

## **Bancarization and cost of the social norm in Morocco**

## **Bancarisation et coût de la norme sociale au Maroc**

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### **Abstract:**

Despite an abundant literature on the relationship between the social norm and the preferences of individuals within a community, it does not prevent us from detecting considerable disagreement on the effects of the social norm on preferences. This article attempts to empirically estimate the relationship between the Islamic principles considered as a social norm prohibiting the interest rate and the possession of a bank account granting possibilities of interest credit in Morocco. An interesting remark in this country is to note a divergence among a majority of the population between the social norm and the holding of bank accounts offering the possibility of credit. Therefore, this empirical study can offer a considerable advantage in determining the reasons for this discrepancy. It is shown that the cost of the social norm of informing each other to exclude holders of interest-bearing bank accounts can constitute a brake on the application of the social norm. Indeed, indeed, the larger the population and banking density, the more dispersed the information and the higher its cost, thereby, reducing the cost effect of the social norm in relation to the expected gains from holding the bank account. Our estimates show that the cost of the social norm on the holding of the bank account by Moroccans is low.

**Keywords:** «Bancarization» ; «direct and indirect costs» ; «social norm» ; «credit» ; «Bank account»

### **Résumé :**

Malgré une littérature abondante sur la relation entre la norme sociale et les préférences des individus au sein d'une communauté, il n'empêche de déceler des désaccords considérables sur les effets de la norme de la norme sociale interdisant le taux d'intérêt et donc la détention d'un compte bancaire octroyant des possibilités de crédit à intérêt au Maroc. Une remarque intéressante dans ce pays est de constater une divergence chez une majorité de la population entre la norme sociale et la détention des comptes bancaires offrant des possibilités de crédit. Par conséquent, cette étude empirique permet d'offrir un avantage considérable pour déterminer les raisons de cette divergence. On démontre que le coût de la norme sociale de s'informer les uns sur les autres pour exclure les détenteurs des comptes bancaires à intérêt peut constituer un frein à l'application de la norme sociale. En effet, plus la population et la densité bancaire sont importantes, plus l'information est dispersée et donc plus son coût est élevé, réduisant du coup l'effet du coût de la norme sociale par rapport aux gains attendus de la détention du compte bancaire. Nos estimations montrent que le coût de la norme sociale sur la détention du compte bancaire par la population marocaine est faible.

**Mots clés:**« Bancarisation »;« coût direct et indirect » ; « norme sociale» ; «crédit»; « compte bancaire»

## **Introduction:**

The bank account is a central element in economic activity. It has three functions: the staggering of expenditures/expenses over time, the paid hoarding, and the demand for a credit with interest. The staggering of expenditures over time means that the holder of a bank account allocates consumption between the present and the future according to his preferences. Thus, according to the interest he has in time to consume his income, the bank account holder may prefer to consume more than at least in the present or in the future. However, this arbitration can only be done in the context of a bank account.

In the context of this arbitration between the present and the future, the holder of a bank account may have consumption preferences for the future. Saving or hoarding in a bank account is one sure way to achieve this goal without the purchasing power of the savings falling or deteriorating. Indeed, as the divergence in consumption preferences among bank account holders creates a demand for credit and a supply of money (savings), the market for loanable funds is emerging where the interest rate makes it possible to maintain the purchasing power of lenders who are savers and to satisfy the applicants.

In Morocco, where religious influence is very strong since there is no separation between the state and religion in the management of public affairs, the conventional interest-bearing bank account should face obstacles in its use since the principles of the Muslim religion are not compatible with interest-bearing bank accounts. Furthermore, the communal nature of Muslim society and the cost of the social norm that may result should lead to a homogeneous behavior of all the individuals who compose it in abstaining from the use of such accounts. Thus, given that exclusion may be a cost to the individuals who may adopt it, the individual as a «social animal» seems very sensitive to its rejection from a community with which it shares the same values. Therefore, it may seem logical to see a society without bank accounts.

