

Financial, Regulatory and Monetary Restructuring of the Banking Sector and Financing of the Economy

La Restructuration Financière, Réglementaire et Monétaire du Secteur Bancaire et Financement de l'Économie

Mariam AGOUMI, (PhD Student)

*National School of Business and Management of Kenitra
Ibn Tofail University, Morocco*

Khalid RGUIBI, (Research Professor)

*National School of Business and Management of Kenitra
Ibn Tofail University, Morocco*

Correspondence address :	ENCG KENITRA B.P. 1420, University Campus Maamora, Av. of University. Kenitra Ibn Tofail University, Morocco Zip code : 14020
Disclosure Statement :	Authors are not aware of any findings that might be perceived as affecting the objectivity of this study
Conflict of Interest :	The authors report no conflicts of interest.
Cite this article :	AGOUMI, M., & RGUIBI, K. (2023). Financial, Regulatory and Monetary Restructuring of the Banking Sector and Financing of the Economy. International Journal of Accounting, Finance, Auditing, Management and Economics, 4(4-1), 734-749. https://doi.org/10.5281/zenodo.8298959
License	This is an open access article under the CC BY-NC-ND license

Received: July 29, 2023

Accepted: August 29, 2023

International Journal of Accounting, Finance, Auditing, Management and Economics - IJAFAME

ISSN: 2658-8455

Volume 4, Issue 4-1 (2023)

Financial, Regulatory and Monetary Restructuring of the Banking Sector and Financing of the Economy

Abstract

This paper aims to answer systematically a central question concerning the influence of the major factors of financial, regulatory and monetary restructuring on bank profitability in the context of its financing of the economy. Today, banks that neglect the importance of restructuring their adopted model may be more vulnerable to delicate financial and economic situations. It has therefore become imperative for the Central Bank to shift to a dual mandate that incorporates the constraints facing our economy. In this sense, it is clear that measuring the profitability of a bank that makes a major contribution to economic growth is of unquestionably crucial importance. Nevertheless, their contribution to financing the economy relies on two colossal sources: indirect financing (the bank) and direct financing (the financial market). As a result, the latter's intervention in the financial system calls into question bank profitability, which is impacted by a range of restructuring factors in three main categories: financial, regulatory and monetary. To explain the relation between these factors, we schematize the modes of financing within the financial system under the supervision of the Central Bank. Then, we propose a theoretical model of the influence of these factors on bank profitability, using the return on assets (ROA) indicator. The main theoretical conclusions of our paper are based on the colossal importance of the banking sector in financing the economy, in particular through the loans granted to (Households, Companies, State, etc.) under the supervision of the Central Bank, monetarily through the money supply and regulatory by focusing on the counter-cyclical buffer. They therefore represent a panoply of financial, regulatory and monetary restructuring factors that promote bank profitability, particularly in a turbulent environment.

Keywords : Financial Restructuring, Regulatory Restructuring, Monetary Restructuring, Bank Profitability, Return On Assets

JEL Classification : G21

Paper type : Theoretical Research

Résumé

Ce papier vise à répondre systématiquement à une problématique centrale reposant sur l'influence des facteurs majeurs de la restructuration financière, réglementaire et monétaire sur la rentabilité bancaire dans le cadre de son financement à l'économie. Aujourd'hui, les banques qui négligent l'importance de la restructuration de leur modèle adopté peuvent être plus vulnérables à des situations financières et économiques délicates. Donc, il est devenu impératif que la Banque Centrale passe à un mandat dual qui intègre les contraintes auxquelles fait face notre économie. Dans ce sens, il est clair que la mesure de la rentabilité de la banque qui contribue fortement à la croissance économique est d'une importance incontestablement cruciale. Néanmoins, la contribution au financement de l'économie recourt à deux sources colossales : Financement indirect (La banque) et Financement direct (Marché financier). Alors, l'intervention de ce dernier dans le système financier remet en cause la rentabilité bancaire qui se trouve sous l'impact d'un ensemble de facteurs de la restructuration suivant trois grandes catégories: financière, réglementaire et monétaire. Pour bien expliquer la relation entre ces facteurs, nous schématisons les modes de financement au sein du système financier sous la supervision de la Banque Centrale. Ensuite, nous proposons un modèle théorique qui porte sur l'influence de ces facteurs sur la rentabilité bancaire en recourant à l'indicateur du rendement sur actifs (ROA). Les principales conclusions théoriques de notre papier reposent sur l'importance colossale du secteur bancaire dans le financement de l'économie à travers notamment les crédits octroyés aux (Ménages, Entreprises, Etat...) sous la supervision de la Banque Centrale monétairement à travers la masse monétaire et réglementairement en se focalisant sur le coussin contra-cyclique. Ils représentent donc une panoplie des facteurs de restructuration financière, réglementaire et monétaire qui favorisent la rentabilité bancaire, particulièrement dans un environnement turbulent.

Mots clés : Restructuration Financière, Restructuration Réglementaire, Restructuration Monétaire, Rentabilité Bancaire, Rendement des Actifs

Classification JEL : G21

Type de l'article : Article Théorique

1. Introduction

The turbulence in the financial environment has caused much ink to flow around the world and has called into question the model adopted by banking institutions. Today, the bank is faced with the need for a major restructuring that follows an agile and continuous process to acclimatize to the various financial, regulatory and monetary evolutions to be in a good position to resist external shocks.

Indeed, the use of more advanced management systems enables the bank to better cope with an economic downturn. Similarly, banks that place technology at the heart of their concerns, can be better prepared to face a turbulent environment, due to its favorable consequences in terms of lower costs and optimized operational efficiency, which positively favors the management of the bank's assets and liabilities, minimizing the interest rate spread and optimizing liquidity management.

