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THE RELATIONSHIP BETWEEN FINANCIAL FLEXIBILITY AND CASH LIQUIDITY: AN EMPIRICAL STUDY IN A SAMPLE OF IRAQI PRIVATE BANKS

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ABSTRACT:

Due to the rapid progress of technology, businesses, both political and economic, from the beginning of the twentieth century to the outside environment has been a microcosm of the world for these organizations, which means service or productivity. At any level, from horizontal systems to the upper levels to inter-organizational dealings, these were a challenge. For the survival and growth of these organizations, it is important for them to work on long-term plans that embrace the cash provided by the dealers so that the potential fall and rise in funding options that can be made accessible to them. These banks, represented by their departments, are impacted by changes on one side and by stress due to considerations and concerns on the other. public debt, and cash flow (investment). in order to achieve the goals of the report, the information on the Iraq Exchange was used in the Iraqi private sector between two factors from January 1st of 2019 to December 31st of 2019, and using certain financial and mathematical tools, the results indicate that there is a strong association between the two. The findings in this report are consistent with the proposed theory, and

recommendations. The most important of these is that banks in the Iraqi banking sector should realize that their financial leverage is closely linked to their percentage of equity, which gives an indication of their sources of financing.

INTRODUCTION:

Financial flexibility was and still is an intellectual debate about the extent of its connection and its impact on the formation and creation of cash liquidity, whether it is financial assets or assets that can be converted into cash and liquidity(Amusawi, Almagtome, & Shaker, 2019). In light of a dynamic competitive environment full of variables produced by globalization, business organizations are required to adapt their situations to these different variables(HAMEEDI, AL-FATLAWI, ALI, & ALMAGTOME, 2021). In order to remain and grow in that transforming environment, adaptation includes matching their human energies with their skills and renewed staff, through their human capital on the one hand, and the need for them to possess the liquidity required to cover their investment projects in an optimal manner due to the need to ensure their cash flow on the other hand(Khaghaany, Kbelah, &Almagtome, 2019). This process can only be achieved through the use of principles of employing financial flexibility in its activities and developing a flexible financial policy that is based on managing that liquidity.

LITERATURE REVIEW:

First: The concept of financial flexibility and its measurement tools:

Financial flexibility is the degree, ability, and speed of the company to mobilize its financial resources in order to take interactive measures, as well as the ability of the company to establish and generate internal and external funds alike during periods of uncertainty (Byoun, 2007)(Kbelah, Amusawi, &Almagtome, 2019). Debt to ensure its future expansions, as it is one of the priorities for executives when making decisions about its capital structure, and to stimulate the administrative desire to maintain the structure of financial claims, especially debt claims, so that the negotiation process is easier (Brown & Powers, 2015: 2), as it is one of the main pillars of managers' decisions(A. H. Almagtome, Al-Yasiri, Ali, Kadhim, &Bekheet, 2020). Those who focus on the factors that help the company to prepare the necessary requirements to attract financing, and in a way to maximize cash flows to face the urgent changes that occur in investment opportunities (Choudhry&Mizerka, 2018: 44-45). The measure of financial flexibility is through my measure of financial flexibility according to what (Daniel et al., 2008: 165) mentioned it through the leverage ratio, and (Ayaydin et al., 2013: 1) for the scale (the capacity of public debt and net cash flow) as they are The measures adopted to demonstrate financial flexibility indicators, and through the following laws:

- Leverage(The ratio of debt to the right of ownership)(Saunders& Cornett, 2012: 393)

$$\frac{\text{Current liabilities+ Long-term}}{\text{Property right}}$$

- Net cash flow (Zhang, Zhao&Jian, 2020: 14)

$$\frac{\text{Cash flow}}{}$$

Findings Total

- The capacity of the public debt(Kuti, 2011: 511)

Total cash assets

Deposits and the like

Second: The concept of cash liquidity and its measurement tools:

Liquidity is the ease with which securities are traded through the context of how easy it is to obtain financing for trading a security(Al-Wattar, Almagtome, & AL-Shafeay, 2019). Since the liquidity risk in the market-based financial system is positively related to the net interest margin in addition to banks with high levels of illiquid assets obtaining higher interest income (Marozva) (2015: 455), a critical function being an important pillar to support economic activities, which represents a potential weakness in the context of the crisis, and the bank is transferring risks in its balance sheets and creating liquidity (Nitescu, Dună&Ciurel, 2020),(A. H. Almagtome, 2021). Through the following laws (Rose, 1991: 141):

- Cash balance ratio

Estimated tangible assets

FindingsTotal

- Legal liquidity ratio

Primary precautions + secondary precautions

Deposits and the like

Employment ratio (investment)

Loans And predecessor

Deposits and the like

Third: The relationship of financial flexibility with cash liquidity:

The concepts of cash liquidity and financial flexibility are among the basic concepts that support the ability of business organizations to fulfill debts (Health, 1978), (Amagtome&Alnajjar, 2020). Liquidity can be identified as a potential and important source of flexibility, and cash and internal and external liquidity represent credit lines for business organizations, which are two forms of liquidity. Similar to debt, credit lines can be seen for liquidity options as they can be practiced by business organizations as strategies when they fail to access the financial markets (Campello, Giambona, Graham & Harvey 2009: 69). Marozva (2015) believes that there is a need to consider bartering. Between flexibility in facing liquidity shocks and the cost of maintaining liquid assets that are less profitable, as the latter is supposed to affect the bank's ability to take advantage of

emerging market opportunities that may lead to an increase in revenues or capital or the ability to expand capital.

THE SCIENTIFIC METHODOLOGY OF THE STUDY:

Research problem:

The global and Iraqi business environment in particular in the private commercial banks in Iraq, especially those listed on the Iraq Stock Exchange, is striving to achieve a state of financial flexibility that helps it achieve a great deal of cash liquidity, and the problem of the study is specifically reflected in the answer to the following question:

Does financial flexibility have a correlation with cash liquidity through their indicators?

