Revue-IRS

Revue Internationale de la Recherche Scientifique
(Revue-IRS)
ISSN : 2958-8413
Vol. 2, No. 2, Mars 2024

The impact of COVID-19 on the financial performance of Moroccan banks: a post-covid analysis

Mesrar Rida[1], Maach Rime[2]

[1]PhD student at ENCG, Research Laboratory in Organizational Management Sciences Ibn Tofail university, Kenitra, Morocco

[2] PhD student at ENCG, Research Laboratory in Organizational Management Sciences Ibn Tofail university, Kenitra, Morocco

Abstract: The health crisis in Morocco has triggered a palpable macroeconomic and microeconomic shock, which deeply affected all sectors of the national economy. Despite playing a crucial role as intermediaries for the transmission of monetary and fiscal policies to manage economic crises, banks were not spared the devastating effects of the crisis. Banks faced significant financial and operational pressures attributable to various factors such as market volatility, increased credit risk, rise in doubtful debts, liquidity strains, and a significant decline in financial results. This research aimed to specifically examine the repercussions of the pandemic on the profitability and financial performance of banks. To achieve this, a descriptive analysis methodology was adopted while focusing on two key indicators: Return on Assets (ROA) and Return on Equity (ROE). These indicators could potentially assess the profitability of banks and provide a meaningful overview of their financial performance before, during, and after the crisis to better understand the specific effects of the pandemic on the Moroccan banking sector.

Keywords: Financial performance, ROA, ROE, Banks, Covid-19.

Digital Object Identifier (DOI): https://doi.org/10.5281/zenodo.10868441

1 Introduction

Since the emergence of the earliest forms of banks around 8000 BC, banking activities have continuously evolved, transitioning from simple exchange of goods and services to sophisticated and globally interconnected financial systems. The banking system has been deeply marked by several global economic crises, such as the British credit crisis in 1772, the Great Depression that struck the United States from 1929 to 1939, the Asian crisis of 1997, and finally the global financial crisis of 2007 to 2008, not to mention the COVID-19 crisis. December 2019 was a pivotal month that triggered a series of decisive events leaving a profound imprint affecting the entire planet.

The year 2020 was one of the most remarkable periods in history, characterized by the emergence of an unprecedented health crisis qualified as a pandemic by the World Health Organization. The onset of the COVID-19 pandemic led to major economic and social imbalances worldwide. The decrease in production, the decline in demand for goods and services caused by the coronavirus pandemic, as well as by the containment measures implemented to control it, resulted in a profound recession in the global economy and a 3.1% drop in global Gross Domestic Product (GDP) in 2020 according to the IMF.

In Morocco, the health crisis caused a manifest macroeconomic and microeconomic shock, profoundly impacting all sectors of the national economy. According to the High Commission for Planning (HCP), in 2020, the country's Gross Domestic Product (GDP) recorded a significant contraction of 6.3% in volume, compared to a growth of 2.6% in 2019. Similarly, the national GDP dropped by 5.5% in current prices in 2020, while it had increased by 4% the previous year.

Indeed, Moroccan banks were also at the heart of this pandemic. Despite their intermediating roles of transmitting monetary and fiscal policies to manage economic crises, Moroccan banks were subject to the devastating effects of the crisis and faced significant financial and operational pressures. The latter were mainly consequences of several factors such as market volatility, increased credit risk, increase in non-performing loans, liquidity tensions, and the remarkable decline in results; mainly due to the increase in risk costs and the contribution of banks to the COVID-19 crisis management fund.

This pandemic created a major challenge for the Moroccan banking sector by impacting its financial performance. Hence, our study aims to analyze to what extent the COVID-19 pandemic has affected the profitability of the banking sector. By examining the variations in financial indicators before, during, and after the health crisis, we will be able to understand the specific effects of the pandemic on the profitability and financial performance of banks. To this end, we have utilized a descriptive methodology, focusing particularly on two key indicators: Return on Assets (ROA) and Return on Equity (ROE). These indicators could allow us to evaluate, respectively, the profitability of assets and the profitability of banks' equity. Thus, providing a significant overview of the banks' financial performance before, during, and after the crisis.

2 Literature review

2.1 The impact of COVID-19 on the economy

In March 2020, Dr. Tedros Adhanom Ghebreyesus, Director-General of the World Health Organization (WHO), declared during a press conference in Geneva that COVID-19 could be categorized as a pandemic[1]. This health crisis caused unprecedented disruptions both economically and socially on a global scale. Consequently, international trade was heavily impacted by the COVID-19 pandemic in 2020, and the growth dynamics of the global economy are expected to remain low compared to the period before the pandemic[2]. Globally, this health crisis plunged the world economy into a very significant recession, during which global merchandise trade experienced a decline of 5.3%, while real Gross Domestic Product (GDP), calculated using market exchange rates,

[1] https://www.who.int/fr

[2] Arriola C, Kowalski P, Kowalski P, Tongreen FV (2022) International trade during the COVID-19 pandemic: Big shifts and uncertainty. OECD. (https://read.oecd-ilibrary.org/view/?ref=1129_1129345-casormobh7&title=International-trade-during-the-COVID-19-pandemic)

decreased by 3.1%. Additionally, the value of merchandise exports decreased by 8%, reaching $17.58 trillion USD, while exports of commercial services dropped by 20%, settling at $4.91 trillion USD[3].

The literature provides various studies that contributed to the analysis of the impact of COVID-19 on the economy, among which is a study entitled "Evaluation of the Impact of COVID-19 on Society, Environment, Economy, and Education" conducted by Kumar et al. (2021). This study highlighted the disruptions caused by the COVID-19 pandemic which affected all sectors of activity. It comprehensively explored the repercussions of COVID-19 in various areas such as the economy, education, society, and the environment[4].

