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The reality of financial inclusion indicators in the city of Setif - A survey-

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Abstract :

This research aims to study the reality of financial inclusion indicators in the city of Setif for a sample of 317 individuals over the age of twenty years. The results showed that the level of financial inclusion in the city of Setif is low. This was shown through indicators of savings, borrowing, payments and insurance, with the exception of the index of the bank accounts, which recorded a relatively acceptable level. Through the statistical testing of the hypotheses, a null hypothesis was adopted saying that: Financial inclusion indicators did not achieve significant levels, indicating a decreased levels of financial inclusion.

Key words*: financial inclusion, bank accounts, saving, payments, insurance.*

JEL classification codes: *G21, E21, G22*

ملخص :

يهدف هذا البحث إلى دراسة واقع مؤشرات الشمول المالي في ولاية سطيف، لعينة من 316 فردا أكثر من عشرين سنة. وقد تمّ التوصل إلى أن مستوى الشمول المالي في ولاية سطيف منخفض، حيث ظهر ذلك من خلال مؤشرات الادخار والاقتراض والمدفوعات والتأمين، عدا مؤشر الحسابات المصرفية الذي عرف معدلا مقبولا. ومن خلال اختبار الفرضيات إحصائيا، تمّ قبول الفرضية الصفرية التي تفترض أن مؤشرات الشمول المالي لم تحقق مستويات معتبرة، مما يدل على انخفاض مستوى الشمول المالي.

الكلمات المفتاح: *شمول مالي؛ حسابات مصرفية؛ ادخار؛ مدفوعات؛ تأمين*

تصنيف JEL*: G21, E21, G22*

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1. Introduction:

The issue of financial inclusion is concerned with the delivery of official financial services (payments, transfers, savings, credit, insurance…etc.) to the financially disadvantaged and marginalized groups such as low-income owners, small companies and the poor at reasonable prices and high quality, which leads to their financial integration;

The access of finance and financial services to various segments of society and business sectors leads to the eradication of many problems and the achievement of stability and comprehensive and sustainable economic growth. So the issue of financial inclusion has become the focus of attention of developing and developed countries and various international institutions, especially as indicators of financial inclusion for many countries of the world are still below the level, including Algeria, where the financial inclusion index experienced a decline in 2017 compared to 2014 in terms of ownership of bank accounts, the gender gap, the percentage of females who own bank accounts, the percentage of savers and the percentage of borrowers, according to a database ofthe World Bank;

In order to know the indicators and the reality of financial inclusion in terms of using bank accounts, savings, borrowing and payments, and obtaining insurance services for the inhabitants of Setif, being aged over twenty, the problematic of this research was formulated in the following main question:

What is the reality of the indicators of financial inclusion in the city of Setif?

The main question has the following sub-questions:

- What are the basics of financial inclusion? What are its indicators?
- To what extent do inhabitants of Setif use bank accounts?
- What is the level of culture and standing of savings and borrowing in the population of the city of Setif?
- What types of payment are used by the inhabitants of Setif?
- What is the insurance status of inhabitants of the city of Setif?

To answer the main question and sub-questions, the following two hypotheses have been adopted:

a- $\mathbf{H_0}$: Financial inclusion indicators did not achieve significant levels, indicating low levels of financial inclusion.

b- $\mathbf{H_1}$: Indicators of financial inclusion achieved significant levels, indicating the presence of significant financial inclusion;

- **Research Importance**: The research is extremely important, especially in light of the interest of most developing and developed countries and international institutions in the issue of financial inclusion. In an attempt to eradicate poverty and achieve sustainable development and socio-economic stability, as evidenced by the attempt of many countries to adopt policies and strategies to enhance financial inclusion by spreading cultural finance and educational programs, adopting the various financial and regulatory frameworks that guarantee this, and strengthening the structure of financial technology... etc.
- **Research Objectives**: This research paper aims to achieve the following points:
  - Identifying the basics of financial inclusion;
  - Knowing the extent of ownership and use of bank accounts by the inhabitants of the city of Setif;
  - Realizing the status of savings and borrowing in the city of Setif;
  - Understanding the payment patterns used by Setif inhabitants;
  - Realizing the status and culture of insurance for Setif inhabitants.
- **Research Methodology**: The descriptive analytical method was used to study this topic, as this method relies on collecting data to analyze and study it from all sides to reach results. In order to achieve this objective, many references that were closely related to the topic were adopted.

