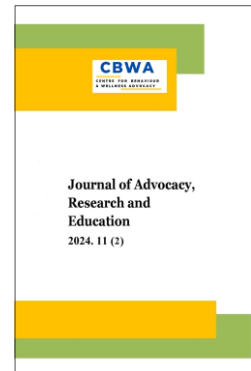




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Exploring the Link Between Financial Inclusion and Saving Behaviors Among Private Security Employees in Mexico: An Empirical Study

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Abstract

Savings related to sociodemographic variables and financial inclusion can be studied from various perspectives. Motivation, without a doubt, is a determinant that triggers certain decisions, such as saving. Individuals create a motivation to save that includes trends in their daily life in order to be able to save something for a future that could be uncertain at the time of making their decision. The purpose of this study was to determine the relationship between workers' savings motives and sociodemographic variables and financial inclusion. The study adopted a non-experimental, descriptive, correlational, and cross-sectional design. The scale designed by Contreras-Rodríguez et al. (2017) was used to collect data from 355 workers. The main findings showed that saving is related to income; thus, the higher, the better. Also, participants who were actively employed, as a determining variable, improved their likelihood of saving for emergencies. Likewise, it was found that men were more likely to save up to invest compared to women. For men, saving up to invest was more important than saving for personal reasons. Our study has implications for practice, policy, research, and education on financial inclusion, credit products, and human development in Mexico.

Keywords: Financial Inclusion, Multinomial Logit Model, Savings, Savings Motive, Sociodemographic Variables.

1. Introduction

Financial education in Mexico is deficient; this is reflected in the use of financial services. Ignorance leads individuals to lack financial planning, which necessarily has an impact on their financial decisions. García et al. (2015) report that financial institutions have not reached their levels of competitiveness in the country. Financial Education in Mexico has been omitted for years, compared to other countries where it has been integrated into educational programs, according to the report of the Comisión Nacional para la Defensa de los Usuarios de Servicios Financieros [by its acronym in English National Commission for the Defense of Users of Financial Services (CONDUSEF, 2010)].

The low level of Financial Education is reflected in the limited use of financial products and services, as well as in bad habits when acquiring them - if they do so - and in addition to this, in the lack of knowledge of individual rights and obligations. This, in turn, impacts well-being and quality

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of life. Furthermore, financial institutions do not achieve their levels of competitiveness precisely due to the low level of knowledge of their population, which generates stagnation of economic development in the country (García et al., 2015).

The study carried out by the Institute of Financial Studies (IEF, 2020) presents some interesting data, which is discussed below. They point out some of the characteristics of the financial behavior of the Mexican population, among which a trend in the abuse of credit is observed, an over-indebtedness that exceeds credit capacity, which brings with it a delinquency rate. Additionally, 31 % of Mexicans spend more than they receive in income. Half of Mexican companies use banking products to settle debts with suppliers and third parties. A large percentage (80 %) of families save informally, that is, outside the Mexican financial system.

The same report from the Instituto de Estudios Financieros [for its acronym in English Institute of Financial Studies] points out that there is a solid initiative to promote Financial Education with the participation of the private and government sectors. At the end of 2009, at least 53 initiatives on Financial Education had been identified in the National context. With these data, Mexico has been recognized for having improved in this agenda. However, they consider that it has not been enough since only 31 % of the population has basic financial knowledge, so greater progress is required in the matter. However, they consider that it has not been enough since only 31 % of the population has basic financial knowledge, so greater progress is required in the matter (Instituto de Estudios Financieros, 2020).

Justifying the existence of Financial Education plans begs the question: Why is it necessary and essential to develop Financial Education plans for Mexican children and young people? Some of the proposed answers from the Institute of Financial Studies are to acquire knowledge of the financial products and services offered by the market and to understand the importance of technology in the world of finance and economics. To understand how important the field of savings is and, with it, the creation of a fund to face contingencies that may arise and that will always be unforeseen, to learn about alternative investment and savings methods, which do not subscribe exclusively to traditional first-tier banking, but also involve the stock markets, to manage one's future and most importantly to know the value of money over time (Instituto de Estudios Financieros, 2020).