The importance of studying:

The importance of the study stems from its discussion of an important and necessary sector of the Iraqi economy, which is the banking sector, which is considered essential for the national economy, through its contribution to building other economic aspects. The importance of the study stems from the fact that it will be concerned with knowing the indicators addressed by each of the variables of financial flexibility and cash liquidity.

PURPOSE OF THE STUDY:

The study aims to show the following:

1. Study the financial flexibility and cash liquidity and the extent of their impact on banks.

2. Calculating financial flexibility indicators and cash liquidity indicators through the use of statistical methods.

Study hypotheses:

The hypotheses of the study are represented by expected claims that are compatible with their directions, so the hypothesis for the current study was formulated in a manner consistent with the directions of research and practical analysis, and in order to complete the requirements of the study, the hypothesis was developed, which is crystallized in the following:

(There is a correlation relationship between the financial flexibility represented by its indicators (financial leverage (FL), net cash flow (NCF), and capacity of public debt (PDC), and the cash liquidity represented by its indicators (cash balance ratio (CBR), statutory liquidity ratio (LLR), And Employment Ratio (IR)).

The limits of the study:

For our study these temporal and spatial limits are as follows:

1. Temporal boundaries: The temporal limits of the study extended from (2009-2019).

2. Spatial boundaries: (10) private Iraqi banks were chosen from the Iraq Stock Exchange, represented by (Iraqi Commercial Bank (private shareholding), Bank of Baghdad (private shareholding), Middle East Investment Bank of Iraq (private shareholding), and Iraqi Investment Bank (joint-stock) Especially). The United Investment Bank (private shareholding), the National

Bank of Iraq, Sumer Commercial Bank, Gulf Commercial Bank, Mosul Bank for Development and Investment (private shareholding), Kurdistan International Bank.

Analytical coverage

The sample relied on this study using the financial equations in processing the data for the sample of the study and then showing the results of the financial and statistical analysis, and the extent of banks 'accreditation in employing the indicators of each of the two variables of the study, financial flexibility, and cash liquidity. For the purposes of the analysis, the banks of the study sample have been coded and as indicated in Table (3-1) as follows:

Table (3-1) Coding of the study sample banks

NO	Bank Name	code
.1	Iraqi Commercial Bank	**B1**
.2	Bank of Baghdad	**B2**
.3	The Iraqi Middle East Bank for Investment	**B3**
.4	Iraqi Investment Bank	**B4**
.5	United Investment Bank	**B5**
.6	The National Bank of Iraq	**B6**
.7	Sumer Commercial Bank	**B7**
.8	Gulf Commercial Bank	**B8**
.9	Mosul Bank	**B9**
.10	Kurdistan Bank	**B10**

Source: Prepared by the researcher

A. Financial analysis of the financial flexibility variable according to its indicators

• Analyzing the results of the Debt to Total Equity Ratio (DER) indicator

Table (3-2) below shows that the general rate obtained by the sector for the aforementioned index reached (11,365), and when it was found that the ratio of debt to equity for the bank (B2) reached (28.76) with a standard deviation of (25.38), where the achieved rate exceeded The level of the surveyed banks, followed by the bank (B3) at a rate of (13.12) with a standard deviation of (10.79).

Table (3-2). The ratio of debt to total equity of the surveyed banks

	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	overall rate
Mean	**3.54**	**28.76**	**13.12**	**6.164**	**20**	**5.135**	**4.49**	**14.8**	**6.565**	**11.06**	**11.365**
Median	**4.65**	**30.46**	**16.45**	**6.527**	**13.5**	**2.263**	**1.83**	**11.4**	**5.961**	**11.47**	
Maximum	**6.83**	**63.56**	**26.14**	**13.84**	**84.9**	**15.48**	**25.7**	**25**	**12.41**	**26.94**	
Minimum	**0.01**	**0.045**	**0.015**	**0.001**	**8.77**	**0.012**	**0**	**8.21**	**3.528**	**0.003**	
Std. Dev.	**2.88**	**25.38**	**10.79**	**5.399**	**21.7**	**6.073**	**7.43**	**6.03**	**2.606**	**10.86**	**9.913**
Skewness	**-0.41**	**0.01-**	**-0.347**	**-0.07**	**2.77**	**0.757**	**2.35**	**0.32**	**1.244**	**0.271**	
Kurtosis	**1.37**	**1.508**	**1.383**	**1.435**	**2.85**	**1.938**	**7.4**	**1.52**	**2.575**	**1.55**	

Jarque-Bera	**1.53**	**1.02**	**1.419**	**1.13**	**2.7**	**1.567**	**2.9**	**1.2**	**2.99**	**1.099**	
Probability	**0.47**	**0.6**	**0.492**	**0.568**	**0.173**	**0.457**	**0.295**	**0.55**	**0.224**	**0.577**	

Source: The researcher's reliance on the results of (Eviews)

Table (3-3) showed the following mean values:

Table (3-3).The arithmetic mean and standard deviation of the study sample banks according to their time series

Year	Mean	Std. Dev.
2009	**10.1627**	**8.6155**
2010	**11.2149**	**10.0668**
2011	**14.4755**	**9.3118**
2012	**16.5277**	**12.6754**
2013	**20.0748**	**16.0028**
2014	**15.7125**	**17.5980**
2015	**15.8877**	**14.4025**
2016	**11.1052**	**26.6941**
2017	**4.418**	**8.4301**
2018	**2.585**	**4.2820**
2019	**2.8491**	**4.8215**
Average	**11.365**	**9.913**

Source: The researcher's reliance on the results of (Eviews)

Figure (1-1) That shows the chart for the same indicator and the time series.