The adoption of bank restructuring brings with it a competitive improvement. Traditional banks are under fierce pressure to offer more attractive interest rates and more personalized services to attract more customers. This obligation triggers an increase in the interest rate spread between banks' assets and liabilities, which can hurt bank balance sheet management.

On the other hand, banks that neglect the importance of restructuring their adopted model may be more vulnerable to delicate financial and economic situations. Indeed, banks that rely on external financing may find themselves facing liquidity crisis due to ongoing fluctuations in the financial markets. Similarly, banks with a concentration in risky economic sectors may find themselves faced with uncomfortable economic shocks, forcing them to rethink their banking strategies in a proactive sense, particularly in an increasingly changing environment.

The various problem areas (financial, regulatory and monetary) date back to the 2008 crisis. The repercussions of the Covid-19 and Ukrainian-Russian crisis have called into question macro-economic policies in general and monetary policies in particular. Bank Al-Maghrib has taken unprecedented measures based on one essential objective: inflation targeting. Today, a whole range of problems are arising in terms of financing the economy, growth, employment, investment and so on. So, it has become imperative to move to a dual mandate that integrates the constraints facing our economy and goes beyond inflation control.

In the context of these changes, it is clear that measuring the profitability of the banking establishment as a key player in economic growth is undeniably crucial. Nevertheless, contributing to the development of the national economy and its financing can only be achieved by walking on two legs: indirect financing (the bank) and direct financing (the financial market). In this sense, the latter's intervention in the financial system calls into question bank profitability, which is then impacted by a range of restructuring factors in three main categories: financial, regulatory and monetary, which we will detail in the fourth section of our paper's theoretical model.

So, the discussion around this restructuring takes on the character of an ardent obligation, with a question:

What is the influence of the fundamental factors in these financial, regulatory and monetary restructuring on bank profitability in the context of financing the economy ?

To answer this question, we will divide our paper into seven sections : the first section constitutes an introduction, the second section will outline the fundamental issues of bank restructuring, the third section will clarify the crucial role of banking regulation and the financial cycle in a turbulent environment, the fourth section will explain the importance of monetary policy in the bank and its vital role in the economy , the fifth will treat the main explanatory theories, the sixth section will propose a theoretical model to estimate the influence of financial, regulatory and monetary restructuring factors on bank profitability, using the return

on assets indicator (ROA) and based on a sample of the five main Moroccan banks observed over a given period, and finally the conclusion.

2. Fundamental issues of bank restructuring

Bank restructuring and the rehabilitation of its role represent colossal points for an in-depth discussion of the new paradigm within the banking establishment. During its revolutions, Russia wanted to abolish money and banks, saying they were bourgeois institutions, to set up another model.

This procedure didn't work, parallel currencies appeared, and in the end, a new economic policy had to be put in place from 1921, a new role was established in 1924 and, of course, the banks had to be re-established. So, we have to realize that even in capitalist systems there is a need for money and a need for bank because they have a very special status in the economy.

Banks are the originators of money creation. Money is essentially created by banks, when they grant credit to economic agents, in particular to finance production. So it's the banks that have the power to create money, and they can do so according to very specific prerogatives within the framework of prudential regulations. The bank will simply write a loan to meet a credit demand that is considered solvent, or even for a major investment project that will generate future income. In this way, the bank can grant credit for a potentially theoretically unlimited amount, which favors the dynamics of credit and the financing of the economy.

The evolution and restructuring of the banking business has its roots in the banking reforms implemented from the 1980s onwards, as well as in the consequences of financial innovations such as derivatives and fintech. Banking restructuring is also the consequence of the financialization of the economy, the rise of shadow banking, i.e. new activities that will compete with the banking business, crypto-currencies and crypto-assets, which are forcing banks to evolve and restructure their business, and consequently maintain and increase their profitability. Banks can help finance the real economy through their power to create money. Today, it has become imperative and judicious to find a new way of rehabilitating the banking business. In other words, we need to rediscover the bank's original activity, based essentially on the collection of deposits and the distribution of credit, while taking into account the need to contribute to the financing of the real, productive economy, by granting credit to the economy. It should also be noted that the major restructuring of the banking sector is focused on the essential role of public development banks. Private and commercial banks are fundamental, but for the system to be even more effective, public development banks, in particular national development banks, must be involved.

It is therefore essential to rely on new players such as public development banks because they will enable us to finance long-term projects that are risky for sectors considered a priority by public authorities, for example, the financing of infrastructure, public health, innovation, ecological transition, the private sector, etc. Public development banks will then bear the long-term risk that private banks won't because the costs of projects with a long-term perspective are too risky. We can therefore see that reactivating the public development bank is a crucial avenue to explore.

As far as credit is concerned, it is sluggish in many developing countries. It should be noted that it's not always credit policy that's to blame, so we shouldn't always blame the banks. In fact, in developing countries such as Morocco, we are faced with major uncertainties, and companies (small, medium-sized or very small) are not always in a position to plan medium- or long-term investment programs because of the risk and demand for credit. So, among the constraints encountered in the context of credit dynamics, we find that investment projects are not always well identified, so banks will not offer credit.

It should also be noted that the sluggishness of credit is explained by another major factor, which is the sometimes-oligopolistic nature of the banking landscape, i.e. several banks share the bulk of activities, which is detrimental to the financing of the economy.

We can also add the question of the establishment of foreign banks, subsidiaries and branches, which improve banking efficiency. Nevertheless, the presence of foreign banks very often entails greater risk-taking on the part of domestic banks, which find themselves confronted overnight with competing banks. Indeed, the opening-up of foreign banks and new arrivals alike can weaken domestic banks that were in a favorable position at the beginning.

