The Fintech landscape and financial inclusion in The Arab world

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Technology is changing the landscape of the financial sector, increasing access to financial services in profound ways. These changes have been in motion for several years, affecting all countries in the world.

Most Arab citizens are still formally unbanked and digital finance is seen as a powerful tool to improve financial inclusion in Arab countries.

This paper aims to demonstrate the current state of financial inclusion and digital finance in the Arab world, explore benefits of fintech and identify potentialities that exist for using digital technology in Arab countries .

Keywords : Fintech , Financial inclusion Arab countries .

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1. INTRODUCTION

Fintech is not a new concept, it had emerged in the 21st Century and the term was initially used in reference to technology employed at the back-end systems of established financial institutions. Since then, there has been a shift to more consumer-oriented services and definition. Fintech has expanded to include any technological innovation in, as well as the automation of the financial sector. This includes advances in financial literacy, advice and education, as well as streamlining of wealth management, lending and borrowing, retail banking, fundraising ,money transfers/payments ,investment management and more.

Technological innovation changes the way in which consumers are able to conduct financial transactions in terms of their ability to access, borrow, lend, insure, invest and transfer funds; as well as transactions involving the making of or receipt of payment for goods and services. This supports financial inclusion whereby technological advances are helping banks reach an increased number of individuals of the world's large and diverse, previously unbanked population. Statistically it is reported that more than half a billion people were availed access to financial services for the very first time between 2014 and 2017, according to the World Bank's Global Findex Database 2017. (The Global Findex database, 2017)

This paper aims to demonstrate the current state of digital finance in the Arab world ,and its impact on a potential financial inclusion .

Inorder to reach this target , we will try to respond to this principal question :

What is the state of Fintech in the Arab countries and what is its impact on the financial inclusion of these countries ?

To respond to this main question , we have devided this study into three main parts :

1. Background on Fintech and Developments in the Arab World ,
2. Fintech and Financial inclusion in the Arab World ,
3. Fintech Oversight, Legislation Gaps and Regulations in the Arab World .

2. Background on Fintech and Developments in the Arab World :

Financial Technology or ("FinTech"), is fundamentally changing the way financial services operate, transforming the way consumers transfer, borrow, protect and manage their money. FinTechs globally have demonstrated innovative and user-friendly solutions and a level of flexibility that traditional institutions have struggled to provide .

With the success of mobile money and the advent of peer-to-peer lending as well as regulatory sandboxes and innovation hubs in many countries around the globe, technology-driven innovation in finance (Fintech) has raised expectations to spur competition, financial inclusion, and structural transformation for economic development at pace, scale and more efficiently.

2.1 Fintech's definition :

Financial technology (Fintech) is used to describe new tech that seeks to improve and automate the delivery and use of financial services. At its core, fintech is utilized to help companies, business owners and consumers better manage their financial operations, processes, and lives by utilizing specialized software and algorithms that are used on computers and, increasingly, smartphones. Fintech, the word, is a combination of « financial-technology ». (Sokolin, 2019)

Financial technology, or fintech refers to innovations aimed at new ways of delivering In financial services. many developed markets, fintech is regarded as disrupting the traditional financial and banking sectors.

At the end , we can define Fintech , as solutions combining innovative business models and technology to enable and/or enhance financial services provision, distribution, and/or infrastructure.

2.2 The Emergence of Technology and the Transformation of Finance :

Technological innovations change the way in which consumers are able to conduct financial transactions in terms of their ability to borrow and lend, insure themselves, invest, transfer funds and make payments.

They enable incumbent financial institutions to reach an increased number of previously unbanked populations. The adoption of Fintech services has moved steadily upward, from 16% in 2015 to 33% in2017, and to 64% in 2019 according to EY's Fintech Adoption . (ey, 2017).

Today, the Arab World has one of the world's lowest financial inclusion rates where almost 2-in-3 Arab adults do not have a transactional account.

