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AN OVERVIEW OF FINTECH IN THE MEXICAN ENTREPRENEURIAL ECOSYSTEM

Review
Article

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Abstract

The evolution of digital technology and its applications in almost every field has led to the rise of numerous startups which, through technological platforms, offer a wide range of services and products. In the financial sector, this phenomenon has led to the creation of Fintech companies (Financial Technologies). Fintech is presented as game-changing and as an innovation capable of shaking up the traditional financial markets. The present study analyzes and discusses the importance of the Financial Technologies for the entrepreneurial ecosystem in Mexico. In addition, it provides an overview of the FinTech sector, its main trends, risks and the terms of the new regulation by comparing Mexico with Latin America. Finally, it discusses the key points of the Financial Technology Law in Mexico.

INTRODUCTION

Technology keeps transforming the world: it has produced radical changes in many sectors in just a few years while the companies that cannot adapt disappear (Kaplan and Haenlein, 2009) such as for example travel agencies, printer enterprises, newspaper corporations or trading companies.

Finance and technology abbreviated as FinTech are innovative startups that give financial solutions with the support of new technologies. The origin of FinTech companies dates back to the international financial crisis that began in September 2008 but lasted more than expected; it started with a low growth stage and a deficient generation of employment and credit restriction for all economic levels and mostly affected the entrepreneurial activity (Arner et al. 2016). Schueffel (2016) defined the concept of FinTech as a new industry that uses technology to improve financial activities.

The emergence of Fintech companies is based not only on the advance of technology but also on the development of digital ecosystems, which has been decisively influenced by the new context in which the traditional financial system and the international economy increased the use of organizational systems in the framework of the so-called sharing economy (Hamari et al., 2016; Schor, 2016).

The beginning and development of the FinTech was visible mostly in the US and the United Kingdom starting from 2010; with their stable economy it was not a surprise that these countries were the most advanced in the FinTech sector from the very beginning of this new area although we have to keep in mind that great changes bring about not only great opportunities but also responsibilities and risks.

This study aims to give a current overview of the FinTech sector in the entrepreneurial ecosystem in Mexico. This research firstly focuses on factors affecting the financial system linked to FinTech and draws a parallel with traditional banks; secondly, it presents empirical results in Mexico, which is one of the most developed countries in the FinTech sector in the Latin American Region. Additionally, it focuses on its services, trends, risks and the new FinTech law recently approved in Mexico.

FINANCIAL TECHNOLOGIES AND FINANCIAL SYSTEMS

Most of the countries aiming at becoming world leaders in FinTech need to build a solid financial system that allows a better distribution of their resources and the diversification of risks; this will consequently be reflected in a dynamic economic system (Fernández, 2010). According to Levine (2004) and Fernández (2010) these financial systems, specifically in developing countries, are

encouraged to implement more and better financial activities which share the following general features:

- The production of information for possible investments and placement of the capital.
- Monitoring investments and governments after the exercise of financing.
- Trade facilitation and risk management.
- Mobilization and promotion of common savings.
- Facilitation of the exchange of goods and services.

The access to financial services is now facilitated by the evolution of technology and innovations and their integration into financial activities.

The current scenario involves new suppliers, consumers, channels, production processes and products (IOSCO, 2017). This sudden unprecedented change needs a certain kind of regulatory system; the fundamental challenge for the policymakers is to come up with strategies that encourage the development of new businesses (startups) and at the same time to find solutions for the vulnerabilities and imperfections in the financial markets that could affect the financial stability. Stiglitz 2010: "They have to make sure that the financial sector fulfills its vital role in a dynamic contemporary economy." The regulatory systems should not only make market failures less possible but they also must be ready to remedy any issue that may arise.

FINTECH AND TRADITIONAL BANKS

There are different opinions about FinTech ranging from being a threat to traditional banks to offering opportunities for demands that important bank corporations cannot cover. FinTech companies have a lighter and more efficient structure and they are more connected with the new demands of the market in comparison to institutions with a long history and expertise in financial issues, which seem to be credible and less volatile.

But the truth is that FinTech offers a certain type of flexibility that traditional banks do not have; they are limited by their operative structure, the cost of their services and their dependence on an established infrastructure whereas FinTech companies have much more liberty to design and innovate customized services anywhere through the internet (Dapp and Slomka, 2015). This variety of services requires the incorporation of digitization, innovation, regulations for consumer protection and transparency in financial processes (Guerrero et al. 2012). The recent trends that support these regulations are RegTech (Regulatory Technology), SupTech (supervisory technology) and the Regulatory Sandbox, concepts that will be explained in Table 1.