Faced with these developments, the first attitude is one of skepticism about the financial system's ability to reform itself without a major crisis. The end of liberalized global capitalism is forcing us to change all our business models, and will have a lasting impact on monetary and central bank policy, against a backdrop of increasingly strong and repetitive intervention by governments, and the frequency of systemic crises. Another approach is to focus on financial innovation.

Financial markets improve corporate governance. To define this concept, we can sum it up as follows: how do the holders of capital and credit influence managers to act in the interests of the lenders ? According to (Levine, 2005), shareholders and creditors can force managers to maximize firm value, thereby improving resource allocation efficiency and encouraging savers to finance production and innovation.

(Ben Naceur, 2003) show that financial intermediaries, improving corporate governance through cost savings on corporate control, can reduce credit rationing and stimulate productivity, capital accumulation and economic growth. Banks, unlike individuals, can decipher the macroeconomic shocks of the economy with their broad portfolios and choose the most appropriate technological projects.

3. The crucial role of banking regulation and the financial cycle in a turbulent environment

Prudential banking regulation is a set of rules imposed on banks to make the financial system more stable. Historically, there was a process of deregulation and deregulation during the 70s. At the end of the 80s, the banking system needed a minimum of regulation to ensure financial stability, so the so-called Basel III accords were put in place.

The first Basel Accord was signed in 1988, and there followed several series of agreements. Following a series of economic upheavals, it was necessary to rethink the agreements to try and take account of the major shortcomings. So the prudential regulations introduced at the end of the 2000s, as part of the overhaul of the Basel agreements, included the introduction of a large number of ratios.

The Covid-19 crisis was a period of great turbulence and a good opportunity to test the effectiveness of banking regulation. Regulators reacted to the crisis with what they called "regulatory easing". Regulatory efficiency is linked both to its objective of financial stability and to strengthening the individuals who make up the banking system, i.e. the banks.

Indeed, regulatory efficiency is based on its undesired impact on bank profitability and its ability to finance the economy. Briefly, to explain how regulation works in a context marked by a series of economic upheavals, the members of the Basel Committee meet in Basel, Switzerland, to discuss the recommendations to be made regarding the rules imposed on banks, known as the Basel Accords. Each member of the Basel Committee is then responsible for transposing these recommendations into his or her jurisdiction, according to each country's system. So, the effectiveness of regulation is determined first and foremost from a macroeconomic point of view.

Moreover, the IMF proposes several variables to measure financial stability, which is the aggregation of the various regulatory ratios at the country level. One of the central aspects of the Basel III regulations is macroeconomic stability. It should therefore be noted that the study of regulatory effectiveness must be adopted from the point of view of the repercussions it may have on the economy, and the banking industry in particular.

In the beginning, prudential banking regulations constrain banks and, in particular, their profitability.

Profitability can be measured, on the one hand, by the profitability of banking activity, and on the other, by the return on equity. The leverage ratio has a positive impact on the profitability of banking activity, while the same ratio hurts the profitability of equity capital (Durand, 2020). Finally, leverage regulation is effective from the point of view of the repercussions it may have on the banking system since it has a positive impact on the profitability of banking activity.

Several vulnerable turbulences have called into question all paradigms and strategies and impacted the global economy with full force (2008 Financial Crisis; Covid-19 & Russo-Ukrainian). Many economists have stressed the importance of the financial cycle in stabilizing the economy. Indeed, this importance consists in better deciphering, forecasting and effectively preparing for the consequences of its reversal. Borio (2014) defines the financial cycle as a set of "mutually reinforcing interactions between perceptions of value and risk and attitudes to risk and financial constraints [...], resulting in booms followed by crisis".

These economists focus on the repetition of financial cycles, of which the crisis represents one period. (Kindleberger, 1978), an American economic historian demonstrated the existence of cycles in the financial sphere by analyzing the great crises of history. According to him, a financial cycle can be broken down into five phases: 1st: boom, 2nd: euphoria, 3rd: paroxysm, 4th: reflux and establishment of pessimism, and finally debt deflation and balance sheet restructuring, as highlighted by the 2008 financial crisis.

A statistical measurement of the financial cycle is based on a set of indicators that are not set in stone. However, two indicators are widely used in the majority of studies: debt and real estate prices, since both were at the heart of the infamous 2008 financial crisis. Other "revealing" variables of the financial cycle are increasingly exploited (stock prices, bond prices) to highlight the multitude of major methods of the financial system. To return to the point of the importance of the financial cycle in stabilizing the economy. The key role of the countercyclical capital buffer (CCyB) as a shock absorber is essential to prepare for the downturn in the financial cycle. The CCyB is part of the Basel III agreements required by prudential regulations. In a period of growth, the CCyB is bound to increase, to encourage banks to avoid overheating. They are then forced to reduce lending, in particular, to adjust the robustness of their balance sheets, which can boost bank profitability. Conversely, when a crisis occurs, this requirement is intended to be lowered to stimulate credit and support businesses, which can boost bank profitability. The CCyB, therefore, makes an important contribution to financing the economy.

In fact, since the 2008 crisis, banks have had to comply more strictly with the capital requirements set out in the Basel III accords (2010), which the counter-cyclical buffer represents as an example. Its purpose is to encourage banks to build up more reserves to cope with a possible recession, by reducing the procyclicality of solvency requirements and acting as shock absorbers, since they are built up in good times and then "consumed" in times of crisis (Quignon, 2021).

In other words, the CCyB is defined as an increase in capital requirements expressed as a percentage of risk-weighted assets, which is designed to adapt over time as the financial cycle progresses. It constitutes a "safety mattress" that the banking establishment will feed during phases of financial cycle acceleration and economic expansion, and from which it can conversely draw in the event of recession and slowdown.

