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University Center Nour Al-Bachir Al-Bayadh

Institute of Economic, Commercial and Management Sciences



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The Impact of Financial Inclusion on Banking Performance

Empirical Study on the Bank of Algeria From 2017 to 2021

Prepared by:

Yahi Hajar

Supervised by:

Pr. Boussalem Aboubaker

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Dedication

This research is humbly dedicated to our parents, who always gave us support, for inspiring us, that we can accomplish this research, and for teaching us that even the largest task can be accomplished if it is done one step as a time, And to all the people who have worked hard to help us complete this research.

Abstract: Despite evidence on the social and economic importance of financial inclusion (FI), the relationship between FI and bank performance remains unclear. The aim of this study is to examine whether financial inclusion influences banks' performance. In this research, we evaluated the association between financial inclusion and the performance of banks.

The study is organized as followed; Chapter 1 is the introduction of the study and the literatures review; Chapter 2 comprises of the methodology, data collection and description; the empirical results and discussion and lastly the conclusion.

Keywords: financial inclusion index, financial inclusion, banking performance

المخلص: على الرغم من وجود أدلة على الأهمية الاجتماعية والاقتصادية للشمول المالي ، فإن العلاقة بينه وبين أداء البنك لا تزال غير واضحة. الهدف من هذه الدراسة هو فحص ما إذا كان الشمول المالي يؤثر على أداء البنوك. في هذا البحث، قمنا بتقييم العلاقة بين الشمول المالي وأداء البنوك.

تم تنظيم الدراسة على النحو التالي ؛ الفصل الأول هو مقدمة للدراسة ومراجعة الأدبيات ؛ يشتمل الفصل الثاني على المنهجية و البيانات ؛ النتائج التجريبية والمناقشة وأخيرا الاستنتاج.

الكلمات المفتاحية: مؤشر الشمول المالي ، الشمول المالي ، الأداء المصرفي

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Introduction

Introduction

The financial institution plays a vital role in contributing to economic growth and promoting financial inclusion by providing facilities to households. Financial inclusion is defined as the accessibility and availability of financial service facilities at an affordable price to any individual within the country. Many financial services exist, such as lending, borrowing, transferring, payments, and saving. Moreover, it also can be interpreted as the process of making and ensuring that financial service is available to all populations. Financial inclusion aims to make the financial product available for the vulnerable or unprivileged population as it will help to elevate the individual economy and welfare of society, especially for the low-income population. Meanwhile, financial inclusion is determined by the access, availability, and usage of banking products and services. Access is defined as the spread of financial services into society. Availability refers to banking infrastructure facilities available and useable by customers. In addition, usage relates to the utilization of banking products.

The Global Financial Index in 2021 indicates that 515 million adults worldwide had an account at a financial institution or through a mobile money provider between 2014 and 2017. The data also reveal that roughly 69% of adults now have an account, up from 62% in 2014 increased from 51% in 2011. However, although financial service development can promote the expansion of inclusive finance, most people in developing countries do not have access to financial services due to the lack of financial institutions, innovative technology, and infrastructure compared to the population in developed countries. Also, people who live in rural areas are more affected and are excluded from access to financial services. High-income economies also have higher access to financial inclusion than developing economies, as indicated by 94% in developed countries with banking accounts compared to only 63% in those emerging countries.

In this matter, to achieve optimal financial inclusion in the economy, banks hold a crucial role because they provide intermediary facilities for the

excess and shortfall of the fund .Moreover, the development of innovation and technology in recent decades likely helped the bank to invent new services and products promising in tackling financial exclusion. The rise of financial technology, such as mobile banking, e-wallet, and online lending, can augment access to inclusive finance, especially among low-income groups. Therefore, financial inclusion then assists in eradicating the gap between higher- income and lower-income households and promoting social equilibrium.

Problematic :

What is the impact of financial inclusion on banking performance?

Sub Questions:

1. What is financial inclusion and how is it measured?
2. How does financial inclusion influence customer satisfaction and loyalty in the banking sector?
3. Are there any specific strategies or initiatives that banks can adopt to enhance their performance through financial inclusion?
4. What is the role of technology and digital innovation in promoting financial inclusion and improving banking performance?
5. What are the implications of financial inclusion on financial literacy and education, and how does it affect banking performance?

Hypothesis:

1. Financial inclusion has a positive impact on the profitability of banks.
2. Financial inclusion enhances the stability of the banking sector.
3. Financial inclusion fosters economic growth and development.

Chapter I: Literature review

Preface

Despite the huge development in financial services at the present time, as a result of the use of communication technology and digitization, we find that more than half of adults in the world are excluded from these services, practicing their work outside the official financial circle, and this is what reduces the level of their well-being and social protection, hence the emergence of the issue of financial inclusion, which has received wide attention by decision-makers in various countries of the world, especially after the global financial crisis, and banks have the largest role in increasing the area of financial inclusion, which in turn is reflected in their financial performance rates, and from it we will address in this chapter the following topics:

1. An Introduction to the concept of financial inclusion
2. Basic concepts about banks
3. Relevant previous studies

1. An Introduction to the concept of financial inclusion:

1.1. Definition and importance of financial inclusion:

1.1.1. Definition:

Financial inclusion means that individuals and businesses have access to useful and affordable financial products and services that meet their needs – transactions, payments, savings, credit and insurance – delivered in a responsible and sustainable way.

- Financial inclusion has been identified as an enabler for 7 of the 17 Sustainable Development Goals.
- The G20 committed to advance financial inclusion worldwide and reaffirmed its commitment to implement the G20 High-Level Principles for Digital Financial Inclusion.
- The World Bank Group considers financial inclusion a key enabler to reduce extreme poverty and boost shared prosperity.

Financial access facilitates day-to-day living, and helps families and businesses plan for everything from long-term goals to unexpected emergencies. As accountholders, people are more likely to use other financial services, such as credit and insurance, to start and expand businesses, invest in education or health, manage risk, and weather financial shocks, which can improve the overall quality of their lives.

The COVID-19 crisis has also reinforced the need for increased digital financial inclusion. Digital financial inclusion involves the deployment of the cost-saving digital means to reach currently financially excluded and underserved populations with a range of formal financial services suited to their needs that are responsibly delivered at a cost affordable to customers and sustainable for providers.

Great strides have been made toward financial inclusion and 1.2 billion adults worldwide have gotten access to an account between 2011 and 2017. As of 2017, 69% of the world's adults had an account. Digital financial services — including those involving the use of mobile phones — have now been launched in more than 80 countries, with some reaching significant scale. As a result, millions of formerly excluded and underserved poor customers are moving from

exclusively cash-based transactions to formal financial services using a mobile phone or other digital technology to access these services.

Moving from access to usage of accounts is the next step for countries where 80% or more of the population have accounts (China, Kenya, India, Thailand). These countries relied on reforms, private sector innovation, and a push to open low-cost accounts, including mobile and digitally-enabled payments.

However, close to one-third of adults – 1.7 billion – were still unbanked in 2017, according to the latest Findex data (*2021 data forthcoming*). About half of unbanked people included women poor households in rural areas or out of the workforce.

Between 2011 and 2017 gender gap in account ownership remained stuck at 9 percentage points in developing countries, hindering women from being able to effectively control their financial lives. Countries with high mobile money account ownership had less gender inequality. The impact of the COVID-19 on this gender gap remains to be seen.

Since 2010, more than 55 countries have made commitments to financial inclusion, and more than 60 have either launched or are developing a national strategy. Countries that have achieved the most progress toward financial inclusion have:

- Policies delivered at scale, such as universal digital ID - India and Aadhaar / JDY accounts - more than 1.2 billion residents covered
- Leveraged government payments. (For example, 35% of adults in low income countries receiving a government payment opened their first financial account for this purpose.)
- Allowed mobile financial services to thrive. (For example, in Sub-Saharan Africa, mobile money account ownership rose from 12% to 21%.)
- Welcomed new business models, such as leveraging e-commerce data for financial inclusion
- Taking a strategic approach by developing a national financial inclusion strategy (NFIS) which bring together diverse stakeholders including financial regulators, telecommunications, competition and education ministries

- Paying attention to consumer protection and financial capability to promote responsible, sustainable financial services

When countries take a strategic approach and develop national financial inclusion strategies which bring together financial regulators, telecommunications, competition and education ministries, our research indicates that when countries institute a national financial inclusion strategy, they increase the pace and impact of reforms.¹

1.1.2. Importance:

A growing body of evidence suggests that access to, and use of, financial services contributes to socio-economic development. Those excluded from the financial system bear greater costs, risks and exposure to fraud. Financial inclusion has been shown to enable greater participation in the economy and cost savings. Indeed, formal financial services, such as savings or insurance, can help in protecting against illnesses, accidents and natural disasters. Access to affordable remittance services allows families to pay for children's education and for health expenses. Access to credit for micro, small and medium-sized enterprises (MSMEs) is an indispensable catalyzer of growth. All in all, for low-income people, access to formal financial services can be the difference between staying above the poverty line, or falling below it.

As a consequence, financial inclusion is becoming an increasingly important component of international development policies, as evidenced by the adoption of the Sustainable Development Goals (SDGs) by the UN General Assembly in September 2015. The SDGs consist of 17 main goals, six of which contain indicators linked to financial inclusion. For example, goal 1, "End poverty in all its forms everywhere" mentions universal access to a number of basic services as a goal to be achieved by 2030, including "appropriate [...] financial services". Meanwhile, goal 8, "Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all" refers to the need to "encourage the formalization and growth of MSMEs, including through access to financial services." All of this shows recognition, by all UN member countries, of the importance of financial inclusion in socio-economic development.²

¹ Financial Inclusion. <https://www.worldbank.org/en/topic/financialinclusion/overview#1>

² Nils Clotteau, Bsrat Measho. (2016). Global Panorama on Postal Financial Inclusion 2016. 13

An access to bank accounts and payment services have a measurable impact on poverty. They:

1. Make day-to-day transactions possible, including sending and receiving money;
2. Safeguard savings, which can help households manage cash flow spikes, smooth consumption and build working capital;
3. Help finance small businesses or microenterprises, helping owners invest in assets and grow their businesses;
3. Support planning and paying for recurring expenses, such as school fees, electricity and water access;
4. Mitigate shocks and manage expenses related to unexpected events such as medical emergencies, death in the family, theft, or natural disasters; and
5. Improve poor families' overall welfare.³

1.2. Dimensions of financial inclusion

1.2.1 The 2014 FIAP:

The GPMI is an inclusive partnership mechanism to take forward the G20's work on financial inclusion. The GPMI produces coordinated analysis and policy recommendations to enhance financial inclusion; facilitates efficient and effective coordination to support various on-going financial inclusion efforts; monitors progress over time and against agreed objectives; and ensures continuity on financial inclusion in global discussions.

The 2014 Financial Inclusion Action Plan (FIAP) presents actions the GPMI membership consider most important to advancing financial inclusion over the next five years.