Some segments are disproportionately excluded from financial services. Women, for instance, face barriers of formal laws and regulations or more nuanced issues of cultural norms. Similarly, small and medium enterprises (SMEs) have limited access to financial services (mainly credit facilities) for reasons such as they often lack of proper financial and legal documentation or because their loan sizes are too small for a traditional financial institution to profit from .

As Uber in transportation, and Udemy in education, technology is continuously changing the landscape of many sectors and industries around the world, and financial services are no exception.

FinTech has disrupted the operations and delivery of financial services throughout the globe with more potential yet to be tapped. Through digital outreach, customized solutions, innovative credit reporting and scoring, and other methods, excluded groups are now accessing and reaping the benefits of financial inclusion.

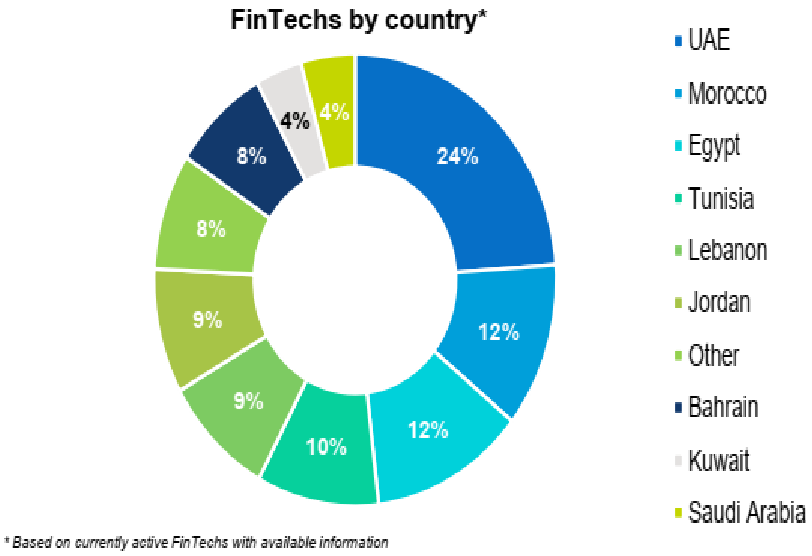
At the core of that shift are FinTech companies and solutions that combine innovative business models and technologies to enable and/or enhance financial services provision, distribution, and/or infrastructure. Through their utilization of technology, FinTech solutions have reduced operational costs, extended reach to a larger target audience through remote channels such as social media, or by hiring agents to act as in-person financial. service access points instead of branches .

Feeling the impact of this global wave of FinTech in the financial services sector, Arab entrepreneurs shifted their focus to FinTech solutions.

Though in relatively nascent stages, the FinTech industry has been gaining momentum both in terms of annual number of new solutions and early-stage investments raised.

Nevertheless, FinTechs in the Arab World are facing major challenges such as, cost of regulatory compliance, lack of growth investment capital or unavailability of qualified talent.

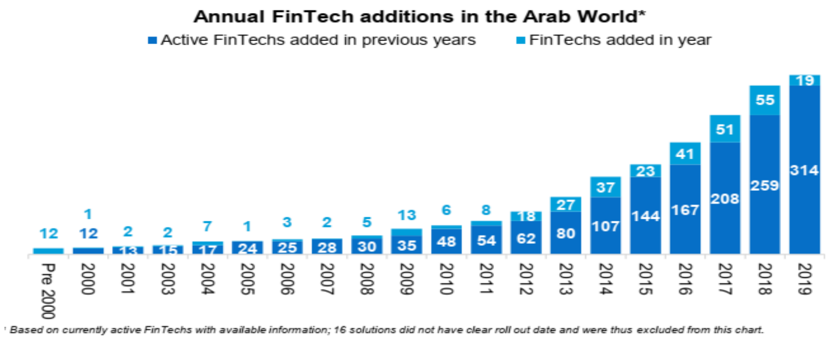
Figure N°1: Fintech in Arab countries



Source : FinTech Landscaping in the Arab World Regional Report , April 2020 , Final draft .