Theoretical Framework

The issue of motivation is undoubtedly a determinant that triggers certain decisions, such as the reason to save. Individuals create a motivation to save that includes trends in daily life in order to be able to save something for a future that could be uncertain at the time of making their decision. Keynes (1936, translated by Hornedo, 1983) identified eight different motivations: precaution, foresight, calculation, improvement, independence, enterprise, pride, and avarice. Furthermore, Browning and Lusardi (1996) added another reason, which was the accumulation of deposits to buy goods, such as houses and cars, among others. Among these motives, the precautionary motive refers to the human tendency to reduce future uncertainties in life. To minimize these uncertainties, individuals prefer something that guarantees the certainty of reducing losses/damages (Zakaria et al., 2016).

In 1936, John Maynard Keynes, in his work "General Theory of Employment, Interest and Money", indicated that savings, rather than depending on the interest rate, depends on the income that people receive, thus showing a positive relationship between these variables, that is, with a higher level of income, individuals have a greater capacity to save. In 1954, Franco Modigliani postulated in his "Life Cycle Theory" that people organize their consumption and savings, distributing their income equitably their lives; that is, individuals accumulate wealth during their working lives -their savings- which is subsequently distributed for consumption during old age. In a complementary way, in 1957, Milton Friedman proposed the "Theory of permanent income", which consists of the successive percentage of expenditure that a person makes throughout their lifetime, considering their total present resources for consumption in the short and long term.

In countries such as Bangladesh, whose population is 90.39 % Muslim, attempts have been made to identify individuals' savings motives and their role in religion (Hasan, Rahman, 2023). The authors found that attitude, subjective norms, perceived behavioral control, promotional campaigns and religiosity influence the intention to save. In Vietnam, the behavior of household heads towards savings has more relevant effects on rural households than on urban households (Hua, Erreygers, 2020). Household characteristics have stronger effects in lower quartiles. The marginal propensity to save in households in low quartiles is greater than those in high

quartiles. Household characteristics and household heads significantly influence rural households more than urban households. Furthermore, the workforce at home should include children and older adults instead of being dependents in order to increase the domestic savings rate.

On the other hand, the adoption of mobile payments increased during the COVID-19 pandemic in rural and urban areas. In this regard, Jayarathne et al. (2023) identified that mobile payments had shortcomings, such as a lack of familiarity with customers, a lack of knowledge of employees about mobile payment systems, poor management orientation, and a lack of computer skills among customers. On the other hand, it is worth mentioning that emergency savings strategies must be multifaceted since it is necessary to include the assistance of advisors and financial educators in order to create greater financial comfort. This will allow programs to increase access to short-term savings opportunities and incentives (Despard et al., 2020).

Having a savings account is a predictor which explains an increase in the probability of having an emergency fund. Likewise, the workplace is another channel to promote emergency savings. In this regard, Harvey et al. (2018) identified that the majority of employees expressed the desire to enroll in a “rainy day” savings program with payroll deduction if their employer offered it. However, according to the Federal Deposit Insurance Corporation (FDIC, 2018), more than half of individuals in households with bank accounts set aside money for emergencies, and only 17 % of households do not have bank accounts. Consequently, parents are an important influence on their adult children’s retirement savings decisions (Robertson-Rose, 2020). In relation to sociodemographic characteristics, in regions like Oromia in Ethiopia, 14.5 % of households were not saving with financial institutions, while around 85.5 % were saved in financial institutions (Zelege, Endris, 2019). Furthermore, the age and occupation of household heads in the household, knowledge of interest rates, household income, and family size were significant determinants of household savings status.

In the same idea, age does significantly influence household savings by 5 %, but especially heads of families between 26 to 35 and 46 years old are less likely to save than those in the 18 – to 25-year-old group (Bizuneh, 2011; Bogale et al., 2017; Girma et al., 2013; Saliya, 2018; Njung’e, 2013; Quartey, Blankson, 2008). Consequently, the age of the household is positively related to the motivation to save.

