

## The Mediating Effect of Strategic Flexibility between Strategic Agility and Liquidity Risk in Iraqi Commercial Banks

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### Abstract

This study investigates the effect of strategic flexibility as a mediator in the relationship between strategic agility and liquidity risk. Understanding these dynamics is important for financial institutions, particularly in the context of Iraqi commercial banks, where liquidity management is important for the stability of the operations that banks provide. This study relied on the quantitative design method. The primary data were relied upon to measure strategic flexibility and strategic agility through a questionnaire distributed in paper form, the number distributed was 400 questionnaires to employees working at various administrative levels. While liquidity risks were measured by collecting secondary data for the period from 2005 to 2023. The results concluded that strategic flexibility has a negative impact on liquidity risks. Also, strategic sensitivity and resource fluidity have a negative impact on liquidity risks, while collective commitment had no impact on liquidity risks in Iraqi commercial banks. As for the overall impact on liquidity risks, strategic agility has a negative and total impact on liquidity risks. The difference lies in the fact that the overall impact of resource fluidity comes from the direct and indirect impact, while the effect of strategic sensitivity comes from the direct impact only. Also, the collective commitment comes from the indirect impact only. These results demonstrate the importance of strategic agility and strategic flexibility in reducing liquidity risks. This study focused on Iraqi commercial banks only, while future studies can focus on other sectors and different markets. The practical implications indicate that banks need to be more rational when choosing a strategy that is compatible with market changes to reduce liquidity risks. In addition, Iraqi commercial banks should adhere to applying the dimensions of strategic agility to achieve the desired goals. The originality of this study lies in providing insight into the role of strategic flexibility in influencing the relationship between strategic agility and liquidity risks. This study

provides valuable insights for investors, shareholders and managers regarding the importance of strategic flexibility in the context of liquidity risk management.

**Keywords:** Strategic Flexibility, Strategic Agility, Strategic Sensitivity, Collective Commitment, Resource Fluidity, Liquidity Risk.

### **Introduction**

Commercial banks play an important role in economic development in many countries of the world, as the services provided by these banks, such as credit facilities, help increase productive investments for individuals, institutions and investors. Despite the presence of some challenges facing banks in rapidly volatile countries such as Iraq, they are still ongoing but not at the level that raises the economic level to the desired goals. Therefore, the Central Bank of Iraq began to present many proposals and major structural reforms in these banks, but these risks that threaten the safety of banks have not been resolved. Liquidity risks are considered a confusing phenomenon in global and local banks, so many researchers in different economies have focused on factors that can limit financial risks such as liquidity, credit risks, interest rate risks, and others. Among these studies is the study (Sathyamoorthi et al., 2020; Hamdi and Hassen, 2022; Wang Yang, 2023; Naifar, 2023; Martin-Oliver et al., 2020; Ruan and Jiang, 2024; Lassoued, 2017; Jalilian et al., 2020; Shah et al., 2023; Akash et al., 2024). Based on the results of these studies, there are many factors that affect financial risks, and an accurate understanding of reducing liquidity risks has positive consequences on the work of banks. Moreover, the strategic management adopted by banks in markets, whether stable or volatile, contributes to reducing liquidity risks (John, et al., 2022).

Agility with its three dimensions (strategic sensitivity, resource fluidity, and collective commitment) is considered the cornerstone of contemporary strategic management. The importance of strategic agility has emerged in times when organizations have experienced rapid and dynamic changes due to its important role in keeping pace with these conditions (Nkoda, 2017; Khoshnoud and Nematizadeh, 2017). A study by (Kosonen Doz, 2008, 2010) showed that banks that deal more flexibly are more able to adapt to sudden changes by working with a strategic sensitivity approach. The concept of strategic agility sensitivity includes many aspects related to anticipating market changes, responding proactively, and conforming to the necessary requirements of the market (Termeer, 2022; Angraini and Sudhartion, 2019). In addition, it simplifies operations, reduces costs, and eliminates inefficiency (Dehaghi and Navabakhsh, 2014). Strategic agility also enables banks in general to maintain strategic paths that adapt smoothly to environmental changes, thus increasing opportunities to leverage strengths and mitigate risks (Kurniawan et al., 2020).

In addition, strategic agility has the ability to provide rapid response and adapt to sudden changes to maintain institutions and their continuity of work in the markets. It also contributes to establishing strong assurances that build proactive measures for these institutions, thus enabling organizations to anticipate changes and develop proactive solutions to address them before they occur (Khochand and Nemat Zadeh, 2017). On this basis, relying on the use of strategic agility in an unstable environment contributes to proactively identifying risks, and through flexibility in work and collective commitment, institutions can reduce financial risks.

This research paper is organized as follows: Reviewing the important literature related to the relationship between strategic agility and liquidity risks by mediating strategic flexibility in this relationship, and the methodology of this study is followed by collecting data and verifying its validity, then discussing the results of the study and the conclusions achieved by this study.

### **Risk Management Theory**

This theory was developed by David (1997), and its focus was on the importance of risk management. The risk management model consists of assessing the risks that organizations suffer from, then working to reduce risks and exploit available opportunities. Risk management also contributes to addressing the internal and external problems of the organization, which improves the organizational scope of the institution. The most complex problem for financial institutions is the rapid dynamic changes that make risk management a difficult defect for risk management, as these rapidly and continuously increasing fluctuations increase financial risks, so management must work in a manner consistent with the changes to assess the borrowers' ability to repay debts, and there must be a prior reading of events to make adjustments consistent with the changes and achieve the desired goals. Agile management plays an important role in unstable times, so financial institutions are looking for a mechanism that enables them to adapt to sudden changes to reduce financial risks.