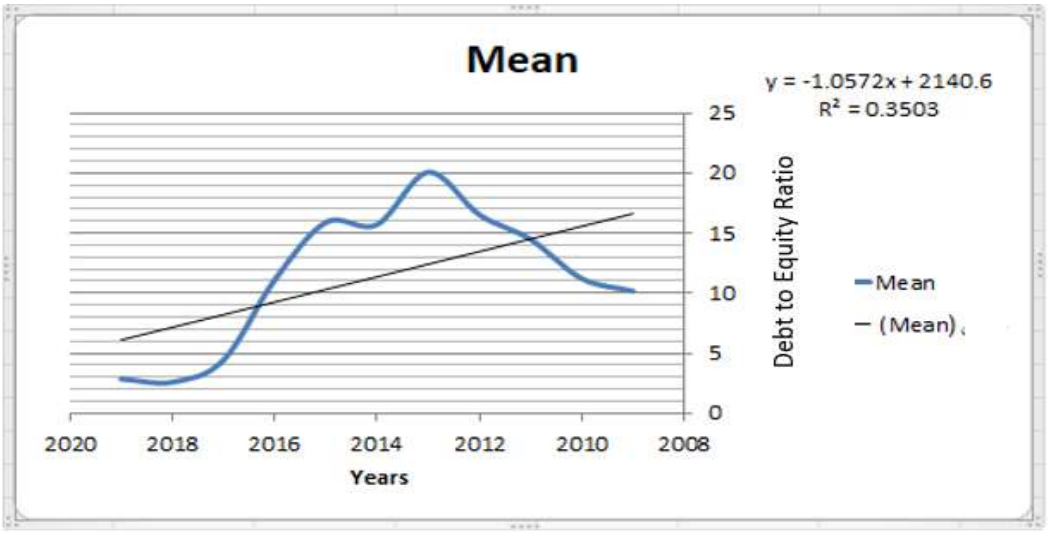


Figure (1).Time series debt-to-equity ratio diagram

Source: Excel output

- Analyze the results of the Net Cash Flow Ratio (NCF) indicator

The following table (3-4) showed that the general rate obtained by the sector for the aforementioned index was (0.251), and it was found that the net cash flow rate of (B10) bank reached (0.3871) with a standard deviation of (0.4477) as it exceeded the rate achieved at the level of banks The surveyed, followed by a bank ((B7) with a rate of (0.36) with a standard deviation of (0.26).

Table (3-4) The ratio of net cash flow to the surveyed banks

	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	overal l rate
Mean	**0.2**	**0.208273**	**0.161**	**0.287**	**0.16**	**0.352**	**0.36**	**0.11**	**0.287**	**0.3871**	**0.251**
Median	**0.16**	**0.131**	**0.055**	**0.139**	**0.13**	**0.321**	**0.28**	**0.11**	**0.25**	**0.043**	
Maximum	**0.5**	**0.497**	**0.593**	**0.743**	**0.57**	**0.718**	**0.73**	**0.27**	**0.652**	**0.953**	
Minimum	**0.03**	**0.012**	**0.005**	**0.008**	**0.02**	**0.017**	**0.05**	**0**	**0.083**	**0.001**	
Std. Dev.	**0.13**	**0.169105**	**0.203**	**0.307**	**0.14**	**0.255**	**0.26**	**0.07**	**0.174**	**0.4477**	**0.216**
Skewness	**1.01**	**0.674042**	**1.346**	**0.528**	**2.44**	**0.093**	**0.34**	**0.58**	**0.754**	**0.4323**	
Kurtosis	**2.58**	**2.082258**	**2.23**	**1.528**	**2.96**	**1.532**	**1.46**	**2.95**	**2.64**	**1.2908**	
Jarque-Bera	**2.03**	**1.218974**	**2.344**	**1.505**	**2.2**	**1.004**	**1.3**	**0.62**	**1.101**	**1.6815**	
Probability	**0.36**	**0.54363**	**0.188**	**0.471**	**0.293**	**0.605**	**0.52**	**0.73**	**0.577**	**0.4313**	

Source: The researcher's reliance on the results of (Eviews)

Table (3-5) showed the following arithmetic mean values:

Table (3-5) The arithmetic mean and standard deviation of the study sample banks according to their time series

Year	Mean	Std. Dev.
2009	**0.1906**	**0.1654**
2010	**0.103**	**0.0970**
2011	**0.1175**	**0.1045**
2012	**0.2064**	**0.1383**
2013	**0.144**	**0.0699**
2014	**0.1457**	**0.1925**
2015	**0.0854**	**0.0640**
2016	**0.454**	**0.2650**
2017	**0.4292**	**0.3141**
2018	**0.5146**	**0.2802**
2019	**0.3733**	**0.3074**

Average	**0.251**	**0.216**

Source: The researcher's reliance on the results of (Eviews)

Figure (2-3) the following which shows the chart for the same indicator and the time series.

