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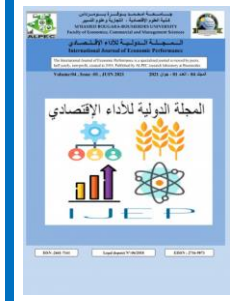
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Diagnosis Of The Fintech Ecosystem In Côte d'Ivoire And Promotion Of Digital Financial Inclusion

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Abstract:

This study aims to highlight the initiatives undertaken by fintech companies in Côte d'Ivoire to access and use financial services, including by promoting financial inclusion. The study focused primarily on mobile money accounts and how they have already improved financial inclusion in Côte d'Ivoire, drawing on the analytical descriptive approach.

The study found a dynamic ecosystem of players from different sectors, but access to finance remains the most difficult. On the other hand, Côte d'Ivoire is an emerging fintech platform, driven by the rapid adoption of « mobile money », where it has witnessed strong investor enthusiasm for digital finance, driven by favourable factors such as young people in the population, increasing the spread of smartphones, high-speed Internet and expanding populations without bank accounts.

Key words: fintech, financial inclusion, mobile money, digital finance.

JEL Classification Codes: E4, E5, F36, G2, G3.

* Corresponding Author

Introduction :

The dramatic and rapid development of fintech has contributed to the emergence of many financial services and innovative business models such as mobile banking and banking without bank branches as well as improving people's access to them and enhancing financial inclusion. As a result, the global economy recovered in 2021, after a slowdown in 2020 linked to the COVID-19 pandemic. This recovery in 2021 has increased the demand for raw materials, Economic recovery has been notable in sub-Saharan Africa, particularly in the West African Economic and Monetary Union (WAEMU) region.

The financial sector has played an important role in mitigating the impact of the COVID-19 pandemic on financing economic activity in the countries of the West African Economic and Monetary Union (WAEMU) thanks to measures taken by the Central Bank of West African States. These include increasing banks' resources and promoting the use of electronic services.

Côte d'Ivoire owns the world's largest cocoa market, producing more than 1.4 million metric tons of raw cocoa annually, which can hurt huge production volumes to 2.3\$ billion in harvest revenue (Susie et al., 2016, p. 3). Despite the large amounts involved, almost all of these payments are made in cash. Cash payments thus pose many problems for farmers, and given these challenges, the Ivorian authorities have sought political and regulatory efforts, through the development of policies and regulations aimed at enhancing the emergence and use of financial technology as a key element to promote financial inclusion as well as access to finance. Against this background, we considered that the following main question should be raised:

What role does the fintech ecosystem in Côte d'Ivoire play in promoting financial inclusion?

Sub-questions:

- What depends on the development of fintech in Côte d'Ivoire.
- What are the main challenges to the development of fintech and digital finance in Côte d'Ivoire.
- How the fintech ecosystem is a catalyst for financial inclusion.
- Could fintech improve the current low financial inclusion situation in Côte d'Ivoire?

Hypotheses:

- The development of fintech in Côte d'Ivoire depends on the establishment of a legal and regulatory framework that promotes digital finance.
- The main challenges to the development of fintech and digital finance in Côte d'Ivoire are the low level of education, lack of awareness and training towards digital finance.
- The development of the fintech ecosystem in Côte d'Ivoire has contributed to the emergence of many financial services and innovative business models such as mobile banking, including improving people's access to banking services.

- Digital financial services through digital channels, especially mobile payment systems, help Ivorian citizens access the financial services they need through their mobile devices.

The importance of the study:

The importance of this study was reflected in the initiatives undertaken by fintech companies in Côte d'Ivoire to promote access to and use of financial services.

Objectives of the study:

- Analysis of the main challenges and obstacles to the development of fintech and digital finance in Côte d'Ivoire.
- Identify opportunities and strengths to promote fintech ecosystem development.
- Clarify the relationship between digital finance and financial inclusion.
- Formulating recommendations for a fintech ecosystem that is a catalyst for financial inclusion.

I. Analysis of the legal and regulatory framework for digital finance in Côte d'Ivoire

Globally, the financial services sector is experiencing a strong emergence of fintech. The World Bank defines fintech companies as: agile enterprises that rely on technological advances that can transform the delivery of financial services by stimulating the development of new operating models, applications, processes and products.(Bank-Mondiale, 2018)

The development of fintech depends on the creation of a legal and regulatory framework that promotes digital finance that: regulates and encourages the development of electronic payment, guarantees consumer protection as well as financial stability. Innovation centres can also promote the development of the fintech ecosystem.

1- Measures to promote banking and the use of non-monetary and electronic means of payment

The texts governing access to the account and the use of electronic payment have enabled the promotion of financial inclusion and digitization of government payments. Since 2004, the Central Bank of West African States (BCEAO) and member states of the West African Economic and Monetary Union (WAEMU) have led efforts to promote the use of digital technology in financial transactions and electronic exchanges. In Côte d'Ivoire in particular, reference should be made to Act No. 2013-546 of 30 July 2013 on electronic transactions and executive decrees, as well as Ordinance No. 2017-500 of 02 August 2017 on electronic exchange between users, administrative authorities and administrative authorities to promote digitization.(Alassane, 2013, p. 583; 2017a) When these texts are applied, certain economic groups such as scholarship students and peasants are now paid digitally, yet this law is very little applied and relatively unknown to actors, contrary to what we see in Nigeria where a similar law exists and has served as a lever for digital payments.