Similarly, a study was conducted by Gazi N. et al. in 2022 on the impact of COVID-19 on the financial performance and profitability of the banking sector, with a special reference to private commercial banks: Empirical evidence from Bangladesh. The study examined the impact of COVID-19 on the financial performance and profitability of private commercial banks in Bangladesh. It used a standardized rating system called CAMELS and the Financial Performance Index (FPI) of each bank was calculated to assess banks' position before and during the pandemic. The results revealed that banks performing well before the crisis also continued to perform well during the pandemic, with notable examples such as AIBL, EBL, and BBL[5].

Likewise, a study was conducted on the impact of COVID-19 on the liquidity and profitability of commercial banks by Noor Aldeen Kassem Al-Alawnh, et al. (2022)[6] to analyze the impact of the COVID-19 pandemic on the profitability and liquidity of commercial banks in Jordan, using liquidity ratio and return on equity (ROE) as indicators. By comparing data before (2017-2018) and during the pandemic (2019-2020), the study observed, through a comparative statistical analysis, that bank profitability was affected while their liquidity remained stable. It suggested that Jordanian banks ought to diversify their sources of profitability, particularly by investing in a more varied range of securities and funds, and recommends in-depth studies on profitability and liquidity conducted by banking and monetary authorities to ensure the sustainability of banks in the future.

Moreover, Mohamed Zaki Balboula and Maha Saad Metawea (2021) studied the impact of the COVID-19 pandemic on the performance of banks, while providing evidence from banks listed on the Egyptian Stock Exchange. The enquiry provided an opportunity to examine how the COVID-19 pandemic affected the risk and return of Egyptian banks. It evaluated bank performance by analyzing stock volatility (as a risk indicator) and stock returns, while measuring the impact of COVID-19 using various metrics such as new confirmed cases, new confirmed deaths, and mortality growth rate on a weekly basis. Control variables such as leverage effect, bank size, and asset returns were also considered. The study used statistical methods such as Pooled OLS regression, Pearson correlation, and paired Student t-test to examine the proposed hypotheses. The sample included 12 banks listed on the Egyptian Stock Exchange, covering two equal duration periods, before and during the COVID-19 pandemic. The results indicated that new cases, new deaths, and the mortality growth rate related to COVID-19

---

[3] International Monetary Fund.https://www.imf.org/fr/Home

[4] Kumar, Vijay, Alshazly, Hammam, Idris, Sahar Ahmed, Bourouis, Sami; Evaluating; the Impact of COVID-19 on Society, Environment, Economy, and Education 2021.

[5] Gazi, Md. Abu Issa; Nahiduzzaman, Md.; Harymawan, Iman; Masud, Abdullah Al; Dhar, Bablu Kumar; Impact of COVID-19 on Financial Performance and Profitability of Banking Sector in Special Reference to Private Commercial Banks: Empirical Evidence from Bangladesh 2022.

[6] Noor Aldeen Kassem Al-Alawnh, Hayder Jerri Mohsin, Laith Yousef Bani Hani, Basil Mohammad Al-Naser, Awad Adel Qurran and Sara Khaled Alzubi (2022); THE IMPACT OF COVID-19 ON LIQUIDITY AND PROFITABILITY IN COMMERCIAL BANKS *Int. J. of Adv. Res.* 10 (May). 490-496] (ISSN 2320-5407). www.journalijar.com

were associated with negative (positive) variations in stock returns (volatility). In summary, this study highlighted the significant impact of the pandemic on the stock market of Egyptian banks; hence, emphasizing a correlation between COVID-19 indicators and bank stock performance[7].

2.2 Literature Review on Performance in the Banking Sector

In literature, performance is a concept used across various domains to describe a level of accomplishment. In the 13th century, Etymologically, the word "performance" was derived from Old French "parformer," meaning "to accomplish". In its strict sense, it denotes a quantified result, often used in a ranking framework, either concerning self-improvement or in comparison to others. In management, performance is a complex concept often associated with effectiveness and efficiency. It has been debated and defined in various ways by researchers, especially in the context of sustainable development[8].

Several authors have attempted to grasp the notion of performance. A. Bourguignon (1998) provides three levels of management performance: result performance, action performance, and success performance. According to P. Lorino (1997), "Performance in the company is anything, and only what, contributes to achieving strategic objectives."

For banking institutions, the concept of performance remains complex due to the diversity of indicators used to measure it and the different perspectives under which it can be interpreted. Bank profitability, for example, illustrates a bank's ability to generate sufficient profits from its operations after subtracting associated costs. This ability is crucial as it conditions the long-term viability of the bank, allowing it to ensure the continuity of its activities sustainably. Therefore, evaluating profitability is essential for the bank to determine its financial health and sustainability over time (Bel Hadj M., 2020).

The assessment of bank performance is often examined by considering various internal and external factors. Internal factors, sometimes called microeconomic or bank-specific factors, encompass aspects related to their internal operations and management. In contrast, external factors refer to variables that are not directly related to bank management but rather reflect the economic and legal environment in which banks operate, influencing their operations and results.

Various explanatory variables have been put forward for these two categories, depending on the context and specific objectives of each study. Bank performance is primarily assessed using quantitative financial indicators, as demonstrated by several previous studies (Yao, 2005; Heffernan & Fu, 2010; Ongore & Kusa, 2013).

The majority of recent empirical studies (Bonin et al., 2005; Berger et al., 2005; Peters et al., 2004; Demirgüç-Kunt et al., 2012) focused on the financial performance of banks, emphasizing their profitability measured by the Return on Assets (ROA) and Return on Equity (ROE) ratios. ROA illustrates a bank's ability to generate income from its assets, making it a relevant measure of its financial performance, given that strategic decisions directly impact the composition of bank assets. In contrast, ROE is considered the most appropriate performance measure, aligning with the objective of maximizing shareholder profits (Goddard et al., 2004).

---

[7] Mohamed Zaki Balboula et Maha Saad Metawea ; The Impact of Covid-19 pandemic on Bank Performance: Evidence from Listed Banks on the Egyptian Stock Exchange 2021.