In countries like Kenya, men and women save a portion of their income equally. This same study found that the population in the 45-65 age range had the highest savings rate of 65.6 %; savings are positively related to total income, gender and education but negatively associated with employment status and age (Njung’e, 2013). Women are experts in informal savings due to the lack of use of mobile banking services (Loaba, 2022). In South Gondar in the Libokemkemm district of Ethiopia, 85.8% of the population who were married were the population who saved the least compared to single people. In comparison, 83.5 % of men were non-savers (Mazengiya et al., 2022). Table 1 shows a summary table of the variables related to savings.

Table 1. Theoretical Contributions on Savings Motives

Savings reasons	Relationship	Author
Age	Positive	Zelege and Endris (2019); Quartey, Blankson (2008); Bizuneh (2011); Njung'e (2013); Girma et al. (2018)
Household income	Positive	Zelege and Endris (2019)
Financial inclusion	Positive	Jayarathne et al. (2023); Harvey et al. (2018); Despard et al. (2020)
Family size	Positive	Zelege and Endris (2019)
Employment status of the head of household	Positive	Hua, Erreygers (2020); Zelege and Endris (2019)
Genre	Positive	Njung'e (2013)
Civil status	Positive	Mazengiya et al. (2022)

Recently, in Mexico, the date of the National Financial Education Week was set, and it is scheduled for October 4 to 15, 2021. The National Commission for the Protection and Defense of Users of Financial Services (CONDUSEF) carries out this effort, as well as institutions from the private and public financial sectors, as well as academia represented by educational and social Institutions. The topics are divided into different categories: children, young people, adults, seniors, SMEs and Mexicans who are abroad. The purpose of this categorization is to ensure attractive activities for all (Condusef, 2021).

These types of activities denote the interest of the authorities in Mexico in promoting initiatives that seek to increase Mexican society’s interest in personal finance issues, such as savings, investment, budgets, credit, insurance, credit bureau, fraud prevention, financial technology (FINTECH), psycho-finance, and financial intelligence, among other topics.

Problem Formulation

Main question: What is the relationship between workers’ savings motives and sociodemographic variables and financial inclusion?

Study Objectives

To determine the relationship between workers’ savings motives and sociodemographic variables and financial inclusion.

Conceptual Model for the Study (Preliminary Construct)

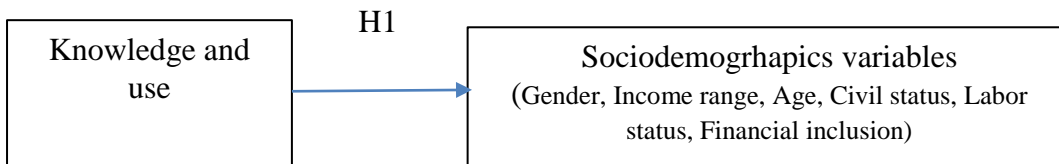


Fig. 1. Empirical study route

2. Methods

Research Design

The research has a non-experimental design since no independent variable (X) is manipulated or altered, with the idea of modifying the effect on the dependent variable (Y). Therefore, the study is approached from the hypothetico-deductive paradigm.

Population and Sample

The type of sampling is non-probabilistic due to self-determination. The questionnaire was distributed physically *face to face* in those cases where workers were within reach by geographic location. In the case of workers who were not, they were contacted through an electronic questionnaire with the support of the human resources department staff in each area. The instrument was applied from April 1, 2023, to September 30, 2023. Participants were 355 employees of the Duxon corporation, between 18 and 53 years of age. Duxon is a firm in the field of private security, with fiscal domicile in the city of Veracruz, in addition to having its headquarters in Mexico City. As an inclusion criterion, workers are those considered to be hired under the salaries and wages regime and are also registered with the Mexican Institute of Social Security.