2- Issuance of electronic money

The regulatory framework governing the issuance of electronic money and e-money institutions (EME) has been in place since 2006, and was reviewed in 2015.(BCEAO, 2015a) The amount of capital required to obtain an eMoney licence (EME) has been set at CFAF 300 million or about 541000 USD, which for financial companies is a barrier to entry because it is too high. However, this regulatory framework no longer meets market needs, especially those of fintech companies that are increasingly willing to intervene in the provision of digital credit, by setting deposit interest rates, participating in the issuance of treasury bonds or distributing interest received to electronic money. In addition, the regulations stipulate the size of the electronic portfolio which is limited to 2 million CFA francs or 3600 \$ US, and therefore the maximum amount does not correspond to the needs of Ivorian farmers, often from rural areas and without bank accounts. In addition, a cap on interest rates by the West African Economic and Monetary Union (WAEMU) constitutes a restriction on fintech companies as much as they tend to become more involved in the supply of digital credit (via partnerships).

3- Money Transfer

Quick money transfer activities as sub-agents are very popular in Côte d'Ivoire and constitute restrictions on fintech companies wishing to become sub-agents. Money transfer activities were framed by Instruction No. 013/2015 of 10 November 2015 on procedures for the exercise of rapid transfer of funds as sub-agents within the West African Economic and Monetary Union.(BCEAO, 2015b) It defines the procedures for implementing the rapid transfer of funds as sub-agents by natural or legal persons acting on behalf of accredited intermediaries or decentralized financial regulations (SFD). Authorized transactions are sending and receiving funds from customers as well as transferring them to beneficiaries. Sub-agents are also prohibited from collecting funds from the public, in the form of deposits or any other banking operation.

4- Brokers in Banking Operations (IOB)

Fintech companies cannot access broker status requirements in banking operations. The activity of intermediaries in banking transactions is governed by articles 38 and 105 of the Regulation Act and Bank Instruction No. 015-12/2010/RB, which sets out the conditions for the exercise of intermediaries' activities in banking operations.(BCEAO, 2011, p. 25) The latter contains requirements that are highly restrictive for natural or legal persons who wish to become intermediaries in financial operations, including fintech companies that have proven to be effective financial inclusion tools in low-income urban and rural areas in Eastern and Southern Africa. Requirements include an insurance deposit ranging from US \$8,000 to US \$24,000 or an insurance policy to guarantee customers' funds, which explains the low number of brokers in banking transactions in the entire UEMOA region.

In Côte d'Ivoire, the lack of proper organization is even more problematic as the density of traditional access points remains limited.

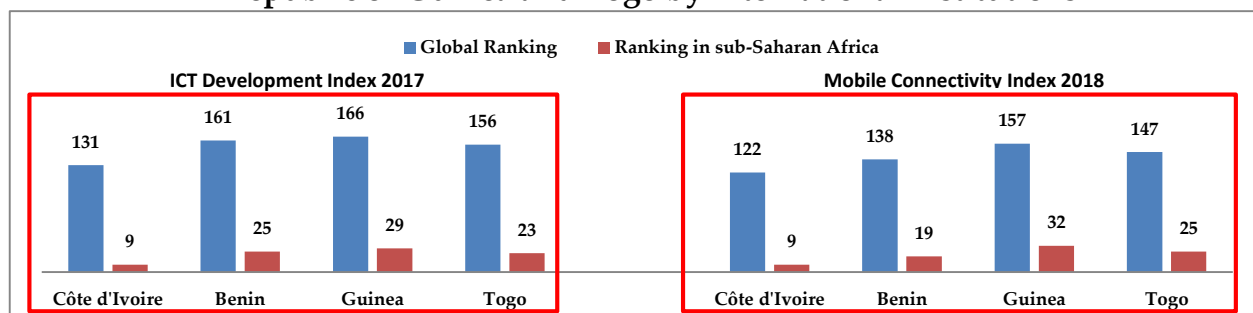
5- Access to unregulated supplementary service data for fintech companies (USSD)

Without access to USSD[†], fintech companies have to look for other ways to deploy their services: applications, online payments, etc. USSD codes are generally controlled by telecom operators who may or may not request access to their infrastructure. (Michel & Gregory, 2015) In developing markets, USSD codes are the most cost-effective way to reach customers. The Central Bank of West African States and member States of the West African Economic and Monetary Union (WAEMU) have agreed to pursue a plan to accelerate financial inclusion with 15 key measures. One of the actions being considered is improved access to USSD codes for value-added service providers (FFSVA). (ARTCI, 2020) The Government of Côte d'Ivoire issued a press release on 4 March 2020, which includes opening the USSD channel to players in the financial sector, as part of its work on digitizing financial flows with effective operation of existing platforms (TRESOR PAY) and digitizing 80% of government financial flows. (Tiémoko, 2020)

II. Information and communications technology sector in Côte d'Ivoire

The ICT sector in Côte d'Ivoire has grown steadily over the past decade, generating a total revenue of 1034.4 billion CHF in 2018 (1.72 billion \$ US), contributing 7% of the country's GDP and generating some 2550 direct and more than 100000 indirect jobs. (Abidjan.net, 2018; APA, 2018; ARTCI, 2021), as shown in the following figure:

Figure 01 : Information and communications technology in Côte d'Ivoire, Benin, Republic of Guinea and Togo by international institutions



Source: Prepared by the two researchers, based on:

- group, W. B. (2020). Etude diagnostique de l'économie numérique de la Côte d'Ivoire, (Digital Economy for africa, Issue. <https://thedocs.worldbank.org/en/doc/61714f214ed04bcd6e9623ad0e215897-0400012021/related/Rapport-Etude-Economie-Numerique-Final-FR-2021-08-23.pdf>

Based on the above format, Côte d'Ivoire's good performance in the first quarter of all other sub-Saharan countries according to ICT development index (IDT) of the

[†] **USSD code (Unstructured Supplementary Service Data)**, sometimes called a « short number », is a communication protocol used by GSM cellular phones to communicate with the operator's mobile network computers (via communication sessions). USSD can be used for WAP browsing, prepaid call back service, mobile money services, location-based content services, menu-based information services, and as part of phone network configuration.