There are 10 action areas:

a. Small and medium-sized enterprise (SME) Finance:

1. Accelerate and replicate successful policy reforms that facilitate the expansion of financial services to SMEs

³ Why is financial inclusion important?. <https://www.cgap.org/about/faq>

2. Establish the SME Finance Forum as global center for good practice knowledge exchange and promotion

3. Improve financial access through the SME Finance Compact, SME Finance Initiative, and key development achievements

b. Regulations and standard setting bodies:

4. Mainstream financial inclusion in the work of the standard setting bodies and other relevant global bodies and increase understanding of the interdependence of financial inclusion, stability, integrity and consumer protection

5. Encourage effective and consistent incorporation of financial inclusion in financial sector assessments

c. Financial consumer protection and financial literacy:

6. Improve the capacity of public authorities and other relevant stakeholders to develop and implement financial literacy and consumer protection measures

7. Promote consumer protection and financial education good practices for digitally delivered financial products and services

d. Markets and payment systems:

8. Help to analyze and consider ways to address the MTO bank account closure issue

9. Reduce the cost of sending remittances

10. Expand opportunities for innovative technologies to grow responsible financial inclusion

Present in all of the work of the GPMI will be a focus on:

- innovation;
- women's economic empowerment;
- data harmonization;
- cooperation with the private sector; and
- outreach and promotion.

The GPFPI will continue to report annually on its work program and will review the FIAP in 2017.⁴

1.2.2 G20 Principles for Innovative Financial Inclusion:

The G20 Principles for Innovative Financial Inclusion were endorsed by G20 Leaders at the Toronto Summit in May 2010.

Innovative financial inclusion means improving access to financial services for poor people through the safe and sound spread of new approaches. The following principles aim to help create an enabling policy and regulatory environment for innovative financial inclusion. The enabling environment will critically determine the speed at which the financial services access gap will close for the more than two billion people currently excluded. These principles for innovative financial inclusion derive from the experiences and lessons learned from policymakers throughout the world, especially leaders from developing countries.

1. Leadership: Cultivate a broad-based government commitment to financial inclusion to help alleviate poverty.

2. Diversity: Implement policy approaches that promote competition and provide market-based incentives for delivery of sustainable financial access and usage of a broad range of affordable services (savings, credit, payments and transfers, insurance) as well as a diversity of service providers.

3. Innovation: Promote technological and institutional innovation as a means to expand financial system access and usage, including by addressing infrastructure weaknesses.

4. Protection: Encourage a comprehensive approach to consumer protection that recognizes the roles of government, providers and consumers.

5. Empowerment: Develop financial literacy and financial capability.

6. Cooperation: Create an institutional environment with clear lines of accountability and co-ordination within government; and also encourage partnerships and direct consultation across government, business and other stakeholders.

⁴ (2 September 2014). G20 Financial Inclusion Action Plan (FIAP). 1-2

7. Knowledge: Utilize improved data to make evidence based policy, measure progress, and consider an incremental “test and learn” approach acceptable to both regulator and service provider.

8. Proportionality: Build a policy and regulatory framework that is proportionate with the risks and benefits involved in such innovative products and services and is based on an understanding of the gaps and barriers in existing regulation.

9. Framework: Consider the following in the regulatory framework, international standards, national circumstances and support for a competitive landscape: an appropriate, flexible, risk-based Anti-Money Laundering and Combating the Financing of Terrorism (AML/CFT) regime; conditions for the use of agents as a customer interface; a clear regulatory regime reflecting for electronically stored value; and market-based incentives to achieve the long-term goal of broad interoperability and interconnection.⁵

1.3. the financial inclusion index

Using data from the global finindex database 2021⁶ we summarize as follow:

1.3.1. Financial Access:

a. account ownership:

Accounts are a safe way to store money and build savings for the future. They also make it easier to pay bills, access credit, make purchases, and send or receive remittances. Around 76 percent of people worldwide have an account either at a bank or similarly regulated deposit-taking financial institution, including a mobile money service provider. Yet a regional or economy-level view of account ownership shows wide variation Among the 123 surveyed economies, account ownership ranges from just 6 percent in South Sudan to universal ownership in high-income economies such as Canada, Germany, and the United Kingdom.

So how do we define account ownership?

The Global Findex 2021 defines account ownership as ownership of an individual or jointly owned account at a regulated institution, such as a bank, credit union, microfinance institution, post office, or mobile money service

⁵ G20 Financial Inclusion Action Plan (FIAP). 13

⁶ Asli Demirgüç-Kunt, Leora Klapper, Dorothe Singer, Saniya Ansar. (2022). The Global Findex Database 2021. International Bank for Reconstruction and Development / The World Bank

provider. Data on adults with an account also include an additional 3 percent of respondents who reported having a debit card in their own name; receiving wages, government transfers, a public sector pension or payments for the sale of agricultural products into a financial institution account or mobile money account in the past 12 months; or paying utility bills from a financial institution account in the past 12 months.

Financial institution refers to banks and other financial institutions in a specific country that offer a transaction account and that fall under prudential regulation by a government body (excluding mobile money accounts). The definition does not include nonbank financial institutions such as pension funds, retirement accounts, insurance companies, or equity holdings such as stocks. Data on adults with a mobile money account only include respondents who personally used a mobile money service to make payments, buy things, or to send or receive money in the past 12 months.

b. Opportunities to increase account ownership through an enabling environment:

Globally, about 1.4 billion adults are still unbanked—that is, they do not have an account at a financial institution or through a mobile money provider . This number has declined from 2.5 billion in 2011 and 1.7 billion in 2017. Because account ownership is nearly universal in high-income economies, virtually all unbanked adults live in developing economies. Indeed, 54 percent of the unbanked—740 million people—live in only seven economies. Meanwhile, despite having relatively high rates of account ownership, China and India claim large shares of the global unbanked population (130 million and 230 million, respectively) because of their size. Pakistan, with 115 million unbanked adults, and Indonesia, with 100 million, have the next-largest populations of unbanked. These four economies, together with Bangladesh, Egypt, and Nigeria are home to more than half of the world’s unbanked population. The top five economies hosting the largest share of the world’s unbanked were the same in 2017 and 2021.

As account ownership continues to grow, women, poor adults, and less educated adults continue to make up the majority of people excluded from the formal financial sector. Improving financial access for these groups will involve building an enabling, inclusive infrastructure for financial services.

1.3.2. use of financial services:

a. digital payments:

In developing economies, growth in digital payments outpaced growth in account ownership. In the Global Findex 2021 survey, 64 percent of adults around the world—or 84 percent of account owners— made or received at least one digital payment. In high-income economies, 95 percent of adults (98 percent of account owners) did so, compared with 57 percent (80 percent of account owners) of adults in developing economies. As defined, digital payments include the use of a mobile money account, a debit or credit card, or a mobile phone or the internet to make a payment from an account, or the use of a mobile phone or the internet to send money to relatives or friends or to pay bills. Digital payments also include in-store or online merchant payments; paying utility bills; sending or receiving domestic remittances; receiving payments for agricultural products; or receiving wages, government transfers, or a public pension directly from or into an account. Survey respondents were prompted to answer based on their experience during the past year.

In high-income economies, the use of digital payments has been virtually universal since 2014, when such data were first collected as part of the Global Findex survey. In developing economies, the share of adults making or receiving digital payments has grown rapidly in recent years and rose by 13 percentage points between 2017 and 2021, from 44 percent to 57 percent. In 2014, the share was 35 percent. Indeed, growth in the use of digital payments outpaced growth in account ownership in developing economies: the share of account owners making or receiving a digital payment increased to 80 percent in 2021, up from 69 percent in 2017 and 63 percent in 2014.

b. savings:

People save for several reasons: for large future expenses, for investments in education or a business, for their needs in old age, or for emergencies. Globally, 49 percent of adults responding to the Global Findex 2021 survey saved or set aside money in the past 12 months. In high-income economies, 76 percent of adults reported having saved, while 42 percent of adults saved in developing economies. The Global Findex 2021 survey data further highlight how and why people save. New data also reveal that a larger share of adults reported using their account to store money for cash management purposes than to save money.

People go about saving money in different ways. Globally, 31 percent of adults—or about two-thirds of people who saved any money—reported having

saved formally at a financial institution or using a mobile money account. 23 Among all adults, the share who reported saving formally averaged 58 percent in high-income economies and 25 percent in developing economies. Among those who saved in any form, three out of four in high-income economies and more than half in developing economies saved formally. This marks the first time that formal savings is the most common mode of saving in developing economies.

A common alternative to saving formally in developing countries is to save semi formally by using a savings club or relying on a person outside the family. In 2021, 9 percent of adults reported saving in this manner, including 4 percent of adults who saved semi formally but not formally. One common type of savings club is a rotating savings and credit association (ROSCA). These associations generally operate by pooling weekly deposits and disbursing the entire amount to a different member each week. Saving semi formally is especially common in Sub-Saharan Africa, where 25percent of adults reported having saved that way, including 16 percent who saved semi formally but not formally. In Sierra Leone, the share of those saving semi formally but not formally is as high as26 percent of adults, or more than half of savers.

The options for saving go beyond doing so formally or semi formally. In both high-income and developing economies, about 14 percent of adults, on average, reported having saved only in some other way. This may include saving cash at home (“under the mattress”) or saving in the form of assets such as livestock, jewelry, or real estate. It may also include using investment products offered by equity and other traded markets or by purchasing government securities. In 26 developing economies, more than half of those who saved did so only using some other way. In the Philippines, for example, 30 percent of adults (55 percent of savers) saved in only some other way, making it one of the economies with the highest share of adults doing so

c. borrowing:

In 2021, 53 percent of adults worldwide reported having borrowed any money in the past 12 months, including by using a credit card. The share of adults with new credit, formal or non-formal, averaged 65 percent in high- income economies and 50 percent in developing economies.

In high-income economies, formal borrowing—whether through a loan from a financial institution, using a credit card, or through a mobile money account—

was by far the most common source of credit. 28 In developing economies, by contrast, 46 percent of borrowers did so formally. About an equal share of borrowers in developing economies cited family and friends as their only source of credit. In developing economies 2 percent of adults borrowed semi formally from a savings club, such as rotation savings and credit associations, but did not borrow formally. Other sources of borrowing were reported by 5 percent of adults globally.

d. the financial ecosystem:

Owning an account is an important step toward financial inclusion. To fully benefit from an account, however, people must be able to use it safely and conveniently. The first three sections in this chapter looked at the use of accounts for payments, savings, and borrowing. This section looks at how these services interact as part of a broader financial ecosystem.

In developing economies, 57 percent of adults, on average, used their account for payments, followed by 24 percent who formally saved and 22 percent who formally borrowed. 30 Of the possible combinations of payments, borrowing, and savings, the use of payments alone was most common: 24 percent of adults used their account only for payments. About 10 percent of adults used their account for all three financial services. About the same share of adults (10 percent) used their account for payments and savings or for payments and credit. Virtually no one used their account only for savings or only for credit.

When the definition of saving is expanded to include both those who saved formally and those who used their account to store money, the share of those who did so increases to 43 percent. Considering all the possible combinations of financial services, combining payments with saving formally or storing money was the most common—22 percent of adults did so—followed by 16 percent who used their account for all three financial services and 15 percent who used it only for payments.