[8] Issor, Z. (2017). « La performance de l'entreprise : un concept complexe aux multiples dimensions ». *Projectics / Proyéctica / Projectique*, 17, 93-103. https://doi.org/10.3917/proj.017.0093

In this regard, Lestari conducted a study titled "Analysis of the Performance of Conventional Commercial Banks in Indonesia During the Covid-19 Pandemic (2019-2020)[9]. The study aimed to evaluate the impact of the COVID-19 pandemic on bank performance in Indonesia. In response, the Indonesian government implemented economic stimulus policies. The objective of this research was to analyze the performance of Indonesian banks during the COVID-19 period (2019-2020) based on financial indicators, particularly for conventional commercial banks from BUKU 1 to 4. Additionally, it sought to examine the effect of government economic policies on the financial health of banks during this period. The methodology adopted was quantitative, with an analysis based on descriptive statistics using data from Indonesian Banking Statistics (SPI) from 2015 to 2020. The results revealed that despite stabilization efforts, banks experienced a decline in management and profitability aspects, attributable to credit easing measures and the continued decline in the reference interest rate by the Bank of Indonesia. All in all, this study shed light on the resilience of banks in the face of the pandemic.

2.3 Characteristics of the Moroccan Banking Sector

In addition to its oligopolistic nature, the Moroccan banking sector is distinguished by significant concentration, substantial regulation, and a capacity for resilience in the face of shocks. These are the main traits that define this sector.

2.3.1 Structure of the Moroccan Banking System

Number of credit institutions and similar organizations:	**90**
• Banks	**24**
Including participative banks	5
Including participative windows	3
• Financing companies	**29**
Including consumer credit companies	12
Including leasing companies	8
• Offshore banks	**6**
• Microcredit associations	**11**
• Payment institutions	**18**
• Other establishments	**2**

Source 1: Banking Supervision Report of Bank Al-Maghrib 2022

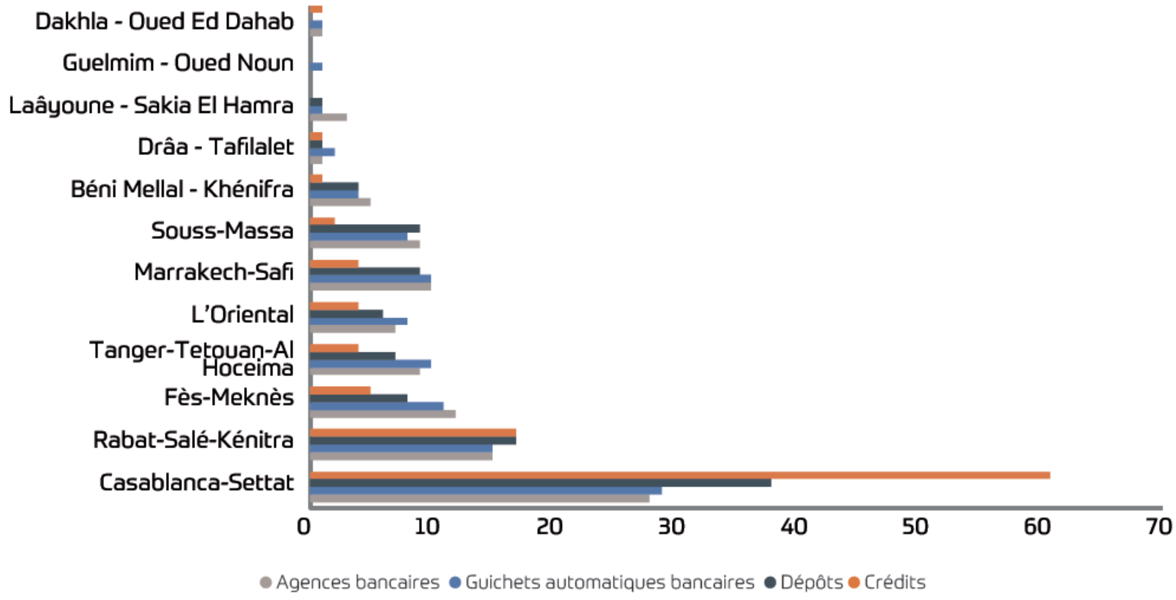
The number of credit institutions and entities subject to the control of Bank Al-Maghrib is 90 establishments, distributed among 19 conventional banks, including 3 participative windows, with one specialized in financing guarantees, 5 participative banks, 29 financing companies, 6 offshore banks, 11 microcredit associations, 18 payment institutions, and 2 other establishments: the Caisse de Dépôt et de Gestion (CDG) and the Société Nationale de Garantie et du Financement de l'Entreprise (SNGFE), which are also subject to the control of Bank Al-Maghrib.

[9] Lestari, F.A. (2022). Performance Analysis of Conventional Commercial Banks in Indonesia During the Covid-19 Pandemic (2019-2020). Proceedings of the International Conference on Economics, Management and Accounting (ICEMAC 2021).

2.3.2 Concentration of the Moroccan Banking System

The concentration of the Moroccan banking sector is evident both geographically and in various activity indicators.

Figure 1: Share of each region in the total banking network.



Source 2: Banking Supervision Report of Bank Al-Maghrib 2022

The Moroccan banking system displays significant geographic concentration, as demonstrated by the graph below. The Casablanca-Settat region ranks first, representing 29% of branches, 38% of deposits, and 64% of credits. Next, the Rabat-Salé-Kénitra region holds 15% of the banking network, 17% of deposits, and 17% of credits.

It is noteworthy that the Casablanca and Rabat regions together account for over half of the collected deposits, and only the Casablanca-Settat region significantly surpasses the 50% mark of the total amount of credits granted during the same year, with 64%.

2.3.3 Concentration of banking activity:

What we have mentioned regarding geographic concentration also translates to activity level, as the top three banks hold over sixty percent of the total assets of the banking sector, as well as in deposit collection and credit granting, with the top five banks holding over 76%.

The concentration of activity in total assets, deposits, and credits, for the top 3 banks and the top 5 banks during the last three years, is presented in the table below based on data published by Bank Al-Maghrib.

