

## REGIONAL SECTORAL

# Understanding savings affordability of Mexican consumers through socio-demographic variables

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- The savings affordability of Mexican consumers has not managed to regain the levels seen prior to the 2008-09 global economic recession.
- The higher the educational level of respondents, the higher the likelihood of their intention to save.
- It can be observed that the likelihood of the intention to save diminishes with the respondent's age.
- Respondents in cohabitation or married, separated or divorced, and widowers or widows are less likely to intend to save than singles.
- The unemployment rate, annual headline inflation and the fiscal reform have a negative impact on the ability to save of Mexican consumers.
- On the other hand, the *ex-post* real interest rate and the labor reform have contributed positively to savings affordability.

## Introduction

National savings comprises three elements: household savings, business savings and public sector savings. The first two types of savings are generally aggregated into one, the so-called private savings. Most studies of savings, however, focus on household savings, given their greater significance within national savings. Such studies are based on partial equilibrium models that seek to explain the individual behavior of households when it comes to deciding how much to save on the basis of variables such as income and others of a macroeconomic nature (real interest rates, economic growth, inflation, etc.).

Economic texts distinguish certain key motives for households to save. These are generally associated with retirement, precautionary savings –such as a potential fall in income or the prospect of losing one's job–, bequests for family members and purchases related to the acquisition of assets –real estate, cars and other durable goods. Moreover, the tax and social security systems are institutional factors that affect both household savings levels and savings ratios. For example, Sturm (1983) suggests that a pay-as-you-go public pension scheme –whose benefits are greater than the contributions paid over a person's working life– on the one hand tends to reduce both savings levels and ratios by relaxing the household's life-time budget constraint. Although, on the other hand, the aforementioned author says that this encourages a higher savings ratio because people get tempted to retire earlier provided that leisure during retirement is a normal or superior good –the demand for it increases as income does.

In this paper I analyze the individual behavior of households to gain a greater understanding of what could lie behind the savings affordability of Mexican consumers. This analysis relies on an econometric model that is used to evaluate the influence of certain socio-demographic variables associated with the surveyed Mexican consumers while controlling for the country's macroeconomic context. It should be clarified that the scope of this

study is confined to discovering the key determinants of the ability to save of Mexican households. An understanding of the factors shaping the aggregate or total savings of households necessarily calls for a general equilibrium analysis that includes the demand for capital investment as well.

### Description of data and methodology

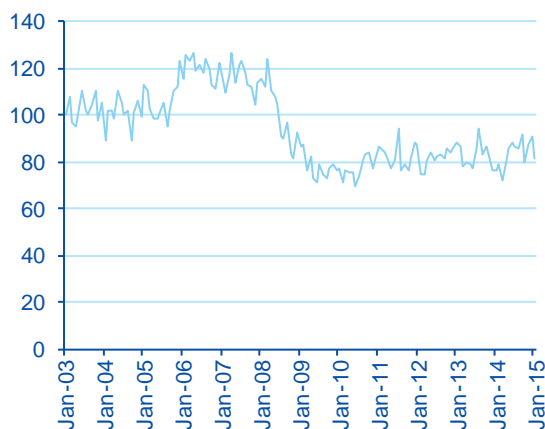
The information on the ability to save of Mexican consumers was gathered from the qualitative responses to question 10 of the basic questionnaire in the National Consumer Confidence Survey (ENCO), which is formulated as follows:

ARE YOU CURRENTLY ABLE to SAVE part of your income?

- 1. Yes
- 2. No
- 3. Don't know
- 4. Don't earn any income

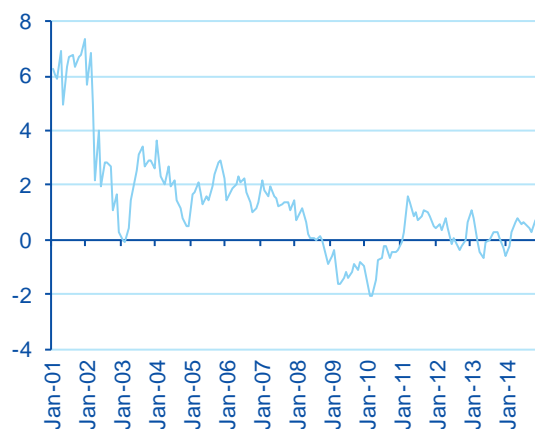
To obtain an aggregate measurement which embraces all the responses of Mexican consumers, a monthly diffusion index was constructed.<sup>1</sup> The data sample for constructing the index included information from January 2003 to January 2015.

Figure 1  
Savings affordability of consumers  
(diffusion index, January 03=100)



Source: BBVA Research with INEGI data

Figure 2  
Real wage of IMSS-affiliated workers  
(% var. YoY)



Source: BBVA Research with INEGI and STPS data

Figure 1 shows that the ability of Mexican consumers to save has not managed to regain the levels prior to the 2008-09 global economic recession. Moreover, the diffusion index for this ability exhibits a behavior without any trend over the interval spanning from January 2010 to January 2015. This could reflect the fact that the positive phase of the current economic cycle has been accompanied by a lower real wage growth when compared to what was observed for such indicator during the positive phase of the previous economic cycle (see Figure 2).