### **Literature Review**

Liquidity risks are considered complex risks that are affected by many factors and determinants. Many studies have focused on the risks affected by the changes that banks are exposed to, especially in unstable conditions and dynamic fluctuations. These studies include (Ali & Dhiman, 2019; Abbas, et al. 2019; Kotaskova et al 2020; Al-Eitan & Bani-Khalid, 2019; Dai, et al., 2023; Ismail, 2023 and Ahmed; Ghabri, et al 2021; Weerasinghe and Ekanayake, 2023; Sudarsono, et al., 2024; Canh et al., 2021). These studies focused on finding solutions that limit financial risks, but due to the complexities that are renewed with the changes, there was no clear and explicit answer to end this problem. Other studies have shown that banks that deal more liquidly and hold more money than required have more risky businesses (Nguyen & Boateng, 2015). Many banks seek to improve their financial performance to maintain the continuity of the institution during sudden fluctuations and reduce its risks, such as the study of (Mushafiq et al., 2023; Hamdi & Hassen, 2022; Ko et al., 2019). The results of these studies concluded that there is a clear relationship of influence between the variables despite the difference in market stability.

As for strategic flexibility, it has a prominent importance at all times and at various economic levels, due to its ability to support and assist institutions when they are exposed to administrative problems resulting from sudden fluctuations in the markets. Therefore, many studies have focused on this topic, such as (Yang and Gan, 2021. Kafetzopoulos and Katou, 2024; Lirios et al., 2024; Shahzad and Jasińska, 2024; Bashir, 2023; Beraha et al., 2018; Yousuf; 2021). These studies have reached the prominent importance of strategic flexibility in various fields, as well as the important role of dealing with shocks and finding appropriate outlets to get out of crises. While the study (Shimizu and Hitt, 2004) reached the important role of strategic flexibility in dealing with fluctuations in unstable markets and the possibility of dealing with problems in the most rapid and flexible manner, the study (Arslan-Ayaydin and Ozkan, 2014) confirmed that institutions that deal in a flexible manner are more secure than

more rigid institutions when exposed to shocks. Financial flexibility varies from one economy to another according to the economic policy in that country.

On the other hand, strategic agility plays an important role in improving management and strategic flexibility, so it has gained special attention in the field of strategic management. Agility has also enabled many companies to overcome risks during sudden market fluctuations and adapt to changes (Nkoda, 2017). Agile organizations have the ability to make bold decisions to overcome problems smoothly and flexibly (Doz and Kosonen, 2010). Therefore, interest in strategic agility began with its three dimensions: strategic sensitivity, resource fluidity and collective commitment, and linking it to many variables such as (financial performance, competitive advantage, quality, organizational performance, etc.) (Orojloo, et al., 2016; Omar, 2021; Owusu-Tucker, 2018; Sampath and Krishnamoorthy, 2017), and the results of these studies reached the important role of strategic agility in adapting to continuous changes in the market. In addition, many studies have focused on linking the relationship between strategic agility and performance, and the focus of researchers in these studies was on markets that are exposed to sudden and economically unstable shocks, such as the study (Nurjaman et al., 2021; Arokodare, 2021; Lyn and Muthuveloo, 2021 ;Suradi et al., 2020 ). The studies reached the important role of strategic agility in dealing with changes and adapting to them in a manner consistent with the objectives of institutions, and the researchers stressed its use in such markets. Based on what was discussed, strategic agility plays an important role in dealing with financial risks, but such an important relationship between the dimensions of strategic agility represented by (strategic sensitivity, resource liquidity, collective commitment) with financial risks was not addressed, so the current study is strongly concerned with linking the relationship between these variables to reduce financial risks in Iraqi commercial banks, and the current study is considered a strong and effective contribution to many of the literatures that focused on the important variables in this study.

### **Hypothesis Development**

#### *The Effects of Strategic Agility on Strategic Flexibility*

Many studies have focused on the importance of strategic flexibility and its link to performance, such as the study (Nadkarni and Narayanan, 2007; Guo & Cao, 2014; Zahoor and Lew, 2023; Nadkarni; Chen et al., 2017; Hensellek et al., 2023). As for Al-Taie's study (2010), it focused on the relationship between strategic flexibility and leadership. The results of this study concluded that strategic flexibility is closely related to leadership. As for Al-Ghazali's study (2019), it was interested in the relationship between strategic flexibility variables and management, as the results of this study reached the mediating role of strategic flexibility in improving administrative work. The study of Shekarin et al (2020), focused on linking strategic flexibility with processes related to improving the damage resulting from sudden changes. Therefore, managers who work to find rapid response, regardless of the functions they work in, need to find the appropriate strategy, because investments that work flexibly contribute more to improving work and response. The study of Shalender and Yadav (2019), also found that strategic flexibility is related to good performance.

Moreover, Shimizu and Hit (2004), found that practicing strategic agility in unstable markets requires a balance in resource allocations, in order to put money into the most appropriate projects and make bold and correct decisions. The uncertainty that affects decisions also has an impact on the actions of decision-makers. Therefore, caution and strategic sensitivity are

important in making the right decisions to reflect resource commitments and dispose of them in a safer way, and through this, strategic sensitivity has an important role and a clear relationship with strategic flexibility (Shimizu and Hitt, 2004). While Kafetzopoulos et al. (2022), found that leadership that works more flexibly has a role in determining successful strategic flexibility. Based on what has been presented, this study can reach the hypothesized relationship between strategic agility and strategic flexibility. Therefore, the following hypotheses were formulated:

H1: There is a positive effect of strategic sensitivity on strategic flexibility.