However, as we can see, the banked population in Morocco is close to a rate of 53% in 2021. If we stick to these data and although there are other economic and sociological explanations, this means that almost the half of the population that respects this religious principle experiences incompatibility and uncertainty in economic calculations. In addition, the divergence of these individuals' preferences and the impossibility of staggering expenditures over time to satisfy their preferences can lead to increased poverty of the population and lasting underdevelopment (see Gousse [2009] and Chapellière [2009]. ). Indeed, according to these data, the majority of the

population lives day to day or in general experiences a low level of investment and growth. The high level of liquidity circulating outside the banking circuit and therefore the low possibilities that this causes lead to lower levels of wealth creation.

If almost half of the population is unbanked, we observe that the other half of the Muslim faith in Morocco has a bank account and resorts to hoarding and credit operations despite cultural and religious constraints. If we assume that religion is an essential component in the management of affairs between the individuals who make up society, we can wonder about the reasons that lead Muslim consumers to hold conventional bank accounts despite the cost of the normsocial.

The objective of this article is to resolve this paradox, in other words to answer the following question: what are the reasons that lead Muslim consumers to hold conventional bank accounts despite the cost of the social norm? To do this, we present the size of the population, the distance between the place of residence and the bank branch and the density of the branches as an alternative explanation to the paradox of the relationship «cost of the social norm and holding a conventional bank account opening up a probable possibility of credit ». The idea is that these factors can affect the level of conventional bank account holder. We demonstrate that the larger the population size and the density of bank branches or counters, the more information is dispersed on the use of a bank account and therefore the higher the cost of the social norm (cost of exclusion ) for the user to be identified is almost nil. On the other hand, the lower the population size and the density of bank branches, the more information is expected to be concentrated and, therefore, the cost of the social norm to be high, thus increasing the probability of to be identified and the cost of exclusion. For the distance factor, we consider that the lower the distance traveled to reach a bank branch or counter, the lower the cost of being identified by the population and therefore of being excluded.

Thus, we consider that the link between these factors and the use of a bank account in the presence of religious constraints are related to the cost of information. If this agent information cost exceeds the expected cost of holding a conventional bank account, agents tend to hold a conventional bank account. Therefore, the determinants of the cost of holding a conventional bank account in the presence of the cost of the social norm or not are therefore related to the opportunity costs of credit estimated by income, the density of conventional banks in the place of residence individual and population density.

We thus propose to identify, in a first step, the direct and indirect costs related to the holding of a conventional bank account; we empirically test, in the second stage, the impact of these costs on the probability of holding a conventional bank account. For this and to compensate for the scarcity of the presence of Muslim banks in these countries, we use data collected on interest credit behavior during the period from 2008 to 2012 from a representative sample of the Moroccan population. More specifically, we estimate, using a *probit* model with selection (of the population holding a bank account with the possibility of benefiting from credit), the probability that a holder of a conventional bank account will use credit at least once. times in the past four years.

The remainder of the article is structured as follows: Section 1 presents a literature review; Section 2 presents some stylized facts; Section 3 describes the behaviors of bank account holders of Moroccan Muslims; Section 4 presents the determinants of holding a bank account through a description of the direct and indirect costs of credit and discusses the estimation results.

### **1. Literature review on the determinants of whether or not to hold a bank account**

The theoretical foundations of the relationship between legal, political or social (religion) constraints and holding a conventional bank account opening the possibility of credit have their origins in the theory of intertemporal choices and seem to be based on two indirect and contradictory theoretical approaches. One relates to transaction costs. It links permanent income, consumption and savings; While the other, it relates to qualitative foundations. It links consumption to psychological, cultural and institutional phenomena.

Theoretical studies of transaction costs on "bank account holding, highlight the negative role of the interest rate linked to the services of this account on the costs of goods and the negative impact of the hoarding which results from the establishment of this account on the rise in prices of commercial transactions (see Nakhjavani Mehran [1982]).

Classical quantitative theoretical studies on the relationship "permanent income, interest rate and consumption" confirm this negative link between interest rate and current consumption<sup>1</sup>. However, this literature considers that the interest rate is the mechanism that leads to the balance of supply and demand for savings. Any change in the interest rate changes consumption and therefore savings. Consequently, the fact of introducing a qualitative constraint

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<sup>1</sup> In our analysis, taking into account permanent income or wealth as a quantitative variable means implicitly taking into account all the other variables that constitute wealth, namely: current income, anticipated future income, interest rates, heritage (real estate and financial assets). See on this subject Keynes [1936], pp. 93-95

such as the religious prohibition of a conventional bank account has no effect on the rational choice of individuals over time since the interest rate remains the sole arbiter of individuals between preferences for present and future consumption (see Fisher [1930]).

