital adequacy ratio fell to a record (122%) respectively due to the terrorist events that the country experienced. (%105), political instability and the closure of several branches of the government and commercial banks in disputed areas caused this overall decline, but in general, it is still at a high level, but in the year, there was a significant increase in the capital adequacy of the banking sector 2020 (%sector. Iraq reached)253.

2- Financial Liquidity Index:

To analyze liquidity, the ratio of total cash loans to total deposits and the ratio of liquid assets to total assets, as an expression of liquidity, were used for the period (2004-2020) in (Table)1, where there is investigation minimum rate For a ratio of total loans to cash to total deposits during a period looking in 2004, the This amounted to The ratio you explains capacity drains on demand for % 9.6 credit cash, either higher rate that it has It was in 2016, where I reached this level falls within The ratio that it choose the central bank (59.60%) As for the ratio of liquid assets to total assets, its lowest ratio was in 2004, where it reached (7.1%) as a result of the increase in total assets and the decline in liquid assets in relation to it. Thereafter, the ratio of cash and cash equivalents to total assets began to rise and reached its highest value (56.2) in 2011, because of the decrease at the end of 2011 and the increase in cash and cash equivalents.

3- Financial Profitability Quality Index:

This indicator is made up of the return on assets and the return on equity. the table below shows that the return on assets for banks fluctuated between high and low until it reached its lowest percentage in 2012 at)0.01(. During the period (2004-2020), this decrease is due to the decline in the bank's profitability compared to the high volume of assets. The highest percentage was reached in 2017 at)1.19(%). This explains the investment banks' asset management policy. It was good, i.e., investments were high there. As for the... As for return on equity, return on equity recorded the highest profits in the bank at (105.2%). This indicates the high efficiency of banks in 2007 when it came to making investment and operational decisions to utilize owners' funds. Thereafter, the return on equity began to fluctuate until it reached the lowest percentage in the study period in 2018 at (4.4%), which is due to the increasing increase in the value of assets.

4- Asset quality index:

This index is made up of the ratio of non-performing loans to total loans (f) The ratio of non-performing loans to total capital as asset quality reached its lowest value in, 2012 at (2.2%), as banks continued to implement their financing programs and made credit facilities available to less risky sectors. However, after 2012, the bank recorded its highest level of performance in 2018 at (15.61), although it is above the requirements of the Central Bank of Iraq, while the bank reached the highest level of performance in terms of the ratio of non-performing loans to total capital in 2004 at (37.23%). The reason for this is the increase in capital compared to loans. The lowest value was reached in 2012 and amounted to (8.47%), which is due to the increase in the bank's lending activities.

5- Exchange rate risk index:

We note that the absolute value of the percentage profit made by the banking sector through its transactions in foreign currency is divided by the capital invested in it. Transactions are good percentages during the study period (2004-2020)) We note that the profits started from the year 2004 at (149.76) with an equity of 7,947,719 million Iraqi dinars and increased by(196.3) in 2010 with an equity of (6,456,665 million) dinars, which is the result of an increase in net profit compared to the amount of invested capital. This means that the banking sector is making greater profits from its investments in foreign currencies, which is evidence of the efficiency of trade and the ability of financial institutions to make profits from the sale of currencies, although the exchange rate is a risk that is also at a high level. It continues to rise and fall in subsequent years, albeit at a rapid pace. We note that during the period 2012-2020, the highest absolute rate was recorded in 2019 with (433.9) and an equity of (23,521,056 million) Iraqi dinars.

Table 2: (Banking stability indicators in Iraq for the period)2004-2020

Exchange rate risk				Asset quality		Profitability quality		Liquidity		Capital adequacy ratio %	the years
The absolute value of the ratio of net dealing in foreign currency to capital *	Owned capital and reserves (million) (dinars)	Foreign assets (Million) (dinars)	Foreign liabilities (Million) (dinars)	- performing loans ratio Total capital % al (2)	- performing loans ratio Total % loans (1)	Return on Equity Rate % (2)	Rate of return on asset (s)1	Ratio of liquid assets to total assets (2)	Ratio of total cash credit to total deposits (1)		
149.76	7947719	18139253	21030906	37.23	22.95	16	0.02	7.1	9.6	108	2004