As in developing economies, adults in high-income economies used their accounts most commonly for payments: 95 percent did so, followed by 58 percent who formally saved and 56 percent who formally borrowed. 31 However, the most common combination of financial services in high-income economies was use of all three services: 39 percent of adults used payments, savings, and borrowing. About 20 percent of adults used their account only for

payments, and somewhat equal shares of adults (about 20 percent) used their account for payments and savings or for payments and borrowing.

When the definition of saving in high-income economies includes both those who saved formally and those who used the account to store money, the share of those who did so increased to 88 percent, and there was a near- perfect overlap with those who used their account for payments. The share of adults who used their account for all three financial services expanded to 53 percent.

e. Opportunities for expanding the use of accounts:

As described throughout this chapter, many account owners used their account to make or receive payments, to save or store money, or to borrow money. Yet 13 percent of account owners in developing economies did not use their account at all in the previous year. This section explores the data on account owners with “inactive” accounts and the reasons account owners with an inactive account in India gave for not using the account (India has the highest share of people who have accounts but do not use them). This section also explores opportunities for increasing the use of accounts among account owners, both those with inactive accounts and those who still make some financial transactions only in cash.

In developing economies, 9 percent of adults overall—13 percent of account owners—have what could be considered an inactive account—that is, an account with no deposits or withdrawals and no incoming or outgoing digital payments in the past year. The share of account owners in developing economies with an inactive account fell from 17 percent in 2017 to reach about the level (12 percent) it was in 2014.³⁴ In high-income economies, virtually all account owners have an active account.

The share of account owners with an inactive account varies across developing economies, but it is especially high in India at 35 percent, the highest in the world. That share is about seven times larger than the 5 percent average for all developing economies, excluding India . One reason for India’s high share of account inactivity may be that many of these accounts were opened as part of the Indian government’s Jan Dhan Yojana scheme to increase account ownership. Launched in August 2014, the program had by April 2022 brought an additional 450 million Indians into the formal banking system.³⁵ Most of the new accounts had already been opened when the Global Findex 2017 survey was conducted. The share of adults with an inactive account in India remained about the same between 2017 and 2021.

In developing economies, women account owners are, on average, 5 percentage points more likely than men account owners to have an inactive account. However, India is driving this gap with a 12 percentage point difference between women account owners who had an inactive account (42 percent) and men account owners who did so (30 percent). The data on account inactivity in developing economies, excluding India, reveal that women and men have, on average, equal rates of inactivity.

f. Opportunities for increasing account ownership for the unbanked through digitalizing payments:

This chapter opened with evidence on the ways in which using financial services—in particular, payments— gives recipients better privacy, security, and control over their money, while also increasing savings and financial resilience. For example, digital payments of wages can encourage workers to save using their account, and digital payments for agricultural products can make it easier for farmers to access additional financial products such as input financing and crop insurance. Digitalizing wage or government payments also helps recipients by reducing the time and cost of receiving such payments, and it can help payers by ensuring the money goes to the intended recipients and by reducing leakage. However, these benefits can accrue only to those who have an account and use it. This section explores opportunities to further increase account ownership based on the Global Findex2021 survey findings on the use of financial services.

Just as there are opportunities to help people who have an account make more use of it, there are also opportunities to increase account ownership by digitalizing cash transactions for the unbanked.

Millions of unbanked adults around the world still receive regular payments in cash from employers or from the government. Digitalizing such payments is a proven way to increase account ownership. In developing economies, 39 percent of adults—or 57 percent of those with a financial institution account—opened their first account at a financial institution specifically to receive a wage payment or to receive money from the government .

The share is higher in some economies. In India, Malaysia, South Africa, and República Bolivariana de Venezuela, 70 percent of account owners opened their first account at a financial institution to receive a wage or government payment. The same is true for about two-thirds of account owners in Mongolia, as well as

in a few economies in Europe and Central Asia, including Bosnia and Herzegovina, Kazakhstan, and Serbia.

1.3.3. Financial well-being:

a. financial resilience:

Every year, adults around the world face a significant financial repercussion stemming from, for example, job loss, ill health, crop failure, new caring responsibilities, or an essential repair to a vehicle or home. Failure to cope with these events can cause short-term harm and have long-lasting consequences. The ability of adults to cope financially when faced with a sudden drop in income or an unavoidable expense is known as financial resilience.

There are many ways to build financial resilience, and people may adopt different approaches, depending on the cause of the financial event, the size of the impact, how long-lasting it is likely to be, and other factors. Common approaches include calling on family and friends to bridge a finance gap, working additional hours to boost income, drawing down savings, taking out a formal loan, or selling an asset.

Yet these strategies may not be easy to deploy when a person needs them. For example, adding work hours may not be possible if the person's employer or informal labor market is in a slow season. A systemic shock that causes widespread economic damage across a community, such as the COVID-19 pandemic or an extreme weather event, can affect the ability of close family and friends to help. Savings committed to a community group, such as a rotating savings and credit association (ROSCA), may be inaccessible in the time frame needed.

Personal circumstances also affect financial resilience. Individuals' income level, whether they have an account, and how they use it all increase the probability that they have savings or the ability to receive an outside payment. Other factors, such as where individuals live and the size and diversity of their social network, also play a role because larger and more diverse social networks increase the chance that friends are not exposed to the same risks at the same time. There are also personal factors that go beyond income or social networks that influence individual choices—for example, how willing an individual is to negotiate for help with family members or concern about social status.

b. financial worrying:

The previous section on financial resilience focused on the ability to access financial resources to deal with an emergency expense or loss of income. Another dimension of financial well-being is the anxiety or worry that people feel about their financial lives. Not having sufficient protection from shocks, having trouble paying for basic family needs, or falling behind on personal financial goals influence how financially secure or stressed people feel. Of course, real-life circumstances have a huge impact on all of these factors. When people are barely meeting their living expenses with the income they have—and with no extra money for unexpected expenses—they are likely to worry more than people who have an income buffer. For that reason, it is logical to assume that poor people—and, in particular, poor people with limited or no savings and limited access to appropriate credit—are, on average, more likely to worry about money.

Beyond the objective reality of simply not having enough money, people also have subjective perceptions about their financial lives. These are complicated by personality traits, cultural norms, the economic context, social dynamics, available information about financial needs, and the social support programs available to people. The likely timing of an expense and how far away it is in the future are other major factors in worrying. For example, younger people may be more likely to worry about school fees and less likely to worry about old age. That does not mean that youth do not care about having enough money when they are older, but rather that they have more immediate concerns.

c. Opportunities to support financial well-being through the financial system:

The previous sections in this chapter highlighted two financial outcomes distinct from financial account ownership and usage that nevertheless matter for individuals and families: (1) their ability to come up with money to cover an extra or unexpected expense, and (2) their subjective concerns related to four common sources of potential financial stress. As those sections describe, unlike account ownership and account usage which can be directly influenced by the financial sector by making products available, accessible, and helpful financial well-being outcomes such as resilience and stress are influenced by many factors outside the financial system.

Meanwhile, within the financial system, financial service institutions and supportive regulators can play a role in driving financial well-being outcomes for consumers. The key question for financial service providers and policy

makers is how can financial products and services, and the regulatory environment in which they operate, effectively help people achieve financial well-being? One answer is to create incentives for service providers to design and deliver products and services with demonstrated benefits to consumers. Another is to prevent and mitigate consumer risk and harm by identifying and weeding out bad actors and bad practices. Both are critical for improving resilience and reducing financial stress.

In developing economies, many adults need help using an account, which makes them vulnerable to bad information

The marketplace for retail financial services can be inherently complex to navigate. Furthermore, the speed with which technological advances and other innovations enter the market can create challenges for the regulators tasked with ensuring a stable, safe, and equitable financial system, and for the consumers to whom new products and services appeal. Mobile devices, agent networks, and software applications have transformed how people move and manage their money in every region of the world. Although millions of people have been able to take advantage of these offerings, the ability to use them requires access to a mobile device, enough income to afford mobile network access costs, and digital skills such as the ability to activate a digital wallet or account, navigate user interfaces, manage passwords, and use authentication services. For example, a recent study in Malawi found that digital loans taken out in response to a text message-driven mass marketing campaign were less likely to be repaid. And in Mexico, the speed with which internet-based loans can be arranged is associated with lower loan repayment.

Atop these challenges are risks for consumers, including lack of transparency about fees and other terms of service, aggressive marketing, poor dispute resolution, data or identity theft, mobile app fraud, and other threats. 16 Many of these risks are not new, but they can be amplified given the reach and convenience of digital technologies. Women, who often have less prior financial experience, may be more exposed to financial abuse. For example, a nationally representative survey in Côte d'Ivoire found that women are less likely to understand the financial products offered through their phones (22 percent of women, compared with 18 percent of men) and more likely to lose money to scams (16 percent of women, compared with 12 percent of men).

2. basic concepts about banks:

2.1. introduction and types of banks

A bank is a financial institution that is licensed to accept checking and savings deposits and make loans. Banks also provide related services such as individual retirement accounts (IRAs), certificates of deposit (CDs), currency exchange, and safe deposit boxes.

There are several types of banks including retail banks, commercial or corporate banks, and investment banks.

Types of Banks:

Most banks can be categorized as retail, commercial or corporate, or investment banks. The big global banks often operate separate arms for each of these categories.

a. Retail Banks:

Retail banks offer their services to the general public and usually have branch offices as well as main offices for the convenience of their customers.

They provide a range of services such as checking and savings accounts, loan and mortgage services, financing for automobiles, and short-term loans such as overdraft protection. Many also offer credit cards.

They also offer access to investments in CDs, mutual funds, and individual retirement accounts (IRAs). The larger retail banks also cater to high-net-worth individuals with specialty services such as private banking and wealth management services.

b. Commercial or Corporate Banks:

Commercial or corporate banks tailor their services to business clients, from small business owners to large, corporate entities. Along with day-to-day business banking, these banks also offer credit services, cash management, commercial real estate services, employer services, and trade finance,

c. Investment Banks:

Investment banks focus on providing corporate clients with complex services and financial transactions such as underwriting and assisting with merger and

acquisition (M&A) activity. They are primarily financial intermediaries in these transactions.

Their clients include large corporations, other financial institutions, pension funds, governments, and hedge funds.

d. Central Banks:

Unlike the banks above, central banks does not deal directly with the public. A central bank is an independent institution authorized by a government to oversee the nation's money supply and its monetary policy.

As such, central banks are responsible for the stability of the currency and of the economic system as a whole. They also have a role in regulating the capital and reserve requirements of the nation's banks⁷.

2.2. Characteristics of banks:

2.2.1. Dealing with Money:

The bank is a financial institution that deals with other people's money, i.e., the money given by depositors.

2.2.2. Individual/Firm/Company:

A bank may be a person, firm, or company. A banking company is a company that is in the business of banking.

2.2.3. Acceptance of Deposit:

A bank accepts money from people in deposits that are usually repayable on demand or after a fixed period expires. It gives safety to the deposits of its customers. It also acts as a custodian of funds of its customers.

2.2.4. Giving Advances:

A bank lends out money in loans to those who require it for different purposes.