H2: There is a positive effect of resources fluidity on strategic flexibility.

H3: There is a positive effect of collective commitment on strategic flexibility.

### *The Effects of Strategic Sensitivity on Liquidity Risk*

Strategic sensitivity is defined as the ability of an organization to understand externally influencing factors, and it needs an environment that works on the basis of accepting internal dialogues to achieve the goal of proactive work (Dawes and Kosonen, 2008). Many studies have indicated that strategic sensitivity is related to environmental vigilance and strategic response, as environmental vigilance is concerned with monitoring and understanding external changes to the organization, while strategic response is through taking measures that are consistent with the organization's goals based on the previous analysis. This shows that organizations that have the ability to respond quickly are able to face challenges and exploit opportunities (Teece, et al., 2016). In order to obtain important data for the organization, there must be good knowledge of the surrounding environment (Brueller et al. 2014). Strategic sensitivity is also a good and important means of managing sudden changes. Despite the difficulty of managing work in unstable times, it can be achieved through knowledge and strategic exchanges between relevant parties (Vecchiato, 2012).

In addition, dynamic capability controls work and reshapes it in a way that enables the organization to adapt, and it also plays an important role in learning to adapt to changes to increase the organization's ability to sense opportunities and stand against the risks that affect it proactively. Organizations that have good sensing capabilities are able to identify changes that occur suddenly before they occur (2007, Tice). The decisions that organizations make about future events are very difficult because they depend on expectations, so it is necessary to search for ways that enable the organization to develop its skills and increase its dynamic capabilities (Ince & Hahn 2020). Since strategic sensitivity contributes to knowing risks before they occur and identifying opportunities, therefore, preparing and dealing with risks proactively, it also contributes to transforming the strategy from a forward-looking to a sensitive strategy (Doz, 2020). The study of (Overby (2006), concluded that strategic sensitivity contributes to the transfer of knowledge and the exploitation of opportunities.

Regarding the studies that focused on the Iraqi market, the study of Abbas (2019), indicated that Iraqi banks that did not follow the method of strategic sensitivity and did not develop their cadres on this strategy will suffer from fluctuations and sudden changes. As for the study (Faleh et al. 2022; Radhi and Hassan 2022), it explained that proactive measures protect the institution from the risks it is exposed to during dynamic and rapid fluctuations. As for the study of Halil and Shalaka (2022), it concluded that there is a relationship between environmental sensing and strategic agility. Other studies showed that strategic sensitivity

has a positive relationship with crisis management, and based on what was discussed above, the following hypothesis can be put forward:

H4: There is a negative impact of strategic sensitivity on liquidity risk

#### **The Effects of Resource Fluidity on Liquidity Risk**

Resource fluidity is defined as the quality and speed with which organizations operate to avoid risks resulting from sudden changes (Sampath and Kri shnamoorthy, 2017). Resource fluidity contributes to increasing flexibility in transferring resources from specific investments to new investments to achieve set goals (Breevaart et al., 2014). Strategic flexibility plays an important role in increasing knowledge and skills in organizations to create a capacity that enables them to confront and adapt to changes (Junni et al., 2015). It also plays an important role in creating opportunities for success for businesses operating in unstable environments (Ogola, 2020).

While the study by Redwell et al (2021), concluded that resource liquidity must be at the right times in order to be flexible. The study by Birknshaw and Hamill (2008), explained that many business concepts developed in unstable market times. The problems that markets suffer from in various countries of the world have an impact on the allocation of resources according to need (Gilbert, 2005), so the study (Dawes and Kosonen (2008), was interested in that the allocation should be done in more flexible ways in order to be available when needed, and that these resources should not be in the hands of one person or administration.

In addition, the illiquid resource increases the costs of institutions due to the difficulty in providing complementary resources when needed (Wei et al., 2014). While the resources that are more liquid make it easier for the institution to work, which reduces the costs incurred (Matthesn et al., 2005). Therefore, some studies have focused on linking liquidity to performance, such as the study (Kitur & Kinyua, 2020), which concluded that there is a positive relationship between performance and Resource fluidity. As for the study (Amin et al, 2014), it concluded that there is a relationship between performance and financial risks, and this is an indication that there is a relationship between the Resource fluidity Financial risks. The study (Asadollahi et al., 2021) concluded that the availability of resources and their correct use reduces risks.

Regarding the Iraqi market, the study by Al-Yasiri (2022), concluded that there is an important relationship between resource liquidity and crisis management. Omar's study (2022), also concluded that financial risks are related to performance. As for the study presented by Jedi et al.'s (2022), it indicated that competitive advantage is related to strategic agility. In addition, Al-Taha (2021), concluded in his study that competitive intelligence among institutions is related to Resource fluidity. A study presented by Ali et al (2024), clarified the relationship between strategic agility and liquidity risks as an inverse relationship, i.e. the higher the agility, the lower the risks and vice versa. Based on what was discussed, Resource fluidity has an impact on financial risks, so the following hypothesis was formulated:

H5: There is a Negative Impact of Resource fluidity on Liquidity Risk.

#### **The Effects of Collective Commitment and liquidity risk**

To achieve the goals of institutions quickly and effectively, banks need to work collectively (Fabohonda, 2013). Teamwork refers to the capabilities of management in making

bold and quick decisions (Debellis et al., 2021). An institution that works in a team spirit has the ability to make the most correct decisions due to the presence of diverse ideas and experiences that contribute to providing more than one answer to a specific problem (Stamevsk & Stamevski, 2020). Based on this, institutions will have the ability to adapt to changes to reduce risks and exploit opportunities (Rose and Norwich, 2014).