- **Previous Studies**: Among the previous studies we mention the following:

- Study of **Asli Demirgüç-Kunt and all** (2018): "*Measuring Financial Inclusion and the Fintech Revolution*", The Global Findex Database. It is a survey of more than 150.000 adults for more than 15 years in 140 countries. Certain indicators were used to know the possibility of obtaining and using formal and informal financial services, as well as data on financial technology, including the use of mobile phones and the internet to conduct financial transactions. It was concluded that there is an opportunity to expand access to financial services among those without accounts, in addition to encouraging greater use of digital financial services among those who have accounts. (Demirgüc-kunt, 2018)

- Study of **جلال الدين بن رجب** (2018): "*احتساب مؤشر مركب للشمول المالي وتقدير العلاقة بين الشمول المالي والناتج المحلي الإجمالي في الدول العربية* ": ArabMonetaryFund. This study aimed to calculate a composite index for financial inclusion in order to obtain a more integrated and comprehensive picture of the situation of financial inclusion in the arab countries by adopting advanced statistical methodologies. The relationship between financial inclusion and per capita gross domestic product was studied, in addition to identifying other determinants of financial inclusion as an indicator Banking concentration and ease of doing business index, with the aim of helping to develop appropriate strategies and business plans to achieve greater financial inclusion. The study found that borrowing from informal channels is an obstacle to financial inclusion, and per capita GDP is one of the most important determinants of financial inclusion. (2018 ،بن رجب)

- Study of **Naoyuki Yoshino and Peter Morgan** (2016): "*Overview of Financial Inclusion, Regulation and Education*": It is a survey of a group of countries (Germany, Britain, Bangladesh, India, Indonesia, the Philippines, Sri Lanka and Thailand) to assess factors affecting the ability of low-income families and small companies to access financial services, including financial literacy, financial education programs, and financial regulatory frameworks, And identify policies that can improve financial access while maintaining stability. It was concluded that there is a set of obstacles that prevent financial inclusion from both the supply and demand sides, and therefore financial inclusion in many Asian economies remains relatively low. A group of factors was proposed that help to expand financial inclusion from both the demand and supply sides, and it has been found that the levels of financial culture in Asia are low and must be raised.(Yoshino, 2016)

- Study of **Financial Inclusion Data Working Group** (2013): "*Measuring Financial Inclusion: Core Set of Financial Inclusion Indicators* ": It is a study that aimed to develop a set of indicators to establish a unified definition of financial inclusion that is internationally acceptable, as these indicators must have a set of characteristics (Usefulness and relevance, Pragmatism, Consistency, Flexibility, Balance and Aspiration). The aim of this study is to assist policymakers in developing appropriate policies for financial inclusion and monitoring progress in this area, with comparability between countries. (Group, March 2013)

- Study of **Mandira Sarma and Jesim Pais** (2008): "*Financial Inclusion and Development: A Cross Country Analysis*". It is a study that used the financial inclusion index for **Sarma** year 2008, where a set of variables were used, such as socio-economic factors (such as income, financial culture, inequality, urbanization...etc.), infrastructure-related factors (such as the road network, telephone, and the use of the Internet) and factors related to the banking sector, in addition to the human development index. It has been recommended that there is a positive correlation between human development and financial inclusion, and socio-economic factors are important factors for the interpretation of financial inclusion, and infrastructure plays a role in promoting financial inclusion, while the relationship of banking sector variables to financial inclusion has varied from one variable to another. (Sarma, 2008)

- Our study differs from previous studies in the following points:

- The difference in the size of the study sample (365 individuals), the place of the study (Setif city), and the date of the study (year 2020);

- Different method of analysis.