35.10	7947719	25342987	28133193	13.52	14.2	32	0.1	9.2	15.9	109	2005
100.945	7388573	34331672	3481496	15.28	10.55	68.4	0.24	10	15.7	112	2006
61.93	7574955	47367983	3993123	15.05	9.71	.105 2	0.45	13.6	13.2	115	2007
102.61	7202192	68084967	2043946	11.98	6.51	57.9	0.34	17.3	13.3	157	2008
12.77	7947719	67910770	5767829	10.32	5.86	36	0.25	20.9	14.7	88	2009
196.3	6456665	12693755	1762523	9.63	2.82	26.8	0.21	24.2	24.4	130	2010
103.22	9438772	11537795	1898190	11.32	3	21	0.59	56.2	36.2	89	2011
96.77	14379095	15491204	1575655	8.47	2.2	26.9	0.01	50.5	45.9	138	2012
105.12	19497202	22139272	1642248	26.02	8.1	21.5	0.16	52.8	43.5	205	2013
130.52	19732212	27323928	1568645	26	8.4	13.5	0.82	52.2	46.1	122	2014
74.7	20080809	15952767	951158	30.34	10.16	10.2	0.76	45	57.1	105	2015
49.16	22878155	12144096	895180	28.5	10.93	9.6	0.85	42	59.6	128	2016
36.9	29882347	11902000	874005	30.26	14.01	9.2	1.19	52.2	56.6	181	2017
68.38	22014411	16132099	1257700	32.41	15.61	4.4	0.53	46.7	50.1	285	2018
433.9	23521056	10288310 8	814211	27.01	11.71	7.1	0.82	43.7	51.2	173	2019
260.8	40176416	10555380 4	739420	26.52	10.34	7.3	0.89	38.1	58.7	253	2020

: Sources

- Central Bank of Iraq, Central Statistical Organization, Early Warning Report (for the Iraqi banking sector for the period)2010-2020

- Ministry of Planning, Directorate of National Accounts, Early Warning Indicators, different years, various pages

The second topic

Measuring the impact of inflation on banking stability indicators in

Iraq

Introduction:

The researcher conducted two types of statistical analysis, descriptive statistics and analytical statistics, to measure the impact of some monetary banking indicators on banking stability. The descriptive statistics included means, standard deviations, the highest and lowest values of the variables included in the study and some graphs. As for analytical statistics, the researcher used linear regression in addition to correlation coefficients. The statistical program SPSS vr.24 was used to obtain the results for the analysis and interpretation of the relationships between the variables.

Analysis of the effect of inflation on capital adequacy:

To determine the effect of the inflation variable on capital adequacy, the researcher used simple linear regression. Before drawing the results, the presence of the problem of heterogeneity was tested, as the Breusch-Pagan test was used where the value of the test is equal to,

BP = 1.9007, df = 1, p-value = 0.168

It was found that there was no problem of heterogeneity of variance in the data. The existence of the autocorrelation problem was also tested using the Durbin-Watson test, where the value of the test is equal to:

DW = 1.4255, p-value = 0.01083

It turns out that there is an autocorrelation problem in the data. The results were found based on the statistical program.24 SPSS and the amount and significance of the effect were determined. The following table shows the values of the coefficient of ^{determination} R² And the corrected: coefficient of determination.

Table 1: Values of the coefficient of determination and the corrected coefficient of determination of the model

Model summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.190 ^a	.036	.022	22.107340
a. Predictors: (Constant), Inflation				

The value of the coefficient of determination was 0.03, and the corrected coefficient of determination was 0.02. This means that the regression model of the inflation variable on capital adequacy provides an explanation of 3.0%

In addition, an analysis of variance table was found in relation to the regression model used to determine its significance using the F- test, as shown in the following table.