« For macro-prudential supervisory purposes, Bank Al-Maghrib may require institutions to build up a capital buffer known as a "counter-cyclical capital buffer" on an individual basis. The said buffer, the level of which lies within a range of 0% to 2.5% of adjusted weighted risks, is made up of basic Tier 1 capital » Article 5 of Bank Al Maghrib's circular on the capital of banks and participative finance companies.

"The great mistake of 2010 was to impose austerity at the worst possible time." (Gilles Moëc, 2020). Procyclicality can be defined as the set of risk measures that overestimate future risk in times of crisis while underestimating it in normal times. It is a central constraint faced by all financial institutions, particularly by the banking establishment, which must anticipate overvalued capital during the crisis and undervalued capital before it.

Several regulatory authorities have made available various macroeconomic approaches to minimize procyclicality. Macroeconomic conditions are impacted by the bank's reaction, which in turn impacts the bank's performance, clearly highlighting the effects of cyclical fluctuations in the macroeconomy.

4. The importance of monetary policy in the bank and its vital role in the economy

The discussion around monetary policy may seem at first glance to be a difficult set of issues, but this is not the case. Admittedly, this policy requires certain expertise and in-depth knowledge of the mechanisms involved in financial and monetary economics.

The central bank's mission is to ensure reasonable management of the quantity of money in circulation in the economy (the so-called money supply), so that it is adjusted to the needs of economic agents and does not give rise to either recession or inflation.

Monetary policy plays an important role in a bank's operations, affecting financing conditions, refinancing costs and the risks it faces. Indeed, in periods of low-interest rates, the bank suffers lower net interest margins, which has a negative influence on their loan portfolio in terms of income earned. However, this can also lead to greater demand for credit, as lenders' financing costs are lower, which can boost overall economic activity. In contrast to a period of high-interest rates, banks tend to generate higher net interest margins. However, this can also minimize demand for credit, as high interest rates can negatively impact borrowers' ability to meet some or all of their commitments, and can degrade asset quality.

Monetary policy puts banking management back under the microscope, by impacting the structure of the bank's assets and liabilities, notably its cost and yield. Indeed, if the central bank raises interest rates, this can lead to higher borrowing costs for the bank, with negative consequences for its profitability and competitiveness in terms of lending rates. On the other hand, if the bank lowers interest rates, this may stimulate demand for credit and minimize the bank's cost of funds.

Monetary policy thus calls into question the bank's decision-making process about the management of its portfolio of assets and liabilities. Indeed, when interest rates are low, the bank is encouraged to increase its investment in risky assets, seeking to compensate for the more fragile returns of safer assets, so it can find itself in a delicate situation with a range of risks. In the case of high-interest rates, the bank tends to invest more in fixed-income assets. However, this can lead to lower returns.

On the other hand, monetary policy also has an impact on the structure of the bank's liabilities. Indeed, if the central bank reduces interest rates, this may generate lower deposit costs for the bank, leading it to adopt lower interest rates on short-term deposits and favor longer-term deposits. However, this can also lead to investors shying away from longer-term liabilities.

It is therefore imperative for the bank to rethink its banking strategies in the light of changes in monetary policy, to gain a better understanding of the risk/return trade-off. Indeed, the bank can resort to loan portfolio management, particularly in a period marked by rising interest rates, by choosing fixed-rate loans rather than variable-rate loans, which are more vulnerable to interest-rate instability. It can also adapt interest rates for borrowers to optimize returns.

It is therefore imperative for the bank to rethink its banking strategies in the light of changes in monetary policy, to gain a better understanding of the risk/return trade-off. Indeed, the bank can resort to loan portfolio management, particularly in a period marked by rising interest rates, by choosing fixed-rate loans rather than variable-rate loans, which are more vulnerable to interest-rate instability. It can also adapt interest rates for borrowers to optimize returns.

Equally, the bank can aim to maintain a robust deposit base, enabling it to minimize financing costs and better manage the risks associated with its loan portfolio.

In recent years, Morocco has increasingly embraced banking restructuring as part of a process of financial inclusion and liberalization that has further boosted the development and competitiveness of Moroccan banking on local and international markets. Nevertheless, a series of economic and financial turbulences have called into question the entire model adopted within the banking establishment, making it vital to position the role of monetary policy at the forefront to cope with these turbulences and thus promote the financial stability necessary for the smooth running of the bank.

Monetary policy uses a range of tools to deal with economic and financial turbulence, including:

- **Adjusting interest rates:** the central bank can adjust interest rates to stimulate economic activity. Indeed, during a period of economic recession, interest rates need to be lowered to promote consumption and investment.

- **Liquidity regulation:** the central bank can manage liquidity by adjusting banks' reserve requirements, or by injecting more liquidity in the event of financial stress.

- **Stimulating investment:** the central bank can stimulate investment through tax incentives and flexible access to credit for businesses.

- **Currency devaluation:** in the event of external economic shocks, such as an international recession, the central bank can lower the value of the currency to minimize export costs for our trading partners and thus promote economic activity.

Finally, monetary policy should be in the interests of the country's economic and social development. We cannot have a strong currency in a weak economy. Monetary policy must therefore not be limited to the exclusively financial and monetary dimensions.

Regarding the impact of changes in the general price level, the work of (Molyneux and Thornton, 1992), (Guru et al, 2002) and (Abreu and Mendes, 2002) have shed light on the possible links between return on assets and inflation. Their empirical results reveal a positive relationship, suggesting that rising inflation will be favorable to increased bank profits.

Based on empirical evidence, (Milne, 2003) has clarified the paramount importance of monetary policy: in a normal economic climate, it is important to assess loan portfolios according to normal parameters and also to subject them to stress tests incorporating a recession scenario, to ascertain the risks to which the institution would be exposed if the situation were to deteriorate. According to Milne, it seems that financial institutions neglected to take this precaution, either because they didn't have sufficient time series data to carry out such simulations regularly, or because they didn't see the point, since in some circles, current monetary policy had definitively put an end to inflation-driven recessions.