In terms of compliance, regulators often place requirements that are challenging for startups to meet. To address this issue, many regulators in the Arab World launched Regulatory Sandboxes to test the innovative products and provide licensing paths for the emerging solutions. This allowed emerging complex solutions, such as blockchain , a path to compliance and potentially unleash their ability to transform sectors and regulations.

Figure n°2 : Annual Fintech additions in the Arab World

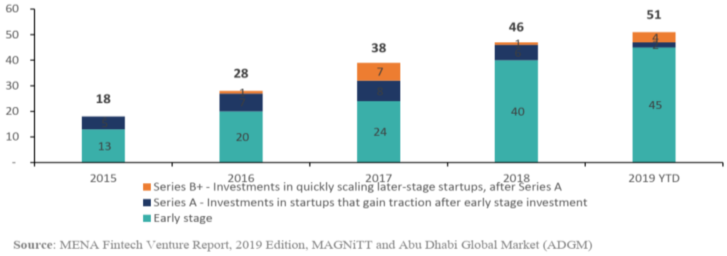


Source : FinTech Landscaping in the Arab World Regional Report , April 2020 , Final draft .

2.3 Fintech developpement in the Arab world :

A total of $237M has been invested in 181 deals since 2015 in MENA-based Fintech startups, with 51 of those deals being made in 2019 alone. Early stage investments make up the majority of deals at an average of 75.8% between 2015 and H1 2019. (magnitt, 2019)

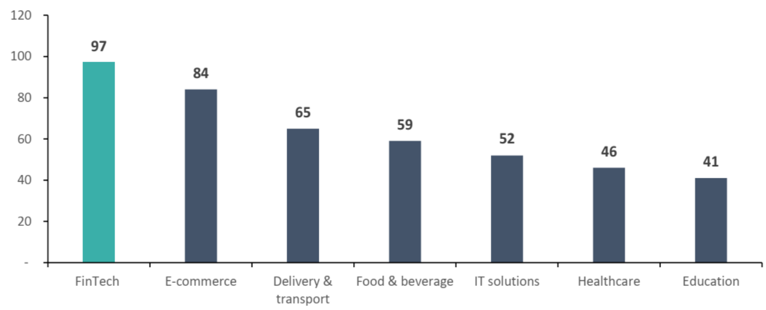
Figure n°3: Number of deals breakdown according to stages, 2015A– 2018A-



Source : MENA Fintech Venture Report , 2019 Edition , MAGNiTTand Abu Dhabi Global Market (ADGM)

2017 was the breakout year for Fintech venture investment across MENA, and in 2018 and 2019 YTD Fintech ranked first among the sectors which received venture investments in the region by the number of deals, overtaking other popular industries such as e-commerce and transport and logistics.

Figure n°4: Top seven industries by number of deals, 2018A – H1 2019A



Source: MENA FinTech Venture Report, 2019 Edition, MAGNiTT and Abu Dhabi Global Market (ADGM)

Despite the rapid growth of fintech in the Middle East, the sector remains in its early stages in the when compared with counterparts such as China or Europe.

As of January 2017 the Middle East region only attracted 1% of the US$50 billion raised globally by fintech . (accenture, 2017)

In Arab countries, various and numerous government driven initiatives have supported the rapidly growing network of fintech startups. Governments across the Arab region have committed to helping create a thriving fintech ecosystem, supporting fintech innovation with favorable regulations and initiatives, such as accelerator programs or regulatory sandboxes.

3.Fintech and Financial inclusion in the Arab World :

The Arab world covers a huge geographical region with an estimated population of more than400 million people (World Bank, 2017) who live in 22 countries with diverse economic, social and political conditions. The contribution of digital finance to the concept of financial inclusion has been globally propagandized and endorsed during recent years due to its proven impact on a country's economy.

Financial inclusion is still in its early stage in the Arab world and faces some obstacles and growing slowly but with a potential growth in future. Most Arab citizens are still formally unbanked and digital finance is seen as a powerful tool to improve financial inclusion in Arab countries.