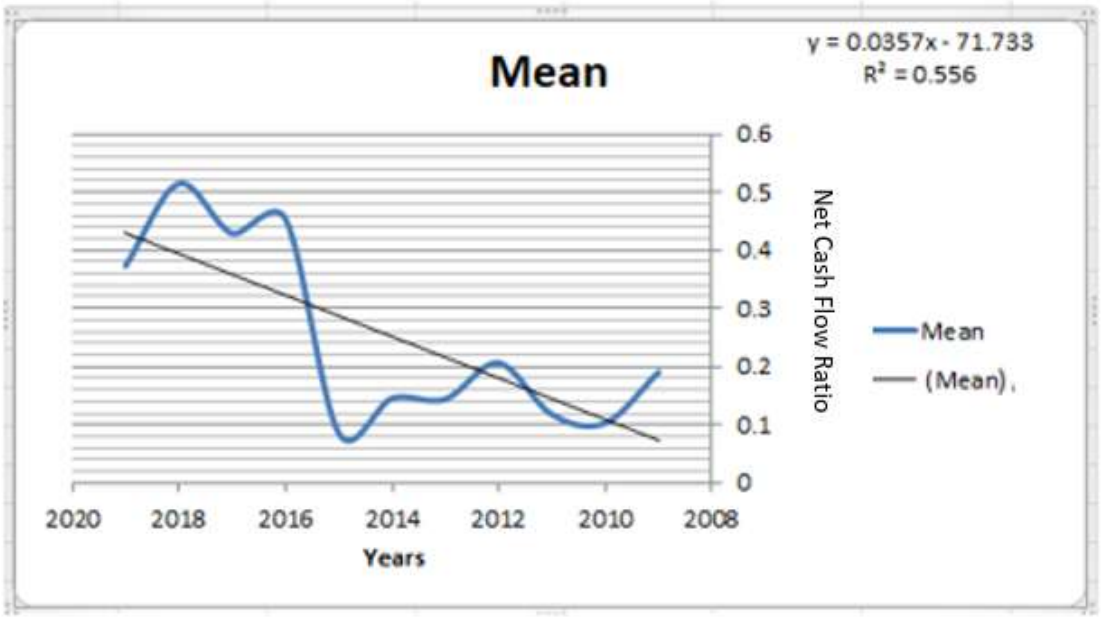


Figure (2-3). Chart of net cash flow ratio for the time series

• Analysis of the results of the Public Debt Capacity Ratio (BDC) indicator

The following table (3-6) showed that the general rate obtained by the sector for the aforementioned index reached (0.073), and when comparing the ratios obtained by the researched banks, it was found that the ratio of the public debt capacity of (B4) bank reached (0.133) with a standard deviation of (0.22), as it exceeded the achieved rate at the level of the surveyed banks, followed by (B3) bank at a rate of (0.113) with a standard deviation of (0.052) and as shown in Table (3-6):

Table (3-6) The percentage of public debt capacity of the surveyed banks

	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	overal l rate
Mean	**0.01**	**0.069364**	**0.115**	**0.133**	**0.07**	**0.072**	**0.06**	**0.09**	**0.04**	**0.068**	**0.073**
Median	**0.01**	**0.033**	**0.113**	**0.036**	**0.09**	**0.025**	**0.06**	**0.06**	**0.017**	**0.037**	
Maximum	**0.04**	**0.443**	**0.201**	**0.585**	**0.11**	**0.284**	**0.08**	**0.21**	**0.133**	**0.418**	
Minimum	**0**	**0.018**	**0.001**	**0.027**	**0.02**	**0.016**	**0.02**	**0.02**	**0.01**	**0.004**	

Std. Dev.	**0.01**	**0.124059**	**0.052**	**0.22**	**0.04**	**0.102**	**0.02**	**0.06**	**0.046**	**0.117298**	**0.079**
Skewness	**2.31**	**2.834347**	**-0.469**	**1.648**	**-0.6**	**1.631**	**-0.82**	**0.95**	**1.491**	**2.737595**	
Kurtosis	**2.14**	**2.0611**	**2.519**	**2.722**	**1.72**	**2.707**	**2.57**	**2.31**	**2.45**	**2.743505**	
Jarque-Bera	**2.6**	**2.56588**	**0.527**	**2.221**	**1.41**	**2.108**	**1.38**	**1.89**	**2.169**	**2.85921**	
Probability	**0.076**	**0.074**	**0.768**	**0.073**	**0.5**	**0.078**	**0.5**	**0.39**	**0.124**	**0.055**	

Source: The researcher's reliance on the results of (Eviews)

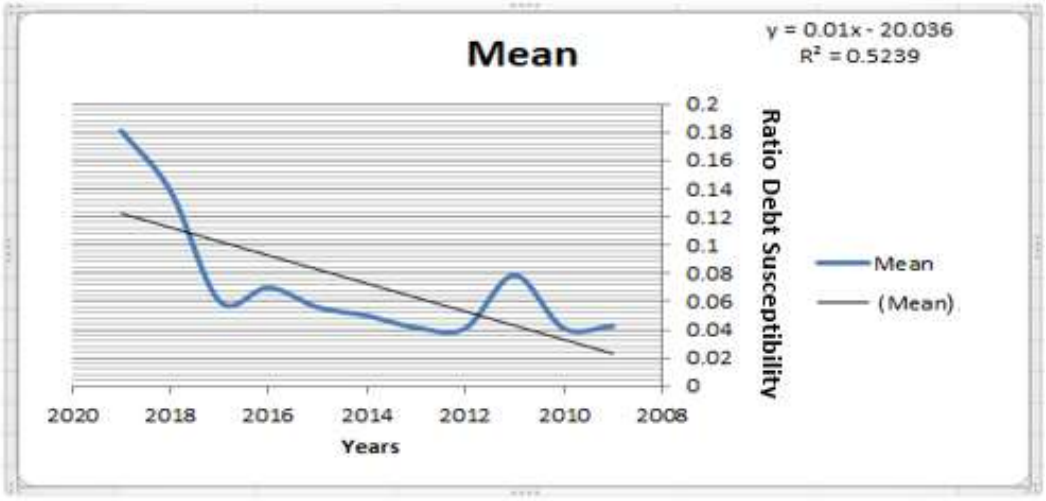
Table (3-7) A show the following mean values:

Table (3-7) The arithmetic mean and standard deviation of the study sample banks according to their time series