Collective commitment can be considered one of the important points in implementing effective strategies due to its important role in influencing, dealing with changes and adaptation (Waldman et al., 2001). Rapid changes have the power and influence to make institutions unable to work slowly, so these institutions resort to making decisions quickly (Kamasak et al., 2017). The risks that institutions suffer from can be addressed by making critical decisions based on the exchange of opinions and information between leaders and lower administrative cadres (Lichtenstein et al. 2006).

Among the studies that focused on the Iraqi market is the study of Muhammad (2021). This study concluded that strategic flexibility is associated with an important relationship with crisis management. As for the study of Al-Marshadi and Al-Shammari (2022), it focused on the relationship between collective commitment and entrepreneurial vigilance. Also, the study of Radhi and Hassan (2022), concluded that there is a strong relationship between performance and collective commitment. Therefore, the current study can conclude that there is an inverse relationship between strategic agility and financial risks. Therefore, the following hypothesis was built:

H6: There is a negative impact of collective commitment on liquidity risk

#### *Strategic Flexibility Mediates the Relationship between Strategic Agility and Liquidity Risk*

Continuous changes increase the need to deal more with strategic flexibility. They also contribute to building organizational capabilities that increase the ability of institutions to deal with sudden changes (Chroust, 2015). Strategic flexibility also plays an important and fundamental role in managing financial risks in which strategic agility is involved (Yang et al., 2015). Some studies have confirmed that strategic flexibility mediates the relationship between competitive advantage and learning (Schoch, 2016). It also mediates the relationship between strategic choice and strategic control (Sorour et al., 2016). Strategic flexibility plays an important role in organizing the work of organizations by choosing and implementing decisions that address sudden changes (Radomska, 2015). As for the study of Yang and Gan (2021), it was interested in clarifying the mediating role of resource flexibility with goals and dynamic capabilities.

According to the theory of dynamic capabilities (Teece et al., 1997), organizations must be sensitive before being exposed to shocks and opportunities. Strategic flexibility can also be achieved by focusing on improving the flexibility of materials. Institutions must provide scarce alternatives to achieve the effectiveness of using these resources. Strategic flexibility also is considered one of the important basics in building and transferring ideas and integrating them into a new pattern (Yang et al., 2015). Accordingly, strategic agility can be a complement to the work of strategic flexibility to reduce financial risks.

In the context of Iraq, the study of Al-Ghazali et al (2019), showed that the dimensions of strategic flexibility are effectively related to the dimensions of strategic agility. They also

reached the important role of strategic flexibility in administrative reform through the mediating role. Strategic flexibility also plays an important role in mediating the relationship between strategic agility and entrepreneurial alertness (Al Morshedy, 2021). The results of this study concluded that there is an effect of strategic agility on strategic flexibility. Therefore, the hypothesis was formulated: strategic flexibility mediates the relationship between strategic agility and liquidity risk.

H7: Strategic flexibility mediates the relationship between strategic sensitivity and liquidity risk

H8: Strategic flexibility mediates the relationship between resource fluidity and liquidity risk

H9: Strategic flexibility mediates the relationship between collective commitment and liquidity risk

### *The Effects of Strategic Flexibility on Liquidity Risk*

Strategic flexibility is considered as the possibility of dynamic transformation of capabilities, which is the ability that can change with the degrees of change that occur in the market environment on the original strategy (Li et al., 2010; Nadkarni and Herrmann, 2010). In addition, strategic flexibility plays an important role in improving the good performance of rapid response and appropriate adaptation to changes that occur unexpectedly (Farnese et al., 2016). Therefore, flexible institutions are able to adapt to sudden changes, but institutions that are more solid in their dealings should move towards adopting strategic flexibility to adapt to the dangerous reality of dealings and sudden changes. Also, banks that are exposed to shocks and the rate of uncertainty and dynamic changes is unstable need the above-mentioned method, because the strength that lies in strategic flexibility stems from the ability to adapt to rapid changes in the environment (Cingöz Akdoğan, 2013).

Many other studies have also reached the role of strategic flexibility in improving bank performance, such as the study of (Muheisen et al., 2022; and Hussein, 2023). In addition to studies that focused on linking financial risks to performance, such as the study (Almustafa et al., 2023; Wani & Ahmad, 2015; Zhao et al., 2023; Muriithi, 2016; Jacobs et al., 2016;). The results of these studies showed that good performance reduces the financial risks to which financial institutions are exposed. Therefore, we can conclude that strategic flexibility has a positive relationship with performance, and it also plays an important role in reducing liquidity risks. This was confirmed by the study of Kamasak et al (2017), that strategic flexibility can reduce liquidity risks through agile solutions in volatile environments. Based on what was presented above, the following hypothesis can be formulated:

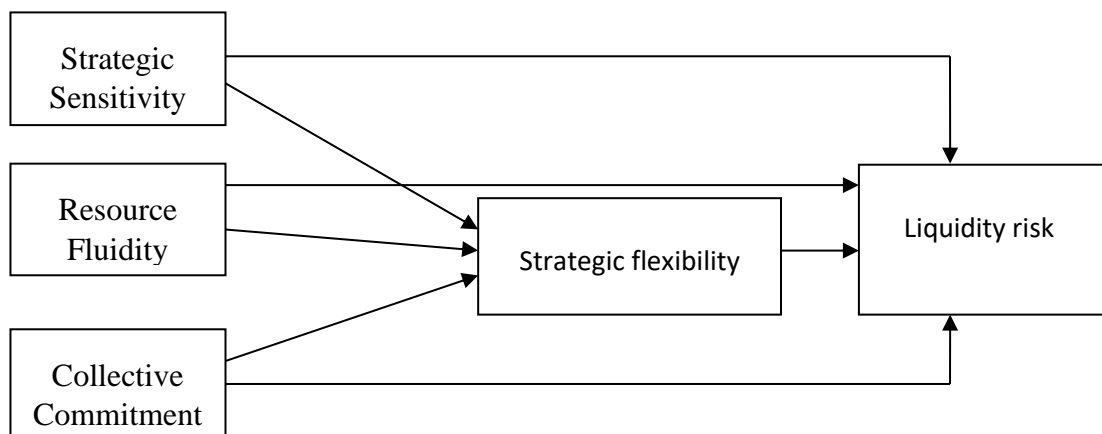
H10: There is a negative impact of Strategic Flexibility on liquidity risk.

### **Conceptual Framework**

The aim of this model is to find the effect of strategic flexibility by mediating the relationship between strategic agility with its three dimensions: strategic sensitivity, collective commitment, and resource liquidity on liquidity risk in Iraqi commercial banks. Through careful research into the relevant studies, the dimensions of strategic agility were adopted based on the following studies (Otsupius and Akintaro, 2020; Kosonen and Doz, 2008). Strategic flexibility was chosen as a mediator to find the hypothesized direct effect and indirect effect of strategic agility on liquidity risk, (Mohammed & Onyigi, 2018; and Maniagi, 2018). Figure 1 shows strategic agility with its three dimensions that are supposed to affect



liquidity risk with the presence of strategic flexibility as a mediator between this relationship in Iraqi commercial banks.



Figure(1) :Conceptual Framework.

Source: Prepared by Researchers depending on the Previous study

#### *Risk Management in IRAQI COMMERCIAL BANKS*

The banking sector plays an important and pivotal role in the economic growth of various countries of the world, as it is the main source of financing in various investment fields (Mahmoud et al., 2015). Therefore, countries are constantly looking for appropriate solutions to preserve their banking institutions. Therefore, Iraqi banks are trying hard to keep pace with developments and work periodically to update administrative systems to increase their capabilities in facing risks. Despite the efforts made by Iraqi banks and the Central Bank, they still need expertise that contributes to the better use of resources (Sam and Khadir, 2019).

Many studies have confirmed that Iraqi banks lack the use of strategies that suit the economic environment. Lopez (2003), concluded in his study that institutions that have the appropriate capabilities in choosing a strategy for risk management have the critical components in risk management. It is necessary for banks to have a mechanism for their business to continue and well, so many aspects must be taken into account to reach an approach that achieves risk management (Hussein and Al-Ajmi, 2010). The Central Bank of Iraq explained that Iraqi banks do not have the capabilities that qualify them to choose systematic strategies that contribute to managing risks effectively. Some studies have also shown that the Iraqi banking system suffers from sudden fluctuations, which causes instability, and these fluctuations cause a disruption in the banking system, which contributes to paralyzing the movement of Iraqi banks to keep pace with economic developments. A sound economy needs strong and agile banking systems to keep pace with developments. The changes that Iraqi banks are exposed to as a result of sudden fluctuations in the market cause many administrative problems, which cause many problems that hinder the work of risk management. Therefore, the study of Mahmoud et al (2015), aimed to find the reason that increases financial risks in Iraqi banks, as the volatile economic conditions constitute a major obstacle to achieving the set goals.

#### **Research Design and Data Samples**

The current study relied on the descriptive and analytical approach, and this approach includes two aspects: theoretical and field. In the theoretical aspect, the focus is on logical

description and the use of analysis. As for the theoretical aspect, the researchers focused on using primary data represented by the questionnaire and secondary data. The primary data was used to measure strategic agility in its three dimensions with strategic flexibility. The questionnaire was distributed to employees working in administrative and financial departments at various levels to include the largest possible number of participants. Approximately 300 valid questionnaires were obtained for analysis out of 400 that were distributed in paper form, while secondary data were used to measure liquidity risks, which included Iraqi commercial banks, amounting to 16 banks out of 25 banks, for the period from 2005 to 2023.

### **Study tool**

After in-depth research in the literature related to the study topic, the researchers reached the formulation of the questionnaire to include the following sections:

**Section One:** Includes variables Demographics, information related to this section was collected through closed questions, which included four factors: age, gender, qualifications, and experience.

**Section Two:** It included the dimensions of strategic agility: strategic sensitivity, collective commitment, and resource liquidity. The questionnaire consisted of 19 paragraphs. The current study also relied on choosing strategic flexibility as a mediator between strategic agility and liquidity risk, which consists of 6 paragraphs, and all of these paragraphs are based on a five-point Likert scale

While the study relied on the formula to measure liquidity risk: the ratio of liquid assets to total assets (Aspal and Nazneen, 2014; Mohamed and Onyiego, 2018).

### **Statistical tests**

The analyses that were adopted to show the impact between strategic agility through the questionnaire and liquidity risks through historical data were done through the Statistical Package for the Social Sciences (SPSS version 23) and the smart PLS package for inferential and analytical operations, and the statistical methods that are consistent with the objectives set for the research were analyzed, which included (reliability, (AVE), Cronbach's alpha, percentage, deviation test, frequency of distribution, standard deviation, arithmetic mean).