3.1 Definitions of Financial Inclusion :

Financial inclusion is defined as "a state where individuals, including low-income people and companies, including the smallest ones, have access to and make use of the full range of formal quality financial services (payments, transfers, savings, credit, and insurance) offered in a responsible and sustainable way by a variety of providers operating in a suitable legal and regulatory environment", (Chehade et al, 2017) In a similar way, (Ozili, 2018) refers to digital finance as the "financial services delivered through mobile phones, personal computers ,the internet or cards linked to a reliable digital payment system". Digital financial services (DFS) . have been described by (Abbasi and Weigand , 2017) as the broad range of financial services accessed and delivered through digital channels, including payments, credit, savings, remittances, insurance and financial information" .

3.2 Importance of Digital Finance to reach Financial Inclusion:

The access to finance is not merely a financial or banking service It is a question of livelihood and empowerment especially for developing nations as it comes across with crucial development sectors that are particularly related to gender and rural community developments and economic resilience.

Traditional access to finance is currently unsatisfying in the Arab world as (Chehade et al, 2017) report, 70 % of adults still have no access to formal credit because they are relying on informal financial channels rather than formal financial institutions.

This constitutes a great opportunity for the formal financial sector to address a huge unmet need and to investigate diverse ways to achieve this for a range of stakeholders.

Access to formal credit is still low in the Arab world for both individuals and enterprises. It is argued that offering appropriate formal financial services is absent in the Arab region and the most excluded are vulnerable groups .

Such as women, youth and low- income people. (Elzoghbi, 2016)proposes that that majority of those excluded from formal financial sectors in Arab countries are women and this is due to the laws that.

Table n°1: **SMEs and Female Participation in Ownership**

Country	Year*	No. of SMEs	Total No. of Enterprises	% of Enterprises with Female Participation in Ownership
Algeria	2007	554	600	15%
Djibouti	2013	248	266	23%
Egypt	2016	1279	1814	26%
Iraq	2011	749	756	7%
Jordan	2013	447	573	20%
Lebanon	2013	471	561	38%
Mauritania	2014	125	150	17%
Morocco	2013	294	407	36%
Sudan	2014	614	662	9%
Syria	2009	382	508	15%
Tunisia	2013	436	592	53%
WB and Gaza	2013	411	434	13%
Yemen	2013	313	353	12%

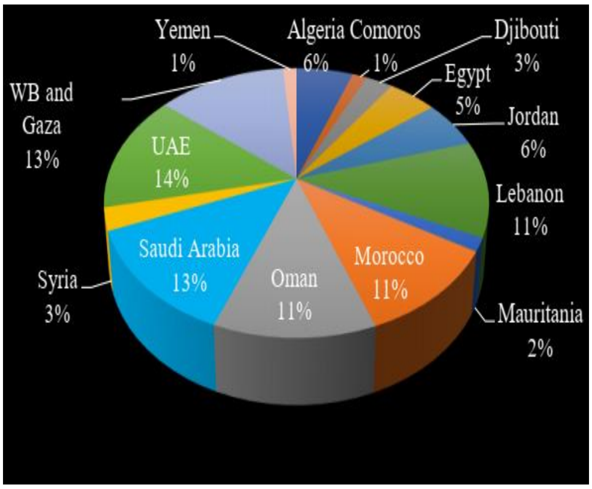
Source: World Bank Enterprise Surveys Data (2013)

Table (1) shows that SMEs account for 83% of the total enterprises (firms) in Arab world. Nevertheless, female participation in SMEs ownership, which varies amongst Arab countries, is only 22% on average. postulate that low financial inclusion in Arab countries has resulted (Chehade et al, 2017) primarily from the low outreach of the formal financial institutions whereas (Ozili, 2018)
believes that the differences in income and education across countries affect the level of financial inclusion and thus, people with high income and high education are more likely to benefit from financial inclusion than those of low income or lower education level.

Another reason for exclusion from the formal financial sector is what (Ozili, 2018) calls “voluntary financial exclusion” where people do not wish to deal with banks or they lack awareness of the benefits of digital financial or they lack education about how to use digital finance.