Top 3 Banks

	2020	2021	2022
Total assets	62,9%	62,4%	61,6%
Deposits	63,8%	63,4%	63,3%
Credit	61,5%	60,8%	60,1%

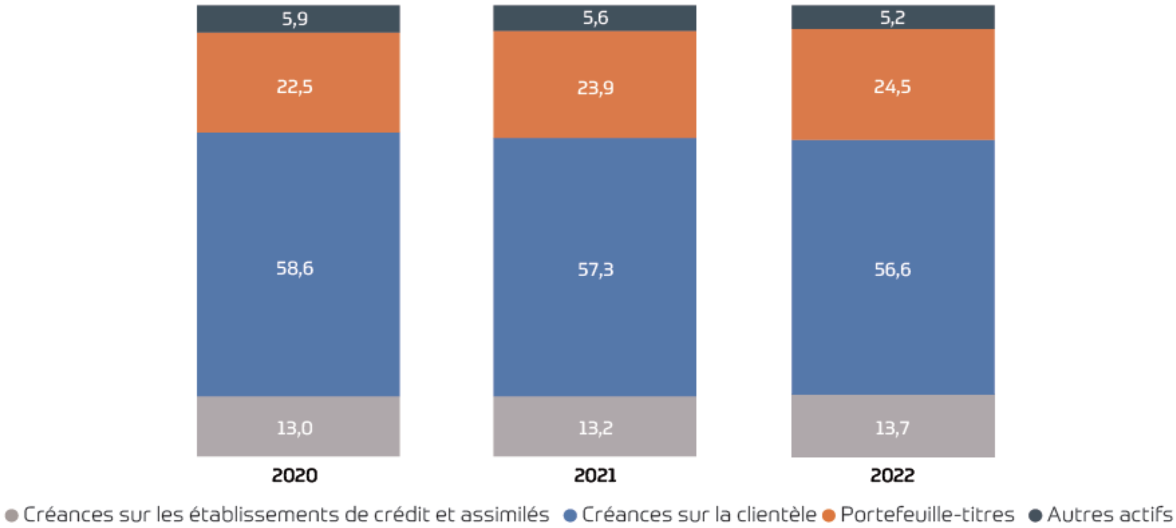
Top 5 Banks

	2020	2021	2022
Total assets	77,6%	76,8%	76,4%
Deposits	78,7%	78,5%	78,3%
Credit	79,3%	78,3%	78,1%

Structure of Bank Assets

The structure of total bank assets shows that the vast majority consists of customer loans, accounting for over 56%, followed by a share of the securities portfolio around 24%, and loans to other credit institutions accounting for 13%, as shown in the following graph:

Figure 2: Structure of Bank Assets



Source 3: Banking Supervision Report of Bank Al-Maghrib 2022

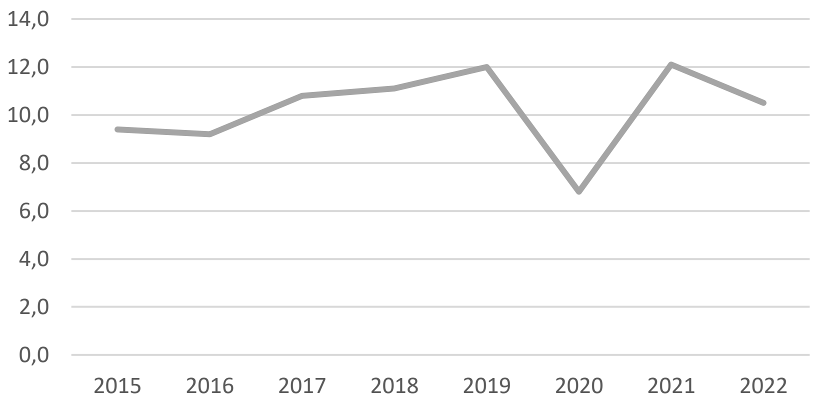
3 Analysis of the Impact of Covid-19 on the Financial Performance of the Moroccan Banking Sector:

3.1 Activity and Profitability Indicators

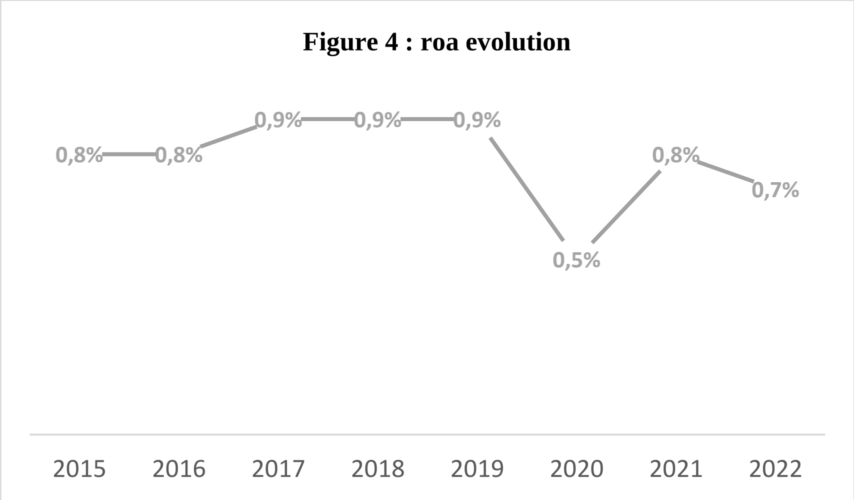
Table 3: Activity and Profitability Indicators of Banks - Social Basis

Indicators	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
Total assets	**1 145**	**1 199**	**1 271**	**1 341**	**1 415**	**1 491**	**1 565**	**1 680**
Net income	**9,4**	**9,2**	**10,8**	**11,1**	**12,0**	**6,8**	**12,1**	**10,5**
Return On Assets (ROA)	**0,8%**	**0,8%**	**0,9%**	**0,9%**	**0,9%**	**0,5%**	**0,8%**	**0,7%**
Return On Equity (ROE)	**9,1%**	**8,6%**	**9,5%**	**9,5%**	**9,4%**	**4,9%**	**8,2%**	**6,9%**