International Telecommunication Union (ITU) for 2017, as well as GSMA's 2018 Mobile Connectivity Index, however, these same international classifications highlight that the ICT sector in Côte d'Ivoire ranks 131st (ITU) and 122nd (GSMA) globally.

1- Key players in the ICT market in Côte d'Ivoire

In 2020, three players participate in the ICT market in Côte d'Ivoire:

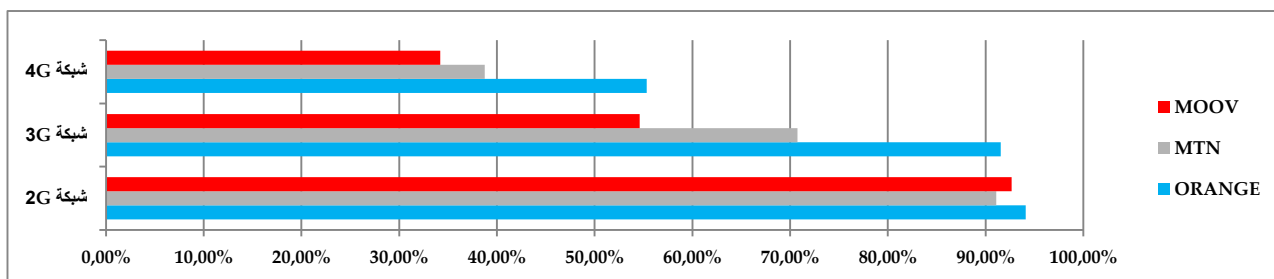
➤ **Orange Cote d'Ivoire (OCI):** Found in all telecom markets: mobile phone, fixed broadband and fixed phone. OCI capital is 75% owned by international operator Groupe Orange of France, located in more than 10 countries on the African continent. The Government of Côte d'Ivoire owns 15% of the remaining OIC and 10% owned by the local industry group Sifcom.

➤ **MTN Cote d'Ivoire:** MTN is active in two major telecommunications markets: mobile and fixed broadband. It also has a small activity in the fixed phone market (dominated by OCI, which holds 97% of the market share). MTN Ivory Coast is majority owned (66.83%) by MTN International Group (South Africa), and is like Orange Group active in more than 10 African countries.

➤ **MOOV Africa Cote d'Ivoire:** Largely active in the mobile market and has little activity in the fixed broadband market (dominated by Orange and MTN) This third mobile operator is 84.99% owned by Morocco telecom, based in the United Arab Emirates, and also active

Côte d'Ivoire is a leading mobile phone market in Africa. With more than 40 million SIM cards in circulation (end of 2019), Côte d'Ivoire has one of the highest rates of mobile spread (total number of SIM divided by total population), reaching 151.5% at the end of the first quarter of 2021. (World Bank, 2020, pp. 28-29)

Figure 02 : Regional coverage rate for mobile networks by the end of 2019



Source: Prepared by the two researchers, based on:

- ARTCI. (2019). statiques du marche des télécœmunication en cote d'ivoire, (autorité de régulation télécœmunication / TIC de cote d'ivoire, Issue. https://www.artci.ci/images/stories/pdf/rapport_activite/rapport_statistique_annuel_2019.pdf

Although there is a gender gap in access to mobile phones, this gap is less evident than in other countries. There is also a gap in mobile phone, but it is less severe than in many sub-Saharan African countries: 82% of women surveyed have a mobile phone, compared to 90% of adult men, according to a 2019 GSMA study, in addition, 28% of

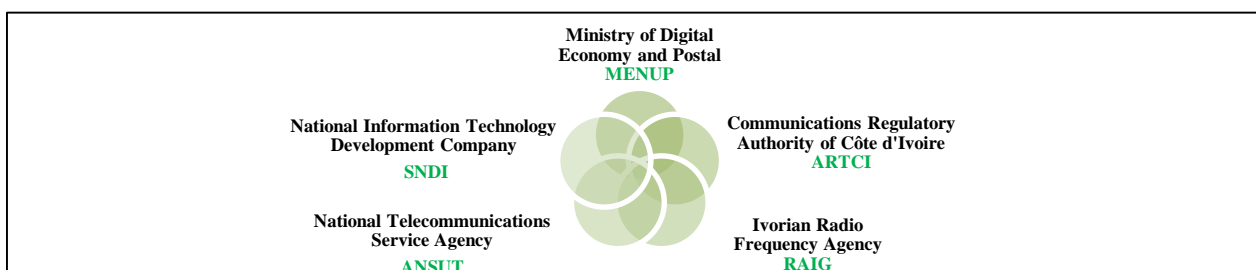
women surveyed are mobile Internet users compared to 52% of men according to the same study.(Oliver, 2018, p. 18) According to regulator ARTCI, mobile operator network coverage reaches about 94% of the population on the second generation network (2G), about three quarters of the population on the third generation network (3G), and about half of the population on the fourth generation network (4G).(ARTCI, 2019, p. 19) Telecommunications operators tend to deploy mobile access infrastructure primarily in more urbanized areas, before extending coverage to suburbs and rural areas. In Côte d'Ivoire, 56.8% of the rural population lives below the poverty line compared to 35.9% of the urban population, but this gap narrows over time.(Word-Bank, 2019)