The point here is that huge sectors of the world’s poor are excluded from formal financial services because “they are simply too expensive to deliver through traditional banking models” and thus advantageous digital financial channels are suggested .

Figure n°5: Deposit accounts with commercial banks per 1,000 adults by countries 2017



Source: IMF FAS 2017

With reference to figure (5) most Arab countries show low deposit accounts. Commercial banks in Jordon and Algeria possess only 6%, and Egypt 5% whereas the remaining countries stand below this rate and most of their current financial underdeveloped such as Yemen, Syria and Djibouti. capabilities are comparatively Countries that record relatively developed financial systems in the region like the UAE and Saudi Arabia record 14% and 13 % of deposit accounts per 1,000 adults, while Oman, Lebanon and Morocco reached an equal rate of 11 % in 2017.

Therefore, it was concluded that geographical expansion of formal banking could not satisfactorily attract adult deposit accounts, and this caused a state of weak financial inclusion in Arab countries.

3.3 Benefits of digital technology for Arab households :

The digital financial technology field is undergoing growth and has facilitated important banking and financial transactions, especially for the poor in developing countries which has also improved financial inclusion.

Basically, financial inclusion advocates digital tools to offer appropriate financial services, especially in developing countries such as the Arab world. Digital financial channels can help poor households in Arab countries to build investments and access credit through financial inclusion. Financial inclusion is also found to savings, make have positive effects on financial stability and economic development by increasing the of number deposits at banks.

Owen and Pereira (Owen et Peria, 2018) consistently prove a strong and positive relationship between financial inclusion and the level of economic growth in their research on financial inclusion which used panel data from 83 countries over 10 years.

Digital finance can additionally stimulate adequate access to financial services for Small and Medium Enterprises (SMEs) which constitute a huge part of Arab small business activities and consequently contribute positively to the unemployment rate in the region particularly since SMEs are labor- intensive by nature. Most of the poor in Arab world, including women and small income-generators, depend mainly on informal financial resources since form al banking has not been a choice.

Digital financial services through digital channels particularly mobile payment schemes can help households get the financial services they need through their mobile sets for example.

In summary, using fintech and strengthening financial inclusion appear to be a necessity for the Arab world to improve socio-economic development and economic growth.

Abbasi and Weigand (2017), has encouraged many developing countries to invest heavily in building their IT infrastructures to facilitate successful transformation to digital banking. (Abbasi and Weigand , 2017)

3.4 Potentiality of Arab countries to adopt digital platforms :

The spread of digital payment companies and mobile network operators in Arab countries has been noted in recent years. (Chehade, 2016) explains that " JoMo Pay" in Jordan, for instance, has expressed a growing interest in digital financial services while "Fawry processes over 1.2 million transactions daily in Egypt, and the GSMA has recently outlined the opportunities and challenges for mobile money in the region".

The growth of innovative technology companies like mobile phone network providers has encouraged many Arab customers to use digital financial services rather than cash-based transactions.

As it becomes relatively simplified, previously excluded households need only to open an account and get digital access to borrow and perform transactions remotely, (Ozili, 2018).

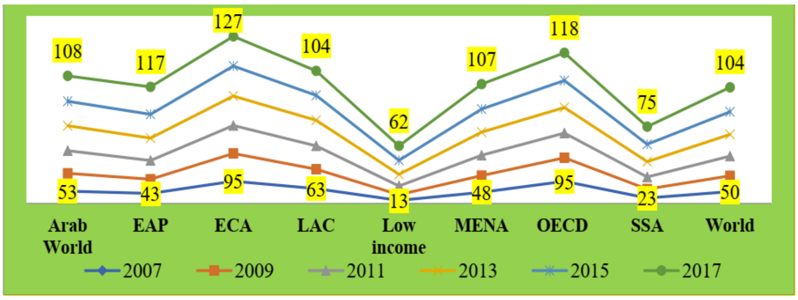
It is worth mentioning that Mobile cellular subscriptions (per 100 people) have grown, exponentially at the rate of 104% in Arab World from 53 in 2007 to 108 in

2017.

