

# The impact of fintech on traditional banking: A literature review with a focus on morocco's financial inclusion

Ayman Toudghi<sup>1\*</sup>, Achraf El Yadmani<sup>1</sup>, Omar Kharbouch<sup>1</sup>

<sup>1</sup> *Laboratoire de l'Economie et Management des Organisations (LEMO), Faculté d'Économie et de Gestion, Université Ibn Tofail Kenitra, Maroc*

\*Corresponding author: [ayman.toudghi@uit.ac.ma](mailto:ayman.toudghi@uit.ac.ma)

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## Abstract

Financial Technology (Fintech) is a new challenger for traditional banking services. Notably, banks that have failed to adapt and incorporate new technologies in finance have faced stiff competition from digital banking, lending platforms, and digital payment solutions. This study focused on the impact of financial technology on traditional banking institutions and the challenges and opportunities presented by emerging digital financial solutions. The study sought to understand the extent of Fintech's disruption in operation and the role of traditional banking systems. It delved into the emerging trends in finance, such as mobile banking, digital payment, and emerging solutions in lending. The study focused on fintech innovation in the Moroccan financial institutions. Fintech, like any other emerging technology, comes with its share of challenges. Regulatory concerns, competition between Fintech firms, and issues of cybersecurity in Finance persist. This research assessed the transformative role of Financial Technology in banking and the overall financial inclusion. The methodology entails reviewing financial publications on the role of fintech in the traditional banking system, the World Bank and Morocco's central bank reports, and other material from relevant sources such as the United Nations Development Program (UNDP), the United Nations Capital Development Fund (UNCDF), and industry experts. The findings emphasized the need for collaboration among financial institutions, policymakers, and fintech firms in sustaining an inclusive financial ecosystem.

**Keywords:** Fintech; traditional banking; Fintech disruption; financial inclusion; digital payments; Mobile Payments.

## 1. Introduction

Fintech employs innovative strategies poised to transform the financial sector. World Economic Forum, 2017, termed Fintech as a „disruptive revolution’ that will tear down the barriers of traditional financial institutions. In broad terms, Financial Technology (Fintech) refers to all innovations enabled by technological advancement, seeking to improve and automate financial service delivery. (Jalal, A. et.al, 2023)

In the past decade, Fintech has simplified banking services, money transfers, and everyday small business transactions. The percentage of the non-banked population and small businesses is shrinking: according to Ernst & Young, over 64% of the global consumers have used a Fintech platform to access financial services, including money transfers, payments, and loans. As a result, Global Fintech investments grew to over \$210 billion in 2021 (KPMG). However, investment fell to a seven-year low of \$95.6 billion in 2024, according to the *Pulse of Fintech H2’24 bi-annual report* published by KPMG. The decline was attributed to geopolitical conflicts, elections in major jurisdictions, and global macroeconomic challenges. Global Fintech investment is expected to recover in 2025- quoting Said Karim Haji (Global Head of Financial Services, KPMG International) “*There’s a lot to be positive about 2025... We are starting to see more deals coming through because of interest rate cuts in different jurisdictions and the lower cost of funding...*” (KPMG International, 2025).

Whether entities driven by Fintech are a competitive match for traditional banking infrastructure is debatable. However, integrating automated financial operations in traditional financial institutions is necessary for players seeking to remain competitive in the fast-changing ecosystem (Dapp, T. et.al, 2015). Moreover, the necessity for institutions to understand and adopt Fintech will only grow as money morphs faster from paper to digital representation. The banking sector is embracing electronic innovations. The global banking sector has made major strides in integrating advanced information technology (IT) into banking and lending operations. In the new dawn of advanced digital in financial operations, banks distribute services through mobile apps and the internet. The nature of bank deposits is also evolving where banks are adopting digital deposits in the form of cryptocurrency (Broby, 2021). Since the first bank (Banca Monte dei Paschi di Siena) opened in 1472, traditional banking systems have scaled freely. However, their role as financial intermediaries has changed quickly in the past decade.