### **Validity and Reliability**

In order to verify the validity of the questionnaire, the researchers relied on the comprehensive approach specific to the content of the questionnaire list, as the draft of the questionnaire was presented to a group of arbitrators, and the arbitrators reviewed the criteria that made up the questionnaire to verify its content, and the review played an important role in formulating the questionnaire in its final form (Sekaran, 1992).

As for the validity of the questionnaire, Bagozzi and Yi (1988), summarized it in their study as the validity of the questionnaire as the ability of this tool to give similar results if the measurement process is repeated on the same person more than once under the same conditions. As for the validity of the tool, the researchers relied on the composite validity of the tool (CR) and the indicators related to Cronbach's alpha and the extracted variance mean. You can refer to Table No. 1 to view the results of the data analysis.

Table (1)

*The Reliability for the Study Variables*

Variables	Dimensions	Cronbach's alpha value	CR	AVE
Strategic Agility	Strategic Sensitivity	0.917	0.92	0.583
	Resource fluidity	0.923	0.91	0.670
	Collective Commitment	0.953	0.91	0.803
▪ Mediator variable:				
Strategic Flexibility		<b>0.948</b>	92	0.756

Source: Prepared by researchers based on field study.

In Table 1, the values of Cronbach's alpha are shown, which ranged between (0.917-0.953). These results are consistent with the results determined by (Hu & Bentler, 1999) for the categorical values, which should be equal to or greater than 0.60. The CR value ranged between (0.91-92), and these values were consistent with the values determined by (Fornell & Larcker, 1981), which should be greater than or equal to 0.70. When examining the values of (AVE), they ranged between (0.583-0.803), and these values were consistent with the values determined by (Malhotra and Dash (2011) in their study, which should be greater than or equal to 0.5. This indicates that the reliability criteria are good.

**The Results of the Analysis and Testing Hypotheses**

*Descriptive Analysis of the Study Variable*

Table (2)

*Descriptive analysis of strategic sensitivity*

Strategic sensitivity	N	Mean	Std. Deviation
1- The existence of a mechanism to identify opportunities and risks in advanced ways when they appear	304	2.300	1.3360
2- Maintaining the strategic advantage of banks through foresight and anticipation	304	2.330	1.2590
3- There is flexibility in work within banks to identify environmental changes	304	2.330	1.3070
4- Banks have the ability to create new alternatives	304	2.310	1.2390
5- Continuity of employees' work in a creative way to improve efficiency	304	2.220	1.2230
6- Continuity of employees' work in a creative way to improve ineffective processes, instead of working around them	304	2.260	1.1460
7- Banks have the ability to continuously develop.	304	2.320	1.2010
8- Communication in banks is the main driver of the organization's strategy.	304	2.220	1.1800

Source: Prepared by researchers based on field study

In Table (2), the arithmetic mean and standard deviation of the highest and lowest values obtained from the answers to the questionnaire can be seen. Paragraph (3) obtained the highest value of the arithmetic mean, which was (2.330), while its standard deviation for the same paragraph was (1.3070). This is considered the highest percentage among the values obtained in this dimension. As for paragraph No. (8), it obtained the lowest values, as its arithmetic mean was (2.220) and its standard deviation was (1.1800).

Table (3)

*Descriptive analyzes of collective commitment*

collective commitment	N	Mean	Std. Deviation
1- Leaders in my organization engage in open dialogue and welcome differences of opinion.	304	2.360	1.2980
2- Leaders in my organization reveal their underlying motivations, including fears, aspirations, and biases.	304	2.370	1.3440
3- Leaders in my organization work as a cohesive, integrated team to create value.	304	2.400	1.4080
4- Leaders in my organization care about the common good through an ambitious vision, shared values, and passions.	304	2.390	1.3400
5- Leaders in my organization care about others and demonstrate empathy and compassion	304	2.370	1.2910

Source: Prepared by researchers based on field study.

Table No. (3) shows the standard deviations and arithmetic mean of the highest and lowest values of collective commitment. Paragraph No. (3) obtained the highest value of the arithmetic mean (2.400) while its standard deviation was (1.4080), and this value is considered the highest among the values. As for paragraph No. (1), it obtained the lowest values of the arithmetic mean (2.360) and the lowest values of the standard deviation (1.2980).

Table(4)

*Descriptive Analysis for Resource Fluidity*

Resource fluidity	N	Mean	Std. Deviation
1- Teams have the ability to find appropriate solutions when new problems arise without a book or instructions to guide them	304	2.420	1.2870
2- There is a strong sense that we “win together and lose together” in our organization	304	2.530	1.3270
3- When making big and bold decisions in the organization, there is encouragement in different perspectives	304	2.520	1.3740
4- There is ease in moving resources quickly and flexibly throughout the organization in response to need	304	2.340	1.2690
5- Maintaining strategic advantage through anticipation and foresight	304	2.440	1.2750
6- The organization has a parallel business model where it can switch from one model to another when needed	304	2.510	1.2850

Source: Prepared by researchers based on field study.

Table No. (4) showed the arithmetic mean and standard deviation of the highest and lowest values of resource liquidity. The value of number (2) for the arithmetic mean was (2.530) and its standard deviation was (01.327), as these values are considered the highest among the values at the level of this dimension. As for paragraph No. (1), it obtained an arithmetic mean of (0.422) and a standard deviation of (01.287), and these values are considered the lowest among the questions related to this dimension.