The instrument used for this study is the scale referred to in the work of Contreras-Rodríguez et al. (2017). The instrument is divided into items on the socioeconomic profile, a section that integrates items on financial knowledge in topics such as savings, credit management, credit cards, budget management and a specific section in Likert format that collects information inherent to the topic of financial inclusion.

To evaluate the level of financial literacy of workers with respect to knowledge and use of savings accounts, credit and budgets, the multinomial Logit model is used (Greene, 2002).

The model is denoted as:

$$P_{from\ the} = \frac{\exp(x_i\beta_j)}{1+\sum_{k=1}^{m-1}\exp(x_i\beta_k)} \quad j = 1, \dots, m - 1$$

$$P_{me} = \frac{1}{1+\sum_{k=1}^{m-1}\exp(x_i\beta_k)}$$

For example, in the case $m=2$,

$$P_{1i} = \frac{\exp(x_i\beta_1)}{1+\exp(x_i\beta_1)} \quad \text{and} \quad P_{2i} = \frac{1}{1+\exp(x_i\beta_1)}$$

For example, in the case $m=3$,

$$P_{1i} = \frac{\exp(x_i\beta_1)}{1+\exp(x_i\beta_1)+\exp(\beta_2)} \quad (1)$$

$$P_{2i} = \frac{\exp(x_i\beta_1)}{1+\exp(x_i\beta_1)+\exp(x_i\beta_2)} \quad (2)$$

$$P_{3i} = \frac{1}{1+\exp(x_i\beta_1)+\exp(x_i\beta_2)} \quad (3)$$

To estimate the $m-1$ parameter vectors, $\beta_1, \beta_2, \dots, \beta_{m-1}$, the likelihood function is maximized

$$L = \prod_{i=1}^n P_{i1}^{Y_{i1}} P_{i2}^{Y_{i2}} \dots P_{im}^{Y_{im}}$$

Taking logarithms

$$\ln L = \sum_{j=1}^m \sum_{i=1}^n Y_{ij} \ln P_{ij}$$

By maximizing this function, the estimators are obtained

$$\beta_1, \beta_2, \dots, \beta_{m-1}$$

In the binomial logit case ($m=2$), it is true that

$$P_i = \frac{\exp(x_i\beta)}{1+\exp(x_i\beta)} \quad \text{and} \quad 1 - P_i = \frac{1}{1+\exp(x_i\beta)}$$

Taking logarithm $\ln\left(\frac{p_{in}}{1-p_i}\right) = x_i\beta$

That is, the β in the logit is the impact of X on the logarithm of the relative risk ratio. From the estimation, the significant variables related to the decision to save are identified, for which the z-contrast statistic is used. In our model, the independent variables are age, marital status, employment status, income range, financial inclusion, and gender.

Operationalization of the Variables.

The operationalization of the variables is shown in [Table 2](#).

Conceptual Definition of Variables

Table 2. Conceptual definition of dependent variables in the model

Variable	Definition	Author
Savings reasons	Reasons such as accumulating savings to purchase assets like houses and cars. Among these reasons, the precautionary motive refers to the human tendency to mitigate future uncertainties. To manage these uncertainties, individuals prefer to have something that ensures protection	Browning, Lusardi (1996); Zakaria et al. (2016); Zeleke and Endris (2019)

Variable	Definition	Author
	against potential losses or damages.	

Operational Analysis of Each Variable

Next, [Table 3](#) presents each of the variables that, in this case, are the dependent variables in this research, along with their corresponding categories and their coding. [Table 4](#) presents each of the variables that, in this case, are the independent variables.