- **The research plan**: This research consists of three main axes:

The first axis: is devoted to studying the basics of financial inclusion;

The second axis: is devoted to reviewing the study methodology;

The third axis: deals with the presentation and analysis of the results of the form.

2. Financial Inclusion: Theoretical Background

2.1. Definition of financial inclusion.

The definitions of financial inclusion are numerous, and among the various definitions, the following are addressed:

- **Akhil Damodaran** defined financial inclusion as: "The essence of financial inclusion is to ensure that a range of appropriate financial services is available to every individual and enable them to understand and access those services. Apart from the regular form of financial intermediation, it may include a basic no frills banking account for making and receiving payments, a savings product suited to the pattern of cash flows of a poor household, money transfer facilities, small loans and overdrafts for productive, personal and other purposes, insurance (life and non-life)…etc." (Damodaran, 2013, p 54)
- "Financial inclusion does not mean merely opening of saving bank account but signifies creation of awareness about the financial products, education and advice on money management and offering debt counselling etc. by banks." (Damodaran, 2013, p. 55)
- **The World Bank** defined financial inclusion as: "The proportion of individuals and firms that use financial services." (World Bank, 2014)
- **The CGAP and Arab Monetary Fund** defined financial inclusion as: "Financial inclusion refers to a state where individuals, including low-income people, and companies, including the smallest ones, have access to and make use of a 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." (CGAP, 2017)

Financial inclusion can also be defined by defining the anti-term, which is Financial Exclusion, where:

Thrift & Leyshon define financial exclusion as referring to "those processes that serve to prevent certain social groups and individuals from gaining access to the formal financial system."(Sarma, 2008, p 4)

Proceeding from that, financial inclusion can be defined as: **The total procedures that would lead to the delivery of official financial services, including bank accounts, payment, transfer, borrowing, lending, insurance services and other financial services to all members of society, especially the marginalized, at reasonable cost and with affordable procedures**.

2.2. The importance of financial inclusion:

The importance of financial inclusion is represented in the following points: (Ozili, 2018)

- It provides low-income individuals with the possibility to save for the future which fosters stability in personal finance, and a high level of use of bank deposits which contributes to securing a more stable deposit base for banks distressed times;
- It provide poor households with opportunities to build savings, make investments and access credit;
- Financial inclusion also enables them to handle income shocks over unforeseen emergencies such as illness or loss of employment;
- financial inclusion has positive effects for financial stability by reducing procyclicality risk; a substantial increase in the number of small savers via greater financial inclusion would increase both the size and stability of the deposit base of banks which would reduce banks' dependence on "non-core" financing, which tend to be more volatile during a crisis, thus improving banking system stability;
- low-income groups are relatively immune to fluctuation in economic cycles and including them in the financial sector will improve the stability of the deposit and loan bases in the financial system;

- Hannig and Jansenshow that financial institutions catering to the lower end individuals tend to survive through macro crises well and help sustain local economic activity. Additionally, Prasad also observes that the lack of adequate access to credit for small and medium-size enterprises and small-scale entrepreneurs has adverse effects on overall employment growth since these enterprises tend to be much more labour intensive in their operations;
- Greater levels of financial inclusion can facilitate increased participation by different sectors of the economy in the formal financial system.

Financial inclusion also leads to: (IBEF, no date)

- Financial inclusion leads to economic growth buy mobilizing greater savings into productive investments;
- It help in enhancing financial literacy of the vulnerable and weaker section of society through financial advice and decreases dependence on unreliable and expensive finance;
- Financial inclusion promotes innovation for cost-effective delivery of financial products through the use of technology;
- Financial inclusion promotes competition and helps provide market-based incentives delivery of sustainable financial access.