Table(5)  
*Descriptive Analysis for Strategic Flexibility*

Strategic Flexibility	N	Mean	Std. Deviation
1- If circumstances change, our organization can easily change its current plans.	304	2.473	1.242
2- Is prepared to react in a modified and viable manner.	304	2.526	1.218
3- Can control a shift in strategy.	304	2.569	1.285
4- Has the necessary practical knowledge to make shifts in daily routines and practices.	304	2.588	1.334
5- Can pro-actively develop a new project .	304	2.582	1.307
6-Can shift projects with a high probability of success.	304	2.483	1.210

Source: Prepared by researchers based on field study.

Table No. (5) showed the arithmetic mean and standard deviation of the highest and lowest values of resource liquidity. The value of number (4) for the arithmetic mean was (2.588) and its standard deviation was (1.334), as these values are considered the highest among the values at the level of this variable. As for paragraph No. (1), it obtained an arithmetic mean of (2.473) and a standard deviation of (1.242), and these values are considered the lowest among the questions related to this variable.

Table (6)  
*Results of the impact of Strategic agility dimensionson Liquidity Risks considering Strategic flexibility*

**Endogenous variables:**Strategic flexibility, Liquidity risk.

**Exogenous variable:**Strategic sensitivity, Resource fluidity, Collective commitment.

**Method:** Maximum Likelihood (ML) with Satorra-Bentler.

Paths	Expected signal	Unstandardized Coefficient	Standardized Coefficient	Std. Err.	z stats.	p >  z
▪ Strategic Flexibility Equation:						
Strategic sensitivity→Strategic flexibility	+	-0.002	-0.002	-0.036	0.060	0.953
Resource fluidity→Strategic flexibility	+	0.452	0.455	0.057	7.959	0.000**
Collective commitment→Strategic flexibility	+	0.430	0.462	0.060	7.193	0.000**
▪ Liquidity Risks Equation:						

Strategic flexibility → Liquidity risks	-	-0.266	-1.076	0.080	-3.331	0.001*
Strategic sensitivity → Liquidity risks	-	-0.306	-1.107	0.055	-5.546	0.000**
Resource fluidity → Liquidity risks	-	-0.218	-0.888	0.074	-2.964	0.003**
Collective commitment → Liquidity risks	-	-0.015	-0.065	0.069	0.213	0.831

Note: \*\*, \* indicates statistical significance at the 1%, 5% level respectively.

Through the results in Table (6), it is clear that collective commitment and resource liquidity positively affect strategic flexibility in Iraqi commercial banks. According to the results of the non-standard regression coefficient, an increase in resource fluidity and collective commitment by one degree will lead to an increase in strategic flexibility in Iraqi banks by an average of 0.452 and 0.430 degrees, respectively. However, strategic sensitivity did not significantly affect strategic flexibility in Iraqi commercial banks, as the probability value of this dimension was more than 0.05. Through the standard regression treatment, which is important in unifying measurement units, therefore reflects the coefficients of the relative importance of variables on the impact size side, it can be clear that the most influential dimension of strategic agility on strategic flexibility is collective commitment, and the impact ratio was 0.462, followed by resource liquidity, which reached 0.455, and finally, strategic sensitivity, which reached -0.002. Strategic flexibility has a direct and negative impact on liquidity risks, and the dimensions of strategic agility (strategic sensitivity and resource liquidity) have a direct and negative impact on liquidity risks at the 1% level, while collective commitment had no impact on liquidity risks in Iraqi commercial banks.

Table (7)

Baron & Kenny approach to testing mediation

Path	Step (1)	Step (2)	Step (3)
	$X \rightarrow M$	$M \rightarrow Y$	$X \rightarrow Y$
▪ Liquidity Risks Equation:			
Strategic sensitivity → Strategic flexibility → Liquidity risks	[β = 0.002]	[β = -0.0266]*	
Resource fluidity → Strategic flexibility → Liquidity risks	[β = 0.452]**	[β = -0.0266]*	[β = -0.0218]**
Collective commitment → Strategic flexibility → Liquidity risks	[β = 0.430]**	[β = -0.0266]*	[β = -0.015]

Note: \*\*, \* indicates statistical significance at the 1%, 5% level respectively.

From Table No. (7), strategic agility has a negative and total impact on liquidity risks. The three dimensions of strategic agility combined affect liquidity risks at a level of 1%. The difference lies in the fact that the total impact of resource fluidity comes from the direct impact and indirect impact, while the impact of strategic sensitivity comes from the direct impact only, but the collective commitment has a total impact from the indirect impact.

Table (8)

*Formal mediation test*

Path	Sobel test	RIT	RID	Mediation type
▪ Liquidity Risks Equation:				
Strategic sensitivity → Strategic flexibility → Liquidity risks	0.001 [0.056]	0.003	0.003	Not mediation
Resource fluidity → Strategic flexibility → Liquidity risks	-0.120 [-3.046]**	0.355	0.550	Partial mediation
Collective commitment → Strategic flexibility → Liquidity risks	-0.114 [-3.016]**	1.152	7.600	Fully mediation

Note: \*\*, \* indicates statistical significance at the 1%, 5% level respectively.

Through these results in Table No. (8), it is clear that strategic flexibility does not play any significant role in the relationship between strategic sensitivity and liquidity risks. While Strategic flexibility plays a partial mediating role in the relationship between resource liquidity and liquidity risks. The effect of Strategic flexibility between collective commitment and liquidity risks have fully mediation effect.