Fintech has entered the same lending space as banks, providing convenient and easily accessible services. Mobile banking (M-Banking) has been described by Liu et al (2020) as a crucial distribution channel offering automated customer interactions.

Africa is a world-leader in digital financial technology. By the end of 2023, nearly half of all global mobile banking accounts and approximately two-thirds of global mobile banking services came from the continent. Additionally, the registered mobile money accounts had grown to 835 million in Sub-Saharan Africa (Willige, A., 2023). According to the annual African Banker report released the same year, approximately 43% of the 153 African banks surveyed viewed fintech as a major threat. Also, 69% believed artificial intelligence was the most crucial technology shaping the industry's future ( Zimwara, 2023).

Morocco's level of digital banking remains low. Although the efforts by the central bank and the World Bank have boosted access to financial services, more than half of Morocco's adult population did not own bank accounts as of 2024. The study seeks to investigate the impact of financial technology on traditional banking institutions, the emerging trends in banking, and the challenges facing fintech firms in the effort to increase Morocco's financial inclusion. The study's objective is to document the impacts fintech has had on the banking system in the past decade and its role in financial inclusion. Additionally, the study identifies the gaps and opportunities for financial technology entrepreneurs in the Moroccan economy.

The structure of the paper is aligned as follows: following the introduction is section two, methodology. The section lists the data sources and inclusion and exclusion criteria. Section three presents a detailed literature review on Morocco's fintech landscape in the past decade. Section four presents findings on the current state of Morocco's banking system and fintech, detailing the progress in Morocco's financial access, mobile banking, lending, and banking management. The conclusion and discussion section details policy inferences, limitations of the study, and the recommended direction for future studies.

## **2. Methodology and Data Gathering Approaches**

The study methodology involved assembling local and global data on fintech's role in financial inclusion, zeroing in on Morocco's fintech ecosystem. A deep literature review was conducted detailing the fintech evolution and progression, role, and adoption in Morocco's financial and banking systems. The study assessed recent developments in fintech, challenges to financial inclusion, and the financial regulatory framework by Morocco's central bank.

### ***2.1. Research Design***

A combination of descriptive and analytical research designs was used. The aim was to comprehensively understand and document the evolution and relationship between fintech and traditional financial institutions. The descriptive design assessed the evolution of fintech and its impact on banking trends, while the analytical component used empirical data to interrogate its influence on financial inclusion.

### ***2.2. Data Collection and Sources***

The primary data collection methods involved analyzing financial reports, publications, and similar documents published by credible institutions such as financial journalists, the World Bank, and Morocco's central banks. The study also reviewed various academic write-ups and financial research reports published by reputable sources and financial institutions.

All financial data on Morocco's banking system, fintech penetration and adoption, and population statistics were sourced from reliable databases including the World Bank, UNSGSA, and the IMF. The World Bank also provided data on Morocco's financial reforms strategies and financial inclusion targets for 2023. Statista.com and the Fintech Times offered detailed information on Morocco's traditional banking system and the impacts of fintech in raising financial inclusion. Official posts by Morocco's central bank (Bank Al Maghrib) provided up-to-date information on Morocco's regulatory framework towards financial inclusion. Additionally, recent publications by the Harvard Business School and posts by financial institutions, including KPMG and Deloitte, about developments in the fintech landscape were included.

After reviewing high-quality impact factor journals, the collected data were analyzed using a quantitative approach, including trend study. The analysis sought to establish and document the

recent impacts of emerging financial technologies in traditional banking systems and their role in Morocco's financial inclusion goals.