Table 2: Analysis of variance table for simple linear regression model

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1210.038	1	1210.038	2.476	.120 ^b
	Residual	32256.477	66	488.734		
	Total	33466.515	67			
a. Dependent Variable: Enough head the money						
b. Predictors: (Constant), inflation						

the results show that the calculated F-test value is 2.476, which is a non-significant value below the 5% significance level due to the sig value. The value of 0.120 is greater than the 5% significance level. Hence, we conclude that the inflation regression model for capital adequacy is a non-significant model.

Estimating the regression model parameters and their significance:

The researcher also found the results of the t-values of the standard and non-standard regression parameters, in addition to the test values and their significance for each parameter, which are included in the following table The null hypothesis to be tested here is

H0 There is no statistically significant effect of inflation on capital:

adequacy

Against the alternative hypothesis

H1 There is a statistically significant effect of inflation on capital: adequacy.

The following table includes the parameter values of the linear regression model, in addition to the t-test values calculated for each parameter and their significance

Table 3: Evaluate the parameters of the model used and test them

Coefficients ^a	
---------------------------	--

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	38.983	3.016		12.925	.000
	Inflation	-.927	.589	-.190	-1.573	.120
a. Dependent Variable: Enough head the money						

The results clearly show that the value of the regression parameter equal to -0.190 is statistically insignificant below the 5% significance level, as shown by the significance value equal to 0.120. We conclude from this that an increase or decrease in inflation does not lead to an increase or decrease in the value of capital adequacy.

Analysis of the effect of inflation on asset quality:

To determine the effect of the inflation variable on asset quality, the researcher used simple linear regression. Before drawing the results, the presence of the problem of heterogeneity was tested, as the Breusch-Pagan test was used where the value of the test is equal to

$BP = 0.11229, df = 1, p\text{-value} = 0.7376$

It was found that there was no problem of heterogeneity of variance in the .data

The existence of the autocorrelation problem was also tested using the Durbin-Watson test where the value of the test is equal to

$DW = 1.4196, p\text{-value} = 0.01005$

It turns out that there is an autocorrelation problem in the data. The results were found based on the statistical program.24 SPSS and the amount and significance of the effect were determined. The following table shows the values of the coefficient of determination R² And the corrected:ncoefficient of determination.

Table 4: Values of the coefficient of determination and the corrected coefficient of determination of the model

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate

1	.205a	.042	.027	3.434143
a. Predictors: (Constant), inflation				
b. Dependent Variable: Quality the findings				

The value of the coefficient of determination was 0.04 and the corrected coefficient of determination was 0.02. This means that the regression model of the inflation variable on asset quality provides an explanation of 4%

In addition, an analysis of variance table was found in relation to the regression model used to determine its significance using the F- test (see Table 5 below)

Table5: Analysis of variance table for simple linear regression model

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	34.036	1	34.036	2.886	.094 ^b
	Residual	778.360	66	11.793		
	Total	812.397	67			
a. Dependent Variable: Quality the findings						
b. Predictors: (Constant), inflation						

The results show that the calculated F-test value is 2.886, which is a non-significant value below the 5% significance level, as the sig. Equivalent to 0.120 is greater than the 5% significance level. Hence, we conclude that the regression model of inflation on asset quality is a non-significant model.

Estimating the regression model parameters and their significance:

The researcher also found the results of the values of the standard and non-standard regression parameters as well as the values of the t test and their significance for each parameter, which are shown in the following table the null hypothesis to be tested here is H0 There is no statistically significant effect of inflation on asset quality Against the alternative hypothesis H1. There is a

statistically significant effect of inflation on asset quality: The following table contains the parameter values of the linear regression model as well as the Thet test values calculated for each parameter and :their significance.

Table 6 :Evaluate the parameters of the model used and test them

Coefficients ^a						
Model		Unstandardized Coefficients		Standardize d Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.657	.469		12.073	.000
	Inflation	-.155	.092	-.205	-1.699	.094
a. Dependent Variable: Quality the findings						

The results show that the regression parameter's value of -0.205 is not statistically significant below the 5% significance level, as the significance value shows. Equal to 0.094. From this, we conclude that an increase or decrease in inflation does not lead to an increase or decrease in the value of asset quality.