Year	Mean	Std. Dev.
2009	0.0426	0.026
2010	0.0411	0.030
2011	0.0787	0.122
2012	0.0411	0.027
2013	0.0416	0.032
2014	0.0501	0.041
2015	0.0559	0.042
2016	0.07	0.075
2017	0.0602	0.064
2018	0.1384	0.177
2019	0.1811	0.193
Average	**0.073**	**0.079**

Source: The researcher's reliance on the results of (Eviews)

Figure (3-3) that shows the graph of the same indicator and the time series



Graphic of public debt capacity ratio for the same time series

B. Financial analysis of the cash liquidity variable according to its indicators

Analyze the results of the Cash Balance Index (CBR)

The following table (3-8) showed that the general rate obtained by the sector for the aforementioned index (1,145), and when comparing the ratios obtained by the surveyed banks, it was found that the cash balance ratio of the bank (B7) reached (1.972) with a standard deviation of (0.754), where it exceeded The achieved rate at the level of the studied banks, as is evident in Table (3-8).

Table (3-8) The ratio of the cash balance of the researched banks

	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	overall rate
Mean	**1.049**	**1.293**	**1.807**	**0.724**	**0.412**	**1.109**	**1.972**	**0.650**	**1.089**	**1.346**	**1.145**
Median	**1.076**	**0.722**	**0.786**	**0.822**	**0.384**	**1.164**	**1.820**	**0.614**	**1.184**	**1.447**	
Maximum	**2.315**	**6.865**	**11.710**	**1.502**	**1.269**	**2.070**	**3.307**	**1.113**	**1.557**	**2.426**	
Minimum	**0.001**	**0.654**	**0.011**	**0.001**	**0.058**	**0.064**	**0.760**	**0.309**	**0.524**	**0.097**	
Std. Dev.	**0.698**	**1.850**	**3.300**	**0.593**	**0.350**	**0.586**	**0.754**	**0.252**	**0.355**	**0.618**	**0.936**
Skewness	**0.328**	**2.834**	**2.795**	**-0.103**	**1.341**	**-0.483**	**0.148**	**0.273**	**-0.065**	**-0.230**	
Kurtosis	**2.325**	**2.059**	**2.934**	**1.511**	**2.298**	**2.806**	**2.154**	**2.058**	**1.668**	**2.050**	
Jarque-Bera	**0.406**	**2.553**	**2.465**	**1.035**	**2.996**	**0.445**	**0.368**	**0.544**	**0.821**	**0.098**	
Probability	**0.816**	**0.072**	**0.081**	**0.596**	**0.131**	**0.800**	**0.832**	**0.762**	**0.663**	**0.952**	

Source: The researcher's reliance on the results of (Eviews)

Table (3-9) showed the following mean values for those values:

Table (3-9) The arithmetic mean and standard deviation of the study sample banks according to their time series

Year	Mean	Std. Dev.
2009	**0.842**	**0.3745**
2010	**0.823**	**0.3191**
2011	**0.932**	**0.3916**
2012	**0.972**	**0.4906**

2013	**1.102**	**0.5134**
2014	**0.938**	**0.7515**
2015	**1.014**	**0.7414**
2016	**1.309**	**0.8260**
2017	**1.122**	**0.6920**
2018	**0.9**	**0.8050**
2019	**2.643**	**3.8046**
Average	**1.145**	**0.936**

Source: The researcher's reliance on the results of (Eviews)

Table (3-9). The chart for the same indicator and the time series.

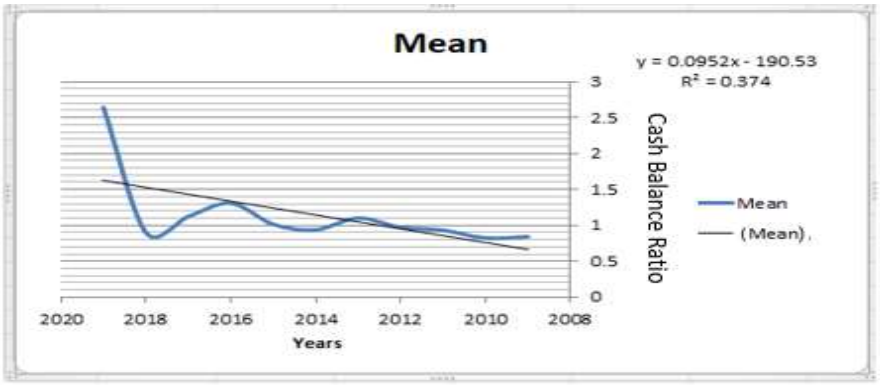


Figure (3-4)

Cash balance ratio chart for the same time series

- Analysis of the results of the Legal Liquidity Ratio (LLR) indicator

The following table (3-10) showed that the general rate obtained by the sector for the aforementioned index is (0.288). When comparing the ratios obtained by the researched banks, it was found that the legal liquidity ratio of the bank (B5) reached (0.78), with a standard deviation of (0.38), as it exceeded the achieved rate at the level of the studied banks, and as shown in Table (3-10).