### ***2.3. Inclusion and Exclusion Criteria***

The following inclusion/exclusion criteria were applied to keep the research precise and relevant to the study. Only information on fintech, traditional banking, and financial inclusion was covered. To ensure data accuracy, all information was sourced from reviewed journals, official publications, and industry experts' websites. Opinion posts and articles were excluded as credible sources. Only relevant topics directly correlated to traditional banking, financial inclusion, and fintech were chosen for the study. General information with no direct link to the impacts of fintech on the banking system was strictly excluded. On the timeframe front, all sources included were publications and studies done in the last 10 years (2015-2025) to rule out outdated data. Publications earlier than 2015 were only used to give context and show the evolution of Fintech.

## **3. Literature Review**

The study reviews available literature on fintech to illuminate its impacts on Morocco's banking landscape and financial inclusion. We look at fintech evolution over the past ten years, and its swift penetration into the financial sector. The study reviews statistics in Africa and Morocco on the rising fintech solutions. Moreover, recent literature and statistics on the growth in Morocco's banking sector, increasing banking coverage, and simplification of financial access for the rural population are studied.

### ***3.1. Evolution of Fintech***

Up until the 1990s, the application of fintech was strictly confined to the backend of the financial services. Technology was mainly applied in funds transfers and cashing of checks, while customers relied fully on person-to-person interactions. By the mid-to-late 90s, we see the adoption of fintech in consumer services, albeit mostly static. For instance, account owners could check their bank balances online. Soon after, smartphones entered the market and fintech innovation attained a new level. Suddenly, everyone had 24/7 access to financial services through a „portable computer' (Columbia Business School, 2024). Fintech innovation became even faster as more banks and financial offerings became mobile-first.

### **3.2. *Fintech Eruption in Africa***

Financial inclusion for the vulnerable in Africa is vital in risk management and in curbing climate change. Since 2018, most African policies have prioritized youths, women, the rural population, and small businesses. From small payments, credit, remittance, and insurance, digital finance has reached among the most remote places (World Bank, 2023). A study by McKinsey & Company titled „*Fintech in Africa: The End of the Beginning*’ revealed that fintech had an average market penetration level of 3% to 5% in Africa by 2020. The African fintech industry had an estimated revenue of \$4 billion to \$6 billion in 2020. Fintech companies tripled to 5,200 between 2020 and 2021 (Flötotto, M. et. al., 2022). Also, from the study, 90% of the African economy was cash-based in 2020, indicating the high revenue potential for fintech innovators seeking to invest in the continent. Kenya was among the highest Fintech penetrated economies in Eastern Africa and the world. M-Pesa was and is still the most widely used digital platform for payment, lending, and saving. All these services are achievable on feature phones without the need for internet (Marous, J, 2024).

Morocco’s fintech landscape led the North African region with tremendous expansion in the past decade. About 40 fintech solutions were active as of 2020, according to a report by Consultative Group to Assist the Poor (CGAP) titled „*Fintechs Across the Arab World*’. Out of over 40 fintech solutions in the country, payment, point-of-sale (POS), and remittance were the most developed sections. Service providers such as Inwi Money and HmizatePay specialize in mobile payments, while OnePay facilitates digital payment for offline and online businesses. From the point-of-sale (POS) front, Invyad introduced end-to-end mobile solutions for SMEs, iVend digitized retail operations management, while Omniful AI streamlined sales functions.

### **3.3. *Morocco’s Financial Inclusion Strategies***

According to the World Bank, financial inclusion is when „individuals and businesses can easily access financial services and products, transact, save, make payments, and get insured affordably and sustainably.

Morocco’s central bank (Bank Al-Maghrib) leads in expanding the country’s financial access. First, in 2020, during the COVID-19 pandemic, the central bank (Bank Al-Maghrib) introduced several measures to raise the adoption of digital payments. The government gave financial aid to its vulnerable population during the COVID-19 lockdown through the Scale2Save project. In

partnership with Al Barid Bank's subsidiary Barid Cash, the central bank introduced digital payment for individuals collecting the government-to-person (G2P) aid. Barid Cash took the opportunity to incentivize G2P beneficiaries to open mobile payment accounts: payments shifted from cash-based to account-based government transfers. Their mobile account holders increased tremendously after waiving mobile payment costs for G2P beneficiaries and introducing other services like utility payments. The central bank also encouraged small businesses to adopt mobile payments.