Analysis of the effect of inflation on profitability:

To determine the effect of the inflation variable on profitability, the researcher used a simple linear regression. Before producing the results, the presence of the problem of heterogeneity was tested by using the Breusch-Pagan test, whose value is equal to

$$BP = 6.3138, df = 1, p\text{-value} = 0.05198$$

It was found that there was no problem of heterogeneity of variance in the data. The presence of the autocorrelation problem was also tested using the Durbin-Watson test, with the value of the test being equal to

$$DW = 0.97414, p\text{-value} = 2.634e-06$$

It turns out that there is an autocorrelation problem in the data. The results were found based on the statistical program.24 SPSS, and the amount and significance of the effect were determined. The following table shows the values of the coefficient of determination R2 And the corrected coefficient of determination.

Table 7: Values of the coefficient of determination and the corrected coefficient of determination of the model

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.546 ^a	.298	.287	6.554884
a. Predictors: (Constant), inflation				
b. Dependent Variable: Profitability				

The value of the coefficient of determination was 0.29 and the corrected coefficient of determination was 0.28. This means that the regression model of the inflation variable on profitability explains 29.0%. In addition, an analysis of variance table was found in relation to the regression model to determine its significance using the - test as shown in the following table.

Table 8: Analysis of variance table for simple linear regression model

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1202.554	1	1202.554	27.988	.000 ^b
	Residual	2835.789	66	42.966		
	Total	4038.343	67			
a. Dependent Variable: Profitability						
b. Predictors: (Constant), Inflation						

the results show that the calculated value of the F-test reached 27.988, which is a significant value below the 5% significance level, as the sig. Equivalent to 0.000, is below the 5% significance level and we conclude that the regression model of inflation on profitability is a significant model.

Estimating the regression model parameters and their significance:

The researcher also found the results of the values of the standard and non-standard regression parameters, in addition to the t-test values and their significance for each parameter, which are

included in the following table. The null hypothesis to be tested here is H0. There is no statistically significant effect of inflation on profitability : Against the alternative hypothesis H1. There is a statistically significant effect of inflation on profitability : The following table contains the parameter values of the linear regression model, in addition to the t-test values calculated for each parameter and: their significance.

Table 9: Evaluate the parameters of the model used and test it

Coefficients ^a						
Model		Unstandardized Coefficients		Standardize d Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.085	.894		5.686	.000
	Inflation	.924	.175	.546	5.290	.000

a. Dependent Variable: Profitability

the results show that the value of the regression parameter of 0.546 is statistically significantly below the significance level of 5, as shown by the sig value. Equal to 0.000 From this we conclude that a. Increase in inflation by one unit leads to an increase in the value of profitability by 0.546.

Analysis of the effect of inflation on exchange rate risks :

To determine the effect of the inflation variable on exchange rate risks, the researcher used a simple linear regression. Before producing the results, the presence of the problem of heterogeneity was tested by using the Breusch-Pagan test where the value of the test is equal,

$$BP = 1.1361, df = 1, p\text{-value} = 0.2865$$

It was found that there was no problem of heterogeneity of variance in the data. The presence of the autocorrelation problem was also confirmed with the durbin-Watson test, where the value of the test is equal to

$$DW = 0.83782, p\text{-value} = 5.353e-08$$

It turns out that there is an autocorrelation problem in the data. The results were determined using the statistical program VR.24 SPSS and the size and significance of the effect were determined. The following table shows the values of the coefficient of determination R² and the corrected coefficient of determination.

Table 10: Values of the coefficient of determination and the corrected coefficient of determination of the model

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.129 ^a	.017	.002	30.680014
a. Predictors: (Constant), inflation				
b. Dependent Variable: Risks price Exchange				

The coefficient of determination was 0.01 and the corrected coefficient of determination was 0.002. This means that the regression model of the inflation variable on exchange rate risk explains 1.0%. In addition, an analysis of the variance table was found in relation to the regression model used to determine its significance using the F-test, as shown in the following table:

Table 11: Analysis of variance table for simple linear regression model

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1048.899	1	1048.899	1.114	.295 ^b
	Residual	62123.374	66	941.263		
	Total	63172.273	67			
a. Dependent Variable: Risks price Exchange						
b. Predictors: (Constant), inflation						

the results show that the calculated F-test value is 1.114, which is a non-significant value below the 5% significance level, as the sig. Equivalent to 0.295 is greater than the 5% significance level. Therefore, we conclude that the regression model of inflation on exchange rate risk is a non-significant model.