2.2.5. Payment and Withdrawal:

⁷ ADAM BARONE. (March 28, 2023). How Banking Works, Types of Banks, and How To Choose the Best Bank for You. <https://www.investopedia.com/terms/b/bank.asp>

A bank provides its customers with an easy payment and withdrawal facility in checks and drafts. It also brings bank money into circulation. This money is in the form of checks, drafts, etc.

2.2.6. Agency and Utility Services:

A bank provides various banking facilities to its customers. They include general utility services and agency services.

2.2.7. Profit and Service Orientation:

A bank is a profit-seeking institution with having service-oriented approach.

2.2.8. Ever-increasing:

Functions banking is an evolutionary concept. There is continuous expansion and diversification regarding a bank's functions, services, and activities.

2.2.9. Connecting Link:

A bank acts as a connecting link between borrowers and lenders of money. Banks collect money from those who have surplus money and give the same to those who require money.

2.2.10. Banking Business:

A bank's main activity should be to do banking business that should not be a subsidiary of any other business.

2.2.11. Name Identity:

A bank should always add the word "bank" to its name to let people know that it is a bank that deals in money.⁸

2.3. Basic Bank Services:

Banks have existed since at least the 14th century. They provide a safe place for consumers and business owners to stow their cash and a source of loans for personal purchases and business ventures. In turn, the banks use the cash that is deposited to make loans and collect interest on them.

Banks offer various ways to stash your cash and various ways to borrow money.

⁸ Gaurav Akrani. (02/09/2011). What is a Bank ? Introduction, Definition and Features of Bank .<https://kalyan-city.blogspot.com/2011/02/what-is-bank-introduction-definition.html>.

2.3.1. Checking Accounts:

Checking accounts are deposits used by consumers and businesses to pay their bills and make cash withdrawals. They pay little or no interest and typically come with monthly fees, usage fees, or both.

Today's consumers generally have their paychecks and any other regular payments automatically deposited in one of these accounts.

2.3.2 Savings Accounts:

Savings accounts pay interest to the depositor. Depending on how long account holders hope to keep their money in the bank, they can open a regular savings account that pays a little interest or a certificate of deposit (CD) that pays a little more interest. The CDs can earn interest for as little as a few months or as long as five years or more.

2.3.3 Loan Services:

Banks make loans to consumers and businesses. The cash that is deposited by their customers is lent out to other customers at a higher rate of interest than the depositor is paid.

At the highest level, this is the process that keeps the economy humming. People deposit their money in banks; the bank lends the money out in car loans, credit cards, mortgages, and business loans. The loan recipients spend the money they borrow, the bank earns interest on the loans, and the process keeps money moving through the system.

Just like any other business, the goal of a bank is to earn a profit for its owners. For most banks, the owners are their shareholders. Banks do this by charging more interest on the loans and other debt they issue to borrowers than they pay to people who use their savings vehicles.

For example, a bank may pay 1% interest on savings accounts and charge 6% interest for its mortgage loans, earning a gross profit of 5% for its owners.⁹

2.4. Banking performance indicators:

⁹ ADAM BARONE. (March 28, 2023). How Banking Works, Types of Banks, and How To Choose the Best Bank for You. <https://www.investopedia.com/terms/b/bank.asp>

As banks continue to navigate through uncertainty, more regulatory scrutiny, competition from fintech and other new entrants, and changing customer expectations, performance-based metrics have become an increasingly important part of a bank executive's arsenal.

To measure bank performance and you can start by measuring Key Performance Indicators (KPIs), which is the foundation of successful benchmarking practices.

2.4.1 The Key Performance Indicators for Banks:

The pressure for banks to perform comes from many places: customers, shareholders, regulators, and employees. Thankfully, there are a wide variety of key performance indicators (KPIs) you can rely on. A KPI for banks can be defined as a metric that can be used to evaluate the success of a bank as a whole down to individual bank employees. From industry standard financial performance metrics such as Return on Assets (ROA) and Return on Equity (ROE) to more operationally-focused metrics such as accounts opened per employee and operating expenses as a percentage of assets, key performance indicators can help you measure bank performance.

Using KPIs, you can identify the factors that increase or shrink profits and then make strategic decisions about those factors. Over time, you can use KPIs to evaluate your bank's success and quantify performance. For example, a KPI can reveal that closing low-performing branches will have a positive impact on profits or that you need to focus on increasing deposits to boost your efficiency ratio.

KPIs dive deeper into profitability numbers than less analytic metrics such as assets under management (AUM) so you can really understand your performance drivers. For instance, just because a bank has billions of dollars in AUM doesn't mean they are able to effectively turn those assets into revenue. Or, those assets may include a large number of non-performing loans, driving down asset quality.

The KPIs monitored vary from bank to bank and play a crucial role in how to measure bank performance. A growth-focused bank will rely on different KPIs than a bank that prioritizes risk minimization. However, all banks report ROA and ROE. ROA is about efficiency: it measures how well you use your resources to generate income. ROE measures shareholder returns and is tightly aligned with how well a bank uses equity financing.

2.4.2 Bank Performance Benchmarking:

KPIs don't exist in a vacuum. In order to improve profitability and achieve long-term success, you need to compare your bank with industry benchmarks. Use benchmarking data to make more strategic operational decisions. The goal is to improve performance and efficiency while still continuing to invest in technology, staffing, training, and marketing.

Benchmarking provides transparency to shareholders as well as bank executives. You can see how your bank stacks up to its peers and better allocate resources to hit earnings targets. Benchmarking is another tool in your box to answer the question of: How to measure bank performance?

2.4.3 How and Why to Use KPIs to Benchmark Bank Performance:

KPIs can support a variety of bank performance goals. For example, your brick and mortar branch network may be a huge operational cost. As digital banking has taken hold, your bank likely recognizes that traditional high-cost branches can be a profitability drain. KPIs can help you re-think your physical footprint, closing branches or re-tooling their design, size, and function.

Branch-focused KPIs can help you make important decisions about your branch delivery model by identifying drains on performance such as inefficient account opening and account management, subpar branch employee training and performance, poor location, and unsuccessful marketing and advertising campaigns.

2.4.4 Bank Key Performance Indicators:

Although some KPIs—including ROA and ROE—are standard metrics, you have a wide variety of KPIs to choose from depending on your strategy and operating model. Here are some examples.

a. Bank KPI Metric #1: Total Deposits per Branch:

Branches are expensive, and deposits are one way to recoup brick and mortar costs and even shore up profits. Total deposits per branch gives you a baseline of overall branch performance. Once you determine the baseline, you can analyze the performance of individual branches. You may decide to close branches with too few deposits, relocate branches to more deposit-rich areas, or improve branch employee training to increase the deposits-to-branch ratio.

To calculate, divide the total dollar amount of assets the bank manages by the number of retail branches.

b. Bank KPI Metric #2: Banking Efficiency Ratio :

This metric compares expenses (or operating costs) to interest and non-interest income and is an easy way to measure your bank's ability to turn assets into revenue. A lower ratio is better, with most banks striving to remain under 50%. If the efficiency ratio increases, the bank is either incurring increased operating costs or decreasing revenues.

To calculate efficiency ratio, divide non-interest expenses by total revenue (interest and non-interest income), as a percentage.

c. Bank KPI Metric #3: Operating Expenses as a Percentage of Assets :

A large bank with billions of dollars in deposits is not automatically better managed than a smaller community bank. The ratio of expenses to assets is a better indicator of financial health. Bank assets include cash, interest-earning loans, and government securities like Treasury bills, Treasury bonds, and municipal bonds. Examples of operating expenses include employee salaries and benefits, building and occupancy costs, information technology costs, legal fees, consulting services, and directors fees.

To calculate, divide operating expenses by the total dollar amount of assets, as a percentage.

d. Bank KPI Metric #4: Revenue per Registered Financial Representative:

Banks collect both fee and investment revenues from the sale of stocks, bonds, options, mutual funds, and annuities. Registered financial representatives are licensed by FINRA to sell securities on behalf of the bank. Representatives typically work on salary plus commission. This metric is a general gauge of bank profitability and commission fee pipeline.

To calculate, divide total fee and investment revenue by the number of registered financial representatives.

e. Bank KPI Metric #5: New Accounts Opened per Branch:

Location, location, location. Just like in real estate, placement matters. What makes one branch more attractive to customers partly depends on the density of the market, local demand, a visible location that's easy to get to, and other

factors. Measuring the number of new accounts opened per branches is just one important way to track overall branch performance.

To calculate, divide the total number of new deposit accounts by the number of branches.¹⁰

3. relevant previous studies:

We summarize the studies as follow:

Study	Sample	Variables	Goal	Conclusion
Saleh F. A. Khatib, Ernie Hendrawaty, Ayman Hassan Bazhair, Ibraheem A Abu Rahma, Hamzeh Al Amosh. (2022)	Palestine	Financial inclusion, bank performance	Evaluating the association between financial inclusion and the performance of banks in Palestine	Access to financial services, service delivery, and the quality of the product improves bank probability, point-of-sale terminals have no impact on profitability. Additionally, financial service utilization reflected in bank account number sand credit to small and medium-sized enterprises do not affect bank profitability, and among bank-specific variables, the nonperforming loan ratios, the cost-to-income ratios, and liquidity were found to be the main drivers of profitability.
Fadi Shihadeh, Palestine Technical University, Bo Liu, Hunan University. (2019)	financial development databases for 189 countries and 701 banks	Financial inclusion, Bank Penetration, bank risk	Examining whether financial inclusion influences banks performance and risks	This study presents global evidence that enhancing the financial inclusion will positively affect the bank's activities as well as the disadvantaged life. Furthermore, this study covers the financial inclusion topic from the new novel, thus open a new field of research for further research

¹⁰ Bank KPI Metric #5: New Accounts Opened per Branch. <https://opsdog.com/resources/measure-bank-performance-key-performance-indicators-kpis-benchmarking/>

<p>ODERO JOSHUA ORANGA, DR. IBRAHIM TIRIMBA ONDABU (PhD). (2018)</p>	<p>Kenya</p>	<p>Financial inclusion, financial performance, Financial literacy</p>	<p>This study sought to determine the effect of financial literacy programs, usage of agents and representatives, increased proliferation of ATMs and Mobile banking services on the financial performance of listed banks in Kenya and to determine the effect of bank branch spread on performance of listed banks in Kenya.</p>	<p>The results of the studied determined that financial inclusion elements have a positive and strong impact on the financial performance of banks in terms of return on equity. The study determined that financial literacy programs have positive but weak impact on financial performance of banks. The use of agents and representatives had positive and strong effect on performance of banks. The proliferation of ATMs and Mobile banking services had positive but weak effect on financial performance of banks. Bank branch spread had positive but weak effect on financial performance of banks.</p>
<p>Prince Asare Vitenu-Sackey, Jiang Hong Li. (2019)</p>	<p>10 West African Countries</p>	<p>Financial inclusion, bank performance</p>	<p>The paper assesses the effect of financial inclusion on banks performance in West African countries</p>	<p>The study concluded that financial inclusion has positive effect on banks performance with an enticing results showing that financial inclusion increases banks performance in low gdp per capita countries which signals that banks should increase their presence and provide services to those countries.</p>