Table (9)

*shows the percentage of impact of strategic agility dimensions on strategic flexibility and liquidity risks.*

	R squared	Wald test for goodness fit			Stability analysis	
		$\chi^2$ Stats.	df	p-value	Eigenvalue	Modulus
Observed:						
Strategic Flexibility	61%	53.84	3	0.000**	0	0
<b>Liquidity Risks</b>	<b>35.9%</b>	<b>97.31</b>	<b>4</b>	<b>0.000**</b>	<b>0</b>	<b>0</b>

Note: \*\* indicates statistical significance at the 1% level.

From Table No. (9), it is clear that the dimensions of strategic agility explain 61% of the variance in strategic flexibility. These three dimensions combined with strategic flexibility explain 35.9% of liquidity risk. The unexplained percentages from these equations are due to random errors resulting from measurement errors and other administrative elements that were not included in the model.

## Conclusion

This study aimed to verify the impact of strategic flexibility as a mediator between strategic agility and liquidity risks in Iraqi commercial banks. Strategic agility was adopted as a form of management to reduce financial risks. Strategic agility also works to enhance risk recognition proactively to identify treatments and exploit opportunities. Through the analysis results, it is clear that collective commitment and resource fluidity positively affect strategic flexibility in Iraqi commercial banks, while strategic sensitivity did not affect strategic flexibility significantly. The results also concluded that strategic flexibility has a negative impact on liquidity risks, as well as the strategic sensitivity and resource fluidity have a negative impact on liquidity risks at a level of 1%, while collective commitment had no direct

impact on liquidity risks in Iraqi commercial banks. As for the overall impact on liquidity risks, strategic agility has a negative and total impact on liquidity risks. The three dimensions of strategic agility combined affect liquidity risks at a level of 1%. The difference lies in the fact that the overall impact of resource fluidity comes from the direct and indirect impact, while the impact of strategic sensitivity comes from the direct impact only, As well as, collective commitment comes from the indirect impact only. These impact are the reverse effect, meaning that the increase in the practice of strategic agility dimensions with the presence of strategic flexibility as a mediator will reduce liquidity risks. Resource fluidity has a clear role in supporting banking services and providing the important needs that it provides in times of necessity for banks, so this has an important role in reducing financial default and increasing confidence for investors and borrowers.

The results of this study also found that the level of use of strategic agility dimensions in Iraqi commercial banks is low, while the level of financial risks is high. Therefore the cognitive and skill level in practicing the dimensions of strategic agility is not important and did not impress the employees in these banks. Many employees lack sufficient knowledge in practicing financial risk management .The study results also concluded that the main reason behind the increase in risks in banks is due to sudden fluctuations in the market and the failure to apply the dimensions of strategic flexibility. For its important role in dealing with these changes, as strategic flexibility plays an important role in the way of dealing, adapting and contributing to improving administrative work to avoid risks in general.

This study contributes significantly to the current knowledge in the market by providing a nuanced understanding of the interaction between strategic flexibility, strategic agility, and liquidity risk in the specific context of Iraqi commercial banks. The findings highlight the critical role of strategic agility as a management approach that mitigates financial risks and also enhances proactive risk recognition, giving banks the ability to identify opportunities and develop appropriate responses. By clarifying the mediating effect of strategic agility, this research provides the theoretical framework surrounding strategic management in banking, and shows how the dimensions of strategic agility (collective commitment and resource fluidity) can positively influence strategic agility. The study also reveals that despite the potential benefits, the current level of implementation of these strategies in Iraqi banks is low, which may exacerbate financial risks amid market volatility. This context-specific insight emphasizes the need for Iraqi commercial banks to enhance their knowledge and skills related to financial risk management, suggesting that deeper integration of the dimensions of strategic agility can lead to improved resilience against liquidity risks. Therefore, this research not only addresses a gap in the literature, but also provides practical implications for banking practitioners and policymakers to enhance financial stability in Iraq.

### **Suggestions**

Based on the results of the study, Iraqi commercial banks need to follow a set of suggestions to reach an understanding of the use of strategic agility dimensions with strategic flexibility as a mediator in order to reduce liquidity risks. Banks also need to scrutinize these concepts to understand the relationship between these variables. Strategic agility is considered one of the important pillars in enhancing the capabilities of institutions to adapt quickly to financial and economic changes, and it also contributes to improving administrative levels in understanding risk management. Therefore, Iraqi commercial banks need to focus



on applying strategic sensitivity as an early warning system that predicts financial risks before they occur. It is also necessary to focus on historical financial data to analyze them and benefit from them in identifying future needs for providing liquidity and dealing in ways that suit these funds to reduce their risks. Reducing liquidity risks requires making informed decisions in a manner that is consistent with the changes and the strategy followed.

Moreover, collective commitment is important in making the right decisions, so banks need to encourage the use of this dimension and spread awareness among different levels of employees for its important role in financial stability. Strategic flexibility must be taken into consideration for its important role in changing the impact on liquidity risks and reducing them. In addition, focusing on the speed and flexibility that these banks need. It must also increase the automatic feedback through effective leadership. Moreover, strategic flexibility must play an intermediary role between strategic agility and liquidity risks for the important role in reducing risks. Banks need to focus on the mechanism followed in banking transactions. Also, adaptations to market changes can only be achieved with liquid resources. These must be in a manner that is consistent with the banks' changing course to reduce liquidity risks.

In addition, the plans and procedures developed by banks must be at a level that limits the obstacles that prevent the use of the dimensions of strategic agility and strategic flexibility. This also requires developing skills at all administrative levels to apply strategic agility correctly. Moreover, strategic leadership needs to manage the work of employees in a manner consistent with strategic agility due to its distinctive role in improving employees' abilities to manage liquidity risks in a manner that keeps pace with changes to reduce them.

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