Table (3-10) The statutory liquidity ratio for the surveyed banks

	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	overall rate
Mean	**0.36**	**0.211727**	**0.06**	**0.171**	**0.78**	**0.073**	**0.13**	**0.08**	**0.163**	**0.356818**	**0.238**
Median	**0.28**	**0.028**	**0.061**	**0.111**	**1**	**0.046**	**0.12**	**0.07**	**0.088**	**0.232**	
Maximum	**1.09**	**2.062**	**0.159**	**0.96**	**1**	**0.353**	**0.32**	**0.17**	**0.853**	**1.705**	
Minimum	**0.11**	**0.018**	**0**	**0**	**0.18**	**0**	**0.07**	**0.04**	**0.023**	**0.099**	
Std. Dev.	**0.28**	**0.613704**	**0.044**	**0.266**	**0.38**	**0.095**	**0.07**	**0.04**	**0.234**	**0.458261**	**0.248**
Skewness	**1.68**	**2.845408**	**0.714**	**2.67**	**-1.02**	**2.595**	**2.1**	**0.88**	**2.642**	**2.605675**	
Kurtosis	**2.51**	**2.097831**	**2.454**	**2.547**	**2.04**	**2.293**	**2.66**	**2.98**	**2.368**	**2.273667**	
Jarque-	**2.07**	**2.88575**	**1.029**	**2.18**	**2.33**	**2.19**	**2.2**	**1.43**	**2.08**	**2.19446**	

Bera											
Probability	**0.134**	**0.081**	**0.598**	**0.092**	**0.31**	**0.066**	**0.062**	**0.49**	**0.067**	**0.193**	

Source: The researcher's reliance on the results of (Eviews)

Table (3-11) showed the following mean values:

Table (3-11) The arithmetic mean and standard deviation of the study sample banks according to their time series

Year	Mean	Std. Dev.
2009	0.2042	0.297
2010	0.2023	0.304
2011	0.2131	0.297
2012	0.4826	0.560
2013	0.2424	0.297
2014	0.2793	0.350
2015	0.2092	0.290
2016	0.2993	0.407
2017	0.1054	0.120
2018	0.0875	0.077
2019	0.2959	0.625
Average	**0.238**	**0.248**

Source: The researcher's reliance on the results of (Eviews)

Figure (3-5) that shows the chart for the same indicator and the time series.

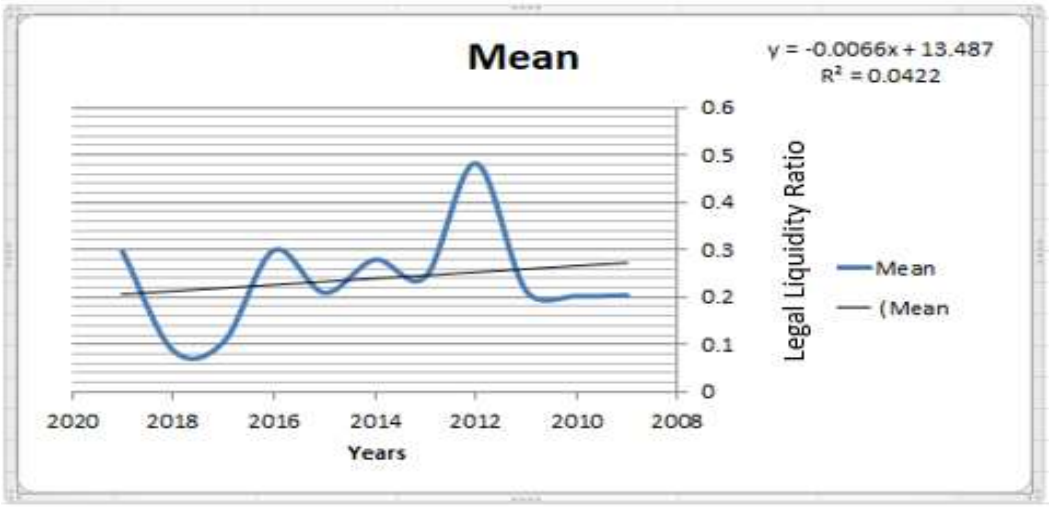


Figure (3-5). Graph of the legal liquidity ratio for the time series

• Analyzing the results of the Employment (Investment) Ratio (IR) indicator

The following table (3-12) showed that the general rate obtained by the sector for the aforementioned index was (0.475). When comparing the percentages obtained by the researched

banks, it was found that the employment (investment) ratio of the bank (B5) reached (1885) with a standard deviation of (1.256).

Table (3-12) The percentage of employment (investment) of the researched banks

	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	overal l rate
Mean	**0.338**	**0.336**	**0.286**	**0.123**	**1.885**	**0.339**	**0.490**	**0.283**	**0.642**	**0.030**	**0.475**
Median	**0.077**	**0.204**	**0.320**	**0.001**	**1.539**	**0.407**	**0.001**	**0.186**	**0.425**	**0.001**	
Maximum	**1.605**	**1.866**	**0.525**	**0.620**	**4.937**	**0.689**	**1.524**	**0.685**	**2.311**	**0.297**	
Minimum	**0.004**	**0.117**	**0.000**	**0.000**	**0.472**	**0.000**	**0.001**	**0.000**	**0.001**	**0.000**	
Std. Dev.	**0.503**	**0.510**	**0.170**	**0.234**	**1.256**	**0.279**	**0.586**	**0.280**	**0.757**	**0.089**	**0.466**
Skewness	**1.647**	**2.800**	**-0.582**	**1.515**	**1.381**	**-0.071**	**0.452**	**0.294**	**1.312**	**2.804**	
Kurtosis	**2.648**	**2.946**	**2.260**	**2.497**	**2.236**	**1.492**	**1.608**	**1.434**	**2.406**	**2.950**	
Jarque-Bera	**2.216**	**2.579**	**0.873**	**2.320**	**2.196**	**1.051**	**1.264**	**1.283**	**2.233**	**2.646**	
Probabilit y	**0.145**	**0.121**	**0.646**	**0.115**	**0.123**	**0.591**	**0.532**	**0.527**	**0.199**	**0.163**	

Source: The researcher's reliance on the results of (Eviews)

Table (3-12) showed the following mean values for those values:

Table (3-13) The arithmetic mean and standard deviation of the study sample banks according to their time series

Year	Mean	Std. Dev.
2009	**0.3068**	**0.234**
2010	**0.3324**	**0.310**
2011	**0.3634**	**0.319**
2012	**0.3946**	**0.504**
2013	**0.3574**	**0.473**
2014	**0.6357**	**0.908**
2015	**0.542**	**0.631**
2016	**0.5708**	**0.794**
2017	**0.566**	**1.007**
2018	**0.3102**	**0.502**
2019	**0.8485**	**1.566**
Average	**0.475**	**0.466**