<p>Aliffianti Safiria Ayu Ditta, Arifiansyah Saputra. (2020)</p>	<p>Indonesia</p>	<p>Financial inclusion, banking performance</p>	<p>Examining the impact of financial inclusion and banking performance in Indonesia</p>	<p>By conducting a regression analysis, researchers found that several indicators of financial inclusion can help improve banking performance using ROA and NIM ratios, as well as some indicators of financial inclusion that do not demonstrate its influence. The results of this study drove banking as one of the formal financial institutions to increase financial inclusion. Banks can earn more profit if financial inclusion increases.</p>
<p>Nedjla Lemerini, Abdellatif Habi. (2022)</p>	<p>The Arab world and Algeria</p>	<p>Financial inclusion</p>	<p>the reality of financial inclusion in Algeria and the Arab world by examining the concept of financial inclusion and its importance for economic development</p>	<p>The study concluded that the Arab world continues to suffer from low levels of financial inclusion compared to the countries of the world, facing several challenges, which require the need to adopt an effective strategy to support and strengthen financial inclusion. As for Algeria, the ownership of the accounts at formal financial institutions have improved to an acceptable level, but borrowing from financial institutions is still very low.</p>
<p>Ozili, Peterson K. (2022)</p>	<p>global</p>	<p>Digital financial inclusion</p>	<p>The paper revisited the digital financial inclusion agenda to provide extensive insights into what digital financial inclusion is all about.</p>	<p>The implication of the discussion in this paper is that digital financial inclusion is more of a journey than a destination. A great deal of progress need to be made, and it will require the use of existing and new innovative digital technologies to adapt financial services to meet the needs of everyone towards financial inclusion.</p>

Antonia Grohmann, Lukas Menkhoff. (2022)	global	Financial literacy, financial inclusion	examine the relationship between financial literacy and financial inclusion	it is useful to improve financial literacy in order to make better use of available financial services.
Hasanul Banna, Md Rabiul Alam. (2021)	Data from seven emerging Asian countries	Digital financial inclusion, bank stability	examine the effect of digital financial inclusion (DFI) on banking stability through promoting sustainable economic development	The results suggest that DFI brings banking stability and an integrated digital financial system among the emerging Asian banks is not merely a way of ensuring banking stability, rather it ensures inclusive and sustainable economic development that helps achieve financial sustainability.
Rahima Benaini, Samiya Metair. (2022)	algeria	Financial inclusion	This study aims to afford an empirical insight on the factors that have a great impact on financial inclusion levels in Algeria	Farther, the estimation findings revealed a positive relationship between financial inclusion index and GDP per capita as a proxy of incomes, population, oil rent, interest rate, while, money supply is not significant factor. However, the strong positive relationship is found between FII and corruption, fixed phone subscriptions as a measure of internet access, which means there are the most important determinant of FII in Algeria.

Table 1: Relevant previous studies summery.

Summary:

In this chapter, we touched on the conceptual framework of financial inclusion, and the financial inclusion index, and we touched on the importance of promoting financial inclusion to achieve economic goals, Poverty eradication and sustainable development.

We also discussed basic concepts about banks and the bank performance indicators.

In the last topic, we referred to previous studies on the issue of financial inclusion, and we concluded in the end the differences and similarities with our study, whether in terms of the method used or in terms of the objectives of the study.

Chapter II:

Empirical study

Preface

The expansion and spread of modern financial services and their increased use made it possible to attract more users. Increasing reliance on electronic financial services, especially with regard to payments, will benefit both the sender and the receiver, and the financial institutions that provide Services so that payments arrive very quickly and at a lower cost.

It will also benefit the financial system by improving the ability to track and monitor the movement of funds to reduce levels of financial crime and operations related to money laundering, this allows creating an opportunity to enter more individuals among the users of the formal financial system.

With the aim of clarifying the role played by the Bank of Algeria in improving, developing and modernizing the means and systems of payment and banking services, relying on the pillars of supporting the financial infrastructure through the development of financial services and products that meet the needs of all segments of society and financial protection to the consumer and evaluate the Algerian banking system, so we divided this chapter into:

1. Data and Methodology
2. Result and discussion

1. Data and Methodology:

1.1 data :

Data for this study was collected from several sources:

- Internet websites
- Previous studies
- National and international journals and forums
- The study also relied on data and indicators from the bank of Algeria website and the global findex database:

1.1.1. an introduction to the Global Findex Database:

a. introduction to the Global Findex Database:

Financial inclusion is a cornerstone of development, and since 2011, the Global Findex Database has been the definitive source of data on the ways in which adults around the world use financial services, from payments to savings and borrowing, and manage financial events such as a major expense or a loss of income.¹¹

The Global Findex Database provides almost 300 indicators on topics such as account ownership, payments, saving, credit, and financial resilience. Findex data is reported for all indicators by country, region, and income group. Data is also included summarized by gender, income (adults living in the richest 60% and poorest 40% of households), labor force participation (adults in and out of the workforce), age (young and older adults), and rural and urban residence. Available indicators are reported for 2021, 2017, 2014, and 2011.¹²

The Global Findex Database has become a mainstay of global efforts to promote financial inclusion. In addition to being widely cited by policy makers, researchers, and development practitioners, Global Findex data are used to track progress toward the United Nations Sustainable Development Goals.

b. the chosen sample:

¹¹ <https://microdata.worldbank.org/index.php/collections/global-findex#:~:text=Financial%20inclusion%20is%20a%20cornerstone,or%20a%20loss%20of%20income.>

¹²

<https://www.worldbank.org/en/publication/globalfindex/Data#:~:text=The%20Global%20Findex%20Database%20provides,%2C%20region%2C%20and%20income%20group.>

this sample included results from 2011 to 2021 from Algeria. It includes data on account ownership, Financial institution account ownership , accounts by individual characteristics, difficulties accessing emergency money in 30 days, also digital payments Made or received, Storing or saving money , Borrowing in the past years.

1.1.2. Bank of Algeria

a. an introduction to the Bank of Algeria:

a.1. The foundation of the Bank of Algeria:

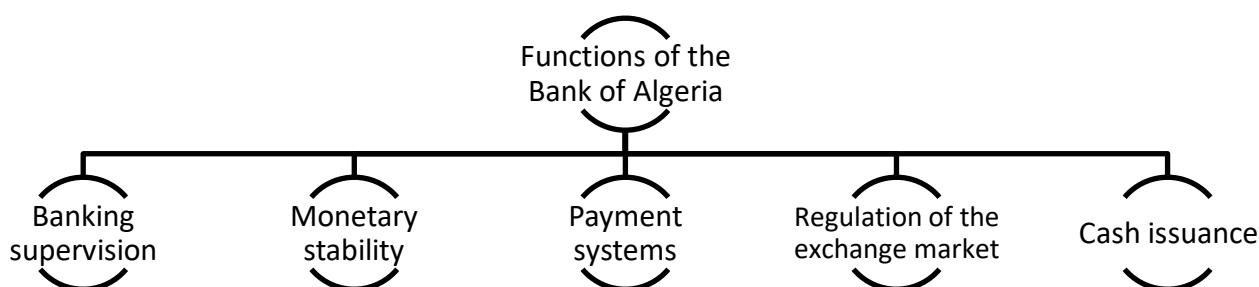
The Bank of Algeria is the institution responsible for the sovereign function of issuing money. It is a central bank in the broadest sense, governed by Ordinance No. 03-11 of August 26, 2003 relating to money and credit, which defines it as a national institution endowed with legal personality and financial independence, and considered commercial with third parties.

The Bank of Algeria is governed by the governor, assisted by three deputies appointed by presidential decree. The Bank of Algeria has a board of directors responsible for deliberating in all matters related to management and management.

The supervision of the management of the Bank of Algeria is supervised by the Supervisory Board, which consists of two sergeants appointed by presidential decree.

a.2. Functions of the Bank of Algeria:

The main task of the Bank of Algeria is to ensure price stability, as well as monetary and financial stability, through the creation and maintenance of currency, credit and exchange, which are the most favorable conditions for the orderly development of the economy.



a.3. regulatory and supervisory bodies:

The Bank of Algeria has two organs that enable it to carry out all the tasks that fall within the scope of its powers, in particular that of the regulator and supervisor of banks and financial institutions in the market.

For this purpose, the bank shall have a deliberative body called the Monetary and Loan Council, which has the status of a monetary authority that determines monetary objectives, determines the conditions for approval and establishment of banks and financial institutions, and enacts regulations related to standards and ratios applied to banks and financial institutions. Regulations are published in the Official Gazette.

The Monetary and Loan Council consists of the Governor, the Chairman, the members of the Board of Directors, and two personalities, selected for their competence in economic and financial affairs, appointed by presidential decree.

The Bank of Algeria also has a body called the Banking Commission, which is the authority responsible for monitoring the compliance of banks and financial institutions with legislative and regulatory provisions and penalizing their violations.

The Banking Committee is chaired by the Governor of the Bank of Algeria.

The committee consists of three members selected for their experience in banking, financial and accounting, two judges delegated, one from the Supreme Court and the other from the State Council, a representative of the State Audit Bureau, and a representative of the Ministry of Finance. Its members are appointed by the President of the Republic for a term of five years. The Banking Committee shall have a general secretariat whose powers, organization and executive procedures shall be determined by the Board of Directors of the Bank of Algeria.

a.4. Bank history:

From 1962 to the present day The Central Bank of Algeria was established by Law No. 62-144 approved by the Constituent Assembly on December 13, 1962, to establish and define the statutes of the Central Bank.

Adjustments were made during the 1970s and early 1980s, however, reforming the financial system, both in the way it was managed and in its characteristics, became necessary.

Law No. 86-12 of August 19, 1986 on the banking system marked the beginning of a comprehensive reform of the Algerian banking system.

Thus, the Central Bank regains its powers in terms of defining and implementing monetary and loan policy, at the same time that its relations with the public treasury were reviewed.

However, these developments proved not to adapt well to the new social and economic context characterized by deep reforms.

Law No. 90-10 of April 14, 1990, amending and supplementing money and credit, completely redefined the Algerian banking system.

This was done through Ordinance No. 03-11 of August 26, 2003 regarding cash and credit, repealing Law No. 90-10 of April 14, 1990. Likewise, Ordinance No. 10-04 of August 26, 2010 amending and supplementing Ordinance No. 03-11 of 26 August 2003 related to cash and loan.

Thus, the law grants broad autonomy, both organic and functional, to the Central Bank, which is now called the Bank of Algeria.

The direction, management and control of the Bank is overseen, respectively, by the Governor and the Board of Directors, which is chaired by the Governor and two sergeants. The Board of Directors is composed of three deputy governors and three senior officials appointed on the basis of their expertise in economic and financial affairs.

The governor is appointed by presidential decree. The three deputy governors are appointed under the same terms. The other members of the Board of Directors are appointed by an executive decree.

Censors are appointed by presidential decree on the proposal of the Minister in charge of Finance.