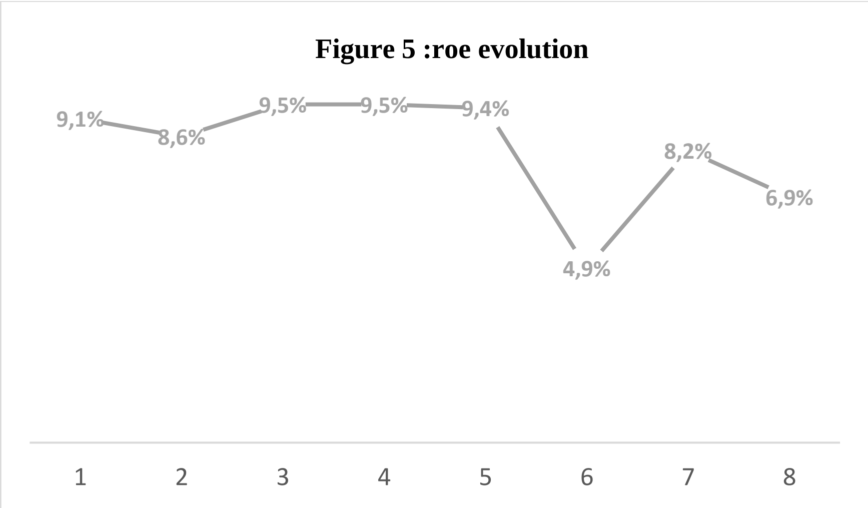
Figure 3 : Net income evolution



Source: realized by the authors



Source: realized by the authors



Source: realized by the authors

Based on the table and graphical representations, it is evident that over a period of 8 years from 2015 to 2022, the Moroccan banking sector has undergone significant changes while generally showing a trend towards growth. There has been a progressive increase in net income, which rose from 1.145 million dirhams in 2015 to 12 million dirhams in 2019. Similarly, Return on Assets (ROA) remained stable at 0.8% in 2015 and then stabilized at 0.9% for the following four years. Return on Equity (ROE) also saw an increase, rising from 9.1% in 2015 to 9.4% in 2019. This period was characterized by relative stability and solid financial performance, reflecting prudent asset management and reasonable profitability for shareholders.

However, the year 2020 marked a crucial turning point due to the devastating impact of the health crisis. This resulted in a significant disruption, translating into a substantial decrease in net income from 12 million dirhams in 2019 to 6.8 million dirhams in 2020, representing a decrease of 43.33%. The decline in net income consequently led to a decrease in ROA from

0.9% in 2019 to 0.5% in 2020. Similarly, the ROE experienced an unprecedented decline of 48%, dropping from 9.4% in 2019 to 4.9% in 2020. This can be attributed to the direct impact of COVID-19 related restrictions on economic activities, an increase in provisions for loan losses, non-performing loans, and the cost of risk.

Despite the challenges faced, the Moroccan banking sector showed notable resilience in 2021, with a significant improvement in net income, approximately doubling from 6.8 million dirhams in 2020 to 12.1 million dirhams in 2021. Concurrently, ROA and ROE also increased significantly compared to 2020.

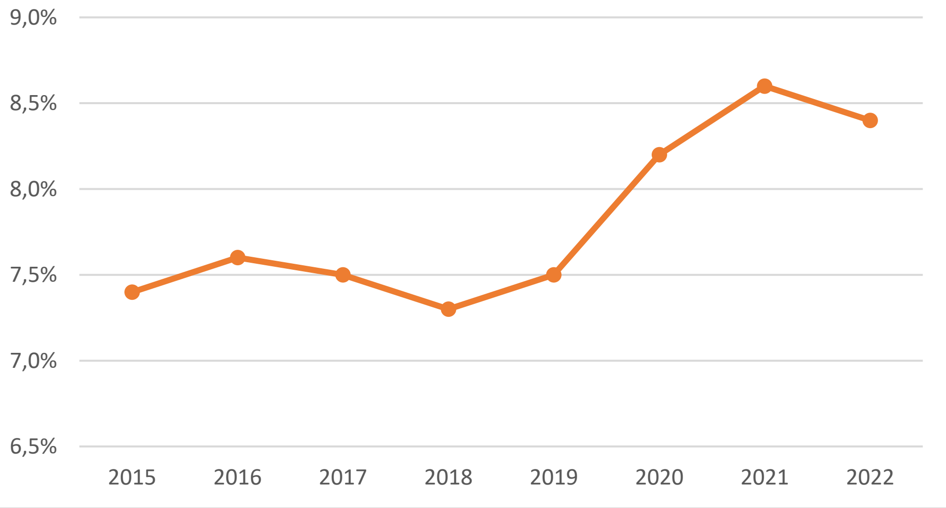
However, in 2022, signs of performance downturn emerged, accompanied by a slight decrease in net income, ROA, and ROE compared to the previous year, suggesting continued pressure on the sector's profitability due to economic conditions.