ICT sector taxes are applied and can hinder fintech activity. According to a joint study conducted by GSMA and Deloitte in 2015, combined VAT and customs duties accounted for 28% of the total cost of mobile phone, the study ranked Côte d'Ivoire 23rd in VAT rates and combined customs duties on mobile phones from 110 countries surveyed. On the positive side, in August 2015, the government issued a decree exempting electronic devices from VAT and reducing customs duties, which ended in 2018.(APA, 2015)The Government of Côte d'Ivoire has been active in reforming the enabling environment for digital infrastructure, with the introduction of a new law in 2012 (Decree 2012-293)(Alasanne, 2012) and the Information Society Law in 2017 (Act 2017-803)(Alassane, 2017b). Competition in the mobile market remains strong as prices have fallen over the past decade (although prices remain high compared to households' low purchasing power).

2- Institutional framework governing fintech activity

The Government of Côte d'Ivoire has established institutions to stimulate the fintech ecosystem.

Figure 03 : Institutional actors in the ICT sector in Côte d'Ivoire



Source: Prepared by the two researchers, based on:

- Group, W. B. (2020). Etude diagnostique de l'économie numérique de la Côte d'Ivoire, (Digital Economy for africa, Issue. <https://thedocs.worldbank.org/en/doc/61714f214ed04bcd6e9623ad0e215897-0400012021/related/Rapport-Etude-Economie-Numerique-Final-FR-2021-08-23.pdf>

✓ **Ministry of Digital Economy and Post (MENU):** Initiatives that help the emergence of fintech, yet there is still no strategy for the digital economy. The Ministry's mission is: to develop, promote and disseminate ICT, train national ICT expertise, create

conditions for the emergence of a digital economy, and promote the harmonized development of ICT in Côte d'Ivoire.

✓ **Telecommunications Regulatory Authority of Côte d'Ivoire (ARTCI):** Established in 2013 through the merger of the former telecommunications agency of Côte d'Ivoire (ATCI), which is responsible, inter alia, for communications management, wholesale prices and the Telecommunications Council of Côte d'Ivoire (CTCI), to monitor market competition dynamics and ensure compliance with licensing obligations.

✓ **Ivorian Radio Frequency Management Agency (AIGF):** Founded in 2013, focuses on radio frequency management. Its main tasks are: to plan, allocate and monitor radio frequencies by monitoring the needs of radiofrequency departments and authorities, to create a national frequency table, to monitor the use of frequencies according to approved licenses and permits.

✓ **National Comprehensive Communications Service Agency (ANSUT):** Established in 2012, it ensures the implementation of universal service programmes on behalf of the State and manages State-funded ICT investments.

✓ **National Information Technology Development Company (SNDI):** Established in 1999, it developed most of the back office systems of Ivorian enterprises. is a public company under the supervision of the Prime Minister, responsible for the Government's information technology and information systems projects. The latter is gradually involved in the development of fintech, particularly through an ongoing partnership agreement with the Fondation Jeunesse Numérique, which aims to award certain contracts related to the digitization of government payments to startups or financial companies embraced by the Digital Youth Foundation.

3- Institutional actors that promote financial sector development and inclusion

The rise of financial technology takes place in an institutional context conducive to financial sector development. Under the strategic plan “ Côte d'Ivoire, emerging country 2020”, the Government is committed to implementing a package of reforms to promote financial sector development, including: The Financial Sector Development Programme (PDSFI), which aims to increase population coverage by the Credit Office, develop the Commercial Court in order to ensure justice and appropriate jurisdiction in dealing with commercial disputes, develop appropriate savings products, establish a pilot project on bank agents (Brokers in banking operations), operationalizing the Quality and Financial Services Observatory (OQSF) to build the trust of financial services users, developing financial leasing to double the sources of financing for SMEs in particular.(Adama) These reforms are aimed at enabling Côte d'Ivoire to achieve ambitious national development goals through increased public confidence in the financial system, better mobilization of savings, better assessment of credit risks and availability of alternative financing instruments. It should be noted that an agency to promote financial inclusion (APIF-CI)

has been established to enhance people's access to financial services. The agency piloted and adopted a financial inclusion strategy in 2019, which focuses on innovations, including the rise of fintech.(Zeinab, 2019)