Despite the relevance of this analysis, these predictions are contradictory with the Keynesian approach. The latter considers that the intertemporal choice theory does not integrate the uncertainty that is likely to affect savings and consumption. Indeed, in the intertemporal choice theory which considers savings as future consumption, it is very likely that an additional increase in savings leads to a decrease in present consumption and an increase in future consumption. But this additional increase in savings gives us no information about the date and level of future consumption. This is the reason why Keynes does not take into account the interest rate as a determinant of consumption and saving and therefore of the establishment of a bank account (see Keynes [1936])<sup>2</sup>.

As for the qualitative foundations, the economic literature considers that the consumption function is sensitive to psychological, cultural and institutional factors. This analysis is advanced within the framework of the theory of the cycle (or theory of anticipations) where, the impulses of individuals as to their attitudes are the product of the past, the present and the expected changes in their environment. These impulses are also the product of the group to which they belong and of social norms (see Keynes [1936], Lucas [1980], Usunier and Lee, [2005], Demontrond, [2009] and Hofstede and Bond [1988]). Thus, when a social institutional constraint is established, such as the religious prohibition of a conventional bank account opening the possibility of credit, it will be assumed as a homogeneous and objective datum that individuals cannot ignore in their calculation to optimize their choices. . In this sense, this prohibition must lead to a choice of collective behavior (see Lucas [1977] and Rice and Al Mossawi [2002], Mokhlis [2006] and Saeed et al., [2001]).

Several empirical works are put forward to consolidate this analysis by showing that countries where the populations are of Muslim faith where Islamic principles apply, such as the prohibition to anticipate the future through the interest rate, tend to have a lower uncertainty avoidance index than populations of Orthodox and Catholic faith (see Hofstede, [1980] and [1994]; Bond, [1988], Cornwell et al., [2005] and Javidan and House [2004])<sup>3</sup>.

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<sup>2</sup> Keynes [1936], Chapter XVI.

<sup>3</sup> Several studies have developed models explaining the impact of religiosity on the control of uncertainty, whether in relation to the choice of product quality or in relation to creation and innovation. These studies claim that the

Despite the consistency of this analysis, these results are in opposition to certain practices observed within the populations of certain Muslim countries. Indeed, the prescription of a norm as given does not systematically condition a homogeneous choice of the entire population. In this sense, several ideas are put forward to invalidate this classic thesis. Thus, Hayek (1931) considers that the same stimulus, which may be the product of social institution or culture, cannot systematically lead to a homogeneous behavior of all the individuals composing the population because of the difference in earnings and subjective costs that characterize each individual (see also Al-Khatib et al., [1997]). The analysis of Marshall [1920] goes in the same direction when he considers that the consumption of certain individuals remains insensitive to the increase in costs because of habits<sup>4</sup>.

The current literature highlights the stock of endogenous consumption. Thus, Beker and Stiglitz (1988) explain the increase in the consumption of certain individuals despite the high costs by the stock of past consumption. They consider that forecasts of prices and other future costs of consumption affect consumer behavior. This can result in the non-convexity of preferences in some individuals and therefore in excessive savings or over-indebtedness (see Pashardes [1986]). Along the same lines, Etilé (2000) and Lemennicier (1992) consider that individuals have different preferences: some have convex preferences where their consumption is a combination of different goods from the extreme baskets; others have non-convex preferences where their baskets of consumer goods are extreme. In other words, non-convex preference individuals prefer to consume a good instead of a combination of a set of goods. It therefore follows that some individuals give up present consumption and save more, others consume more and go into debt. Therefore, failing to find altruistic individual lenders, consumers resort to banking institutions through bank accounts where interest is the essence of all banking activity.

Consequently, this literature review on the arbitration between present and future consumption allowing the establishment of bank accounts on credit offers us a field of analysis to determine if cultural constraints such as religion can prevent the emergence of bank accounts on credit. credit knowing that the principles of the Muslim religion are incompatible with bank accounts on credit. If the answer is affirmative, the cost of the social norm (cost of exclusion) is higher than the

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impact of religiosity on the degree of uncertainty positively affects product quality and negatively innovation (see Essoo and Dibb, [2004], Mokhlis, [2006] and Steenkamp et al. [1999]. ).