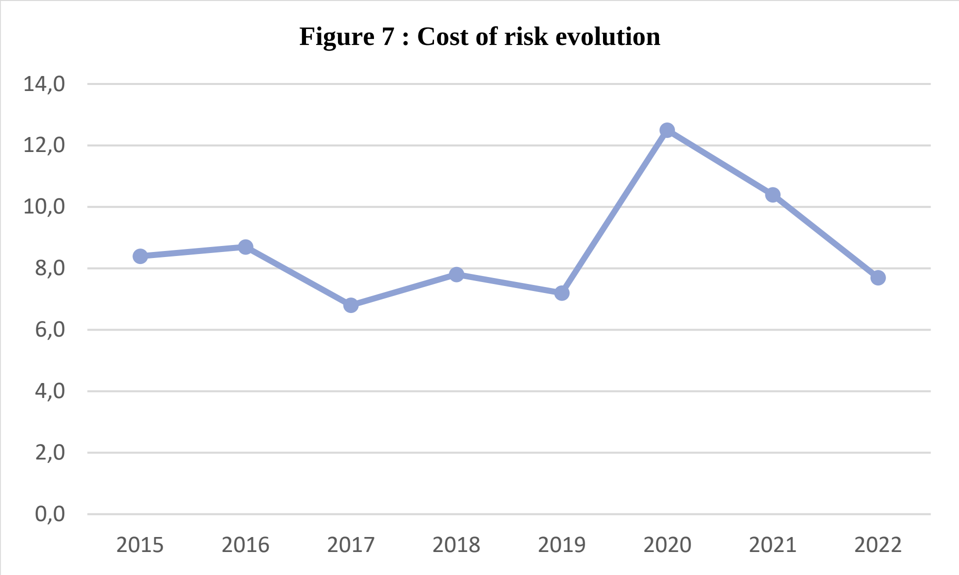
3.2 Bank Risk Indicators

Bank Risk Indicators - Social Basis

Indicators	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
Non-performing Loan Ratio	**7,4%**	**7,6%**	**7,5%**	**7,3%**	**7,5%**	**8,2%**	**8,6%**	**8,4%**
Cost of risk	**8,4**	**8,7**	**6,8**	**7,8**	**7,2**	**12,5**	**10,4**	**7,7**

Figure 6 : Non performing loan ratio evolution





Source: realized by the authors

According to the table above, we can observe that Moroccan banks have experienced a period marked by significant fluctuations in the non-performing loan ratio and the cost of risk in recent years. Although the non-performing loan ratios varied slightly between 7.4% in 2015 and 7.5% in 2019, the costs of risk experienced major ups and downs, ranging from 8.4 in 2015 to 6.8 in 2018, then increasing again to 7.8 in 2018 and 7.2 in 2019.

However, the year 2020 was particularly challenging, with a significant increase in the non-performing loan ratio to 8.2%, accompanied by a notable rise in the cost of risk to 12.5. This increase is undoubtedly attributed to the economic impact of the COVID-19 pandemic, which exerted pressure on borrowers' ability to repay their loans, thereby necessitating additional provisions to address increased loss risks.

In 2021, although the non-performing loan ratios continued to increase, reaching 8.6%, the costs of risk slightly decreased to 10.4%. This year was characterized by increased efforts by banks to address post-COVID-19 economic challenges.

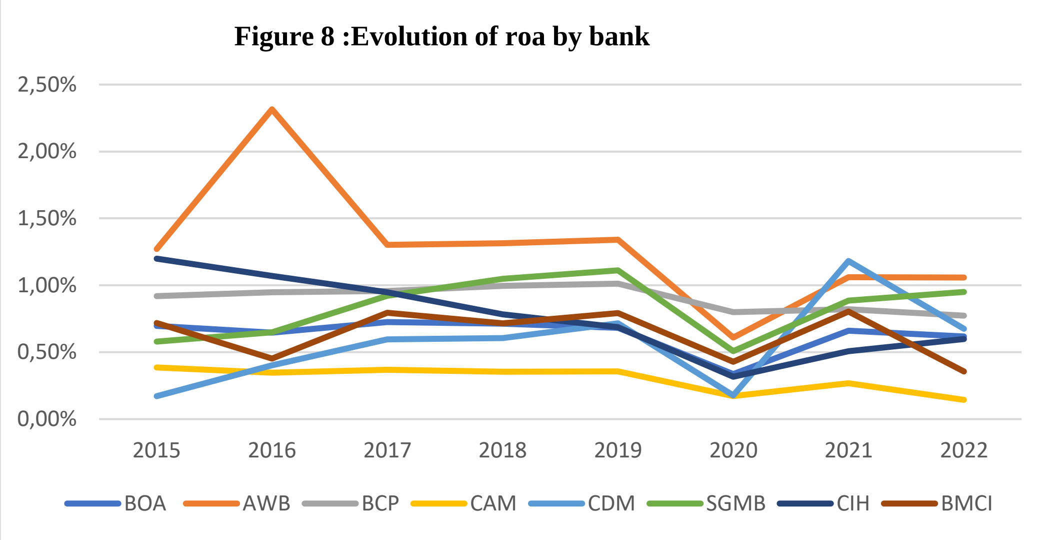
Finally, in 2022, it is noticeable that the non-performing loan ratio slightly decreased to 8.4%, and the costs of risk also decreased from 10.4 in 2021 to 7.7 in 2022.

Overall, these fluctuations underscore the necessity for banks to maintain careful risk management and strategic flexibility to adapt to economic changes and external shocks.

3.3 ROE and ROA analysis

ROA

YEAR	BOA	AWB	BCP	CAM	CDM	SGMB	CIH	BMCI
2015	0,70%	1,27%	0,92%	0,39%	0,17%	0,58%	1,20%	0,72%
2016	0,65%	2,32%	0,95%	0,35%	0,40%	0,65%	1,07%	0,45%
2017	0,73%	1,30%	0,96%	0,37%	0,60%	0,92%	0,95%	0,79%
2018	0,71%	1,31%	1,00%	0,35%	0,60%	1,05%	0,78%	0,71%
2019	0,68%	1,34%	1,01%	0,36%	0,72%	1,11%	0,69%	0,79%
2020	0,34%	0,61%	0,80%	0,17%	0,18%	0,51%	0,32%	0,43%
2021	0,66%	1,06%	0,82%	0,27%	1,18%	0,89%	0,51%	0,80%
2022	0,62%	1,06%	0,77%	0,14%	0,67%	0,95%	0,60%	0,36%



Source: realized by the authors

BOA (Bank Of Africa)

According to the table, it can be observed that Bank of Africa displayed varying performances in terms of Return On Asset (ROA) during the period from 2015 to 2022. In 2015, with an ROA of 0.70%, the bank started on a relatively positive note, reflecting a good utilization of its assets to generate profits.