The Board of Directors has the traditional powers recognized for a body of this type.

a.5. Organization and tasks:

The Algerian Bank has approximately 3,400 employees who work every day to achieve the objectives of the institution. In order to carry out its tasks, the Bank of Algeria is organized at the central level in general directorates charged with departments of studies, inspection and banking activities. The organization of

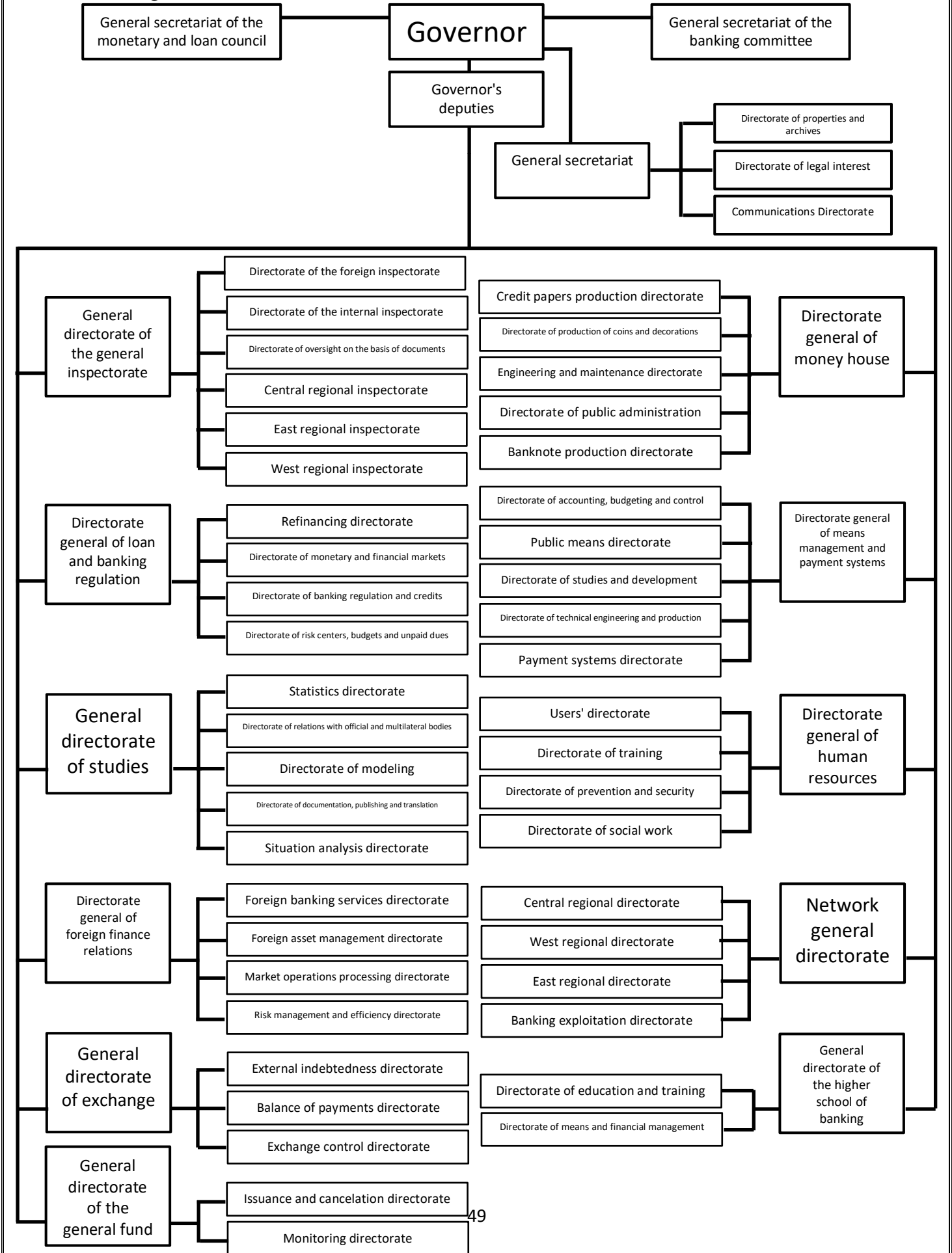
the Bank of Algeria also consists of two general directorates that manage specific aspects related to the issuance of banknotes and banking formation.

The Bank of Algeria has a network of 49 agencies and branches, which guarantees it an effective presence in every province of the country: coordination between agencies and branches is carried out by three regional directorates located in the cities of Algiers, Oran and Annaba.

An extensive program of modernization of equipment and working methods as well as training programs has been carried out in order to ensure and make the banking system in general meet the requirements of the new context, both nationally and internationally.¹³

¹³ <https://www.bank-of-algeria.dz/ar/عن-بنك-الجزائر/>

a.6. Organizational Chart:



b. the sample:

this sample included results from 2017 to 2021 from Algeria. It includes data on Active banks and financial institutions, The development of the Algerian banking sector (number of agencies), Bank performance indicators, Transactions using cards during 2021 and The development of Transactions using cards during 2020 and 2021.

1.2 methodology :

Choosing variables that best represent the study which are the financial inclusion indicators and the banking performance indicators.

The data was collected from the annual report of 2021 of bank of Algeria and the global findex database 2022.

2. results and discussion:

2.1 test results :

2.1.1. Global Findex Database

a. account ownership:

The number of indicators for opening a bank account reflects the extent of the banking systems response and its ability to provide financial services to individuals and institutions as well as the spread of financial culture among members of society as well as the cultivation of banking awareness and the expansion of the range of services that banks can provide to different groups of society which leads to the promotion of financial inclusion.

Table 2: Account ownership ages 15+

Accounts (% age 15+)	
All adults, 2021	44.1%
All adults, 2017	42.8%
All adults, 2014	50.5%
All adults, 2011	33.3%

Source: Global Findex Database/ The Little Data Book on Financial Inclusion 2022

From the previous table and according to this indicator we recognize an increase in the percentage of account ownership in Algeria in 2014 and 2021 from 33.3

% to 50.0% and from 42.8% to 44.1% , and a decrease in 2017 from 50.5% to 42.8%

We explain the rise of account ownership as:

- university students open bank or postal accounts to benefit from scholarships
- employees from the public or private sector open accounts to receive wages and grants.
- public authorities require all farmer contractors to open bank accounts to collect their financial expenses

A decrease could be explained as Imbalance of the strategy approved to enhance financial inclusion and absorb liquidity more outside the financial sector

Table 3: Financial institution accounts ages 15+

Financial institution account (% age 15+)	
All adults, 2021	44.1
Opened first account to receive a wage or government payment	34.9

Source: Global Findex Database/ The Little Data Book on Financial Inclusion 2022

Almost half of the adults in Algeria have a financial institution account (44.1 percent of adults).

Table 4: Account by individual characteristics ages 15+

Account, by individual characteristics (% age 15+)	
Women	31.2
Adults in the poorest 40% of households	31.9
Adults out of the labor force	26.2
Youth (ages 15–24)	26.7

Source: Global Findex Database/ The Little Data Book on Financial Inclusion 2022

Account ownership is around 31 percent for women and adults in low income household and around 26 percent for adults out of labor force and youth.

b. transactions:

This indicator measures the percentage represented by the use of financial accounts

Table 5: digital payments made or received in the past year age 15+

Made or received digital payments in the past year (% age 15+)	
All adults, 2021	33.7
All adults, 2017	26.0
Women	23.1
Adults in the poorest 40% of households	22.1
Received a digital payment	29.6
Made a digital payment	12.8
Received a government payment into an account	24.2
Received a private sector wage into an account	5.3
Sent or received a domestic remittance payment using an account	7.1
Made a digital utility payment	2.3
Made a digital merchant payment	5.3

Source: Global Findex Database/ The Little Data Book on Financial Inclusion 2022

Digital payments has grown from 26.0% in 2017 to 33.7% in 2021, while receiving a digital payments remains higher than making one, receiving a government payment is almost 5 times larger than receiving a private sector wage, making a digital utility payment and making a digital merchant payment remain both low at 2.3% and 5.3% respectively.

Table 6: money stored or saved in the past year ages 15+

Storing or saving money in the past year (% age 15+)	
Used account to store money for cash management	21.9
Saved any money	45.7
Saved using an account	16.0
Saved using a savings club or a person outside the family	3.6

Source: Global Findex Database/ The Little Data Book on Financial Inclusion 2022

Saving using an account (16%) is significantly higher than using a savings club or a person outside the family (3.6%) .

Table 7: Borrowing in the past year ages 15+

Borrowing in the past year (% age 15+)	
Borrowed any money	37.6
Borrowed formally, including using a credit card	3.8
Borrowed from a savings club	0.9
Borrowed from family or friends	30.5

Source: Global Findex Database/ The Little Data Book on Financial Inclusion 2022

Borrowing from family or friends is the highest at 30.5% while borrowing from other methods are significantly low (3.8% for borrowing formally and 0.9% for using a savings club).

The percentage of borrowing formally and savings club is low because:

- The complexity of the procedures followed and the dominance of the public sector.
- High interest rates among them which means high costs of assumption, especially mortgage loans.
- The cancellation of bank consumer loans affects the activities of private banks.
- Non expansion of banks financing for small and micro enterprise.

Table 8: difficulty accessing emergency money in 30 days ages 15+

Not very difficult to access emergency money in 30 days (% age 15+)	
All adults, 2021	63.7
Women	59.0
Adults in the poorest 40% of households	47.0

Source: Global Findex Database/ The Little Data Book on Financial Inclusion 2022

63.7 percent of adults could access emergency money in 30 days with little or no difficulty, 59.0 percent of women and 47.0 percent of adults in low income households.

2.1.2 Bank of Algeria:

banking intermediation and banking sector infrastructure:

a. banking intermediation index

This indicator measures the extent of the expansion of a country's banking network, which means that most of the population can use financial services without incurring the cost of transferring to banking institutions it also reveals the ability of banks to absorb household savings

Table 9: Active banks and financial institutions

Active banks and financial institutions					
	2017	2018	2019	2020	2021
banks	20	20	20	20	19
Public banks	6	6	6	6	6
Private banks	14	14	14	14	13
Financial institutions	9	8	8	8	8
Public financial institutions	6	6	6	6	6
Private financial institutions	3	2	2	2	2
total	29	28	28	28	27

Source: bank of Algeria 2022

At the end of December 2021, the number of banks and financial institutions in Algeria reached 27 banks and financial institutions with their social headquarters in Algiers. Banks and financial institutions are distributed according to the nature of their activities as follows:

six (06) public banks; Thirteen (13) private banks with the foreign capital, including a bank with mixed capital; two (02) public financial institutions; Five (05) institutions specialized in financial renting, including three (03) public; one (01) mutual fund for agricultural insurance approved to carry out banking operations, which was adopted at the end of the year 2009, as a financial institution.

At the end of 2021, the banking network in Algeria includes 1603 agencies, of which 1202 agencies belong to public banks and 401 agencies belong to private banks. As for the financial institutions, the number of their agencies reached 97 agencies.

The total number of agencies for the entire banking system and financial institutions for the year 2021 was 1,700 agencies compared to 1,671 agencies in 2020, which represents one agency for 26,438 people in 2021 compared to 26,944 people in 2020.