Second, through the Amending Financial Law 2020, the central bank granted local grocers a 25% tax exemption on mobile money turnover. Additionally, banks were asked to integrate remote account opening for easy access. (Priollaud, S. & Soudi, N, 2022). Bank Al-Maghrib temporarily deferred the know your customer (KYC) requirements for opening a basic payment account capped at \$555: through their phone number and their digitized ID card, clients could open accounts without visiting the bank

In 2018, Bank Al-Maghrib (the central bank of Morocco) and the Ministry of Economy and Finance launched „The National Financial Inclusion Strategy (NFIS)’. The NFIS aimed to achieve a 50% financial inclusion rate for Morocco by 2023 and 75% by 2030 (UNSGSA, 2023). By mid-2023, 44% of Moroccans had access to bank accounts, from 29% in 2017. Access to digital payment rose from 17% to 30% in the same period. The Fintechs sector's revenue rose to approximately \$195 million in 2021 as 31% of rural districts gained access to digital payment through 19 service providers (World Bank, 2023). According to a study conducted by the Consultative Group to Assist the Poor (CGAP) in 2020, Morocco's fintech industry ranked third among 22 Arab world countries. Morocco hosted 13% of the 400 active fintech solutions, while the UAE and Egypt led with 23% and 14% respectively (Chehade, 2020).

To support Morocco achieve its financial reforms, the World Bank released USD450 million to Morocco on March 31, 2023: this was the third Development Policy Financing (DPF) in addition to two previous financings aimed at promoting financial and digital inclusion (World Bank, 2023). Through the series and the efforts made by Morocco's central bank, the country has made significant strides towards digital and financial inclusion. A 2021 survey by the World Bank revealed a vast mobile coverage of 131% with 4G and 3 G penetration at over 99%. Internet penetration had reached 83%. Over 44% of adult Moroccans (15+ years) were banked compared

to 29% in 2017. The latest report from the Central Bank and the Ministry of Economics and Finance indicated that account ownership among the youth was on the rise: the percentage of unbanked youth fell from 52% in 2017 to 28% in 2021.

#### **4. Presentation of Findings**

Financial Technology in Morocco has made significant impacts. The presentation and findings section details various financial sub-sectors that have made notable progress in Morocco's fintech landscape, including payment and mobile money transfer, lending, real estate, financial management, cryptocurrency, and traditional banking. The section also covers the emerging challenges in fintech adoption and financial inclusion.

##### ***4.1. Payments and Money Transfers***

Fintech payment fills in the gaps in traditional banking. It serves the underbanked and unbanked populations and expands service hours (Columbia Business School, 2024). For instance, mobile banking and transfers stretched to remote areas with no bank branches. Additionally, internet-based payments and transfers made it possible to automate transactions beyond the traditional bank operation hours.

Morocco's access to mobile payments and wallets has grown significantly since 2014. Only Maroc Telecommerce could authorize credit card transactions before 2014, until AmanPay, PayZone, and F-Pay joined in (Santosdiaz, 2025). Currently, Morocco boasts a mobile penetration rate of 137.5%- over 20 players offer payment solutions led by Maroc Telecommerce, Inwi, and Orange. With the extensive mobile access and convenience, the integration of Fintech in traditional banking institutions has expanded the banks' reach and user base. Major banks, including Attijariwafa Bank, Banque Populaire du Maroc, Al Barid Bank, and CIH Bank, have integrated mobile banking solutions.