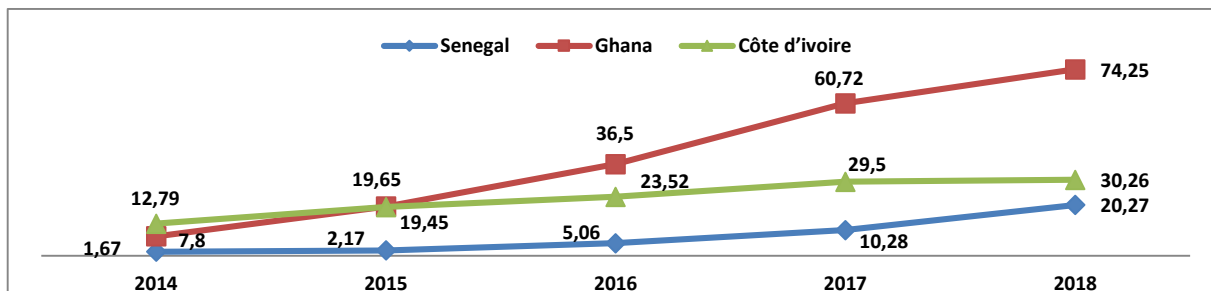
4- Context and prospects for digital finance in Côte d'Ivoire

Digital financial services have revitalized inclusive financing in Côte d'Ivoire, where since 2007 the financial sector has witnessed the birth of e-money initiatives led by non-bank structures authorized for this purpose. Banks and other financial service providers are increasingly turning to technology to reach more demanding clients: women, young people, agricultural producers and small entrepreneurs. With 29 banks(BCEAO, 2022b), two financial institutions, 47 a decentralized financial system and 5 electronic financial institutions(BCEAO, 2022a), this dynamic opens up prospects for offering new financial services by fintech companies to customers fond of digital finance.

➤ Use of electronic money

It appears that every adult from Côte d'Ivoire has at least one electronic money account, as reflected in the data contained in the BCEAO 2019 Digital Financial Services Report(BCEAO, 2019), access to and use of official financial services has increased significantly over the past decade in the West African Economic and Monetary Union, particularly in Côte d'Ivoire. According to ARTCI, the penetration rate of mobile money was about 67% at the end of 2019. In addition, during 2018-2019, the mobile financial subscriber base grew by 37.2%, by volume, about 642 million operations worth 10,800 billion CFA francs were carried out in 2019. The majority of active users choose "Cash Payment, Cash Withdrawal", buy phone balance and transfer transactions from person to person (P2P), however, it should be noted that there has been a change in user behaviour, i.e. an increase in the payment of bills by mobile money with top voters, at the end of 2019, the average daily value of mobile financial transactions was estimated at 30,000 billion CFA francs (approximately US \$54 billion). Moreover, second-generation products are still slowly developing in the market.(Hub, 2021) In addition, the Central Bank of West African States (BCEAO) has adopted strong measures in April 2020 to strengthen electronic means of payment as part of the fight against the spread and epidemic of COVID-19, and these measures are aimed at reducing physical contact through the use of digital means of payment.(BCEAO, 2020) The Central Bank of West African States has decided to encourage electronic money exporters to take the necessary measures to support actions to promote electronic payments in the West African Economic and Monetary Union.(Meyliet, 2020)

Figure 04: Share of mobile funds in GDP 2019



Source: Prepared by the two researchers, based on:

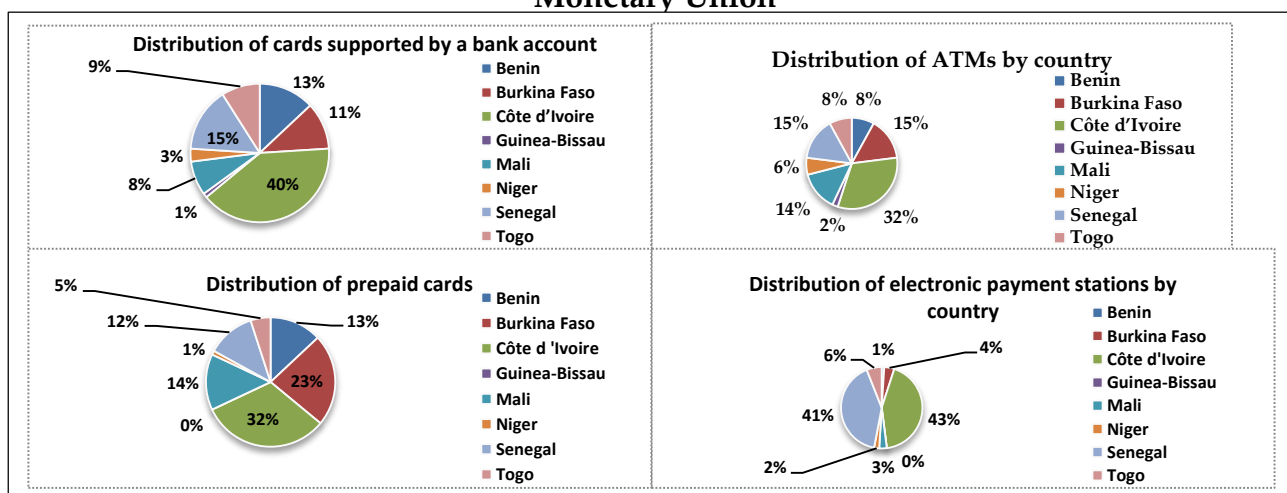
- APIF, C. (2021). Rapport Annuel sur L'Inclusion Financiere. <https://apif.finances.gouv.ci/images/app/publications/219/cote-divoire-rapport-annuel-2021-sur-linclusion-financiere.pdf>

Based on the above figure, mention should be made of the large share of mobile money in Côte d'Ivoire's gross domestic product and its economic growth potential. According to the International Monetary Fund, mobile money occupies an increasingly large place in Côte d'Ivoire's GDP, even if it is 30.26% lower than what was observed in neighbouring Ghana (74.25).