Table 10: The development of the Algerian banking sector (number of agencies)

The development of the Algerian banking sector (number of agencies)					
	2017	2018	2019	2020	2021
banks	1501	1525	1551	1575	1603
Public banks	1142	1155	1172	1185	1202
Private banks	359	370	379	390	401
Financial institutions	94	92	91	96	97
Public financial institutions	77	76	75	79	79
Private financial institutions	17	16	16	17	18
total	1595	1617	1642	1671	1700

Source: bank of Algeria 2022

The ratio of the working population to banking agency windows declined slightly in 2021, equivalent to a bank window for every 7,293 persons of working age, compared to 7,247 in 2020. As for the postal checks center, it includes, at the end of 2021, 4,055 agencies distributed throughout the national territory. . This equates to one postal institution for every 3057 working people.

In total, the number of agencies for each of the banks and the Postal Checks Center increased to 5,658 agencies, so that the ratio of the working population to the agencies recorded a slight decrease, which is equivalent to one agency for every 2,191 people in 2021 compared to 2,177 people in 2020.

At the end of 2021, the number of active bank accounts registered in dinar decreased by 0.48%, as the total of these accounts reached 11,561,408 accounts in 2021 compared to 11,616,624 accounts in 2020. Legal persons represent 11% of the total of these accounts (i.e. 1,226,847 accounts Registered in 2021), while the share of natural persons is greater, representing 89% of the total bank accounts Active activities registered in dinars (i.e. 10 334 561 accounts Registered in 2021).

The number of active bank accounts in hard currency amounted to 4,160,403 accounts in 2021 compared to 4 123 483 accounts in 2020, which represents a slight increase of 0.90%. Legal persons represent 0.72% of the total of these accounts (ie 29 880 accounts registered in 2021) and natural persons represent 99.28% (ie 4 130 523 accounts registered in 2021).

The rate of expansion of the use of banking services, represented by the number of accounts opened for clients at banks (active accounts in dinars and foreign currency) and at the Postal Checks Center, is known to have developed slightly in 2021, estimated at 3.07 accounts per person of working age, compared to 3.04 accounts in 2020.

b. bank performance

Table 11: Bank performance indicators

Bank performance indicators					
	2017	2018	2019	2020	2021
Public banks					
Return on capital (ROE)	20.00%	22.72%	12.31%	7.34%	10.40%
Return on capital (before supplies)	29.21%	30.55%	5.77%	19.61%	13.58%
Ratio of cost coverage to results	144.92%	163.94%	130.09%	128.19%	155.09%
Return on assets (ROA)	1.97%	2.27%	1.26%	1.23%	1.77%
Bank margin	3.87%	3.96%	3.39%	3.33%	2.79%
Private banks					
Return on capital (ROE)	14.69%	21.21%	22.51%	13.59%	15.36%
Return on capital (before supplies)	18.94%	25.36%	30.49%	18.35%	16.17%
Ratio of cost coverage to results	149.04%	146.61%	156.49%	146.43%	164.98%
Return on assets (ROA)	2.59%	3.38%	3.16%	2.73%	3.02%
Bank margin	5.98%	6.57%	6.85%	6.16%	5.58%

The banking sector					
Return on capital (ROE)	18.85%	22.41%	14.08%	8.31%	11.18%
Return on capital (before supplies)	26.99%	29.49%	25.67%	15.43%	12.43%
Ratio of cost coverage to results	145.54%	164.06%	134.61%	131.34%	156.94%
Return on assets (ROA)	2.05%	2.42%	1.51%	1.43%	1.95%
Bank margin	4.15%	4.32%	3.85%	3.70%	3.18%

Source: bank of Algeria 2022

The various measures mentioned above, taken by the Bank of Algeria to contain the effects of the health crisis on the banking sector during the past two years, and the special refinancing program associated with the resumption of economic activity, enabled banks to achieve more results and profits. This situation resulted in an improvement in the return on capital (ROE) for the banking sector, increasing from 8.3% in 2020 to 11.2% in 2021. This improvement is the direct result of the increase in the level of return, which is defined as banking output (before tax). An improvement of + 46,2% between the end of the year2020 and the end of 2021.

At the same pace as the return on capital, the return on assets (ROA) of the banking sector witnessed a slight improvement, moving from 1.43% in 2020 to 1.95% in 2021. This improvement is due to the increase in net results by 46.2, an increase of which is greater than that registered in the average assets, which is estimated at 7.7%. The return on capital for private banks (ROE) for private banks moved from 13.6% in 2020 to 15.4% in 2021. This significant improvement is mainly due to the increase in the net output of these banks led to a slight increase in the return on assets (ROA), which increased from 2.73% in2020 to 3.02% in 2021.

The combined net income of public banks witnessed an increase of 53.9% in 2021, compared to a decrease of 0.25% in 2020. This development in 2021 resulted in an increase in the return on capital (ROE) 10.4% compared to 7.3% in 2020. Meanwhile, the return on assets (ROA) improved slightly from 1.23 in 2020 to 1.77% in 2021.

c. electronic clearing system for payments for the general public:

Table 12: Transactions using cards during 2021

Transactions using cards during 2021				
Nature of operation	size	value	Ratio by size	Ratio by value
Withdrawal via ATM	21,503	413,558	90.10%	96.68%
Payment via cards	2,355	14,122	9.86%	3.30%
Payment via electronic payment terminals	2,349	14,104	9.84%	3.30%
Online payment	0,006	0,018	0.02%	0.00%
Retrieving payment via electronic payment terminals and the internet	0,009	0,078	0.04%	0.02%
Total operations using cards	23,867	427,758	100.00%	100.00%

Source: bank of Algeria 2022

Table 13: The development of Transactions using cards during 2020 and 2021

The development of Transactions using cards during 2020 and 2021						
Nature of operation	2020		2021		Growth rate	
	size	value	size	value	size	value
Withdrawal via ATM		11,997	217,979	21,503	413,558	79.24%
Payment via cards		0,920	4,408	2,355	14,122	155.93%
Payment via electronic payment terminals		0,439	3,441	2,349	14,104	434.94%
Online payment		0,481	0,967	0,006	0,018	-98.83%
Retrieving payment via electronic payment terminals and the internet		0,003	0,024	0,009	0,078	185.04%
Total operations using cards		12,920	222,411	23,867	427,758	84.73%

Source: bank of Algeria 2022

In terms of development, the total volume of clearing payment instruments increased in 2021 and compared to the previous year by 38.66% in terms of volume, due to the significant growth recorded by card operations by as much as deductions.

Hence, card transactions continued their rapid rise, recording an estimated growth rate of 84.73%, and the same applies to deductions, with an estimated increase rate of 32.03%.

Card transactions have literally doubled in value Recording an impressive increase of 92.33% or a lower degree for remittances and instruments at no rates They are negligible, estimated at 13.82 and 11.09%. respectively.

According to the statistics of the Pre-Interbank Electronic Clearing Center (a company with shares), an operator in the electronic payment clearing system for the general public, during the year 2021, cash withdrawals from ATMs may account for 90.10% of the total volume of electronic payment transactions between banks and 96.68% of its total value, which reflects the clear tendency of cardholders to prefer using interbank cards to pay via electronic payment terminals at approved merchants and those on online platforms at web merchants.

During the year 2021, withdrawals via ATMs and payment using cards, in terms of value and volume, witnessed a significant increase, which can be explained by the trend of customers of both banks and Algeria Post and their bias to use cards between banks compared to other means of payment.

Also, withdrawals via ATMs have moved from 12.0 million transactions amounting to 218 billion Algerian dinars during the year 2020, to record 21.5 million transactions amounting to 413.6 billion dinars transactions in 2021, i.e. a growth rate of 79.24% in terms of volume and 89.72% in terms of value.

As for payments using cards registered in 2021, it should be noted that 2.4 million transactions with a value of 14.1 billion dinars were registered by each of the banks as well as Algeria Post, compared to 0.920 million transactions with an amount of 4.4 billion dinars in 2020, with a rate of development of 155,93 in terms of volume and 220,34% in terms of value.

On the other hand, it is important to note that according to the statistics of the automated cash pool on December 30, 2021, it was found that:

- Out of the total of 11 609 624 cards that were put into circulation, 2 768 285 interbank cards were offered or issued by banks (ie an average of 23.84%) vs. 8,841,339 issued by Algeria Post(ie an average of 76.16%);

- The total cards issued by banks and Algeria Post at the end of 2021 witnessed an estimated increase of 17.04%, moving from 136 9919 to 624 609 11 cards. exported;
- A banking services hangar consisting of 3053 distributors or ATMs and 37561 electronic payment terminals that were placed at the disposal of bank card holders and approved merchants, i.e. an average of 3803 cards issued to one automatic distributor and 309 cards issued through electronic payment terminals, which is considered marginal in terms of acceptance points;
- 153 online merchants were approved compared to 71 at the end of 2020, an increase of 115.49%.

During the year 2021, card-issuing institutions registered (interbank and gold cards) within banks and between banks, compared to the previous year with a total of:

- 87.7 million transactions of withdrawals, at a value of 1728.9 billion dinars, compared to 58.4 million transactions, at a value of 1 073.0 billion dinars (i.e. a significant increase by 50.13 in terms of volume and 61.13% from where value);
- 2.1 million payment transactions via electronic payment terminals, with a value of 15.1 billion dinars, compared to 712 million transactions, with a value of 4.7 billion dinars (i.e. a significant increase of 202.11% in terms of volume and 219.24% in terms of value);
- 7.8 million online transactions with a value of 11.2 billion dinars compared to 4.6 million transactions with a value of 5.4 billion dinars (ie a significant increase of 70.24% in terms of volume and 106.05% in terms of value).

2.2 discussion:

2.2.1. the effect of financial inclusion on banking performance (Bank of Algeria):

The application of the financial inclusion system enhances the efficiency and ease of access to banking services at reasonable prices, which directly support the ease of obtaining the necessary credit for the target groups, through a low

financing cost, as financial inclusion aims to provide banking services to all segments of society in a safe and effective manner.

The progress of banks in the field of banking services technology via (the Internet, mobile phones, ATMs...) helps them attract the largest number of new customers, and facilitates their ability to provide banking services in the easiest, fastest and most secure way, through In order to achieve financial inclusion, the increase in the number of dealers in the banking sector leads to an increase in bank liquidity, which may revive the economy, as the liquidity that the individual saves in his home enables him alone to benefit from it, while the liquidity deposited in the bank enables other parties to benefit from it and invest it instead of keeping it. Without investment also, attracting low- and middle-income groups, not only here, but also the residents of remote areas, to have their financial dealings with the banking sector, and would improve the profitability of that sector and increase stock prices in the market. This also contributes to a decrease in the inflation rate, and preserving the value of purchasing power. money, and lower interest rates on lending in banks, and thus increase the financing of real investments that lead to an increase in job opportunities, reduce unemployment and poverty rates, and support economic growth, which is ultimately reflected in enhancing financial performance.

The spread of ATMs as electronic channels to provide financial services encourages customers to increase their use of these services in areas where it may be difficult to open bank branches, or that a bank may be crowded, increasing the ability of the banking sector to expand investments and expand the provision of banking services that It suits all the needs of society to attract the largest number of new customers. This may be reflected in increasing banks' liquidity, increasing their ability to provide credit, achieving more profits, and enhancing financial performance in the long run.