(Murray, 2013) put the Bank of Canada's monetary policy, guided by the inflation-targeting regime adopted over 20 years ago, also played a crucial role in Canada's resilience during the crisis and subsequent recovery. The Bank provided considerable monetary stimulus at the right time, and its hard-won credibility helped anchor household and business confidence during a turbulent period.

5. Main explanatory theories

Since the 2008 crisis, financial intermediation has been called into question. Low interest rates, the recurrence of major systemic crises and the contradictory effects of prudential standards that in practice allow shadow banking to flourish are all mortgages on the stability of the international financial system, and the Covid-19 and Ukrainian-Russian crisis have exacerbated them.

For a long time now, the model of universal banking and intermediation controlled by the big banks has been a thing of the past and is in the process of evolving towards more decentralized models. These sometimes brutal transformations are not without risk, and require regulators to maintain confidence while encouraging innovation (Daniel, 1980). On the other hand, gloomier systemic prospects, such as the possible return of inflation, call for caution (Dominique, 1980). Asset management has become a major component of the bank's financial intermediation and benefits from a positive context in which falling interest rates provoke an influx of capital into investment funds (OECD, 1986). Increasingly pressing demands for environmentally and socially responsible financial management are introducing innovations in risk modeling and management that are consistent with the economic objectives of recovery (Koppenhaver, 1985). In this sense, the bank's business model and restructuring must evolve not only to withstand future systemic crises but also and above all to adapt to the investment needs of economies following the Covid-19 and Ukrainian-Russian crisis.

In other words, the banking sector must adapt its behavior to an environment whose characteristics have been profoundly altered both by financial innovation, which has led to increased market competition in the financing process, and by the wave of deregulation, which has intensified competition between financial intermediaries (Greenbaum and Thakor, 1987). In such a context, interest margins on traditional intermediation activities (loans/deposits) were eroded, and bank profitability steadily declined (Daniel, 1980). At the same time, these changes in financial systems seem to have gone hand in hand with a general rise in risk, which has also weighed on their results.

The inflationary environment following the two oil shocks encouraged the emergence of variable-rate operations, offering banks an additional means of modifying their degree of exposure to interest-rate risk. In the 1980s, the internalized management of interest-rate risk was facilitated by the emergence of a capital market on which all maturities were available (OECD, 1986).

The financial changes brought about by a combination of innovation and deregulation are generating new risks. Similarly, the deterioration in the quality of loans to developing countries and increased competition have led the authorities to introduce prudential capital ratios.

As changes in the way the economy is financed have led to increased variability in interest rates, as well as a more market-oriented approach to the financing process, risk management has acquired the status of an activity in its own right within banks (Greenbaum and Thakor, 1987). The role of the financial system in economic activity is not new, but it has taken on an increasingly important dimension as economies globalize and financial flows liberalize. The financial system weighs ever more heavily on economic cycles. The development of the credit market and financial assets exerts a more marked influence on economic activity than it did a few years ago. This development is driving the financialization of economies. Financial liberalization in the 1970s played a decisive role in economic development.

From an economic point of view, agents differ when it comes to the need for financing. Some can finance (savers) and others need to finance (borrowers). The financial system plays a crucial role in bringing these two categories of agents together. It fulfills this role in two main ways. The first is through what is known as direct financing (financial market). Agents meet on the

market without necessarily using intermediaries. The second way is commonly referred to as indirect or intermediated financing (bank).

6. Proposed theoretical model

6.1. Empirical literature review

Summarizing previous theoretical and empirical studies, we find near-unanimity among economists on the positive effect of bank lending on asset profitability. We would also mention (Bashir, 2000; Ben Naceur, 2003), who have concluded that the more credit a bank distributes, the higher its revenues. While the development of financial markets in developing countries fortifies banking activity, as recent empirical studies have argued (Demergüç-Kunt and Huizinga, 2001; Beckman, 2007), the expansion of these markets can produce a substitution effect on bank activity, contradicting theoretical predictions (Ben Naceur, 2003). As for bank concentration and the size of the banking sector, their estimated impact on the profitability of banking assets is generally positive, which empirically validates economic theory (Rouabah, 2006; Beckman, 2007). The financing of the economy by the banking sector reflects the system's ability to meet the needs of economic players. The size of the sector is therefore expected to benefit the various players (Demergüç-Kunt and Huizinga, 2001; Ben Naceur, 2003). Similarly, concentration strategies and their development have traditionally been justified by the need to achieve economies of scale. The introduction of this variable has empirically demonstrated a positive relation with return on assets (Short, 1979; Bourke, 1989; Molyneux and Thornton, 1992).

6.2. Identification of variables

6.2.1. Variable to be explained

Analysis of the financial, regulatory, and monetary restructuring of the banking sector is of great interest. It enables the banking establishment to better understand the factors affecting its profitability in the context of its contribution to financing the economy, and thus to ensure better levers of control, forecasting and action.

*Bank profitability represents the variable to be explained, which we measure through return on assets **ROA***

6.2.2. Research hypotheses & Explanatory variables

We can classify the factors (explanatory variables) of financial, regulatory and monetary restructuring according to three broad categories:

➤ Financial factors

As we have already mentioned, the contribution to the financing and development of the national economy can only be achieved on the basis of two fundamental pillars: indirect financing (the bank) and direct financing (the financial market). In this sense, the latter's intervention in the financial system calls into question banking profitability.

In other words, the financial restructuring of the banking sector, as part of its financing of the economy, can only be achieved on the basis of a set of factors, while taking into consideration the second player who also participates in financing the economy: the financial market. However, the expansion of the financial market to the detriment of the banking market can have a negative impact on bank profitability. In this sense, we are faced with a relationship of substitutability.