Estimating the regression model parameters and their significance

The researcher also found the results of the values of the standard and non-standard regression parameters as well as the values of the thet test and their significance for each parameter, which are included in the following table. The null hypothesis to be tested here is H0 There is no statistically significant effect of inflation on exchange rate risk Against the alternative hypothesis H1 There is a statistically significant effect of inflation on exchange rate risk.

The following table contains the parameter values of the linear regression model as well as the Thet test values calculated for each parameter and their significance.

Table 12: Evaluate the parameters of the model used and test them

Coefficients ^a						
Model		Unstandardized Coefficients		Standardize d Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	31.245	4.186		7.465	.000
	Inflation	-.863	.818	-.129	-1.056	.295
a. Dependent Variable: Risks price Exchange						

the results show that the value of the regression parameter of -0.129 is statistically insignificant below the 5% significance level, as the sig value shows. Equal to 0.295 From this we conclude that an . Increase or decrease in inflation does not lead to an increase or decrease in the value of exchange rate risks.

Analysis of the effect of inflation on the liquidity ratio:

To determine the effect of the inflation variable on the liquidity ratio, the researcher used a simple linear regression. Before generating the results, the presence of the problem of heterogeneity was tested by using the Breusch-Pagan test where the value of the test is equal,

BP = 5.1818, df = 1, p-value = 0.05282

It was found that there was no problem of heterogeneity of variance in the data. The presence of the autocorrelation problem was also tested using the Durbin-Watson test, with the value of the test being equal to

DW = 1.6601, p-value = 0.1249

It was found that there was no autocorrelation problem in the data. The results were calculated using the statistical program VR.24 SPSS and the magnitude and significance of the effect was determined. The following table shows the values of the coefficient of determination R² and the corrected coefficient of determination.

Table 13: Values of the coefficient of determination and the corrected coefficient of determination of the model

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.509a	.259	.248	5.328226
a. Predictors: (Constant), inflation				
b. Dependent Variable: Ratio Liquidity				

The value of the coefficient of determination was 0.25 and the corrected coefficient of determination was 0.24. This means that the regression model of the inflation variable on the liquidity ratio explains 25.0%. In addition, an analysis of variance table was found in relation to the regression model to determine its significance using the F-test as shown in the following table.

Table 14: Analysis of variance table for simple linear regression model

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	655.905	1	655.905	23.103	.000 ^b
	Residual	1873.739	66	28.390		
	Total	2529.644	67			
a. Dependent Variable: Ratio Liquidity						

b. Predictors: (Constant), inflation

the results show that the calculated value of the F-test reached 23.103, which is a significant value below the 5% significance level, as the sig. Equivalent to 0.000, it is less than the 5% significance level, and we conclude that the inflation regression model on the liquidity ratio is a significant model.

Estimating the regression model parameters and their significance

The researcher also found the results of the standard and non-standard regression parameters as well as the t-test values and their significance for each parameter, which are included in the table below. The null hypothesis to be tested here is H0. There is no statistically significant influence of inflation on the liquidity ratio. the alternative hypothesis H1 is: There is a statistically significant effect of inflation on the liquidity ratio. The following table contains the parameter values of the linear regression model as well as the t-test values calculated for each parameter and their significance.

Table 15: Evaluate the parameters of the model used and test them

Coefficients ^a						
Model		Unstandardized Coefficients		Standardize d Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	10.155	.727		13.970	.000
	Inflation	-.683	.142	-.509	-4.807	.000
a. Dependent Variable: Ratio Liquidity						

The results show that the value of the regression parameter of -0.509 is statistically significant below the significance level of 5, as shown by the sig value, which is equal to 0.000. From this, we conclude that an increase in inflation by one unit leads to a decrease in the value of the liquidity ratio by 0.509.