And the results of the statistical analysis at the level of the banks representing the study sample showed that there is a statistically significant positive relationship between the application of financial inclusion and the financial performance of banks, where providing financial protection to customers and developing the level of financial education for them leads to strengthening the system of financial inclusion by increasing customers' confidence in The banking sector, and making sound and well-thought-out investment decisions regarding their various financial dealings with the lowest levels of risk, which is reflected in the provision of effective communication channels between banks

and customers, the increase in liquidity ratio, and then the enhancement of their financial performance.¹⁴

As for financial inclusion and its impact on the performance of Bank of Algeria it is shown that there is a positive impact of financial inclusion on the rates of return achieved by the Bank of Algeria through its contribution to reducing costs and increasing the bank's assets, which means that financial inclusion is one of the pillars supporting the bank's financial performance. However, this effect was very weak due to the poor infrastructure in which a bank is active. There is a significant shortage in the number of ATMs available to individuals. This fluctuation is due to the breakdown of most of them and the bank's inability to pay the exorbitant maintenance costs, with the lack of qualified personnel in this field. Not to mention the great divergence between the bank's agencies spread across the national territory. Without forgetting the weak confidence of the Algerian individual in banking transactions, and this explains the stability of the number of bank accounts opened with the bank throughout the study period.

In comparison with the results of previous studies, the effect obtained through this study is very weak, and this is due to the poor features of financial inclusion in Algeria, which is confirmed by its low rank in the global financial inclusion index rankings (rank 141).

2.2.2. the effect of financial inclusion on bank stability:

a. Possible positive effects of financial inclusion on the financial stability of the banking sector:

The points of impact of financial inclusion on the financial stability of the banking sector are evident in the following points:¹⁵

- High levels of financial inclusion help the poor to improve their financial conditions and raise their standards of living. It also generates a family sector and a small business sector that enjoys greater relative strength through financial development events that support social and political stability, and then increase the stability of the financial system.
- Supporting the effectiveness of monetary policy by improving the efficiency of intermediation between deposits and investments and

¹⁴ Masmoudi Karima , Sonia Chetouane. (2022). The Impact of Financial Inclusion on Algerian Banks' Performance -Case Study of BNA Bank-. Namaa for Economic and Trade Journal. 6(2). 380-381.

¹⁵ امانة مجلس محافظي البنوك المركزية ومؤسسات النقد العربية، 2015، العلاقة المتداخلة بين الاستقرار المالي و الشمول المالي، فريق العمل الاقليمي لتعزيز الشمول المالي في الدول العربية، صندوق النقد العربي.

increasing the share of the formal financial sector at the expense of the informal sector;

- Achieving a wide range of financial inclusion in bank deposits leads to the stability of the deposit base and thus increases the flexibility of financing and investment in the banking sector, which is a factor supporting bank liquidity on the one hand and financial stability on the other hand;
- Increasing financial inclusion in terms of facilitating the granting of small loans leads to the greatest degree of stability at the level of financial service providers, as the losses of small loans pose less systemic risks than those achieved from large loans;
- The existence of a financial sector characterized by inclusiveness enhances its ability to enhance economic stability an essential component of financial stability;
- The widening scope of financial inclusion contributes to the diversification of portfolios of assets and liabilities, thus enhancing the risk distribution and avoiding its concentration;
- Increasing financial inclusion is facilitating uniform consumption by providing households with savings tools And borrowing and then reduce the cost of production volatility, which facilitates the efforts of central banks to maintain stability Prices on the one hand, on the other hand, the growing financial inclusion leads to an increase in the importance of interest rates in The monetary field, and thus improving the effectiveness of the cash flow in the use of this tool.

b. The potential negative effects of financial inclusion on the financial stability of the banking sector:

Despite the positive effects of financial inclusion in the field of enhancing financial and banking stability, however, there are many opinions that see the possibility of exposing financial and banking stability to more risks due to expanding the base of financial inclusion. Perhaps the most prominent of these threats and risks are the following:

- Increasing the levels of financial inclusion by expanding the base of borrowers may lead to a decrease in lending standards, especially in the event that commercial banks seek outsourcing in the performance of their various activities such as credit assessment in order to reach small

borrowers, which may lead to a rise in the risks facing their reputation and thus undermining confidence in them and exposing its stability is compromised;

- The lack of proper regulation of the lending operations carried out by MFIs would reduce the overall effectiveness of the economic regulation and increase the risks of the financial system;
- The different characteristics of some excluded customers from the current customers in terms of financial services provided by banks may carry additional burdens on them and push them to innovate products and services that are compatible with the specificity of this type that financial inclusion targets. Which may lead to the need to raise the costs of services and products, which is not in the interest of the groups marginalized and vulnerable, which may lead to more exclusion rather than inclusion;
- Giving the banking regulators more responsibility, especially in the field of identifying customers' identities, locations, abilities, and degree of discipline, and the effects of that on the high cost of services provided.

2.2.2. bank of Algeria efforts to promote financial inclusion:

From the Intervention of the Governor of the Bank of Algeria, Mr. Salah Eddine Talib On the media day on the occasion of the Arab Day for Financial Inclusion at the Graduate School of Business - Algeria on Thursday 04 May 2023:

Signs of financial inclusion appeared in Algeria a long time ago, as the beginning of emerging institutions in the years 2000 had the emergence of some personal experiences that have known great success now, with the government adopting a set of measures, mechanisms and regulatory programs, as well as various precautionary instructions supporting and keeping pace with the tangible start of this field in 2020. coincided with a series of legal laws dedicated to the field of modern technologies by expanding the circle of financial and banking services and benefiting from them with minimal effort and cost, as well as Islamic banking by adopting the opening of Islamic windows to enable the category of citizens wishing to deposit and invest their savings according to this formula.

The draft monetary and banking law subject to approval, which is considered a new building block to be added to the series of economic reforms initiated by the state, comes in response to all the changes taking place in the international arena, to lay the appropriate ground for keeping pace with them and confronting

the challenges and risks that accompany them, as this project aroused wide interest by the various segments of society in most stages. His study explains the great significance of the percentage of financial culture that is increasing day after day, which suggests expanding the circle of financial inclusion in Algeria, especially since the draft law deals with the most important pillars of the modern economy represented in the development of digitization and the knowledge economy, the consecration of Islamic banking, the encouragement of green finance and sustainable development, the promotion of Governance and modernization of the banking system. All of this inevitably leads to achieving and strengthening indicators of financial inclusion, monitoring circulating savings outside the banking system, and placing them in the service of the national economy until the desired goal is achieved, which is to enhance financial, economic and social stability.

In line with the government's action plan and fundamental reforms that put the energy transition at the heart of the country's development policies, the Bank of Algeria is in the process of preparing a national strategy for financial inclusion in accordance with international best practices and in line with the local context. sustainable development within its credit and investment policy, in exchange for receiving full support, stimulus and cooperation from the monetary authority, which will spare no effort or means to contribute to supporting efforts to enhance financial inclusion.

From this standpoint, the Bank of Algeria calls on the financial and banking sector to support projects and sectors that contribute to the provision of environmentally friendly services and products, and to work on the need to continue improving indicators of financial inclusion among all segments of society. Despite the progress made, there are still great opportunities for all financial and banking institutions to improve access to services. Finance, targeting groups that are not covered financially, and integrating the informal sector into the national economy through adopting policies Occasion.

Within the framework of supporting the efforts made by the Bank of Algeria as well as all banks and financial institutions in the past years, which contributes to spreading awareness and financial education among all members of society and creating an economically and financially conscious generation that has the ability to plan and manage its financial life properly, we extend our full thanks and appreciation to all The active parties accompanying the financial inclusion campaign, and we look forward to the participation of other supervisory

authorities in reviving the activities of the Arab Day for Financial Inclusion in the future.

Finally, we are grateful for the revival of the occasion in this university edifice that is rich in the goodness of young people who are the future of tomorrow and the bearer of the march of continuing efforts for the activities and events of the Professional Association of Banks and Financial Institutions to raise awareness of financial inclusion, looking forward to the initiative contributing to achieving the desired goals in this matter. We also thank all the banks and financial institutions that took the initiative, on the occasion of the Arab Financial Inclusion Day, to launch activities and initiatives and introduce a number of financial services and products, which enhance the access of various segments of society to official financial services. We also look forward to a broader contribution from the various media in spreading awareness of the importance of financial inclusion.¹⁶

¹⁶ Mr. Salah Eddine Talib(Thursday 04 May 2023). On the media day on the occasion of the Arab Day for Financial Inclusion . The Graduate School of Business, Algeria.

Summary:

Through the study that we carried out in this chapter and based on the data available from the Bank of Algeria, represented in the form of annual reports issued from 2017 until the year 2021 through which we were able to know the role that the Bank of Algeria plays in order to raise and enhance inclusion Financial and by relying on effective strategies through which we seek to provide a strong financial structure to meet the requirements of financial inclusion and achieve an appropriate environment for it and to issue and amend instructions and regulations that regulate the activity of financial institutions through the expansion of the network of branches of financial service providers while benefiting from technological developments and the development of payment and settlement systems.

The reality of financial inclusion in Algeria was also presented through a set of indicators applied by the World Bank, based on various statistical surveys conducted by the World Bank in the years 2011, 2014 , 2017 and 2021.

Conclusion

Conclusion

Banks and the economic financial institutions in general seek to improve their performance and maximize their profitability through the optimum utilization of available capabilities, including the adoption of modern technology, as well as keeping pace with all developments in the economy.

Financial inclusion is considered one of the modern issues that the international arena has known and is gaining increasing interest by countries and governments by seeking to develop strategies and solutions to address this problem. The international community has realized that financial inclusion is of great importance in achieving economic development through its contribution in facilitating the access of services and products to all segments of society, reducing poverty and improving the standard of living for individuals, reducing the rate of disparity in wealth and income, integrating the informal economy into the official economy circle of the state.

Recommendations:

- Encouraging banks to adopt financial inclusion in order to increase their profitability and improve their financial performance;
- Increasing the number of bank branches across the entire national territory and bringing services closer to the citizen;
- Digitizing cash payments is introducing more people to transaction accounts;
- Increasing the number of ATMs across the national territory;
- Improving services and the marketing process in order to attract the largest number of customers and thus increase the number of bank accounts opened with the bank itself;
- Increased availability of customer data allows service providers to design digital financial products that better suit the needs of unbanked individuals;
- Increasing citizens' culture and financial capabilities so that they can understand various financial services and products;
- Create useful and relevant financial products, tailored to consumer needs;

- Develop strong financial protection frameworks for consumers, and adapt relevant regulatory and supervisory authorities to ensure the use of financial technology products.
- Studying the banking market is a good and renewed study to find out the feasibility of the existing banking services, and the extent to which they are compatible with the segments of society.
- Studying the demands and needs of the market in terms of banking services to achieve them on the ground.
- Working on launching new services that cover all banking needs for all segments of society.
- Follow-up of customers and their satisfaction with the available services, and provide all the information they need about their accounts.
- Providing advisory services to clients and assisting them in choosing the most appropriate services for them that help in managing their money in a sound manner.
- Expanding the use of new technology in financial transactions.
- Spreading awareness and financial education for clients.
- Working on activating the role of the various oversight bodies, which gains customer confidence in the services provided.

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