<sup>4</sup> Marshall describes the economic consequences of habit formation as the consequence of increased consumption in the presence of low prices and that the level of this consumption remains constant even if prices tend to rise.

expected gains; otherwise, one can think that the indirect costs to cancel the cost of exclusion are high, rendering the social norm inoperative. In this context, our assumptions are as follows:

**Hypothesis 1:** the direct cost characterized by the interest rate dissuades the Muslim from holding a bank account opening the possibility of resorting to bank credit

**Hypothesis 2:** The cost of the social norm (cost of exclusion) on the holding of bank accounts opening the possibility of a bank loan varies according to the indirect costs (distance between place of residence and bank branch, density of bank branches, number population)

## 2. Stylized facts

Three empirical elements consolidate the choice of our approach. First, the selection of variables to fill the non-existence of Islamic banking institutions in these regions. Also, holding a bank account based on interest or savings or not seems to be a distinguishing factor in this study. Second, the existence of deposit (savings) and credit in the bank accounts of Muslim holders constitutes a means to verify whether or not holders of bank accounts comply with Islamic law. It is observed that a significant portion of the Muslim population with bank accounts uses interest-based credit and savings, which are considered illicit practices under Islamic law. Ultimately, we observe that it is in the Muslim regions where there is a significantly large population where these illicit practices of credit and savings are widely enacted.

The almost non-existence of Islamic banking institutions presented in Table 1 confirms our approach. Table 1 illustrates the fact of withholding savings and interest-based credit from bank account holders within conventional banking institutions. An act of distinguishing between those who adhere to Islamic laws in regards to these illicit practices and those who don't.

**Table 1.- The composition of the banking market in Muslim countries**

Country	Islamicbanks	Classicbanks
SaudiArabia	5	8
UAE	9	19
Kuwait	11	6
Qatar	6	6
Bahrain	19	12

Source: Bankscope[2015]

Regarding illicit practices in terms of credit holding and savings, Table 2 presents the evolution of credit of the population. This table suggests that Islamic law in regards to finance is not respected.

**Table 2. - The evolution of credit and the Moroccan population.**

Year	The evolution of the population	The evolution of credit
2012	33241898	719201
2013	33715693	747008
2014	34192347	763401
2015	34663603	784991
2016	35126296	818098
2017	35581294	843308
2018	36029138	870616
2019	36471769	917152

Source : bankalmaghreb 2020

We note that despite the fact that Moroccan society, in its majority, is of Muslim faith and that the social norm of religion has a significant influence, a significant part of this population deviates from it when it comes to the holding of bank accounts, one of the purposes of which is the use of credit and savings. Hence the question that naturally arises is to determine why Muslims with bank accounts in Morocco resort to bank accounts, one of the main functions of which is the granting of credits despite its prohibition by Islamic law as can be seen in table 1 on the evolution of credit in Morocco.

### **3. The determinants of resorting to illicit practices under Islamic law: in terms of the use of bank credit with interest and savings.**

When a Moroccan Muslim decides whether or not to use a bank account opening up possibilities for interest-bearing loans or to make savings, generally, it implicitly compares the costs and gains of using or not using such a bank account. In the economic literature, it is accepted that individual decisions are based on a trade-off between gains and costs. In the context of the holding of a bank account by a Moroccan Muslim for credit services, the costs are composed of two elements: on the one hand, the direct cost of the bank account and the services granted such as credit. This cost is composed of the interest rate ( $C_i$ ) and, on the other hand, the indirect cost of the bank account.

This indirect cost is made up of the cost of exclusion that society imposes on those who do not respect the social norm characterized by non-respect of Islamic law.

Generally, individuals who reveal preferences for monetary liquidity pay more attention to its value in the present than in the future. Therefore, it is natural, in this case, to consider that the direct cost of using the bank account offering credit services is lower than the direct gain because the utility provided by a monetary unit of a credit applicant is higher than its direct cost.