CONCLUSIONS

1- The rise and fall in inflation do not lead to an increase or decrease in the value of capital adequacy.

- 2- There is no correlation between inflation and asset quality.
- 3- —Inflation and profitability have a direct relationship, as an increase in inflation by one unit leads to an increase in profitability by 0.546.
- 4- There is no relationship between inflation and exchange rate risk.
- 5- There is an inverse relationship between inflation and liquidity, as an increase in inflation by one unit leads to a decrease in the liquidity ratio by 0.509.

Recommendations

- 1- The pursuit of economic stability by addressing the phenomenon of inflation through the interest rate and the exchange rate, as well as through monetary policy instruments of the central bank in a way that has a positive impact on the stability of banks.
- 2- Activating the role of the Iraqi banking sector by improving the performance indicators of banks, expanding their role in financing production and investment projects, and introducing modern banking technology, which contributes to the growth of the banking sector's stability indicators.
- 3- Encouraging domestic and foreign investment in order to achieve economic growth and provide the banking sector with the necessary liquidity to fulfil its role as a financial intermediary between savers and borrowers.

LIST OF SOURCES

- Ahmed, Abdul Ghafour, Ibrahim, Principles of Economics and Public Finance, Zahran Publishing and Distribution House, Amman, 2013\
- .Al-Afandi, Muhammad Ahmed, "Introduction to Macroeconomics
.5th edition, Al-Amin Publishing and Distribution, Sana'a, 2014 ", 3- Hussein, Khaled Hussein, "Financial Safety Indicators in Iraq for the Period 2015-2019 ," Central Bank of Iraq, Department of Statistics .and Research, 2020
,Hammad, Tariq Abdel-Al, ")Corporate Governance - Concepts
", (Principles, and Experiences - Governance Applications in Banks
.University House, 2005 Shindi, Adeeb Qasim, Dhaidan, Dhia Abd, Analysis of measuring the impact of monetary variables on financial market indicators in Iraq for the ,period)2004-2018(, Al-Kut Journal of Economic Sciences, Volume 3 College of Administration and Economics, Wasit University, 2021. 6- ,Saqr Ahmed Saqr, Macroeconomic Theory, Publications Agency 431 ,1977.
Abdel Hamid, Abdel Muttalib, Economic Policies at the National
,Economy Level: A Comprehensive Analysis, Arab Nile Group, Cairo .2002
Laila Badawi, the monetary shock and its impact on the exchange rates of Egypt and Iraq, an analytical study, doctoral thesis, University of
.Kufa, College of Administration and Economics, 2013
- Al-Masoudi, Jamil Al-Zaydanin, "Basics of the Financial System
.Financial Perspective ," Dar Wael for Printing and Publishing, 1999 Source: Central Bank of Iraq, General Directorate of Statistics and.(Research, annual bulletins for different years)2010-2020

- Kanval, N., Ihsan, H., Irum, S., & Ambreen, I. (2024). Human Capital Formation, Foreign Direct Investment Inflows, and Economic Growth: A Way Forward to Achieve Sustainable Development. *Journal of Management Practices, Humanities and Social Sciences*, 8(3), 48-61.
- Rashid, A., Jehan, Z., & Kanval, N. (2023). External Shocks, Stock Market Volatility, and Macroeconomic Performance: An Empirical Evidence from Pakistan. *Journal of Economic Cooperation & Development*, 44(2), 1-26.
- Al-Maidani, Muhammad Ayman Ezzat, "Financial Management in .Companies ," second edition, Obeikan Library, Riyadh, 1999 Ministry of Planning, Directorate of National Accounts, Early
- .Warning Indicators, different years Miguel A. Segoviano, Charles Goodhart, "Banking Stability Measures, International Monetary Fund (IMF)", Working Paper 09/04, 2009.
- Marois, Bernard, " Risque of change and gestion of trésorerie internationale ", 1981. Jura, Michel , " Techniques Financiers Internationals", Danod , Paris , 1999.
- Gitman, Lawrence's, "PRINCIPLES OF MANAGERIAL", 9th, ed., N.Y, Donnelly and sons company, 2000.
- Solnik, Bruno, "International Investments