Moreover, (Chehade et al, 2017) observe that the Arab region has a distinctively active borrowing environment with 44% of adult borrowers, even higher than the rates of 42% of global and 40% of OECD countries.

Yet, this high ratio is attributed to the informal channels and rather this demand could be more appropriately addressed through digital channels.

Figure n°6 : Mobile cellular subscriptions (per 100 people) by regions in the period (2007-2017)



Source: World Bank Group (2019)

The research evidence is that digital financial transactions are more affordable, efficient and transparent. More importantly, through DFS systems people are given power to control their "own financial future".

4. Fintech Oversight, Legislation Gaps and Regulations in the Arab World:

Most emerging FinTech products have been solutions of Payments and Remittances, possibly explained by public sector focus and involvement in recent years. Back- and middle-office solutions such as enterprise resource planning solutions come in second.

Moreoever, there are only 10 digital banking and 6 InsurTech solutions, providing an opportunity considering the low penetration of banks and the low adoption of insurance policies of Arab adults.

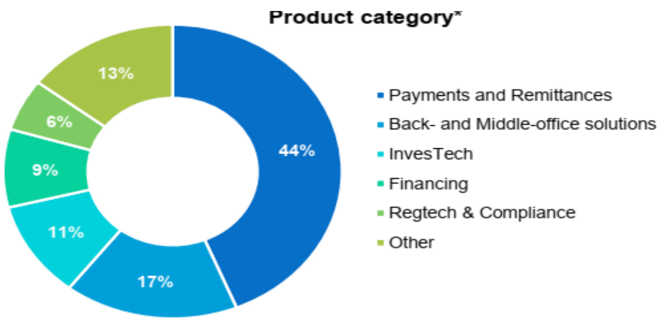
▪ In terms of financial inclusion, among the identified FinTechs, 149 solutions have been identified as financially inclusive by either explicitly having a financially inclusive mandate or by offering solutions similar to other companies with financial inclusion mandate or impact.

As the Arab World lags behind other regions in the context of Financial Inclusion, the emergence of FinTechs may catalyze improvement on this front.

▪ However, since the majority of FinTechs require smartphones and/or internet access, low-income consumers might not be able to benefit from the services offered by those solutions.

To address that, some FinTechs utilize USSD technology which is compatible with feature (basic) phones.

Figure n°7: Financial products in Arab countries



Source : FinTech Landscaping in the Arab World: April 2020 | Page 10

The issue of expanding financial services reach in the Arab World has been gaining additional importance throughout the years.

The Arab Monetary Fund's Financial Inclusion Task Force was established in 2012 as a means of improving financial inclusion in the region. Motivation for financial inclusion is two-fold:

▪ Studies show that access to financial services promotes resilience for individuals and societies by facilitating recovery from shocks, and encourages investments by low-income people. Furthermore, for women in particular, financial inclusion also promotes their participation in the labor force, improve their role in the household and generate positive outcomes for the family and society at large.

▪ Emerging evidence also suggests that financial inclusion may contribute to increased economic growth and reduction of poverty. Empowerment of women, increasing the participation of previously excluded groups in the market, and innovatively introducing new avenues for revenue can motivate growth in economies.

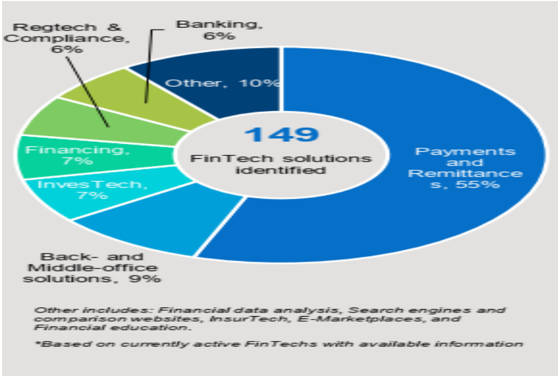
As such, investment in FinTech solutions may pave the way to achieving long- term sustainability , achieving long-term sustainability, fulfill strategic goals, and assist in achieving financial inclusion at large .