However, in 2016, the ROA slightly decreased to 0.65%. In 2017, the ROA rebounded to 0.73%, indicating a recovery in profitability. This positive trend was maintained in 2018 with an ROA of 0.71%. However, in 2019, the ROA again decreased to 0.68%. However, the most significant decrease was observed in 2020, where the ROA plummeted by 50% to the lowest percentage of 0.34%. This significant decrease is explained by the devastating impact of the COVID-19 pandemic.

In 2021, the ROA slightly increased to 0.66%, but in 2022, it decreased again to 0.62%. This series of fluctuations highlights that the financial market is a volatile market that must always adapt to external shocks that may occur.

AWB (Attijari WafaBank)

The performance of Attijari Wafa Bank's ROA has experienced highs and lows from 2015 to 2022. Initially, the ROA showed strong performance in 2016, reaching a remarkable peak of 2.32%, indicating exceptional profitability. However, this performance was followed by a slight decline in 2017 and 2018, where the ROA returned to levels close to 1.30%.

In 2019, a slight increase was observed with an ROA of 1.34%, indicating a moderate improvement in profitability. However, in 2020, the ROA plummeted dramatically to only 0.61%, suggesting significant financial difficulties likely related to the economic impact of the COVID-19 pandemic. Although the ROA slightly rebounded in 2021, reaching 1.06%, it remained unchanged in 2022.

BCP (Banque Populaire)

The evolution of Banque Populaire's ROA shows a general trend towards stability, with some variations. Initially, the ROA slightly increased from 2015 to 2017, from 0.92% to 0.96%. This period reflects a progressive improvement in the bank's profitability. In 2018 and 2019, the ROA maintained this trend with relatively stable values around 1.00%. However, a notable decrease is observed in 2020, where the ROA plummeted considerably to 0.80%, suggesting financial challenges related to the economic impact of the COVID-19 pandemic.

Despite this decrease, a slight recovery is observed in 2021, with the ROA increasing slightly to 0.82%. Finally, in 2022, a significant decline is observed with an ROA reaching 0.77%.

CDM (Crédit Du Maroc)

The evolution of Crédit Du Maroc's ROA reflects a dynamic performance path over the past few years. Initially, the ROA showed progressive growth from 2015 to 2019, increasing from 0.17% to 0.72%. This period was marked by a steady improvement in the bank's profitability.

However, in 2020, a notable decrease is observed, with the ROA dropping to only 0.18%. This decrease is due to the economic challenges faced that year due to the economic repercussions of COVID-19. Despite this decrease, a spectacular recovery is observed in 2021, where the ROA reaches 1.18%, indicating a significant recovery in profitability and an ability to overcome post-covid challenges. Finally, in 2022, the ROA stabilized at 0.67%, reflecting solid financial performance albeit slightly lower than the peak reached in 2021.

SGMB (Société Générale Marocaine Des Banques)

The evolution of this bank's ROA has been variable over the past eight years. In 2015, the ROA was 0.58%, then in 2016, it slightly increased to 0.65%, before experiencing a notable increase in 2017 to 0.92%. In 2018, this upward trend continued with an ROA of 1.05%. In 2019, it continued to increase to reach 1.11%. However, in 2020, a significant decrease is observed, with the ROA dropping to only 0.51%.

In 2021, a slight recovery is observed, with the ROA increasing to 0.89% and 0.95% in 2022.

CIH (Crédit Immobilier et hôtelier)

The variation of the Return on Assets (ROA) of this bank shows a downward trend since 2015, with rates decreasing steadily until 2020, a year where the impact of COVID-19 was the most significant with a percentage of 0.32%. This period was marked by widespread economic contraction and disruptions in the financial sector, thus affecting the performances of many banking institutions.

The ROA slightly rebounded in 2021 to 0.51% and to 0.60% in 2022. This is explained by the gradual economic recovery which allowed for an improvement in the ROA.

BMCI (Banque Marocaine pour le Commerce et Industrie)

The evolution of the Return on Assets (ROA) has been marked by a series of highs and lows over the past few years. In particular, the year 2020 was significant due to the major impact of COVID-19 on the financial performance of the institution. With an ROA falling to 0.43% in 2020, this decrease highlights the considerable challenges faced by the bank due to the pandemic.

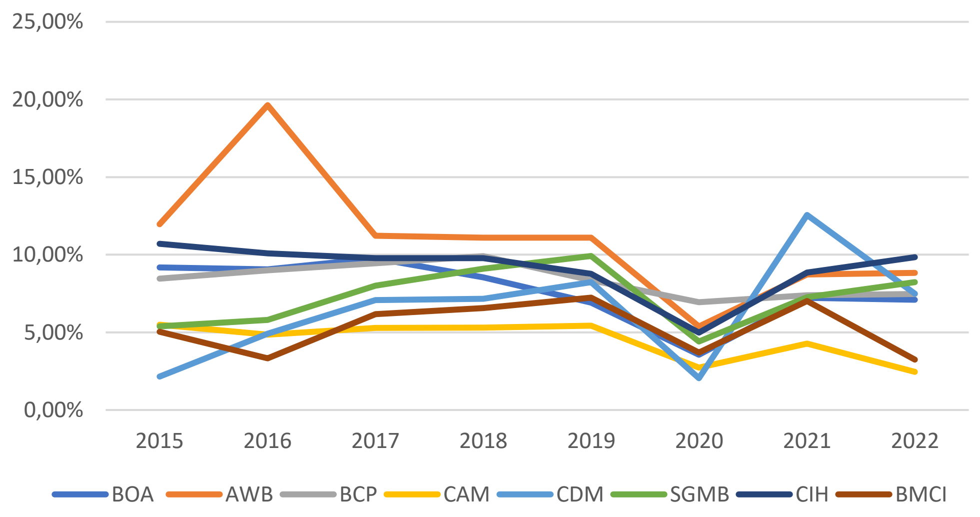
Lockdown restrictions, reduced demand for credit, and widespread economic disruptions weighed heavily on the bank's profitability in 2020. These factors influenced the institution's ability to generate revenue and maintain previous performance levels.