As for the cost of the social norm characterized by the indirect costs of exclusion, they are naturally higher than the expected gains since the latter are worth nothing if the individual is excluded from the community. The individual's earnings here may resemble a wealthy person who finds himself in a desert where his earnings are unable to satisfy his utility. It is for this reason that this indirect cost of exclusion depends, on the one hand, on the population. Indeed, the larger the population, the higher the cost of information on bank account holders offering credit services and therefore the more the cost of exclusion becomes ineffective; on the other hand, it depends on the banking density. As with the population, when the number of bank branches is high, the cost of finding out about the holders of interest-bearing bank accounts is expected to rise, rendering the probability of being identified ineffective.

In addition, the indirect cost of exclusion from using a credit bank account depends on the opportunity cost, which is a function of the individual's income. Indeed, when these incomes are high, the place occupied by the individual in society becomes important, leading to high exclusion costs.

Thus, the probability of resorting to practices considered illicit by Islamic law in terms of the use of bank accounts offering credit possibilities is all the higher when the cost of exclusion is low.

#### **4. The econometric analysis of the determinants of the use of the bank account offering possibilities for bank credit of the Muslim population**

The empirical study presented here aims to test the impact of the direct and indirect costs of Islamic law on illicit practices as exhibited in the use of bank credit with interest. This involves estimating the likelihood that a traditional Muslim bank account holder will resort to credit with interest. Hence, assuming that having a bank account allowing lawful (interest-free) transactions may be the source of a selection bias, we use a probit model with sample selection in order to correct the possible correlation between the term of the errors of the estimation of the probability

of holding a conventional bank account and that of using conventional bank accounts considered as illicit according to Islamic law in terms of interest credit transactions carried out by bank account holders<sup>5</sup>. Thus, the variable to be explained is the "holding of a conventional bank account with recourse to credit or not". This variable is therefore associated with two modalities which are 1 and 0. Thus, if the respondent knows a bank account with recourse to credit, it takes the value 1 otherwise, it takes the value 0. The dichotomous nature of this variable dictates the econometrics of the quantitative and qualitative variables.

#### **4.1. Presentation of the variables of the cost of illicit practices to Islamic law in terms of recourse to credit.**

There are several variables that allow us to measure the direct and indirect costs of illicit practices in terms of the use of bank credit with interest.

The direct cost of illicit practices (Ci) is measured by a single binary variable (CHARGE) describing the use of credit. The direct cost of abstaining from credit is zero. The variable indicates the presence of an interest rate charged on the credit account holder.

For the estimation of the indirect opportunity cost of illicit practices under Islamic law (IC) in terms of recourse to credit, we use the following variables:

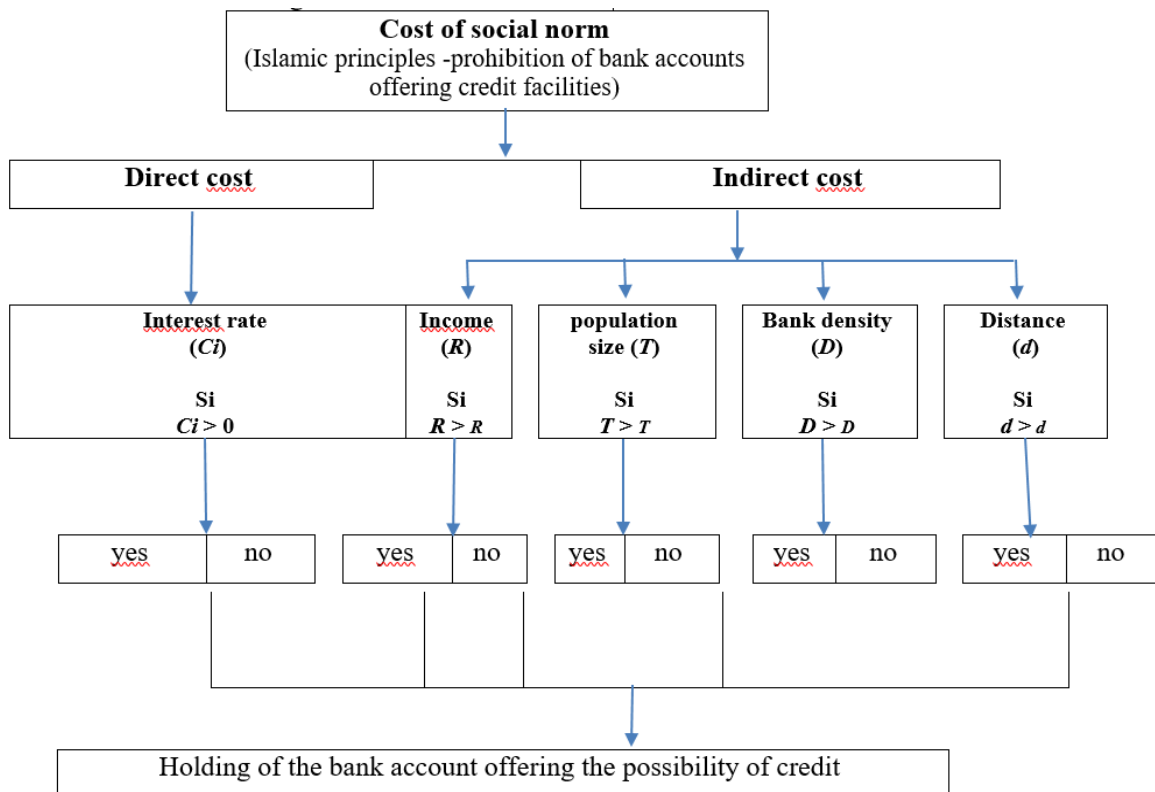
- The level of INCOME «INCOME» of the holder of the bank account.
- The DISTANCE variable «DISTANCE» allows us to measure the distance between the holder of the bank account and his bank branch according to a measure of length in kilometers (Km). We believe that this variable has an impact on the cost of information and identification of the bank account holder since it allows the holder of a bank account to carry out transactions which require such a short time that people do not notice it.
- The «NBQ»BANK DENSITY variable allows us to measure the weight of the banking offer (or density) in the place of residence of the bank account holder and the costs generated in terms of information on transactions. Banking density appears to constitute additional costs for controllers to identify bank account holders. It is expected that the higher this density, the higher the identification costs will be.

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<sup>5</sup> For a presentation of the probit model with sample selection, see Cameron A.-c. and Trivedi P.-k, [2005], "Microeconometrics. Methods and Applications", Cambridge University Press, New York.

- The variable SIZE OF THE POPULATION «SIZE» allows us to measure the weight of the population and the costs generated in terms of information on the transactions of the bank account holder. Again, the size of the population, it seems to us, goes hand in hand with the costs of information and identification of the bank account holder. Indeed, we believe that the larger this number of inhabitants, the higher the control costs and the lower the exclusion costs. The conceptual scheme on the factors that affect the cost of the social norm characterized by the non-respect of Muslim principles by opening a bank account offering credit possibilities can be as follows:

**Figure 1: Cost of social norm**



NB : When  $C_i > 0$ ,  $R > R$ ,  $d > d$  but  $T < T$  and  $D < D$ , the cost of the social norm (exclusion cost) is high and holding the bank account is zero.

Where  $R$ ,  $T$ ,  $D$  and  $d$  are respectively the average of income, population, density of banks and the distance between the place of residence and the bank.

## 4.2.Results

The results of the estimates presented in Table 3 appear satisfactory. The results obtained from the calculations are significant. It allows us to interpret Mc Fadden's R2. The R2 is about 0.40. This number is low, but the LR statistic is significant at the 5% threshold. This means that the model is generally significant and seems to validate the determinants of resorting to illicit practices under Islamic law of holding a conventional bank account enacted in using credit with interest.