Source: The researcher's reliance on the results of (Eviews)

Figure (3-6), which shows the graph of the same indicator and time series:

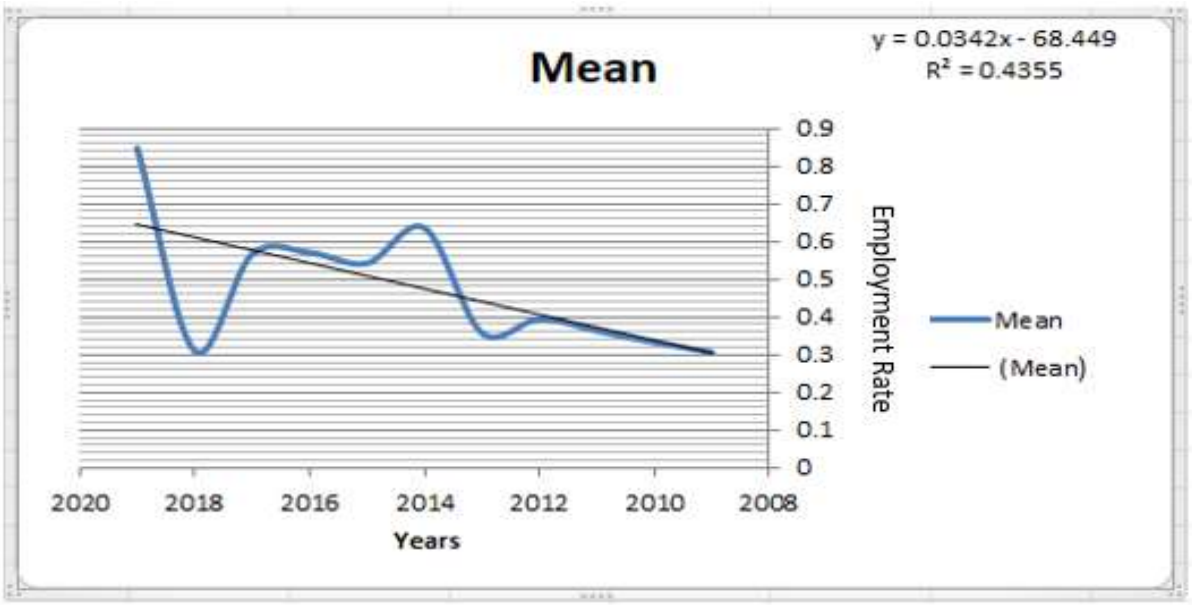


Figure (3-6) the graph of the employment (investment) ratio for the same time series

Analyzing the correlations of the study variables and testing the hypotheses related to it

Based on the aforementioned study data and using the Coefficient of Correlation, the data were analyzed and processed according to Table (3-14) to show the correlations.

The main hypothesis test:

The study assumed with its first main hypothesis that (there is a correlation relationship between financial flexibility represented by its indicators: financial leverage (LF), net cash flow ratio (NCF), public debt capacity (PDC), and cash liquidity represented by its indicators: the cash balance ratio (CBR), Legal Liquidity Ratio (LLR), Employment Ratio (IR)), and the associated hypotheses, and Table (3-14) that displays a matrix of correlation relationships between study indicators after statistically treating them and showing the results of hypothesis testing through the statistical program (Eviews):

Table (3-14) Matrix of correlations between the study indicators

IR	LLR	CBR	PDC	NCF	FL		
.441**	.399**	.385**	.327**	.607**	1	Pearson Correlation	FL
.000	.000	.000	.000	.000		Sig. (2-tailed)	
200	200	200	200	200	200	N	
.472**	.372**	.237**	.523**	1		Pearson Correlation	NCF
.000	.000	.000	.000			Sig. (2-tailed)	

200	**200**	**200**	**200**	**200**		**N**	
.383**	**.337****	**.320****	**1**			**Pearson Correlation**	**PDC**
.000	**.000**	**.000**				**Sig. (2-tailed)**	
200	**200**	**200**				**N**	
.247**	**.591****	**1**				**Pearson Correlation**	**CBR**
.000	**.000**					**Sig. (2-tailed)**	
200	**200**					**N**	
.258**	**1**					**Pearson Correlation**	**LLR**
.000						**Sig. (2-tailed)**	
200						**N**	
1						**Pearson Correlation**	**IR**
						Sig. (2-tailed)	
200						**N**	
****. Correlation is significant at the 0.01 level (2-tailed).**							
***. Correlation is significant at the 0.05 level (2-tailed).**							

Source: The researcher's reliance on the results of (Eviews)

Conclusions and recommendations:

The analytical results showed the correlations between financial flexibility represented by its indicators: financial leverage (FL), net cash flow ratio (NCF) and public debt capacity (PDC), and cash liquidity represented by its indicators: cash balance ratio (CBR), legal liquidity ratio (LLR) and employment ratio (IR) that there is a significant and positive correlation between the indicators of these two variables, which have been referred to within the sub-hypotheses related to them, and this does not contradict the acceptance of the main hypothesis and what the indicators have confirmed for both variables.The banking sector represented by Iraqi banks should use financial flexibility as a tool in planning their activities, whether at the horizontal level (the banks among themselves within the sector) or the level of their dealings with customers because of their role in forming cash liquidity, which has long affected them through their indicators that have contributed In one way or another, to enhance this liquidity, as it is an important and vital part of relying on it in its investment activities, and to enhance its profitability and future growth, and as financial flexibility is represented by indicators that must be used in a way that leads to commitment to the following matters:

A. Banks in the Iraqi banking sector must realize the fact that the financial leverage has an effective link through one of their main measures represented by the ratio of debt to equity, being one of the important tools used in their balance sheet, and help in evaluating their financing structures at a certain time in terms of their dependence on sources Funding, whether external or internal, which makes it closely related to one of the liquidity indicators, which is the percentage of its cash balance that must be kept in balance.