Although the bank managed to rebound in 2021 with an ROA of 0.80%, returning to pre-pandemic levels remained a challenge, as evidenced by the ROA of 0.36% in 2022.

ROE

YEAR	BOA	AWB	BCP	CAM	CDM	SGMB	CIH	BMCI
2015	9,18%	11,97%	8,47%	5,49%	2,15%	5,38%	10,71%	5,03%
2016	9,06%	19,63%	8,99%	4,85%	4,92%	5,80%	10,09%	3,32%
2017	9,77%	11,23%	9,46%	5,29%	7,08%	8,01%	9,79%	6,17%
2018	8,55%	11,09%	9,91%	5,31%	7,15%	9,11%	9,77%	6,56%
2019	6,91%	11,10%	8,36%	5,43%	8,23%	9,92%	8,76%	7,24%
2020	3,56%	5,38%	6,94%	2,73%	2,05%	4,41%	4,98%	3,70%
2021	7,22%	8,73%	7,40%	4,28%	12,56%	7,27%	8,86%	7,03%
2022	7,09%	8,82%	7,48%	2,46%	7,49%	8,24%	9,85%	3,24%

Figure 8: Evolution of roe by bank



Source: realized by the authors

Analysis of the Return on Equity (ROE) of these eight banks reveals varied trends, with the year 2020 particularly marked by the impact of COVID-19 on financial performance.

In 2020, all banks experienced a decrease in their ROE compared to previous years, reflecting the challenges faced by the banking sector in the context of a global pandemic. Reduced economic activities, lockdown measures, and widespread uncertainty weighed on the profitability of financial institutions.

For example, Bank of Africa's (BOA) ROE significantly declined. It dropped from 3.56% in 2020 compared to its peak of 9.77% in 2017. Similarly, Attijariwafa Bank also recorded a notable decrease in its ROE, falling to 5.38% in 2020 after reaching a peak of 19.63% in 2016. Banque Populaire (BCP), Société Générale Marocaine de Banques (SGMB), Crédit Immobilier et Hôtelier (CIH), and BMCI all experienced decreases in their ROE in 2020 compared to previous years.

However, despite this downward trend in 2020, some banks managed to rebound in 2021 and 2022, showing signs of recovery. For example, Crédit Du Maroc (CDM) had its ROE increased significantly after its fall (negative performance) in 2020; even surpassing its highest level recorded in 2019.

In summary, the year 2020 was a challenging period for the banking sector, with a widespread decline in ROE due to the impact of COVID-19. However, some banks have managed to overcome these challenges and regain their momentum in the following years, demonstrating their resilience and ability to adapt to changing economic conditions. Despite the recovery observed in 2021, the post-COVID effects continue to be felt, and the percentages of ROA and ROE still reflect the lingering effects of the health crisis.

4 Conclusion

Undoubtedly, the year 2020 was significant for the global economy, with significant repercussions on the Moroccan banking sector, especially regarding key profitability indicators such as ROA and ROE. The impact of the COVID-19 pandemic was evident as it lead to a substantial decline in the said indicators and put the resilience of the country's financial institutions to the test. Despite the challenges faced, banks have gradually been able to resume their activities and regain some stability, thus demonstrating their adaptability and resilience in the face of major economic crises.

However, it is important to note that the post-COVID effects persist and continue to exert pressure on the Moroccan banking sector. Furthermore, banks have to contend with a series of external shocks, such as fluctuations in financial markets, regulatory developments, and changing macroeconomic conditions, which further complicate their situation. In this context, it is imperative for stakeholders in the banking sector to remain vigilant and implement resilient strategies to navigate through these periods of uncertainty and ensure their long-term sustainability.

REFERENCES

1. Arriola C, Kowalski P, Kowalski P, Tongreen FV (2022) International trade during the COVID-19 pandemic: Big shifts and uncertainty. OECD. (https://read.oecd-ilibrary.org/view/?ref=1129_1129345-casormobh7&title=International-trade-during-the-COVID-19-pandemic)

2. Banking Supervision Report of Bank Al-Maghrib 2022

3. Gazi, Md. Abu Issa; Nahiduzzaman, Md.; Harymawan, Iman; Masud, Abdullah Al; Dhar, Bablu Kumar; Impact of COVID-19 on Financial Performance and Profitability of Banking Sector in Special Reference to Private Commercial Banks: Empirical Evidence from Bangladesh 2022.

4. Issor, Z. (2017). "La performance de l’entreprise : un concept complexe aux multiples dimensions". Projectics / Proyéctica / Projectique, 17, 93-103. (https://doi.org/10.3917/proj.017.0093)

5. Mohamed Zaki Balboula et Maha Saad Metawea; The Impact of Covid-19 pandemic on Bank Performance: Evidence from Listed Banks on the Egyptian Stock Exchange 2021.

6. Kumar, Vijay, Alshazly, Hammam, Idris, Sahar Ahmed, Bourouis, Sami; Evaluating the Impact of COVID-19 on Society, Environment, Economy, and Education 2021.

7. Lestari, F.A. (2022). Performance Analysis of Conventional Commercial Banks in Indonesia During the Covid-19 Pandemic (2019-2020). Proceedings of the International Conference on Economics, Management and Accounting (ICEMAC 2021).

8. Noor Aldeen Kassem Al-Alawnh, Hayder Jerri Mohsin, Laith Yousef Bani Hani, Basil Mohammad Al-Naser, Awad Adel Qurran and Sara Khaled Alzubi (2022); THE IMPACT OF COVID-19 ON LIQUIDITY AND PROFITABILITY IN COMMERCIAL BANKS Int. J. of Adv. Res. 10 (May). 490-496] (ISSN 2320-5407). (www.journalijar.com)

9. World Health Organization. (https://www.who.int/fr)

10. International Monetary Fund (IMF). (https://www.imf.org/fr/Home)S