The financial factors are as follows:

- The bank's financial intermediation activity, through loans granted (**LG**) to finance households, companies, the State, etc. The bank anticipates provisions to cover bad debts. Nevertheless, loans remain the main source of bank earnings, through the improvement in revenues, specifically interest margins. We therefore assume that the loans granted by the bank have a positive impact on bank profitability.

H1: Loans granted by the bank positively affect ROA.

- The banking sector's contribution to GDP (**BSC**). The higher the BSC, the higher the profitability of the banking sector.

H2: The banking sector's contribution to GDP favorably influences ROA.

- The relative size of the financial market in relation to the banking sector (**FMBS**). The larger the MFSB, the lower the profitability of banking (substitutability relationship).

H3: The relative size of the financial market compared to the banking sector significantly influences ROA.

➤ **Regulatory factors**

We have opted for the counter-cyclical buffer (**CCyB**), which is part of the Basel III agreements required by prudential regulations. In fact, we have already mentioned the importance of the financial cycle in stabilizing the economy, where it is essential to use the CCyB as a shock absorber to prepare for a downturn in the financial cycle.

Indeed, in periods of growth, the CCyB is bound to increase, to encourage banks to avoid an overheating of credit. They are then obliged to reduce lending, in particular to adjust the robustness of their balance sheets, which can boost bank profitability. Conversely, when a crisis occurs, this requirement is intended to be lowered to stimulate credit and support businesses, which can boost bank profitability. So, the CCyB makes an important contribution to financing the economy.

H4: The counter-cyclical buffer (CCyB) promotes ROA.

➤ **Monetary factors**

As for monetary policy, we have focused on the central bank's task of ensuring reasonable management of the quantity of money in circulation in the economy (the money supply M3), as presented by (**MS**) in our theoretical model. This management involves adjusting M3 to the needs of economic agents, so as to avoid either recession or inflation.

In the fourth section, we concluded that monetary policy should be in the interests of the country's economic and social development. And that we cannot have a strong currency in a weak economy. The relationship between money and the economy is based on two fundamental concepts: the velocity of money circulation and the money multiplier, defined as the ratio between the money supply (M3) and the monetary base (M0). This multiplier establishes a positive relationship between the credit granted by banks, the source of money creation (M3), and the quantity of central bank money (M0) to which they have access ($M3 = \text{Multiplier} \times M0$). We therefore assume that M3 has a positive effect on bank profitability.

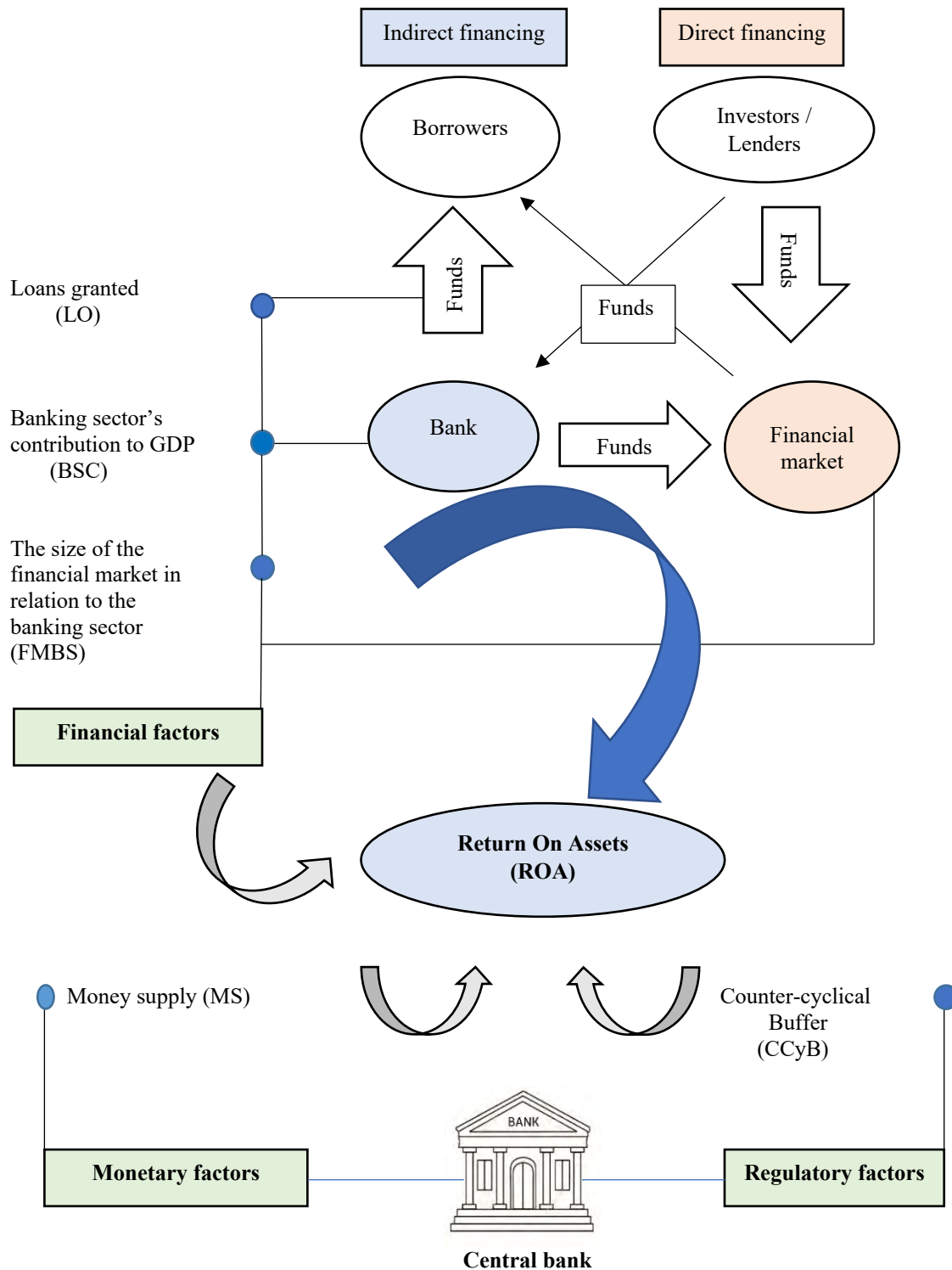
H5: The money supply (MM) favorably influences the ROA.