2.3. Financial inclusion indicators:

The World Bank has identified a set of determinants upon which to build indicators of financial inclusion, mainly: (Demirguc-Kunt & Klappen, no date, p. 2-3)

a- usefulness and relevance: This is done through selecting indicators that help in setting appropriate policies to achieve financial inclusion;

b- consistency: Ensure consistency of measurement and comparability across time and countries.

c- Flexibility: Financial inclusion is linked to the economic, geographical, social, and cultural context of a country, and hence defining an index of financial inclusion enables countries to have sufficient flexibility in choosing tariffs and / or using alternative.

The World Bank has identified a set of indicators (main indicators and partial indicators) on the basis of which the level of financial inclusion in a country is measured. These indicators can be shown as follows: (Demirguc-Kunt & Klappen, no date, p. 3)

a- Use of bank accounts: This axis includes the following indicators:

- **Main Indicator**: Percentage of adults with an accountat a formal financial institution.
- **Sub-indicator**: - Purpose of accounts (personal or business);
  -Frequency of transactions (deposits and withdrawals);
  -Mode of access (such as ATM, bank branch, retail store or bank agent).

b- Savings: This axis includes the following indicators:

- **Main Indicator:** Percentage of adults who savedwithin the past 12 months using a formal financial institution**.**
- **Sub-indicator**: Percentage of adults who saved within the past 12 months using an informal savings club or a person outside the family;
  -Percentage of adults who otherwise saved (e.g. in their home) within the past 12 months**.**

c- Borrowing: It includes:

- **Main Indicator**: Percentage of adults who borrowedwithin the past 12 months from a formal financial institution**;**
  - Percentage of adults with an outstanding loan to purchase a home or an apartment**.**
- **Sub-indicator**: Percentage of adults who borrowed within the past 12 months from informal sources (including family and friends)

d- Payments: This axis includes the following indicators:

- **Main Indicator**: Percentage of adults who used aformal account to receive wages or government payments within the past 12 months;
  -Percentage of adults who used aformal account to receive or send money to family members living elsewhere within the past 12 months.

- **Sub-indicator**: Percentage of adults who used a mobile phone to pay bills or send or receive money within the past 12 months.

e- Insurance: It includes the following indicators:

- **Main Indicator**: Percentage of adults who personally purchased private health insurance;

- Percentage of adults who work in farming, forestry or fishing and personally paid for crop, rainfall or livestock insurance.

3. Methods and Materials:

3.1. Determining the study population and the sample size:

This research was conducted on the population of the city of Setif who are over 20 years old, using the sample (n) that was calculated as follows: (بن فرحات، 2007)

$$n = \frac{t_\alpha^2}{4d_0^2}$$

Where: **α**: risk score, $\mathbf{d_0}$: preview error.

The risk score α was determined by 5%, to be the required accuracy degree of 95%, and $t_\alpha = t_{0.05}$. Referring to the normal table, we find that this value is equal to 1.96, and the amount of sampling error d0 is set at ± 5,5%, and from this point of view the sample size is calculated as follows:

$$n = \frac{(1.96)^2}{4(0.055)^2} = 317.48 \approx 317$$

3.2. Building the formular:

This study relied on the questionnaire method, so the latter was divided into five main axes, in addition to the ones related to gender, age and educational level, where:

a-The first part: Addressing the banking acounts of 09 questions,

b-The second part: in which the saving was addressed, included 09 questions;

c-The third part: was devoted to the borrowing, where 06 questions were included.

d-The fourth part: was devoted to the payment, where 04 questions were included.

e-The fifth part: was devoted to the insurance, where 07 questions were included.

The Triple Likert scale was adopted, which includes the answers: agree, disagree, do not know, and weights of the Likert triple scale were determined in the table (01).

To determine the value of the weighted mean and the degree of approval, the range was calculated for the scale values estimated by: 3-1 = 2. By dividing the range by the number of cells of the scale: 2/3 = 0.66 we get the actual length of each answer field. From this we get the following categories in the table (01).