Table 3. Coding of Dependent Variables in the Models

Variable	Categories	Coding
Savings reasons	<ol style="list-style-type: none"> 1. Miscellaneous reasons 2. All reasons are important 3. Emergencies 4. Health 5. For old age 6. Investment 	<p>Multinomial categorical variable: the categories are mutually exclusive, and for the purposes of incorporating the information into the model, a numerical value is assigned to each category. Of all the possible responses regarding savings motives, the most frequent categories are identified and with which the savings motives variable is constructed.</p> <p>Reference category: Various reasons (food, housing, education, when there is no work, personal expenses, saving money) (Shin, Kyoung 2018; Haider et al., 2018).</p>

Table 4. Coding of Independent Variables of the Research

Variable and Categories	Coding
Gender Women Man	<p>Dichotomous variable: the value one is assigned to the male category and zero to the female category.</p> <p>Reference category: Women (Shin, Kyoung, 2018).</p>
Income range <ol style="list-style-type: none"> 1. Monthly minimum wage 2. Minimum monthly salary 3. Minimum monthly salary or more 	<p>Categorical variable. Dichotomous variables are designed for each category. The value one is signed if the characteristic is present and zero otherwise. Reference category: 1 monthly minimum wage (Shin, Kyoung, 2018).</p>
Age (Age range) 18 to 25 years 26 to 30 years 30 to 40 years More than 40 years	<p>Categorical variable. Dichotomous variables are designed for each category. The value one is signed if the characteristic is present and zero otherwise. Reference category: 18 to 25 years old. (Iregui et al., 2018)</p>
Marital status Single Married Free Union Separated Divorced Widowed	<p>A dichotomous variable is designed: the value one is assigned if the person is married or lives in a common law union and zero for others (Single, separated, divorced, widowed). Reference category: single. (Shin, Kyoung, 2018)</p>
Employment status Only working Working and studying and working and seeking to study	<p>A dichotomous variable is designed: the value one is assigned if the person only works and 0 if the person works and studies or works and seeks to study. Reference category: works and studies or works and seeks to study (Shin, Kyoung, 2018).</p>

Variable and Categories	Coding
Financial inclusion Having a credit card Not having a credit card	Dichotomous variable: the value one is assigned if the person has a credit card and 0 does not have a credit card. Reference category: You do not have a credit card (Rahman, Hossain, 2023; Xu et al., 2022).

Data Analysis

Saving Descriptive Results

Table 5 presents the results regarding the financial knowledge that the respondents have regarding savings. In relation to the question “What is savings?” In order of frequency, 22.5 % chose “economic security” as the answer, 21 % chose something for the future, 20 % said that saving means having money for emergencies, and 13.3 % have money available. Regarding the question, What is the main reason why you save or would save? Also, 31.9 % of those surveyed indicated that all reasons are essential to save (Health, emergency, food, education, old age, investment); the reason that stands out is for emergencies; 22.8 % indicated that the main reason for saving is to cover emergencies.

Regarding the question, how do you determine what you save? 43.1 % of those surveyed have the habit of saving, 21.1 % save when they want to buy, 20.8 % save when they have extra, and 15 % responded that they do not have enough. When you have money left over (from your expenses, from your salary, from the money you receive), what do you use it for most frequently? Of the money that you have leftover most frequently, 58.6 % of those surveyed save it, 16.9 % use it to pay debts, and 14.2 % indicated that they do not have any leftovers. What is the main reason you have never had or would not have a savings, deposit or investment account? Regarding having a savings, deposit or investment account, 27.5% responded that, if they have an account, 18.9 % responded that they do not have an account because they cannot afford it, 12.8 % distrust financial services, and 12.2 % do not care interested.

Table 5. Frequency Distribution of Financial Knowledge of Savings

Ask	Response options	Frequency	Percentage
What is savings?	Keep the money	61	16.9
	Have money for emergencies	72	20.0
	Something for the future	76	21.1
	Do not spend	18	5.0
	Have money available	48	13.3
	Money in the bank	4	1.1
	Economic security	81	22.5
What is the main reason why you save or would save?	Health	34	9.4
	Emergencies	82	22.8
	food	6	1.7
	living place	8	2.2
	Education	12	3.3
	When there is no work	10	2.8
	For old age	22	6.1
	Personal expenses	11	3.1
	Look at him	5	1.4
	Investment	18	5.0
	They are all important	115	31.9
	Have to invest when an opportunity appears	17	4.7
How do you determine what	Save what's left	75	20.8
	Save when you want to	76	21.1

