

Financial inclusion through point-of-sale terminals



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Abstract

Objectives

General Objective: Determine the level of Financial Inclusion through Point of Sale Terminals in Mexico 2019-2022.

Specific Objectives

- Determine the number of POS within the national territory during 2019-2020.
- Determine the coverage of POS in Mexico 2019-2020.
- Determine the coverage of POS by type of municipality in Mexico 2019-2020.
- Determine the access points to a POS in Mexico in the years 2019-2020.
- Make the forecast of the number of POS within the national territory at the end of the year 2021-2022.
- Make the forecast of the access points to a POS in Mexico, 2021-2022.
- Make the forecast of the coverage of the POS in Mexico 2021-2022.
- Make the forecast of the access points to a POS in Mexico in the years 2021-2022.

Methodology

Population: The population will be constituted by all the data of Financial Inclusion in Mexico.

Sampling and Sampling: The sample will be represented by the financial infrastructure data referring to POS in Mexico during 2019-2022.

Procedure:

- Determine the existing quantity, coverage and number of access points that the POS have within Mexico, 2019-2020.
- Make the forecast of the quantity, coverage and number of access points that the POS have in Mexico, 2021-2022 through the extrapolation method.

Contribution: The contribution of this project lies in the prevailing need for financial inclusion within the national territory in recent years, where the main objective of organizations such as the National Banking and Securities Commission is to bring the population closer to the financial system, as well as its services, for this reason the use of financial infrastructure such as the Point of Sale Terminals is described, with the aim of being able to measure the advances or setbacks of financial inclusion within Mexico during 2019-2022.

Introduction

The National Banking and Securities Commission (2018) defines financial inclusion as the access and use of formal financial services under appropriate regulation that guarantees consumer protection schemes and promotes Financial Education to improve the financial capabilities of all segments of the population.

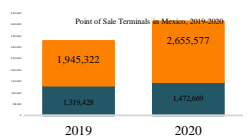
Financial inclusion is a key element to reduce poverty and boost prosperity because it allows people, as well as companies to have access to financial services and products in order to meet their needs, this project will focus on financial infrastructure as a form of financial inclusion especially in the use of Point of Sale Terminals as a form of payment or a method to make transactions facilitating in this way purchase and sale operations between different people. According to the author Lucia Gestión Lorente (2017), the Point of Sale Terminal or POS is defined as a device used in commercial establishments to carry out sales procedures, which allows credit or debit card collections, as well as printing tickets and controlling inventory.

Point of Sale Terminals play a very important role in financial inclusion, as the financial infrastructure is essential to bring the population closer to the financial system through the use of these, as these are a channel of access to these financial services, specifically the payment of a service, product or good. POS, according to this project, has taken an increasingly important role in the lives of users of the financial system derived from various factors such as: the increase in the use of credit cards, as well as debit cards, as well as social and health aspects such as the COVID-19 pandemic.

The use of Point of Sale Terminals is fundamental for the growth of financial inclusion, where the role of aggregators is of vital importance because they provide easy-to-understand and easily accessible technologies to the Mexican population, allowing access to financial infrastructure to the low-income population thus improving their way of life.

Materials and methods

The Point of Sale Terminals within the Mexican territory are divided into two: those belonging to the banks and Public Savings and Credit Entities (EACP) and those belonging to the aggregators. According to data obtained from the Annual Panorama of Financial Inclusion published by the National Banking and Securities Commission during 2019, a total of 3,264,750 Point of Sale Terminals were registered within the national territory, of which 1,319,428 belong to banking and EACP while 1,945,322 belong to aggregators. While in 2020, 4,128,246 were registered, being 1,472,669 from banks or Public Savings and Credit Entities and 2,655,577 POS belonging to aggregators, as shown in Figure 1. Point of Sale Terminals in Mexico, 2019-2020. Likewise, at the end of the second quarter of 2021, a total of 1,269,253 Point of Sale Terminals were registered within the national territory.