FINTECH SERVICES AND TRENDS IN LATIN AMERICA (LATAM)

During the last two years, the FinTech sector has experienced a significant growth in the Latin American entrepreneurial ecosystem, especially in the FinTech startups; these companies have increased their investment and financial activities and have a relevant influence on the traditional financial sector through its alliances and important diffusion of innovation and new technologies (Finnovista, 2017).

A recent study made by Finnovista in collaboration with the InterAmerican Development Bank (IDB) in 2017 identified 703 young technology companies in the LATAM region; Brazil contributes with the largest number of startups: 230 - 32.7%. Mexico comes second with 180 startups (25.6%). Thus, these two countries concentrate 58.3% of the FinTech companies in Latin America.

Analyzing Figure 1, it is visible that 90% of the FinTech startups are concentrated in five countries such as: Brazil 230 startups, Mexico 180, Colombia 84, Argentina 72 and Chile 65.

The research data related to the FinTech activity has specifically focused on LATAM (Latin America) and it is expected that the number of FinTech startups will continue to increase in the entrepreneurial ecosystem as the financial regulations are developed and adapted to the needs of each country.

It is important to highlight the "Latinization" of certain business models; Finnovista Report (2017) noticed a trend in the region where local entrepreneurs adopted successful FinTech models in United States or Europe by adjusting them to their markets.

FINTECH RISKS

Financial risks in Banking and FinTech entities should not be dealt with in the same way although they offer similar or almost identical services. Härle et al. (2016) mentioned that in banking entities, the risk management mainly focuses on credit, market, liquidity, etc. while FinTech risks deal with other types of threats such as cyber risk, model risk and reputational risk.

According to Finnovista Report (2017) the risks which were most frequently identified in the FinTech sector lie in the money laundering and fraud that accompany the non-regularized processes of this financial innovation; this happens because startups do not have the necessary experience in risk management. Although they have expertise in technology, they are not experts in the correct application of policies and procedures which would allow them to perform a deep analysis of the clients that require the services of a FinTech.

A good example of the essential risks in FinTech processes is the case of crowdfunding (Fenwick and Vermeulen, 2017) which are collective financing mechanisms established for a given project in exchange for a return. If the management team does not have strict measures for risk control and due diligence, the startup faces the uncertainty of not knowing how and from where the resources come from or who the mediators and the final beneficiaries are. This uncertainty allows that on the one hand the public funders that invest their money or donate it are victims of fraud and, on the other hand, that through crowdfunding the money launderers integrate dirty money into the legal financial system. Therefore, the use of technology in risk control and of the software for management and filtering of large volumes of data are fundamental. For example, the big data analytics is focused on solving issues related to the complexity of information as well as the volume, veracity and challenges of processing (Gil and Song, 2016). It is possible to perform complex analyses of customer behavior or identification of clients.

Thus, the benefits of technological innovation are numerous in terms of safety and risk prevention; FinTech startups also require appropriate regulations that ensure their optimal functioning and excellent services to consumers.

MEXICO ENTREPRENEURIAL ECOSYSTEM PANORAMA

Nowadays Mexico is considered the largest Spanish-speaking market in Latin America with a population of more than 127 million inhabitants (World Bank, 2017). The country has 4 million micro and small enterprises (INEGI, 2016); according to statistics on the financial inclusion in Mexico issued by the Mexican Ministry of Economy, 30% of these enterprises use Information and Communication Technologies (ICTs) such as computers and the internet. Demirguc-Kunt et al. (2015) state that only 39% of Mexicans have access to formal financial services. FinTech startups may find Mexico as a suitable country to start and establish businesses although 61% of Mexican adults do not have a bank account and there are only 14 bank branches per 100,000 inhabitants, which is 7,142 people per branch (Forbes, 2018). This gives an idea of the opportunities that Mexico offer to FinTech startups. The development of the FinTech companies have been consolidated in Mexico for the last years thanks to the enhancement of the entrepreneurial ecosystem which has stimulated and supported their efforts in the technological field.

In the last two years, the Mexican FinTech ecosystem has benefited from a series of events that support it and make it possible, some of them are shown in Figure 2.

MEXICAN FINTECH LAW

The FinTech Law was published on March 9, 2018 and accepted by the Mexico's National Banking and Securities Commission, (CNBV report). Its purpose is to regulate the financial services that are provided, their organization and operation. It is based on the principles of inclusion and financial innovation, promotion of competition, consumer protection, preservation of financial stability, prevention of illicit operations and technological neutrality (Maxwell, 2014).