Ask	Response options	Frequency	Percentage
you save?	buy or do something.		
	He has the habit of saving	155	43.1
	It's not enough	54	15.0
When you have money left over (from your expenses, from your salary, from the money you receive), what do you use it for most frequently?	Does not save	13	3.6
	There is no leftover	51	14.2
	saves it	211	58.6
	He uses it to pay debts	61	16.9
	Spend on clothes.	9	2.5
	Leisure spending	15	4.2
What is the main reason you have never had or would not have a savings, deposit or investment account?	If I have one	99	27.5
	It's not enough	68	18.9
	Not interested	44	12.2
	Be suspicious	46	12.8
	They ask for many requirements.	11	3.1
	The interest rate is very low	27	7.5
	They charge very high commissions.	15	4.2
	They ask for a very high initial deposit	7	1.9
	They require a minimum balance	10	2.8
	Does not know	33	9.2

Multinomial Logit Model of the Decision to Save and Its Relationship with Sociodemographic Variables and Financial Inclusion

In relation to the research question: Is there a relationship between the decision to save and the sociodemographic characteristics of the respondent and financial inclusion? The objective is established to determine the relationship between the decision to save, the sociodemographic characteristics of the respondent, and financial inclusion. H1 was established as the decision to save is related to the sociodemographic characteristics of the respondent (sex, educational level, marital status, economic dependents – minor children, income, marital status and employment status) and financial inclusion. Below is the resulting econometric model.

Based on the estimation, the results of the six savings categories are presented in relation to sociodemographic characteristics. The reference category is personal savings. From the results for savings motive 2, it is identified that income variable 2 is significant. For the variable income 2 (two minimum monthly salaries), the resulting coefficient has a positive sign (0.687), which indicates that those workers who receive two minimum monthly salaries as income are more likely to save for any reason rather than for personal reasons.

Table 6. Multinomial Econometric Model

Reason: 1 personal savings (base category)	Reason 2: Savings for any reason	Reason 3: saving for emergencies	Reason 4: Health savings	Reason 5: For old age	Reason 6: saving to invest
	Coefficient	Coefficient	Coefficient	Coefficient	Coefficient
Const	0.224	-0.427	-1.894	-21.136	-1.608 ***

Gender					
Female (CF)					
Male	-0.229	-0.334	0.091	1.092	0.993 **
Age					
18 to 25 (CF)					
26 to 30	-0.171	0.345	0.030	-0.390	0.205
30 to 40	-0.030	0.204	0.376	18.420	-0.472
More than 40	0.508	-0.065	0.289	19.784	-0.114
Marital status					
Single (CF)					
Married or Cohabiting	-0.195	0.344	0.112	0.658	0.141
Employment status					
Work and study or work and seek to study (CF)					
Only working	0.546	1.040**	1.048	0.001	0.358
Income range					
1. Monthly minimum wage (CF)					
2. Minimum monthly salary	0.687*	0.019	0.591	0.346	0.987**
3. Minimum monthly salary	0.122	-0.084	2.305**	2.368*	1.826**
Financial inclusion					
Having a credit card (CF)					
Not having a credit card	-0.013	0.177	-0.485	-0.313	0.387

Note: CF indicates reference category; *, **, and *** indicate significance levels of 10 %, 5 % and 1 %, respectively.

From the results for savings reason 3, it is identified that the variable “only working” is significant. For the variable “only working”, the resulting coefficient has a positive sign (1.040), which indicates that those people who work are more likely to save for emergencies compared to those people who work and study or compared to those who work and seek to study. Likewise, it is identified that reason three is not related to financial inclusion.

From the results for savings motive 4, it is identified that the variable only working and three minimum monthly salaries are significant. For the variable only working, the resulting coefficient has a positive sign (1.048), which indicates that those people who work are more likely to save for emergencies compared to those people who work and study or compared to those who work or seek to study. They are more likely to save for emergencies rather than for personal reasons. For the variable three minimum monthly salaries, the resulting coefficient has a positive sign (2.305), which indicates that those workers who receive three minimum monthly salaries as income are more likely to save for health rather than for personal reasons. Likewise, it is identified that reason four is not related to financial inclusion.