##### ***4.2. Fintech Lending Services***

In 2020, global fintech lending was valued at approximately \$125 billion. Projections show that this value could rise to \$1.8 trillion by 2032 (Feyen, E. et.al, 2023). In Morocco, Fintech lending is fueled by easy access as internet penetration surpassed 83% in 2020, and high demand by individuals and SMEs (G.A.O, 2018). Lending solutions with a strong presence in the Moroccan economy include but are not limited to;

**Talaty:** A fintech platform leveraging AI to provide affordable loans and working capital for businesses.

**Cotizi:** As the first crowdfunding platform in Morocco, Cotizi enables users to raise project funds, acting as an alternative lending solution.

**CIH Bank:** Through collaboration with Backbase, a digital banking software provider, CIH Bank incorporated digital financial solutions for easy loan access (Eijpe, M., 2024).

**Silatech Initiatives** collaborated with Attawfiq Microfinance to facilitate "Boudour" (Seed) loans for youth entrepreneurs.

#### ***4.3. Real Estate Technology and Insurtech***

Fintech is at the core of every organization, facilitating automated payments and efficient treasury management. The application of artificial intelligence (AI) and data analytics has made real estate and insurance firms more customer-centric. Real estate companies can finance their customers without being banks. For instance, MeilleurCreditImmo.ma (formerly SOS Credit), acts as an online mortgage broker, facilitating competitive mortgage loans for its customers.

Insurtechs have also redefined consumer experience through innovations in risk-free underwriting, claim processing, and on-spot purchasing (Deloitte, 2018). Wafa Assurance, a leading insurance company in Morocco, streamlined its customer experience through automated claim processing and digital policy management (Harrison, 2021). Notably, the Tamwilcom and ACAPS Initiative, aimed to facilitate insurtech innovation and social welfare in Morocco, was initiated on May 29, 2024, in Marrakesh. The initiative involved a collaboration between Tamwilcom (the National Company for Business Guarantee and Financing) and ACAPS (the Insurance and Social Welfare Supervisory Authority) in a strategic move to boost insurtech innovation and start-ups.

#### ***4.4. Financial Management Tools***

Morocco is catching up to the global financial management market. The Moroccan Capital Market Authority (AMMC) launched "Le Marché des Capitaux pour Tous" (The Capital Market for Everyone), an online tool educating users on capital markets. Other tools, such as Talaty provide behavioral finance analytics and credit assessments used by financial institutions for loan risk management. Talaty's streamlined and accelerated assessment process facilitates working

capital acquisition by small and medium-sized businesses. The Moroccan market, however, lacks access to financial spending and tracking tools like Mint and YNAB used in other parts of the world.

#### ***4.5. Digital Money Through Blockchain and Cryptocurrencies***

The global economy is shifting from paper to digital money through blockchain technology and cryptocurrencies. The cost of financial products has decreased, and transactions are more transparent, accessible, and deeply automated (Columbia Business School, 2024). In the shifting economy, the Central Bank of Morocco (Bank Al-Maghrib) announced a plan to lift the ban on crypto, which has been active since 2017. Additionally, Bank Al-Maghrib announced that it had drafted regulations to govern the adoption and legalization of crypto assets ( Mizner, 2024). Despite the current ban, Morocco ranks top 20 globally with the highest cryptocurrency adoption, and second in Africa after Nigeria. As of 2022, over 4.9% of Morocco's adult population (1.9 million people) owned some form of crypto assets.

The number of Fintech start-ups focused on blockchain and cryptocurrency solutions in Morocco has grown. Coineium, a decentralized payment platform, offers crypto trading and investing in its digital currency, which can be used for online payments. Chari, on the other hand, provides mobile crypto trading and other services such as airtime top-up and bill payment. The list of similar blockchain start-ups in Morocco includes Soluna, ShellBoxes, Raid Money, Cryptazar, Mimosa, and Atlas Crypto Trade. Globally, major companies like Tesla, Microsoft, Air Baltic, and AMC Theatres have adopted various cryptocurrencies for alternative payment (Elusanmi, 2025). Morocco's Web3 adoption paints a bright future for associated fintech companies.