Taking into account the clients, investors, applicants of resources or services of a FinTech, this law defines three types of companies and their services:

Collective financing which allows to request/invest in: a) Loans, credits or any other financing to applicants; b) Buying or acquiring securities representing the capital stock of applicant companies; c) Entering agreements to acquire a proportional part or participation in a present or future good or in the income, profits, royalties or losses of projects. (Cámara De Diputados Del H. Congreso De La Unión, 2018)

Electronic payment funds, which allow access to services related to the administration, redemption and transmission of electronic payment funds, referred to an equivalent monetary value in national or foreign currency, or to a determined number of units of a virtual asset (currency whose transfer can only be carried out through electronic means, such as bitcoin currency). (Cámara De Diputados Del H. Congreso De La Unión, 2018)

Virtual Assets: considered as electronically registered assets and used by the public as a way of payment for all types of acts and whose transfer can only be carried out through electronic methods. The currency of the legal fund in the country will be understood as a virtual asset in neither of these cases, currencies or any other asset denominated in legal tender or currency. All the FinTech startups should have the prior authorization of the Bank of Mexico for the determination of virtual assets; the way the customers use these assets, the unit of the account, the treatment that other jurisdictions give these units will be taken into consideration. (Cámara De Diputados Del H. Congreso De La Unión, 2018).

The FinTech Law opens the door to competition for new players and provides equal opportunities in terms of financial services for both banks and new companies. With this new regulation, everyone, as financial customers, will benefit from more and better financial services in less time and at lower prices (Crosman, 2016).

One might think that this regulation puts the sector at risk, but rather than having a negative impact, it opens the opportunity to cooperate and create strategic alliances, which has not been possible

before. The FinTech Law also encourages investments that flow through private equity funds to participate in this new sector.

DATA AND METHODOLOGY

The study also used secondary data sources; this research is based on the exploratory method and the data was collected from annual reports (Finnovista, 2017 and Inter-American Development Bank, 2017) and published information by different public and private entities through their official websites. This analysis of the data in the current study used the programme Excel Microsoft Office for the graphs, and Word Microsoft Office for the text, tables, and figures.

DISCUSSION AND CONCLUSIONS

The transformation of the financial sector is part of a global phenomenon that has led to the emergence of FinTech startups; they have penetrated the financial system by modifying the way in which companies and consumers make payments, transfer money, receive loans, negotiate assets and administer their resources. In addition, these young companies are better adapted to the current demographic changes and user behavior, while meeting expectations that traditional banks do no longer meet. The digitization of the financial sector opens the doors for ambitious entrepreneurs to accelerate innovation and change the way the population has interacted with its financial services so far. The specialization of the financial sector regarding technological startups and the higher participation of the traditional banks and insurance companies are two factors that foster better conditions for investment in FinTech of a country which is interested in enhancing the entrepreneurial ecosystem.

However, there are still some pending challenges, such as the elaboration of regulatory frameworks that promote innovation in the sector and the existence of many more successful cases with strategic outputs that generate returns for investors. For emerging economies, particularly for those in Latin America, this offers a unique opportunity to take an important jump to new and efficient digital financial services that the population demands.

The FinTech sector in Mexico is seeking for new spaces to develop and aims at elaborating regulations for upcoming changes in this sector; it also considers the future challenges of digitization, which not only generate expectations regarding the efficiency of improvements but also involve greater relevance of certain risks that should be considered by the policy makers.

Biographical sketch

Karen Miriam González Flores is a PhD student of the Institute of Business and Management in the University of Debrecen. As a PhD student, her research is focused on studying the Entrepreneurship Ecosystem and its factors; she is also interested in topics such as gender equality and regional growth, regional development through entrepreneurship or the financial technology world. kamiglez@econ.unideb.hu

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ANNEXES

Table No. 1
Table 1 Basic Concepts

FinTech	Schueffel (2016): "FinTech is a new financial industry that applies technology to improve financial activities." the term FinTech is also used to designate companies that offer products and services within this domain, commonly emerging technology companies known as Startup.
RegTech	"RegTech consists of a group of companies that use technology to help businesses comply with regulations efficiently and inexpensively". Investopedia (2018).
SupTech	The term defines activities based on information and communications technologies, which aim to support the usual tasks of monitoring and control carried out by financial supervisory bodies. In this area, the incorporation of innovations aims to generate improvements in efficiency, increases the capacity of information processing, and improves the timing of interventions by the supervisory authority. (Toronto Centre Report, 2017)
Regulatory Sandbox	A regulatory sandbox is a supervised space, open to both authorized and unauthorized firms, which provides a set of rules for innovators to test their products and services in a live environment without following some or all legal requirements subject to predefined restrictions. (Schueffel, 2017)