Table 1. Triple Likert Scale Weights

Weight	**1**	**2**	**3**
The opinion	Agree	Does not agree	I do not know
Weighted average	From 1 to 1.65	From 1.66 to 2.31	From 2.32 to 3

Source: prepared by the two researchers**.**

3.3. Validity and reliability of the questionnaire:

Cronbach's alpha coefficient was calculated using the SPSS program in order to find the internal consistency of the questions, with a value of 67.3%, which is greater than 60%, which is adopted in the social sciences, which indicates the reliability and reliability of the study. Table (02) illustrates this.

Table 2. The validity and reliability factor of the formular

The axes	Number of items	Stability coefficient (Alpha Kronbach)	Coefficient of honesty
Total	35	0.673	0.798

Source: prepared by the researchers based on the results of the SPSS program.

3.4. The statistical tools used:

In order to analyze the data and reach results, the tools of descriptive statistics and inferential statistics were relied on, as follows:

a- Descriptive statistics methods as: Percentages; absolute frequencies; arithmetic mean and standard deviation;

b- Inferential statistics methods: All hypotheses were tested at the level of significance 05%, where one sample T-test was used to compare the general average of answers with the hypothetical mean. The hypothesis is accepted if the calculated value of (T) is greater than the tabular value (T), and its level of statistical significance is less than 05%.

4. Results and discussion:

The data obtained can be analyzed as follows

4.1. General information: Through this part, primary data related to gender, age and educational level are analyzed:

a- Gender: Based on the sample size of 317 individuals, it was distributed according to gender as follows: males represent 46.1%, while females represent 53.9%, as it is noted that the percentage of females represents a greater percentage compared to men in the study sample. Table (03) illustrates this.

Table 3. Distribution of sample individuals according to the gender

Gender	Male	Female	Total
Absolute frequency	146	171	317
Relative frequency	46.1	53.9	100

Source: prepared by the researchers based on the results of the SPSS program

b- **Age**: Based on the distribution of the sample according to different ages, it turns out that 72.8% of the sample members are between 20 and 40 years old, while other age groups varied, with the lowest percentage reaching 2.8% for the group over 50 years old. Table 4 illustrates this.

Table 4. Distribution of sample individuals according to the age

Age	20 to 30 years old	31 to 40 years old	41 to 50 years old	More than 50 years old	Total
Absolute frequency	107	124	77	9	317
Relative frequency	33.7	39.1	24.2	2.8	100

Source: prepared by the researchers based on the results of the SPSS program

c- **Educational level**: The results of the statistical analysis through the SPSS program showed that most of the sample members have university degrees at a rate of 89.6%, while the secondary education level scored 8.2%, and the primary education scored 0.3%, while without a level it represented only 06%. It indicates that most of the respondents of the study sample are literate. Table (05) illustrates this**.**

Table 5. Distribution of sample individuals according to the educational level

Educational level	Without a level	Primary	Intermed-iate	High school	University	Total
Absolute frequency	2	1	4	26	284	317
Relative frequency	0.6	0.3	1.3	8.2	89.6	100

Source: prepared by the researchers based on the results of the SPSS program.

4.2. Bank Accounts indicators: Table (06) shows the opinions of the surveyed on the axis of bank accounts, as it is clear that:

Table 6. Statistics of bank accounts indicators

Items	Mean	Standard deviation
1- You have a bank account.	1.73	0.444
2- You have a CCP account.	1.47	0.500
3- The purpose of opening a bank account is personal.	1.45	0.498
4- The purpose of opening a bank account is to do business.	1.93	0.260
5- The account is characterized by the intensity of deposit transactions.	1.93	0.255
6- The account is characterized by the intensity of withdrawal transactions.	1.81	0.395
7- A member of your family has a bank account.	1.31	0.464
8- When making the withdrawal and depositing process, you use the ATM	1.65	0.478
9- When you do the withdrawal and deposit process, you go to the bank branch	1.42	0.494
Mean and standard deviation (general)	**1.63**	**0.212**

Source: prepared by the researchers based on the results of the SPSS program.