#### ***4.6. Impact of Financial Technology (Fintech) on Morocco's Traditional Banking System***

Morocco has among the lowest banked populations in the world despite the tremendous growth in its banking industry. Based on a publication by the Oxford Business School in November 2022, Morocco had the best-structured banking system in the region, with 19 banks, 6388 branches, and 7235 ATMs. Of the 19 banks, three, Attijariwafa Bank, Banque Populaire, and Bank of Africa, rank among the top 10 financial institutions in Africa. As Fintech penetration grows and financial literacy spreads, its unbanked population has reduced. Between 2020 and 2024, the number of account holders in various financial institutions grew from 20% to over

44%. Moreover, individual access to mobile banking, online transfers, debit and credit cards increased.

Morocco ranks among the top fintech hubs both in Africa and in the Arab world. Nonetheless, fintech penetration remains at a low 2.68% as of 2024, and is projected to reach 5.99% before 2030. Fintech adoption rate is on the rise as individuals and businesses turn to digital solutions for funds transfer, payments, and account management (Statista, 2024). According to the SDFE Assessment Morocco Report 2023, Morocco's fintech industry is expanding: the payment sector is the fastest growing with a score of 41%. Morocco scored above average in access to finance at 67% and 60% in supportive initiatives, showing it has favorable conditions for fintech start-ups to thrive (Priollaud, S. & Soudi, N, 2023). In addition to telecommunication providers, Paytus and HmizatePay led the payment section, offering multiple services. Paytus users can access multiple currencies, fast person-to-person or business transfers, and multiple transfer options, including FedNow. Moreover, users benefit from financial literacy resources and personal guidance in saving and financial planning. HmizatePay's digital wallets facilitate everyday financial needs, including booking and payments. It has replaced cash transactions in payments for airtime and data, utility, transport tickets, and various auto registration services.

Morocco's traditional banking and fintech ecosystems are merging, growing towards the 75% financial inclusion target by 2030. Currently, several traditional financial institutions have worked on their fintech solutions, enabling them to compete in the fast-moving financial revolution: CIH BANK developed the CIH mobile banking application, facilitating seamless integration with other financial services. Customers manage their accounts, transfer funds, and pay for bills and services through the app. Attijariwafa Bank digitized its customers' experience through Attijarinet and Attijari Mobile solutions. In addition to its tech developments, Attijariwafa Bank integrated Google Pay into its system in 2014, further extending customer inclusion. Another innovative provider is OneSafe, a neo-modern banking provider serving both the traditional fiat and WB3 financial ecosystems. OneSafe has expanded financial inclusion in Morocco by offering global transfers, foreign exchanges, and other international transactions with multiple currencies, including USD, EURO, and MAD. Banque Centrale Populaire (BCP) partnered with SOWIT in 2022 to speed up digital inclusion and financial advisory for farmers. Other Moroccan banks that integrated fintech solutions to their operations are Bank of Africa and

Crédit Agricole du Maroc. With the growing fintech adoption and digitization of services by traditional financial solutions, digital payment in Morocco is projected to grow by 28% in the next four years and reach 22.82 million users by 2028.

#### ***4.7. Challenges Limiting Morocco's Digitization and Financial Inclusion***

Fintech is the pillar of the digitization of Morocco's banking system and overall financial inclusion. However, the country's fintech penetration remains below 3% despite having a mobile penetration rate of 131% and internet reach of over 83%. Additionally, Morocco's banked population remains below 50%: the low figures have been linked to the disproportionately high informal sector. Most non-account-holding Moroccans claim low funds. On top of that, SMEs lack proper accounting, documentation, and collateral required to access traditional banking services (Ocampos, 2023). To curb this deficiency, some SMEs have turned to digital financial solutions for credit, transfers, and payment. From the supply standpoint, access to physical bank branches is still low. Approximately 65% of Morocco's rural population has no close access to bank branches. Financial literacy and exposure to alternative banking services for the rural population are still low. Cryptocurrency-oriented Fintechs face regulatory challenges, waiting for a lift on the 2017 ban. Morocco's Central Bank, in collaboration with the World Bank, is working to lift the ban and set up regulations to govern the crypto landscape.