6.2.3. Schematization of factors (explanatory variables) and modes of financing in the financial system

This schema represents the panoply of factors which are our explanatory variables (financial, monetary and regulatory) and which constitute the keys to answering our problem. It is a clear recapitulation of the basic elements mobilized in our present article, revolving around return on assets (ROA), which presents our variable to be explained. The two financing methods are

shown on the left and right. Direct financing enables borrowers (households, companies, State, the rest of the world) to approach lenders/investors (households, companies, government, the rest of the world) directly, without intermediaries through financial instruments on the market. The second means available to borrowers is indirect financing through financial intermediation, in particular the banking system.

Schema 1: The modes of financing in the financial system under the supervision of the Central Bank and presentation of the factors (explanatory variables) impacting the ROA (variable to be explained)



Source: Developed by us

These two means of financing are complementary since they jointly contribute to financing the economy. As a reminder, we have noted that the financial market can give rise to substitution to the detriment of the banking sector, which calls into question the ROA, hence the choice of the explanatory variable: the relative size of the financial market compared with the banking sector, in addition, then, to the other financial factors which bring together credit granted and the banking sector's contribution to GDP, which reflects the latter's colossal role in the economy, which can favor the ROA. Nevertheless, the flow of funds is rigorously supervised by the Central Bank, whose primary mission is to ensure monetary stability, with a particular focus on the money supply (MM), which is a monetary factor. The central bank also ensures that banking institutions comply strictly with prudential regulations, particularly regarding the counter-cyclical buffer (CCyB), which is a regulatory factor. We have detailed in (b) how (MS) and (CCyB) can have a positive impact on bank profitability.

6.3. Presentation of the theoretical model

We have the variable to explain which is bank profitability through the following indicator:

➤ **ROA** : Return on Assets

As a reminder, the explanatory variables for ROA are:

➤ **LG** : Loans Granted

➤ **BSC** : The Banking Sector's Contribution to GDP

➤ **FMBS** : The Size of the Financial Market in Relation to the Banking Sector

➤ **CCyB** : Counter-cyclical Capital Buffer

➤ **MS** : Money Supply

We adopt multiple regression analysis to test the relation between bank profitability and financial, regulatory and monetary factors over a specific period and for a sample of the five main banks in Morocco. We use the following linear formulation:

$$ROA = \alpha_0 + \alpha_1 LG + \alpha_2 BSC + \alpha_3 FMBS + \alpha_4 CCyB + \alpha_5 MS + \varepsilon$$

With $\alpha_i \in \mathbf{R}, \forall i = 1, \dots, 5$ bank

7. Conclusion

Financial mutations require banks to resort to major financial, regulatory and monetary restructuring to be in a good position to withstand external shocks. In other words, banks that neglect the importance of restructuring their adopted model may be more vulnerable to delicate financial and economic situations, which can negatively influence bank profitability.

Throughout this article, we have sought to address the various aspects of our research question (financial, regulatory and monetary), which constitute a set of factors impacting bank profitability in the context of financing the economy.

The repercussions of the Covid-19 and Ukrainian-Russian crisis have called into question macro-economic policies in general and monetary policies in particular. Bank Al-Maghrib has taken unprecedented measures based on one essential objective: inflation targeting. Today, a whole range of problems are arising in terms of financing the economy, growth, employment, investment and so on. So, it has become imperative to move to a dual mandate that integrates the constraints facing our economy and goes beyond inflation control.

We have made it clear that measuring the profitability of a banking institution, as a key player in economic growth, is of colossal importance. However, contributing to the development of the national economy and its financing can only be achieved through two fundamental sources: indirect financing (the bank) and direct financing (the financial market). In this sense, the latter's

intervention in the financial system calls into question banking profitability, which then finds itself under the impact of a set of restructuring factors in three main categories: financial, regulatory and monetary.

Today, we absolutely must break the taboos that have long prevailed, and broaden the central bank's mandate to include more than just price and financial stability. The role of the central bank needs to be expanded to address the priorities of our time, such as financing the economy and development, as well as financing the digital and ecological transition, which can further promote the dynamism and robustness of banking establishments, and consequently boost their profitability.

Like many other countries, Morocco has recently been hit by a sharp rise in prices. This has hurt household purchasing power and corporate margins and has brought uncertainty to public policy. Initially, this phenomenon was attributed to external shocks, before Bank Al-Maghrib's adoption of a rigorous monetary policy put an end to this explanation.

In Morocco, as elsewhere in the world, this inflation is monetary in origin. It was triggered by the Covid-19 pandemic and accelerated by the energy crisis and Russian aggression in Ukraine. Making the right diagnosis is the beginning of the solution. As this is a macroeconomic imbalance, the levers to be activated to curb inflation can only come under economic policy.

In economic policy, the timing of a decision is more important than the decision itself, given the anticipations or reactions of economic agents that can cancel out the most brilliant of decisions.

Today, no one can predict the transmission speed of this measure (the time elapsing between the rate hike and its impact on credit and prices), nor its real impact on investment and consumption, and even less on price movements.