➤ Card Payment

Côte d'Ivoire is recovering from the political crisis that hampered progress from 2002 to 2011 and is attending continental levels with regard to financial inclusion. (MSC, 2020, p. 10)

Figure 05: Various electronic payment data in the West African Economic and Monetary Union

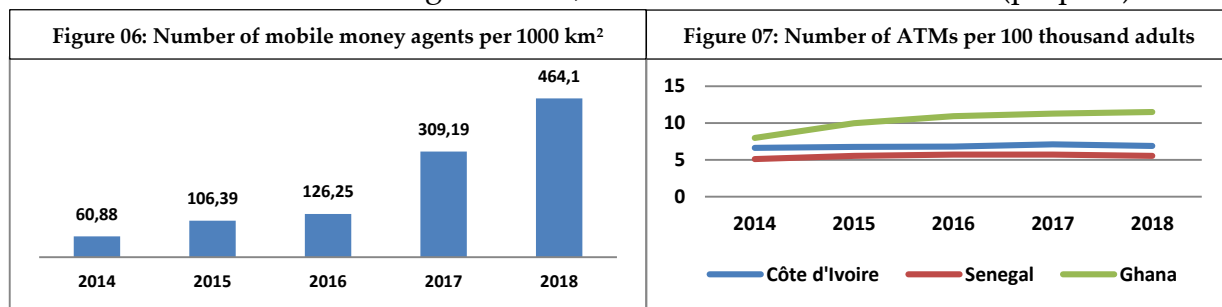


Source: Prepared by the two researchers, based on:

- World Bank. (2020). Promouvoir l'inclusion financière numérique en Côte d'Ivoire Diagnostic de l'écosystème des fintechs. <https://apif.finances.gouv.ci/images/app/publications/130/apif-ci-banque-mondiale-rapport-fintech-cote-divoire-decembre-2020.pdf>

Analysis of electronic payment data from the Central Bank of West African States (BCEAO 2019) shows that not all people with bank accounts have bank cards. This can contribute to reducing the level of use of electronic payment in general. At the end of 2019,

Côte d'Ivoire ranked first in the West African Economic and Monetary Union in terms of card issuance at 32% of the regional size, about 2.4 million bank cards (prepaid).



- IMF. (2018). Financial Access Survey.

<https://data.imf.org/?sk=E5DCAB7E-A5CA-4892-A6EA-598B5463A34CC>

Mobile access points are increasing, unlike ATMs. If we refer to the access network, access to payment service points is very low, with about 7 ATMs per 100,000 people compared to 12 in Ghana and 6 in Senegal (figure 07). The Financial Access Survey (FAS) report of the International Monetary Fund (IMF) shows a downward trend in this indicator for many countries, indicating that mobile funds are taking over as evidenced by the increase in the number of mobile financial services agents per 1,000 square kilometres during the period from 2014 to 2018 in Côte d'Ivoire (figure 16).

There is a strong appetite for mobile money among Ivorians, but the possibility of including vulnerable people in the digital ecosystem is largely untapped.

5- Fintech ecosystem in Côte d'Ivoire

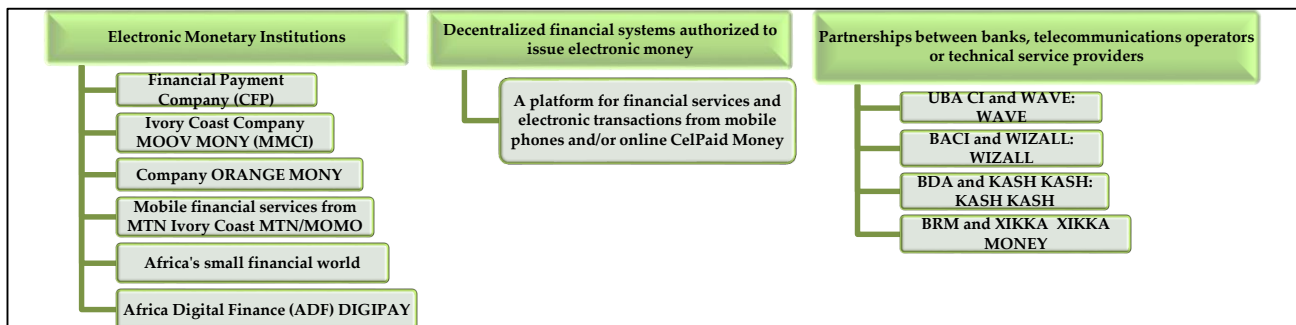
The social and economic context of Côte d'Ivoire is increasingly conducive to digital entrepreneurship. Favourable conditions are amplified by strong economic growth and investment attractiveness, the increasing use of technologies and the growing innovation ecosystem (incubators, co-working spaces, etc.). Fintech companies are generally considered start-ups and therefore subject to the same development constraints as all start-ups (training, access to finance, partnership search, etc.).