Morocco's fintech financing schemes are still young. For this reason, its digitalization remains relatively low compared to its peer economies. As of 2021, over 70% of payments in Morocco were cash-based compared to the global average of 20.5%. High-speed internet remains largely in urban areas, with 60% of the bottom population unable to afford the service. As a result, the digital divide between the rural and urban population remains deep, limiting equal access to emerging financial services (Ocampos, 2023).

### **5. Regulatory Framework and Initiatives for Morocco's Fintech and Financial Inclusion**

The Moroccan government has made some reforms towards boosting fintech adoption and financial inclusion. The government set up initiatives that have increased fintech innovation, including the "Digital Morocco 2030" strategy. The initiative targets to grow Morocco's start-ups from 380 in 2022 to 1,000 by 2026 and 3,000 by 2030. This strategy involves raising 7

billion dirhams for local startups by 2030, a tremendous growth from 260 million dirhams in 2022. The goal will be achieved through two strategies: digitizing public services(e-Gov) and stimulating the digital economy to increase Morocco's digital solutions. And second, to accelerate targeted results, the government will support digital talents, improve digital coverage and quality of connectivity, and harness AI potential in the development of the digital economy (Moroccan Ministry of Digital Transition and Administration Reform, 2024). Under the Digital Morocco 2030 strategy, the Ministry of Digital Transition and Administrative Reform announced the creation of the Morocco Fintech Center (MFC) on January 19. According to Morocco's central bank, MFC will serve as a full-service centre providing companies with education on regulations, mentorship programs, incubation, and skill development. Currently, about 15 banks and institutions have membership in the association, with more institutions expected to join.

Morocco launched the National Strategy for Financial Inclusion in 2019 to reduce disparity in access to financial services. The initiative's goal was to expand financial accessibility for the excluded population (including women, youth, and the poor) and SMEs ( Ocampos, 2023). The strategy focused on improving inclusion in three key areas:

**Digital payment:** The strategy focused on growing mobile payment services for small and medium-sized businesses, and person-to-person transfers. On the digital payment systems front, Bank Al-Maghrib put in measures to promote innovation in payment options (M-wallets and mobile payments) by easing regulations and communication strategies. Bank Al-Maghrib also established a Central Counterparty Clearing House for the futures market and launched instant transfers, which have been operational since June 2023 (Bank Al-Maghrib, 2023).

**Lending Practices:** The initiative targeted growing micro-finance by expanding its clientele to 3 million by 2030. The strategy to achieve this goal involved relaxing interest rate caps and raising the credit ceilings. Through data analytics from sources like bill payment, alternative credit score systems were developed to facilitate easy loan access for small and micro enterprises.

**Banking penetration:** To extend banking services to the underserved regions and rural population, the strategy sought to incorporate the wide reach of postal agencies. Additionally, the underserved segment, such as women and the rural population, would benefit from more flexible regulations on deposits and credit.

### ***5.1. Regulatory Role of Morocco's Central Bank in the Fintech Landscape***

Morocco's central bank, Bank Al-Maghrib, is responsible for shaping the future of fintech companies. It has been tasked with the regulatory role including licensing all fintech providers, ensuring they meet operational standards. To protect consumers from credit institutions, Bank Al-Maghrib ensures compliance by lenders concerning maximum convenience rates, complaint processing, and accuracy of customer information on goods and services used (Bank Al-Maghrib, 2023).