- Through the arithmetic mean of most of the items of the questionnaire, it is found that the respondents' opinions tend towards approval. The general arithmetic mean was equal to 1.63 and it falls within the approval range of the Likert scale;
- Most of the sample members have a postal account to use for personal purposes such as receiving wages, and at least one of the family members has a bank account;
- Most members of the sample use the ATM when carrying out withdrawals and deposits, and they go to bank agencies for that, although most bank accounts do not have the intensity of withdrawals and deposits.

4.3. Saving indicators: Table (07) shows the responses of individuals regarding the savings terms, as the following has been reached:

Table 7. Statistics of savings indicators

Items	Mean	Standard deviation
1- Save in banks	1.86	0.350
2- Save in the post	1.73	0.445
3- Not having savings in previous institutions is due to insufficient income.	1.31	0.464
4- Not having savings in previous institutions because you don't trust them.	1.78	0.418
5- Not having savings in previous institutions because interest is prohibited.	1.19	0.395
6- Your lack of savings in previous institutions is due to the distance from them.	1.94	0.244
7- Not having savings in previous institutions is due to the lack of necessary documents necessary for that.	1.87	0.336
8- Not having savings in previous institutions because you do not need the financial services provided by them.	1.72	0.450
9- You have savings but do not save them in previous financial institutions and put them at home.	1.46	0.499
Mean and standard deviation (general)	**1.66**	**0.160**

Source: prepared by the researchers based on the results of the SPSS program.

- Through the statistical treatment of the savings axis evidence, it was found that the arithmetic mean (1.66) was within the disapproval area of Likert's table [1.66-2.31], which indicates that the sample members do not agree with the savings axis, as:

- Most of the residents of the city of Setif in the studied sample do not have savings in financial institutions because:
- Insufficient income, where the arithmetic mean of this phrase was 1.31;
- The population's unwillingness to deal with interest rates that are prohibited by shariah, and the arithmetic mean of the answers of the sample members was 1.19;
- Setif city populations hoard their money at home, with an average arithmetic rate of 1.46;
- Trust, distance, documentation issue, and the lack of need for financial institution services are not important elements for the sample members to make savings, as they do not care about these elements.

4.4. Borrowing indicators: Table (08) data indicates that it is clear that most of the answers of the sample members were within the scope of disapproval of the borrowing axis phrases. The general arithmetic mean was 1.91, which belongs to the area of disapproval within the Likert table [1.66-2.31].

Table 8. Statistics of borrowing indicators

Items	Mean	Standard deviation
1-You borrowed from banks in the last year	1.99	0.079
2- You borrowed from a family member or a friend	1.64	0.482
3- You do not borrow for high interest rates	1.99	0.097
4- Not borrowed for the many documents required	2.00	0.000
5- Not borrowed due to the distance from the lending institutions	1.99	0.112
6- You don't borrow because you don't want to	1.87	0.333
Mean and standard deviation (general)	**1.91**	**0.085**

Source: prepared by the researchers based on the results of the SPSS program.

These results indicate a decrease in the borrowing index, where:
- Most inhabitants in Setif do not borrow from the banks;
- According to the arithmetic mean (1.64), if the inhabitants of Setif need borrowing, they turn to a family member or a friend;
- The interest rates, the large number of documents and procedures, the distance, and the unwillingness to borrow do not represent specific saving factors for the inhabitants of the city of Setif, as the arithmetic mean of these factors is 1.96 and it is within the field of disapproval[1.66-2.31].

4.5. Payments indicators: The following table shows the responses of respondents about the items of the payments axis.

Table 9. Statistics of payments indicators

Items	Mean	Standard deviation
1- Use your bank account to receive wages.	1.16	0.371
2- Use your bank account to receive payments.	1.77	0.424
3- Use your account to send money to your family members who live elsewhere.	1.97	0.166
4- The mobile phone is used to pay and receive money or pay bills.	1.96	0.191
Mean and standard deviation (general)	**1.71**	**0.163**

Source: prepared by the researchers based on the results of the SPSS program

From Table (09), it is noted that the average responses of the respondents about the axis of payments data fall within the answer fields with different degrees of disagreement and the different standard deviations, as it is noticed that all of them fall in the areas of disagreement [1.66- 2.31], Except with regard to the use of bank accounts to receive wages, which indicates that the payments index has not developed in the state of Setif.