B. banks must pay attention to their cash flows, which constitute one of the indicators of their financial resilience through their net cash flows, which as long as those cash flows constitute an important source and source for them in forming a ratio of their cash balance, through interest income and the sale of assets, which creates a close relationship with one of the liquidity indicators Cash.

C. The necessity of taking into consideration when banks embark on their public debt from others, they must maintain a minimum amount of debt and a specific and targeted level because it is an additional amount that enables them to explain their financial position after engaging in investment and financing operations, as it represents a vital link for their cash liquidity.

D. When using financial leverage, banks must take into consideration maintaining a statutory liquidity ratio ranging between (35% - 30), as a maximum, through maintaining primary and secondary reserves to fulfill their obligations in various circumstances.

E. In light of the ability banks have in forming their net cash flows from the various flexibilities that help to form their cash liquidity, they must work to find an effective balance between them due to the existing state of interdependence.

F. It is imperative that banks, when using public debt, work within the legal ratio of cash liquidity, whereby the greater the proportion of public debt leads to an increase in the legal ratio of liquidity, thus confirming the state of positive interdependence between them.When using leverage, G. The necessity for banks to employ their money obtained from deposits to meet the needs of their clients from advances and loans regularly. With a high employment rate, the bank will help fulfill its obligations towards new loan applicants and vice versa, reflecting the state of interconnectedness between them.

H. the banks that want to increase their cash flows must work on the thoughtful and organized planning of their employment rates (investment) in their various activities because of their interrelated role in increasing their cash liquidity.

REFERENCES:

Almagtome, A. H. (2021). Artificial Intelligence Applications in Accounting and Financial Reporting Systems: An International Perspective. In Handbook of Research on Applied AI for International Business and Marketing Applications (pp. 540-558): IGI Global.

Almagtome, A. H., Al-Yasiri, A. J., Ali, R. S., Kadhim, H. L., &Bekheet, H. N. (2020). Circular Economy Initiatives through Energy Accounting and Sustainable Energy Performance under Integrated Reporting Framework. International Journal of Mathematical, Engineering and Management Sciences, 5(6), 1032-1045.

Al-Wattar, Y. M. A., Almagtome, A. H., & AL-Shafeay, K. M. (2019). The role of integrating hotel sustainability reporting practices into an Accounting Information System to enhance Hotel Financial Performance: Evidence from Iraq. African Journal of Hospitality, Tourism and Leisure, 8(5), 1-16.

Amagtome, A. H., &Alnajjar, F. A. (2020). Integration of Financial Reporting System and Financial Sustainability of Nonprofit Organizations: Evidence from Iraq. International Journal of Business & Management Science, 10(1).

Amusawi, E., Almagtome, A., & Shaker, A. S. (2019). Impact of Lean Accounting Information on The Financial performance of the Healthcare Institutions: A Case study. Journal of Engineering and Applied Sciences, 14(2), 589-399.

Brown, S., & Powers, E. (2015). Do Firms Value Financial Flexibility. Work Peper, University of South Carolina.

Byoun, S. (2007).Financial flexibility, leverage, and firm size. Waco, TX. January, 3.

Campello, M., Giambona, E., Graham, J. R., & Harvey, C. R. (2009). Liquidity Management and Corporate Investment During a Financial Crisis," Working Paper.

Choudhry, T., &Mizerka, J. (Eds.). (2018). Contemporary Trends in Accounting, Finance and Financial Institutions: Proceedings from the International Conference on Accounting, Finance and Financial Institutions (ICAFFI), Poznan 2016. Springer

HAMEEDI, K. S., AL-FATLAWI, Q. A., ALI, M. N., & ALMAGTOME, A. H. (2021). Financial Performance Reporting, IFRS Implementation, and Accounting Information: Evidence from Iraqi Banking Sector. The Journal of Asian Finance, Economics and Business, 8(3), 1083-1094.

Heath, L. C. (1978). Financial reporting and the evaluation of solvency; Accounting research monograph 3.

Hole, Y., &Snehal, P. (2019).Challenges and solutions to the development of the tourism and hospitality industry in India.African Journal of Hospitality, Tourism and Leisure. 8 (3), 1-11

Kbelah, S. I., Amusawi, E. G., &Almagtome, A. H. (2019).Using Resource Consumption Accounting for Improving the Competitive Advantage in Textile Industry.Journal of Engineering and Applied Sciences, 14(2), 575-382.

Kuti, M. (2011). Cash flow at risk financial flexibility and financing constraint. Public Finance Quarterly, 56(4), 505.

Marozva, G. (2015). Liquidity and bank performance. International Business & Economics Research Journal (IBER), 14(3), 453-562.

Marozva, G. (2015). Liquidity and bank performance. International Business & Economics Research Journal (IBER), 14(3), 453-562.

Niţescu, D. C., Dună, F. A., &Ciurel, A. D. (2020). Banking sector and bank liquidity-key actors within financial crises?.Theoretical & Applied Economics, 27(2.(

Saunders, A., & Cornett, M. M. (2012).Financial markets and institutions. The McGraw-Hill/Irwin

Yogesh Hole et al 2019 J. Phys.: Conf. Ser. 1362 012121

Zhang, J., Zhao, Z., &Jian, W. (2020). Do cash flow imbalances facilitate leverage adjustments of Chinese listed firms? Evidence from a dynamic panel threshold model. Economic Modelling, 89, 201-214