## **Conclusion**

The past decade is marked by substantial innovation in the Moroccan fintech landscape. Mobile and internet penetration rates had risen to 131% and 83% respectively as of 2022. Moroccans have access to mobile payment services from over 20 telecommunication services. Traditional Banks, including Attijariwafa Bank, CIH, Bank of Africa, and Bank Al-Maghrib (Central Bank), have incorporated accessible solutions such as mobile money transfers, account management, and digital transactions. As a result, Morocco's access to digital payment had reached 30%, access to affordable loans had grown tremendously, and the banking penetration rate reached 44% by 2022.

Disparity in access to financial services has narrowed as the youth and women's access to banking services has risen. Although the rural population remains highly unbanked, the National Strategy for Financial Inclusion (2019) has set up strategies to reach areas with low access to bank branches, including utilizing postal agencies. Moreover, projections show that with banks' rising digitization and high mobile and internet coverage, account holders in the rural areas will have greater access through online and mobile transactions in the coming years. The Moroccan government launched initiatives such as the "Digital Morocco 2030", aimed at growing Morocco's start-ups to 3,000 by 2030. The initiative seeks to boost the country's fintech industry by digitizing public services (e-Gov) and stimulating the digital economy by supporting talents and boosting AI adoption. Morocco is on a path to its targeted 75% financial inclusion by 2030 (UNSGSA, 2023).

The study documents the progress fintech has made in Morocco's financial inclusion. By understanding opportunity sectors in the market, fintech innovators can target precise gaps and work towards Morocco's 75% financial inclusion target by 2030.

Morocco is on the right path towards achieving financial inclusion for its urban and rural population alike. The government and policymakers could increase efforts in raising fintech awareness through financial education, mobile awareness, training mobile users on digital banking, and registering mobile money solutions. The central bank could incentivize the private sector to partner with financial institutions in bringing financial solutions closer to the rural population.

From the findings, the study agrees with the disruptive innovation theory and the technology acceptance model (TAM). As a disruptive innovation, fintech has taken a considerable share of the Moroccan financial industry. Fintech offers simple and accessible alternatives to traditional financial solutions. For instance, mobile wallets and money transfers compete with banks in serving the younger generation and low-income earners. According to TAM, developed by Davis (1989), several factors affect behavior towards technology adoption, including ease of use and usefulness. TAM explains rapid fintech adoption, especially by the youth and SMEs, due to convenience and user-friendly interfaces. Fintech solutions such as mobile wallets and payment services carry out instant transactions, eliminating delays and physical visits to the bank branches. Additionally, the central bank has carried out proactive campaigns to increase consumers' literacy on fintech safety. As a result, the rising consumer trust and perceived usefulness have raised fintech adoption: Moroccan bankers are shifting to digital financial platforms, leading traditional banks such as Attijariwafa Bank and BMCE to improve their mobile banking solutions. However, the study challenges the financial intermediation theory that positions traditional banks as intermediaries for savers and borrowers. For example, fintech provides easier peer-to-peer transactions, alternative credit assessment, and faster loans for low-income earners and startups. These services reduce dependency on traditional banking institutions. To compete, banks are partnering with fintech providers and digitizing their service: Bank Al-Maghrib is propelling the Moroccan financial landscape towards open banking and digital inclusion.

Morocco's fintech industry is underrepresented in the literature. Thus, gathering relevant, up-to-date information adds to its literature by merging recent data, documenting progress, and listing challenges facing the industry. Investors refer to the growing literature to guide future development and provide targeted solutions. Our study was limited to fintech's impact on the banking sector, only assessing sub-sectors that directly affect banking trends, such as money transfers, lending, and account management. Moving forward, researchers could focus on assessing possible collaborative approaches, where fintech firms and banks partner in bringing an inclusive and innovative financial ecosystem instead of competing. Documenting the regulatory and risk management challenges in fintech adoption will contribute to a more stable and consumer-centric approach to navigating the growing fintech landscape.

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