From the results for reason 5, for old age, it is identified that the income range variable is significant. For the variable income range 3 (three minimum monthly salaries), the resulting coefficient has a positive sign (2.368), which indicates that those workers who receive three minimum monthly salaries as income are more likely to save for old age rather than for personal reasons. Likewise, it is identified that reason five is not related to financial inclusion.

From the results for savings motive 6 (Investment), it is identified that the variables gender, income range, two minimum monthly salaries and three minimum monthly salaries are significant. For the gender variable (Male), the resulting coefficient has a positive sign (0.993), which indicates that males are more likely to save and invest than women. For men, saving to invest is more important than saving for personal reasons. For variable income 2 (two minimum monthly salaries), the resulting coefficient has a positive sign (0.987), which indicates that those workers who receive two minimum monthly salaries as income are more likely to save to invest compared to those who receive the minimum monthly wage. For income variable 3 (three minimum monthly

salaries), the resulting coefficient has a positive sign (1.826), which indicates that those workers who receive two minimum monthly salaries as income are more likely to save to invest compared to those who receive the minimum monthly wage. Those who receive two and three minimum monthly salaries save to invest more than for personal reasons. Likewise, it is identified that reason six is not related to financial inclusion.

4. Discussion

From the results for savings motive 2 (personal, family savings, welfare, education, etc.), it is identified that income variable 2 is significant. This mirrors the findings of Zeleke and Endris (2019), which showed that household income is an important factor for saving. Likewise, it is identified that reason two is not related to financial inclusion. From the results for savings reason 3 (Emergencies), it is identified that the variable “only working” is significant. They are more likely to save for emergencies rather than for personal reasons, as also found in Njung’e’s study (2013).

From the results for savings motive 4 (Health), it is identified that the variable only working and three minimum monthly salaries are significant. The study by Njung’e (2013) found that saving is not related to employment status. The study by Zeleke and Endris (2019) was positive in relation to this result. From the results, the savings motive identifies that gender and income are significant. This agrees with the study by Zeleke and Endris (2019), which found that household income impacted saving for investment. In the studies by Hua and Erreygers (2020) and Zeleke and Endris (2019), it was positively agreed that for reason 5, for old age, it is identified that the income range variable is significant. In the study by Njung’e (2013), there was a positive result in relation to the older the person, and the higher the salary, the greater the possibility of saving for this reason.

From the results for the savings motive, it is identified that the variables gender and income are significant. This agrees with the study by Tadesse (2019), which found that household income impacted saving for investment. In the studies by Hua and Erreygers (2020) and Zeleke and Endris (2019), it was positively agreed that household heads were a determining factor in saving.

5. Conclusion

We can conclude that within the six main savings motives estimated in the econometric model, which were related to the sociodemographic characteristics, we found the following results. In relation to motive 6, it is identified that the gender variable (male) saves more money to invest compared to women. On the other hand, in relation to the income range in reason two and reason 6, the population with an income of two minimum monthly salaries is more likely to save for all reasons and for investment, which is not related to financial inclusion.

In the same idea, it is found that reason four and reason five, in relation to the income range of three minimum monthly salaries, have a greater probability of saving for health and old age. Therefore, it was identified that reason 3, saving for emergencies, coincided with reason 4, saving for health. That is, according to employment status, those who are only working are more likely to save than the rest of the population.

6. Declarations

Ethics approval and consent to participate

This study is carried out in accordance with the recommendations of the Code of Ethics of the National Technology of Mexico. The Research Ethics Committee of the Division of Graduate Studies and Research approved the protocol. In accordance with the Declaration of Helsinki, all workers gave their consent for participation in the study.

Consent for publication

Not applicable.

Availability of data and materials

Data and materials associated with this study are available upon request.

Conflict of interest statement

The authors declare no conflict of interest.

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Author contributions

This document is the work of all the authors as an intellectual contribution to their academic work, which they approved for publication.

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