4.6. Insurance indicators: It appears from table (10) that the arithmetic mean of most of the terms of the insurance axis was within the area of disapproval of the Likert table, with the exception of the car insurance indicator as it is a compulsory insurance that everyone who owns a car, or an indicator that a family member owns insurance**.**

Table 10. Statistics of insurance indicators

Items	Mean	Standard deviation
1- Do the insurance	1.73	0.445
2- You insure the car	1.73	0.445
3- You insure the life	2.00	0.000
4- You insure agricultural crops	2.00	0.000
5- You insure the car because it is obligatory	1.62	0.485
6-You undertake the insurance process because of the benefits of this process	2.00	0.000
7- A member of your family takes out insurance.	1.24	0.428
Mean and standard deviation (general)	**1.76**	**0.191**

Source: prepared by the researchers based on the results of the SPSS program.

The insurance index has registered a clear decrease. Most of the residents of Setif do not insure life or agricultural crops, and they only insure cars not because of the importance of the process but because they are obligatory.

4.7.Hypotheses test: The main hypothesis H1 states that "Indicators of financial inclusion achieved significant levels, indicating the presence of significant financial inclusion. To test this hypothesis, we compare the overall mean of the answers of the sample members with the hypothetical mean at the significance level of 05%. The hypothesis is accepted if:

- the calculated value of (T) is greater than the tabular value (T);
- The level of statistical significance is less than 05%;
- The tabular value (T) is extracted from the Student table with 95% probability and 316 degrees of freedom, and was estimated at 1.645. Table (11) shows the obtained results.

Table 11. One-sample T test to compare average answers with hypothetical mean

Hypothetical mean = 2							
The axis	Calculated T value	The value of the tabular T	Degrees of freedom	Significance level	The difference between the two means is the confidence level	The level of confidence	
						Minimum value	maximum value
1	-30.813	1.645	316	0.00	-0.36698	-0.3904	-0.3435
2	-38.826	1.645	316	0.00	-0.34946	-0.3672	-0.3317
3	-17.843	1.645	316	0.00	-0.08570	-0.0951	-0.0762
4	-30.916	1.645	316	0.00	-0.28391	-0.3020	-0.2658
5	-22.264	1.645	316	0.00	-0.23975	-0.2609	-0.2186
All	-63.306	1.645	316	0.00	-0.26316	-0.2734	-0.2569

Where: 1: bank accounts indicators **; 2:** savings indicators ; **3**: borrowing indicators; **4**: payments indicators ; **5**: insurance indicator**.**

Source: prepared by the researchers based on the results of the SPSS program.

- **The results' analysis:**

From Table 11, the following can be observed:

-The calculated value T in all the study's axes (bank accounts axis, savings axis, borrowing axis, payments axis, insurance axis) is a negative value, which is less than the tabular value of T (T = 1.645), as:

- The calculated T value is calculated basing on the SPSS program output;
- Tabular T value, an extracted value from Student's table at a degree of freedom (n-1), i.e. 317 - 1 = 316

To test the level of the studied phenomenon (the level of financial inclusion indicators), it is also necessary to know the level of statistical significance α, which was equal to zero (0.00) in all axes and this value is less than 0.05.