**Table 3. Estimation of the probability of resorting to illicit practices under Islamic law in terms of recourse to bank credit with interest**

Variable	Coefficient	Std. Error	z-Statistic	Prob.
<b>COUT</b>	0.366759	0.208567	1.758473	0.0787
<b>DISTANCE</b>	1.273393	0.161731	7.873533	0.0000
<b>NBQ</b>	0.708255	0.218840	3.236405	0.0012
<b>PROF</b>	0.253946	0.156362	1.624095	0.1044
<b>REVENU</b>	0.435663	0.071691	6.076953	0.0000
<b>TAILLE</b>	0.400263	0.150720	2.655679	0.0079
<b>C</b>	-1.047569	0.222995	-4.697731	0.0000
McFadden R-squared	0.405502		Mean dependent var	0.876000
S.D. dependent var	0.329746		S.E. of regression	0.263791
Akaike info criterion	0.459659		Sum squared resid	69.09859
Schwarz criterion	0.494014		Log likelihood	-222.8296
Hannan-Quinn criter	0.472716		Deviance	445.6593
Restr. Deviance	749.6393		Restr. log likelihood	-374.8197
LR statistic	303.9801		Avg. log likelihood	-0.222830
			Prob(LR statistic)	0.000000

Thus, the results of the estimates for direct and indirect costs are as follows:

The results on the direct cost of illegal practices under Islamic law in terms of the use of credit characterized by the interest rate do not seem to influence the behaviour of bank account holders in terms of the use of credit. It may seem natural that the cost of interest may prevent bank account holders from using credit. However, this evidence is not validated. The direct cost variable (CHARGE) is 0.07. It is greater than 0.05. It is therefore less significant. In other words, the direct cost of the interest rate does not allow bank account holders to ignore the use of credit. This result

makes it possible to affirm that the burden of the interest rate does not alter the probability of resorting to bank credit.

As for the results of the coefficients of variables associated with the indirect costs of illicit practices in terms of the use of credit, they can be summarized as follows:

With respect to revenues, we expected that the relationship between the use of illicit acts in terms of the use of credit and income would be negative because of the exclusion cost that can affect agents' business transactions and therefore their revenues. This prediction is not confirmed by the results of the empirical analysis that shows a positive relationship between income and the use of credit. In this case, it seems that high-income workers have a low probability of being apprehended and punished because of their social status and their altruism towards the poor and which can offset the exclusion cost effect<sup>6</sup>.

As for the distance between the residential place and the banking branch, it can be said that this variable influences the probability of resorting to bank credit. We find that the more distance increases, the likelihood of an individual to use bank credit decreases.

Similarly, we observe that the density of banks has a significant impact on the probability of resorting to illicit practices in terms of bank credit. We observe that as the number of banks increases, the higher the probability of resorting to bank credit. This result confirms the idea of determining demand from supply.

Furthermore, the study revealed further findings. For instance, we found that age has a significant influence on the likelihood of illicit practices in terms of credit use. This result is consistent with empirical evidence on offences where age has a significant influence on offending behaviour.

## Conclusion:

If the interest-based credit is considered to be an unlawful, illicit act in the Muslim religion and the cost of sanctioning that act appears to be costly for the individual, the results of this study suggest that credit use with interest is a common practice despite the cost of sanctioning exclusion upon the individual. In this article, we show that the density of the population or banks can induce Muslims to resort to illicit practices in terms of credit consumption with interest. In a Muslim

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<sup>6</sup> an agent with a high income can increase his social respect through moral actions such as donations, building mosques, etc.

society, the demand for a credit market with interest is low because the cost of social exclusion is high. It follows that when the density of the population or the banking industry is higher, individuals may have an interest in resorting to illicit acts in terms of buying on credit with interest.

More specifically, if the density of the population or banks is high, information about individuals' banking transactions in society is expected to be dispersed. This will make the cost of information high and the probability of being apprehended almost nil. Since the exclusion cost is related to the cost of the information, it is expected that the exclusion cost will become inoperative allowing the use of illicit acts in terms of the use of interest-based credit. The density which makes the information expensive is related to people resident in the cities compared to rural areas, and the presence of banks.

The results of the current empirical study conducted on 1,000 individuals investigating the costs that can deter consumers from using credit with interest show that Muslim consumers are not sensitive to the direct cost of the interest rate. The charge on the interest rate does not alter the behaviour of agents in terms of using credit with interest.

The study also shows that the cost of exclusion does not affect the behavior of Muslim consumers in terms of resorting to illicit acts in terms of opening bank accounts allowing credit transactions with interest. The effects of this cost are canceled by the density of the population or the banks. We found that the more the distance increases, the more the probability of resorting to illicit practices in terms of recourse to bank credit decreases and that the more the number of banks increases, the higher the probability of resorting to bank credit.

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