There are several Phases between making a monetary decision and seeing its impact. The speed of transmission depends on several parameters, including the adjustment made by banks and the reaction (or anticipation) of economic agents. However, the transmission is slower for long-term loans than for consumer and medium-term loans. It is also strongly influenced by the country's macroeconomic and institutional factors and by the depth of its capital market.

In recent years, Morocco has increasingly embraced banking restructuring as part of a process of financial inclusion and liberalization that has further boosted the development and competitiveness of Moroccan banking on local and international markets. Nevertheless, a series of economic and financial turbulences have called into question the entire model adopted within the banking establishment, making it vital to position the role of monetary policy at the forefront to cope with these turbulences and thus promote the financial stability necessary for the smooth running of the bank.

BAM's decision to raise the key interest rate is not without risk. It could penalize investment in Morocco, particularly that of companies that rely on bank loans to develop their production capacities or households that need them to finance their property investments. Nevertheless, given Morocco's current situation, BAM's decision was inevitable. It is now up to the government and BAM to work together on the other factors driving inflation (including speculation by intermediaries in the distribution networks) to lower the key rate in the medium term and avoid punishing the investment and employment that are at the heart of Morocco's new investment charter.

References

- (1). Abreu, M. et Mendes, V. (2002). "Commercial Bank Interest Margins and Profitability:
- (2). AMDIE, (2022). La charte de l'investissement : Un cadre transparent et lisible pour encourager l'acte d'investir
- (3). BAM, (2013). Circulaire n° 14 /G/13 relative aux fonds propres des établissements de crédit, article 5.
- (4). BAM, (2020). Une politique accommodante au chevet d'une économie en berne.
- (5). Bank of africa. (2020). Avis de réunion des actionnaires à l'assemblée générale mixte de bank of africa.
- (6). Banque populaire, (2019). Document de référence: l'Autorité Marocaine du Marché des
- (7). Bashir, A. (2000). "Assessing the Performance of Islamic Banks: Some Evidence from the Middle East 1993-1998", Papier présenté à la 8ème Conférence de l'Economic Research Forum (ERF), Amman, Jordanie, novembre.
- (8). Baudouin, C. (2019). Stratégie bancaire et réglementaire : De la contrainte à l'opportunité. Edition Dunod
- (9). Beckmann, R. (2007). "Profitability of Western European Banking Systems: Panel Evidence on Structural and Cyclical Determinants; Discussion Paper Series N°2: Banking and Financial Studies, No 17/2007.
- (10). Ben Naceur, S. (2003). The determinants of the Tunisian banking industry profitability: Panel evidence 1980-2000. Papier présenté à la 11ème Conférence de l'Economic Research Forum (ERF), Marrakech, novembre.
- (11). Borio, C. (2014). The financial cycle and macroeconomics: What have we learnt. *Journal of Banking & Finance*, 45, 182- 198.
- (12). Capitaux (AMMC).
- (13). Concentration in Canada, Western Europe and Japan", *Journal of Banking and Finance*, Vol. 3.
- (14). Daniel, A. (1980). « Structure des Taux d'Intérêt et Stratégies des Intermédiaires Financiers », *Economies et Sociétés*, Série MO, n°2, ISMEA
- (15). Demerguç-Kunt, A. et Huizinga, H. (2001). "Financial Structure and Bank Profitability 1990-1997", in Asli Demirgüç-Kunt and Ross Levine (eds.), *Financial Structure and*
- (16). Dominique, L. (1980). Analyse monétaire, Dunod
- (17). Durand, P. (2020). Efficacité de la réglementation prudentielle bancaire : Le retour du ratio de levier
- (18). *Economic Growth: A Cross-Country Comparison of Banks, Markets, and Development* Cambridge, MA: MIT Press.
- (19). Evidence from E.U Countries", *Porto Working paper series*.
- (20). Greenbaum S. & Thakor A. (1987). « Bank Funding Modes », *Journal of Finance*, vol. n°3
- (21). Guru B., Staunton, J. et Balashanmugam, M. (2002). "Determinants of Commercial Bank Profitability in Malaysia 1986-1995", *University Multimedia working papers/2002*.
- (22). Kindleberger, C. (1978). Manias, Panics and Crashes
- (23). Koppenhaver, G.D. (1985). « Bank Funding Risks, Risk Aversion, and the Choice of Futures Hedging Instrument », *Journal of Finance*, vol. 40, n° 1
- (24). Levine, R. (2005) « Finance and Growth : Theory and Evidence », in Aghion, P. et S. Durlauf (eds.), *Handbook of Economic Growth*, vol. 1 (Amsterdam : Elsevier), pp. 865-910.
- (25). Milne, F. (2003). Finance Theory and Asset Pricing, 2e éd., Oxford, Oxford University Press.

- (26). Moëc, G. (2022). Sortie de crise sanitaire. *Revue Banque* n°859
- (27). Molyneux, P. et Thornton, J. (1992). "Determinants of European bank profitability 1986-1989: A note", *Journal of Banking and Finance*, Vol. 16.
- (28). Murray, J. (2013). La prise de décision en matière de politique monétaire à la Banque du Canada. *Revue de la Banque du Canada*
- (29). OCDE, (1986) « La Gestion par les Banques de leurs Actifs et de leurs Passifs », *Tendance de Marché des Marchés de Capitaux*, n° 34
- (30). Rouabah, A. (2006). "La sensibilité de l'activité bancaire aux chocs macroéconomiques: une analyse de Panel sur des données de banques luxembourgeoises 1994-2005", Banque Centrale du Luxembourg, *Cahier d'études* n° 26, mai.
- (31). Short, B. K. (1979). "The Relation Between Commercial Bank Profit Rates and Banking
- (32). Zhani, A. (2021). Les finances publiques à l'épreuve de la crise covid-19 : Analyses et perspectives CDG capital.