Graph 1
Source: Own Elaboration
Data obtained from: Comisión Nacional Bancaria y de Valores

During the year 2019, a total demographic coverage of 99.5% was reached, covering a total of 2,216 Municipalities, of which 1,819 were covered with banking POS or EACP, as well as with aggregators, while 355 only with Aggregator POS and 42 Municipalities with banking POS or EACP. While during 2020 a total of 2,315 municipalities were covered, of which only 66 were covered by banking POS or EACP and 251 by aggregators while 1,998 Municipalities were covered by both, thus reaching a demographic coverage of 99.8%. On the other hand, during the year 2019 a percentage of the population living less than 4 kilometers from a TPV of the banking or the EACP of 85% was reached, while in 2020 this was 90%. The coverage according to the type of municipality during 2019 was 33% in rural municipalities, 79% in transition, 96% in semi-urban, 100% in urban, semi-metropolis and metropolis. While in 2020 this coverage behaved as follows: rural (51%), in transition (91%), semi-urban (98%), urban (100%), semi-metropolis (100%) and metropolis (100%)

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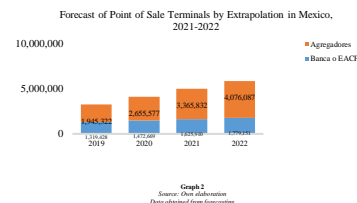
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Results

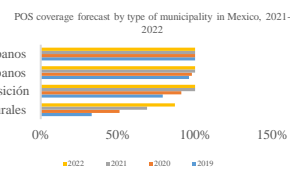
Based on the information presented above, a forecast was made using the extrapolation method to determine the number of Total Point of Sale Terminals during the years 2021 and 2022, as well as the coverage and the number of access points to a Point of Sale Terminal, thus obtaining a forecast of 4,991,742 Point of Sale Terminals of which 1,625,910 belong to the bank or EACP and 3,365,832 to aggregators, while in 2022 a total of 5,855,238 POS are forecast, most of which will be provided by aggregators with a total of 4,076,087 devices. As shown in Figure 2. Forecast of Point of Sale Terminals by Extrapolation in Mexico, 2021-2022. Forecasting a total demographic coverage for both years.

Year	POS	Banca o EACP	Agregadores
2019	3,264,750	1,319,428	1,945,322
2020	4,128,246	1,472,669	2,655,577
2021	4,991,742	1,625,910	3,365,832
2022	5,855,238	1,779,151	4,076,087

Table 1
Source: Own elaboration
Data obtained from forecasting



Counting by 2021 with a percentage of 95% of the population living less than 4 kilometers from a POS, while during the year 2022 100% of the population will be reached, that is, for this year 100% of the population within the national territory will live within a radius of 4 kilometers of a POS. Having a coverage according to the type of municipality for 2021 of 69% in rural municipalities and 100% in municipalities in transition, semi-urban and urban, while in 2022 a coverage of 87% is forecast in rural municipalities and 100% in transition, semi-urban and urban municipalities as shown in Figure 3. POS coverage forecast by type of municipality in Mexico, 2021-2022



Graph 5
Source: Own Elaboration
Data obtained from forecasting

Conclusions

It is inferred that the level of financial inclusion through Point-of-Sale Terminals during the year 2022 will have a great progress because according to the results the demographic coverage will reach 100% by the end of the year as well as the level of population living 4 kilometers from a POS, however, rural municipalities will continue to lag behind. If the growth in the use of POS terminals continues with this trend, this financial service will reach more and more people, increasing the number of individuals using the products and services offered by the financial system.

Future of research

The Point of Sale Terminals in the future will end up being accepted in their entirety thus causing the greater use of these, as well as the greater interaction between the population and the financial system, in the same way the continuous increase of these devices within the companies is foreseen being mostly SMEs as well as a greater number of Fintech willing to offer this service in a novel way. Leading to greater financial inclusion as a whole.

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