Based on that, the outputs of the table 11 can be analyzed as follows:

-**The axis of bank accounts (1)**: From the table 11, it is noticeable that the calculated value of t is equal to -30.813, which is less than the tabular t value of 1.645 (-30.813 <1.645), and that the level of statistical significanceα is equal to zero, which is less than 0.05. This indicates the decline in bank account indicators, whether in the area of owning accounts or the method and intensity of their use;

- **The saving axis (2)**: the calculated value of t recorded a negative value less than the tabular value of t (-38.826 <1.645), and α equal to zero, which indicates the low level of savings among of Setif individuals in banks for many reasons as previously mentioned in Table 7 (decrease Income level, religious aspect, household hoarding);

- **The borrowing axis (3)**: The savings axis also recorded a low level, as the calculated t (t = -17.843) was less than the tabular t, and the level of statistical significanceα was equal to zero. Most of Setif residents refuse to borrow from banks and prefer borrowing from family and friends;

- **Payments axis (4):** The payments axis also scored through the statistical treatment of the data at a low level, as the calculated t equals -17.843, which is less than the tabular t (t = 1.645) and the level of statistical significanceα equals zero. Most of Setif residents use bank accounts only to receive wages and do not use them to receive and send other payments, and they do not use mobile phone technology to send or pay bills;

- Insurance axis (5): The statistical outputs also expressed a decrease in the insurance financial inclusion index, where the computed t recorded a negative value (-22.264) less than the tabular t, and α equal to zero. Most of Setif residents do not take out insurance, except for compulsory car insurance;

- **Total financial inclusion index**: Based on the previous partial indicators (bank accounts, savings, borrowing, payments, and insurance), which all recorded low levels. The total financial inclusion index is also at a low level, as:

- The calculated T is - 63.306, which is a negative value less than the tabular t value of 1.645;

- The level of statistical significanceα is equal to zero, which is a value less than 0.05.

Based on the statistical analysis, through which:

- Either accepting the null hypothesis H0 in the event that the computed t value is less than the tabular t and α is less than 0.05 and rejecting the alternative hypothesis H1;
- Either rejecting the null hypothesis H0 and accept the alternative hypothesis H1 a case that the previous equation was not achieved.

✓ The calculated T = -63.306

- ✓ Tabular T = 1.645
- ✓ The calculated T is less than the tabular T (-63.306 <1.645)
- ✓ α is less than 0.05 and belongs to the [0-2] range

For this the null hypothesis H0 is accepted and the alternative hypothesis H1 is rejected, which means that "the indicators of financial inclusion did not achieve significant levels, indicating low levels of financial inclusion".

5. Conclusion:

Financial inclusion provides the delivery of formal financial services to all members of society, especially the financially marginalized. To measure the level of financial inclusion in the city of Setif, the authors surveyed a sample of 317 people from the city over the age of 20 years. It was found that most indicators of financial inclusion are low except for the bank accounts index, where:

-The general index of bank accounts scored an acceptable rate, as most inhabitants of Setif have postal accounts for use for personal purposes, as they use ATM and go to bank branches when carrying out their banking transactions, although most of the accounts are not characterized by the intensity of withdrawals and deposits;

- The financial inclusion index for savings scored a low rate, as most inhabitants of Setif do not have savings in financial institutions, due to weak income and the issue of interest rates, while the distance, the large number of documents, the procedures and the trust in institutions do not affect the decision of saving, because most people do savings at home;

- The financial inclusion index for borrowing also recorded a low rate. Most residents of Setif did not borrow during the last year from banks, but borrowed from a family member or a friend. Interest rates, the large number of documents, distance, and the unwillingness to borrow from banks are not essential determinants of borrowing in the city of Setif;

- The payments index has also known a decrease, as most residents of Setif do not use accounts to receive payments -except for wages-, or send money to family members in other regions, nor do they use the mobile phone to receive and pay bills;

- As for the insurance index, there is a clear decrease. Most residents of Setif do not carry out the insurance process, except compulsory insurance (car insurance).

To improve the reality of financial inclusion in the city of Setif, the following steps are needed:

- Increasing the spread of various banking branches in various regions, especially rural ones;

- Adopting financial and digital technology that helps to easily deliver financial services and products to all individuals and in all regions;

- Spreading financial literacy among the Algerian public;

- Speeding up the launch of Islamic financial products to suit the religious belief of the Algerian Muslim individual.

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