➤ Electronic Financial Institutions (EME)

The financial landscape has undergone a major shift with the emergence of e-financial institutions, which leave little room for small financial companies. At the end of October 2020, Côte d'Ivoire had 11 structures licensed to issue electronic money (figure below). Mobile operators, through electronic money institutions, operating under a separate licence, have positioned themselves as leaders in the provision of digital financial services with the dominance of withdrawals and transfers. Electronic payment vouchers dominate the issuance of electronic cash with a low diversity of services towards savings and credit, which can evolve through banking partners. As of December 31, 2019, ORANGE had 8792070 mobile financial subscribers, That's 50% of the market share and MTN has 6968905 mobile financial subscribers or 40% of the market share. MOOV has 1760133 mobile financial subscribers with any market share of 10%.(ARTCI, 2019, p. 8)

Côte d'Ivoire owns 11 out of 43 mobile money platforms in the West African Economic and Monetary Union region (Word.Bank, 2020, p. 69) and specifically includes 6 e-money institutions as shown below:

Figure 08: Electronic Money Institutions



Source: Prepared by the two researchers, based on:

- BCEAO. (2022). Etablissements de Monnaie Electronique. <https://www.bceao.int/fr/content/etablissements-de-monnaie-electronique>

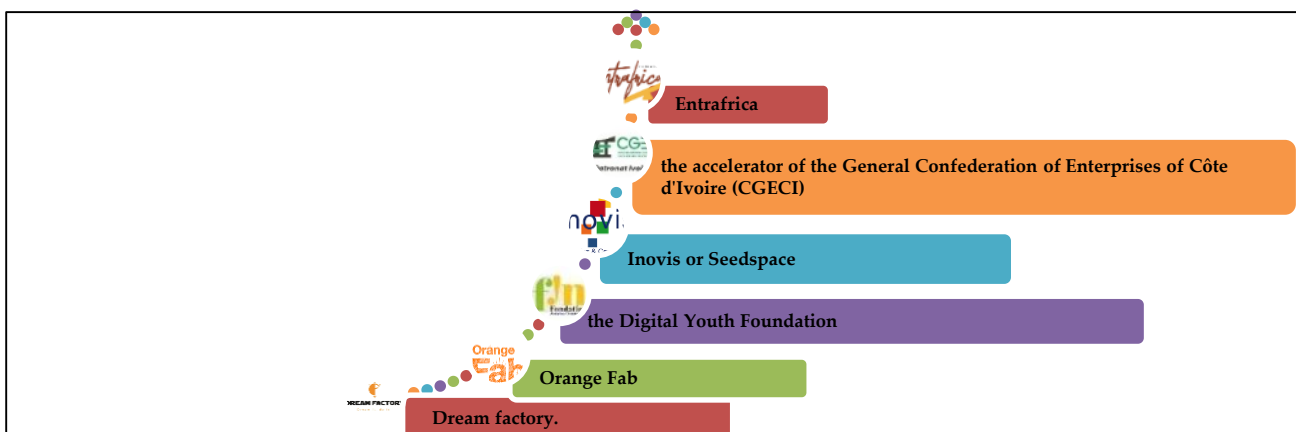
At the end of 2018, these three operators achieved about 24 billion CFA francs in trading volume in the mobile financial services sector according to ARTCI statistics.

➤ **Entrepreneurship Support Organizations (OAE)**

The fintech ecosystem in Côte d'Ivoire has the specificity of having a large number of entrepreneurial support organizations: incubators and accelerators. Côte d'Ivoire currently has about 22 such organizations as the number continues to grow.(Word.Bank, 2020, p. 95) The latter is very active with national fintech startups.

The study included 30 active incubators and accelerators in Côte d'Ivoire, some in the following format:

Figure 09: Some incubators and accelerators in Côte d'Ivoire



Source: Prepared by the two researchers, based on:

- Word.Bank. (2020). *Etude diagnostique de l'économie numérique de la Côte d'Ivoire*, (Digital Economy for africa, Issue. <https://thedocs.worldbank.org/en/doc/61714f214ed04bcd6e9623ad0e215897-0400012021/related/Rapport-Etude-Economie-Numerique-Final-FR-2021-08-23.pdf>

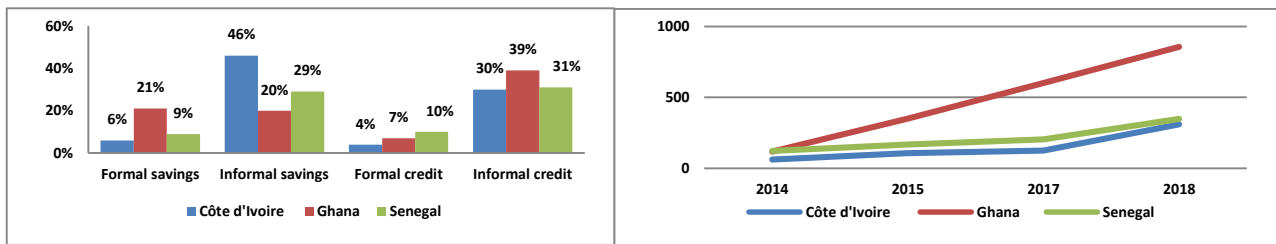
6- Financial technology contributions to fostering financial inclusion and the digital economy

There are many opportunities for fintech companies to participate in financial inclusion.