Source: Author's creation based in the literature (Investopedia, 2018; Schueffel, 2016; Schueffel, 2017; Toronto Centre Report, 2017)

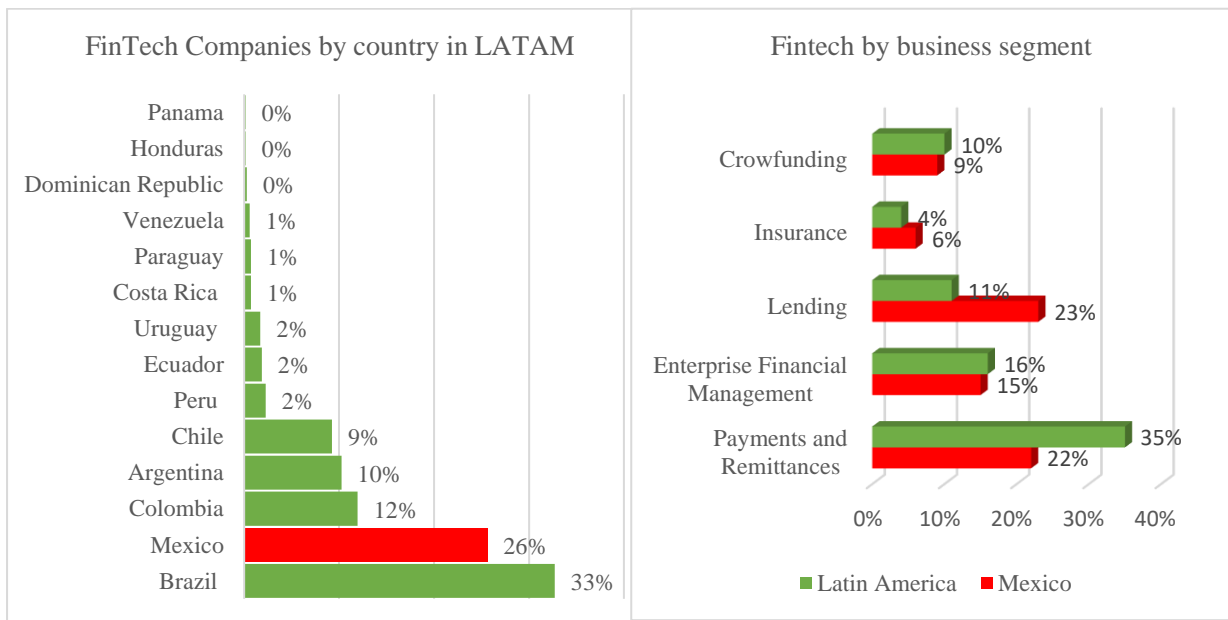


Figure No. 1 FinTech startups in Latin America by business segment and country of origin (Number of enterprises as a percentage of the total) Source: author own design.

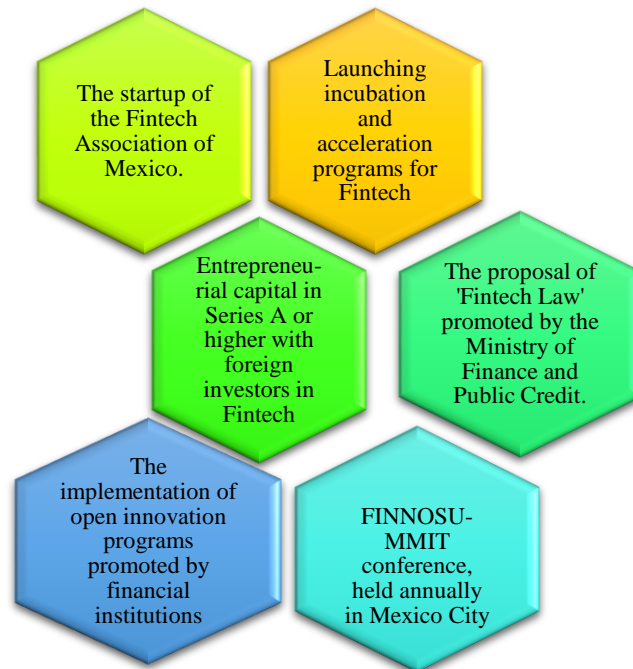


Figure No. 2 Actions that enhance the FinTech startups in the Mexican Entrepreneurial Ecosystem: Source: author's own design.