4.1 Fintech solutions adopted by Arab countries :

The majority of the FinTechs with a financial inclusion in Arab countries mandate are in Payments and Remittances of which most are transactional accounts(i.e. mobile wallets).

The large number of FinTechs in the Payments and Remittances space (43%) could be a result of regulators' focus on creating an enabling ecosystem for such solutions.
▪ Back- and middle-office solutions follow, accounting for 17% of identified solutions.

Figure n°8: Fintech solutions identified in Arab countries



source : FinTech Landscaping in the Arab World Regional Report , April 2020 , Final draft, p 19

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<u>4.2 Fintech Oversights :</u>

Fintech evidences the global impact on the provision of financial services. Countries seek to provide an enabling environment, including open and affordable access to core digital services and infrastructures.

Fintech has and continues to bring significant benefits to organisations, consumers, investors; financial services firms and financial market infrastructure; and supports both financial stability and financial inclusion.

It is to be noted, however, that the increased use of fintech solutions and emerging technologies also brings risks, to which regulators, supervisors, overseers and policy makers (together termed"**authorities**" for ease of reference) are responding . (pudocs, 2019)

Fintech is fundamentally a neutral force; however, its consequences can be clearly positive (i.e. facilitating consumer transactions and the roll out of ATMs in the 1960s) or markedly negative (i.e. mortgage-backed securities helped cause the Great Recession bursting the U.S. housing bubble and catalyst to the global financial crisis from 2007 – 2009).

Fintech has the potential to expose risk to: Consumers and investors, Financial services firms, general Financial stability and cause possible financial exclusion .

<u>4.3 General Fintech implications for financial policymakers and regulators :</u> (deloitte, 2019)

Technological innovation has created business models, products and service delivery channels; as well as creative approaches to attracting, interacting with and gaining the loyalty of customers.

According to studies, authorities have identified risks arising from 3 primary fintech related drivers, namely: the increasing dependence of financial services firms on technology, the increasing interconnectedness within the financial sector and the prospect of greater concentration and herd-like behaviour . (Sushil Bikhchandani and Sunil Sharma, 2001)

Financial services firms are becoming increasingly reliant on technology and the use of large data sets. Expansion of new technologies have included data collection and analytics, artificial intelligence, automation, roboadvice, cloud computing services, platforms, blockchain and crypto assets.

The financial sector is becoming increasingly interconnected and complex. Examples of this include the outsourcing of many fintech-related functions and services, and the increasingly platform-based nature of many financial services.

4.4 Fintech and financial stability implications :

Fintech, in theory, yields benefits for economic growth and financial stability through many transmission channels, including by reducing some of the financial frictions .

Financial Markets are very aware that the speed of innovative change due to fast-moving technology by necessity means that policymakers, regulators, supervisors and overseers must advance at pace with it. As fintech continues to evolve, so should regulation.

Law and policy makers are required to catch up with the rapid pace of fintech development and its opportunities, while ensuring that fintech risks are well understood and mitigated. Regulators and relevant authorities whom actively engage in industry participation are leveraging technology and data to create a more networked system of regulation that functions more efficiently, with strong consumer protections.

Coordination, communication and interactivity between relevant authorities governing fintech can assist with public policy and financial stability objectives.

Regulators must work closely with one-another and together with fintech firms, in order to have a strong network system of regulation that functions efficiently and to allow fintech firms to scale rapidly - thereby not stunting their growth, expansion or ability to function, due to restrictive legislative provisions or legislation gaps.

Authorities should ideally harbor the necessary expertise, data and real-time insight into the manner in which fintech companies are interacting with consumers and their manner of operating in the financial marketplace.

Authorities will be able to strengthen their oversight of the fintech industry by working together, ensuring transparency, eliminating redundancy and providing support in compliance, to ensure the proper working of the financial system, no matter the type of fintech activity . (Basel Committee on Banking Supervision, 2018)

5. Conclusion:

This paper sought to show the current situation of financial inclusion and the use of digital financial technologies in Arab world. The benefits of fintech for Arab households and the potentiality of Arab countries to adopt digital technology were presented. The Arab world is currently far below other regions in several dimensions of financial inclusion since the formal financing channels have not been able to reach the unbanked people in the region. Digital technologies are found to be beneficial for enhancing financial inclusion.