➤ State of financial inclusion in Côte d'Ivoire

Financial inclusion is defined as individuals and companies access to a full range of useful financial products and services adapted to their needs (transactions, payments, savings, credit and insurance) provided by trusted and responsible service providers.(Word.Bank, 2022) Access to the current transaction account is the first step towards financial inclusion, paving the way for depositing funds, but also for sending and receiving payments. As the current account can also act as leverage for other financial services, the World Bank Group is working to ensure access for every adult everywhere, through its Universal Access to Financial Services initiative.(Word.Bank, 2018) Access to financial products and services improves families and businesses daily lives by allowing them to expect to fund long-term goals or deal with unforeseen events. An individual with a current account will be more inclined to use other financial services, such as credit or insurance, to develop their activity, invest in education and health, manage risks and overcome financial shocks, all of which will generally improve the standard of living. Côte d'Ivoire has made progress with regard to financial inclusion, particularly with regard to access to accounts, but women enjoy a higher level of exclusion than men, particularly in rural areas. Access to financial services is growing significantly, especially thanks to mobile money. According to Findex 2021, the financial inclusion rate is estimated at 51%, slightly below the average of 55% in sub-Saharan Africa, and well below its neighbour Ghana, which is 68%. Despite the overall increase in the financial inclusion rate, there is still a gender gap as well as a gap between rural and urban areas.(Findex, 2021) Data from the Findex database (2021) indicate that mobile money is a powerful lever in access to financial services in Côte d'Ivoire, and the latter plays an increasing role in achieving equality in the integration of women and young people. Despite the persistent gap, men and women experienced the same rate of growth of mobile money account ownership between 2017-2020. The gender gap is due both to traditional discrimination against women and to women's poor digital skills. This gap is widening despite women's increasing reliance on mobile financial accounts, as the low level of financial education contributes to women's low level of adoption of financial services. Moreover, with more than 60% of the population under the age of 25, young people represent the largest segment and quickly adopt digital financial services associated with mobile money. However, mobile internet use remains limited.(Monde, 2022)

Figure10 & 11: Number of mobile money agents per 1,000 km2



Source: Prepared by the two researchers, based on:

- IMF. (2018). *Financial Access Survey*. <https://data.imf.org/?sk=E5DCAB7E-A5CA-4892-A6EA-598B5463A34C>
- Findex, D. (2021). In.

The figure above (No. 11-10) indicates the population's tendency to resort to savings and informal loans, with more than 46% of adults benefiting from savings in informal associations, compared to about 6% of those reporting savings through the transaction account. With regard to credit, a similar trend was observed with a wider gap (savings), 30% borrowing from friends or associations versus 4% borrowing from a financial institution. Thus, weak financial services (savings and credit) can be an opportunity for fintech companies, and partnerships must be developed with financial institutions, which are the only institutions authorized to provide such services. In addition, the paucity of mobile access points can encourage more fintech companies to strengthen their distribution network (Figure 10). Although Ivory Coast is among the 10 fastest growing economies in the world, the benefits of growth do not reach low- and middle-income populations. Rural populations are 60% more likely to be financially excluded and women and farmers face the greatest exposure. (MSC, 2020, p. 15)

Conclusion

The general diagnosis carried out by the study is that the State of Côte d'Ivoire has a high potential for the emergence of the fintech ecosystem. In terms of the market, the study indicates a dynamic ecosystem composed of players from different sectors, and the efforts of the Ivorian authorities at the political and regulatory level should be commended, as the development of the right policies and regulations aimed at promoting the emergence and use of fintech was a key element in promoting financial inclusion as well as access to finance.

The ICT market in Côte d'Ivoire has seen two types of digital finance operators: banking players (banks, post offices) and non-banking players (MTN, MOOV, ORANGE... etc.), where the latter dominates the money transfer sector. Thus in terms of access points, the non-bank pole is more important. Mention should also be made of the progress made in digital financial services, which is a key to increasing financial inclusion, as Côte d'Ivoire has all the necessary elements to implement the electronic payment structure.

In West Africa, Côte d'Ivoire is at the forefront of financial inclusion in many areas, according to the global index (Findex 2021), 51% of adults (15 years and more) had access to an account, which represents an increase from 41% in 2017, largely due to the spread of mobile money. Moreover, the presence of the Financial Inclusion Promotion Agency (APIF) enables the State to coordinate inclusive funding efforts across government and the private sector.

Côte d'Ivoire has demonstrated a commitment to the direction of financial inclusion, including the digitization of government payment systems. However, financial inclusion appears to be more limited in rural areas and among disadvantaged groups, such as: poor, women, small and medium-sized enterprises and small farmers, and therefore the challenges to improve access to and use of formal financial services remain significant despite recent performance. In the face of the above challenges, some recommendations should be proposed to make better use of digital finance to increase financial inclusion.

✚ Recommendations

Based on the findings and conclusions contained in this study, the following recommendations were made:

- The Central Bank should review the regulatory framework governing electronic payment, taking into account market needs in terms of classifying new actors and professions related to payment services (bank agents, microfinance agents, fintech companies, etc.).
- The State of Côte d'Ivoire can also play a leading role in defining a digital economy strategy that takes into account the needs of fintech companies, i.e. access to interfaces (code QR, USSD, API), cybersecurity standards and interoperability.
- The adoption of a decree on the digitization of government payments to expand opportunities and enhance the position of fintech in the payment services ecosystem in Côte d'Ivoire.
- It is appropriate for banks, through the Professional Association of Banks and Financial Institutions (APBEF), to consider developing a framework of cooperation with entrepreneurship support organizations (OAE), which can help better understand the needs of fintech and provide solutions.
- The improvement of financial inclusion and the development of the fintech ecosystem in Côte d'Ivoire will depend in particular on the legal, regulatory and institutional reforms governing digital payment but also on an inclusive private sector, and the enhancement of management skills in the field of fintech.
- Increase women's integration into formal entrepreneurship and access to common platforms at a reasonable and transparent cost.

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