Based on the findings and conclusions in this study, we can suggest the following recommendations:

- Expectations of Arab households and consider the variations amongst Arab countries ;
- Focus on vulnerable groups and individuals that are increasing rapidly in the region particularly women, migrants, refugees and the internal displaced people ;
- Support Small and Medium Enterprises (SMEs) in addition to the micro businesses that are spread largely in the Arab region and demand suitable digital financial services;
- Identify inherent barriers and challenges facing digital financial inclusion and provide suggestions on the use of fintech in the Arab region;
- Appraise available technologies related to digital finance that might fit into the contexts of the Arab world;
- Establish a kind of Arab financial inclusion alliance that supports innovation, research and development in the field as well as disseminates awareness .

6.Bibliography list :

1. Abbasi and Weigand . (2017). The Impact of Digital Financial Services on Firm's. Consulté le 2020, sur Literature Review, Department of Management ,Tilburg School of Economics: https://arxiv.org/abs/1705.10294

2. The Global Findex database. (2017). Consulté le 2020, surhttps://globalfindex.worldbank.org/

3. World Bank. (2017). The Global Findex Database. Consulté le 2019, sur https://globalfindex.worldbank.org

4. Fintech news middle east. (2019). Consulté le Decembre 2, 2020, sur UAE leads the Digital Banking scene in Middle East: http://www.fintechnews.ae/3567/fintech/digital-banking-bahrain.uae

5. accenture. (2017). accenture. Consulté le 2020, sur https://www.accenture.com/us-en

6. Basel Committee on Banking Supervision. (2018). Implications of fintech developments for banks and bank supervisors. Consulté le 2020, sur Bank for International settlements: https://www.bis.org/bcbs/publ/d431.pdf

7. Chehade et al. (2017). Financial Inclusion Measurement in the Arab World. Consulté le 2019, sur CGAP and the Arab Monetary Fund's Financial Inclusion Task Force:

https://www.cgap.org/sites/default/files/Working-Paper-FinancialInclusion-Measurement-in-the-Arab-World_1.pdf

8. deloitte. (2019). The future of fintechs: Fintech risk management;. Consulté le 2020, sur https://www2.deloitte.com/us/en/pages/regulatory/articles/fintech-riskmanagement-regulation.html

9. Elzoghbi, M. (2016). What Excludes Women from Formal Finance in the Arab. Récupéré sur CGAP Blog Series Gender, Policy, and Financial Inclusion.: http://www.cgap.org/blog/what-excludes-women-formal-finance-arab-states

10. ey. (2017). ey-fintech-adoption-index-2017. Consulté le 2020, sur https://www.ey.com/Publication/vwLUAssets/ey-fintech-adoption-index-2017/$FILE/ey-fintech-adoption-index-2017.pdf

11. magnitt. (2019). mena fintech venture report. Consulté le 2020, sur https://magnitt.com/research/50675/2019-mena-fintech-venture-report

12. Owen et Peria. (2018). Bank concentration, competition, and financial inclusion,. Consulté le 2019, sur Review of Development Finance Journal: https://www.scopus.com/record/display.uri?eid=2-s2.0-

13. Ozili, P. K. (2018). Impact of digital finance on financial inclusion and stability. Consulté le 2020, sur Borsa Istanbul Review: https://doi.org/10.1016/j.bir.2017.12.003

14. pudocs. (2019). Fintech-executive summary. Consulté le 2020, sur http://pubdocs.worldbank.org/en/361051561641115477/pdf/Fintech-executive-summary.pdf

15. Sokolin. (2019). The Future of Fintech. Récupéré sur : https://www.investopedia.com/financial-technology-and-automated-investing-4689759

16. Sushil Bikhchandani and Sunil Sharma. (2001). Herd Behavior in Financial Markets. IMF staff papers.