<sup>1</sup> The diffusion index was calculated as follows: i) the response "Don't earn any income" was prorated amongst the other response options to question 10; ii) the proportions of responses to these options were calculated over the total responses by taking into account the expansion factors for households; iii) weights of 1.0, 0.5, and 0.0 were used for the options "Yes", "Don't know" and "No", respectively; iv) each proportion was multiplied by its corresponding weight; and v) the products from the previous step were added together. It should be pointed out that the numerical allocations for the weights were done in this way so that the level of 0.5 would indicate neutral savings affordability. In other words, 0.5 would indicate an aggregate savings affordability that is neither favorable nor unfavorable.

For purposes of numerical comparison, the real wage on average grew by 0.01% from July 2009 to December 2014 whereas for April 2002 to June 2008 the corresponding figure was 1.7%. The explanation underlying this behavior of the real wage in recent years would have to refer back to an analysis of labor productivity growth, which is beyond the scope of this paper.

To identify the explanatory factors which might be of assistance in understanding the behavior of the individual ability to save of Mexican consumers, the multinomial logit model was used.<sup>2</sup> In general, this methodology makes it possible to analyze responses of a qualitative nature or categorical dependent variables. For purposes of the analysis in this paper, the dependent variable was constructed in such a way to show whether the respondent “is in a position to save”, “doesn’t know” or “is not in a position to save”.

As for the explanatory factors that were examined, some socio-demographic characteristics of those surveyed were taken into account, such as the region of the country they live in, gender, attained educational level –a proxy variable for income–, age and marital status.<sup>3</sup> Moreover, macroeconomic variables were used to control for the national macroeconomic environment.<sup>4</sup> Finally, in order to measure the impact of the labor and tax reforms on the individual ability to save of Mexican consumers, two dummy variables were added to the previous set of explanatory factors to represent their active state soon after the respective approval by the local Congress.

Given the aforementioned set of explanatory factors, the above framework makes it possible to estimate the probabilities of each of the three response options concerning the current ability to save: “Yes”, “Don’t know” and “No”. For the sake of comparing the econometric model based on the explanatory factors that are mentioned in the previous paragraph, another two econometric specifications were estimated: i) the model featuring only socio-demographic characteristics; and ii) the model featuring the socio-demographic factors and dummy variables to control for any possible monthly seasonality in the respondents’ answers. The econometric estimates were based on a sample of 269,863 survey responses gathered between January 2003 and November 2014.<sup>5</sup>

## Analysis of results

The results of the estimation from the multinomial logit model are described in Appendix B. In relation to the model with socio-demographic and macroeconomic variables –the model to be compared with the other two–, the following results stand out in relation to savings affordability: i) the respondents from the Touristic, Medium development, Industrial and Low development regions tend to answer more positively than those in the High development region;<sup>6</sup> ii) the higher the educational level of the respondent, the higher the probability of responding positively; iii) the probability of being affirmative is lower for women; iv) it can be seen that such probability diminishes with the respondent’s age-interval; v) those surveyed whose marital status is an unmarried partnership or married, separated or divorced, and widowers or widows are less likely to be positive than singles;

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<sup>2</sup> The mathematical notation for the multinomial logit model is described in Appendix A of this paper.

<sup>3</sup> The socio-demographic information was obtained from the microdata in the ENCO’s socio-economic questionnaire.

<sup>4</sup> The macroeconomic variables used were the seasonally adjusted national unemployment rate, the seasonally adjusted percentage annual variation in the IGAE (Global Economic Activity Index), the annual headline inflation in percentage terms, and the *ex-post* real interest rate given by the difference between the Cetes 28-day nominal rate and annual headline inflation.

<sup>5</sup> The estimation sample does not include information up to January 2015 since at the time of the analysis the data on macroeconomic variables was only available up to November 2014.

<sup>6</sup> The grouping by region was done according to economic vocation and development level: High development: DF; Touristic: BCS and QR; Industrial: Ags, BC, Coah, Chih, Jal, Méx, NL, Qro, Son, Tamps; Medium development: Camp, Col, Dgo, Gto, Hgo, Mich, Mor, Nay, Pue, SLP, Sin, Tab, Tlax, Ver, Yuc, Zac; Low development: Chis, Gro and Oax. For further information on the method used to make this regional split see Situación Regional Sectorial México, “Agrupamiento Regional, Cómo y Para Qué”, November 2007, BBVA Bancomer.

vi) the unemployment rate, annual headline inflation and the fiscal reform have a negative effect as opposed to the *ex-post* real interest rate and the labor reform.<sup>7</sup>

To better grasp the results contained in Appendix B, the influence –or the so-called partial effects– of the socio-demographic factors on the probabilities of the three answers –“Yes”, “Don’t know” and “No”– was quantified. Tables 1, 2, 3, 4 and 5 show how these probabilities are affected by such factors for a male with an educational level above high school and who lives in one of the five economic regions into which the country has been divided.<sup>8</sup>

Table 1

**Probabilities estimated by the model with added macroeconomic variables for a male with an educational level above high school and who lives in the High development region\***

Age/Marital Status	Yes				Don't know				No			
	Cohabitation or married	Separated or divorced	Widower	Single	Cohabitation or married	Separated or divorced	Widower	Single	Cohabitation or married	Separated or divorced	Widower	Single
15-24 years	0.43	0.41	0.43	0.44	0.00	0.00	0.00	0.00	0.57	0.59	0.57	0.56
25-34 years	0.38	0.35	0.37	0.39	0.00	0.00	0.00	0.00	0.62	0.64	0.62	0.61
35-44 years	0.29	0.28	0.29	0.30	0.00	0.00	0.00	0.00	0.70	0.72	0.70	0.69
45-54 years	0.26	0.24	0.26	0.27	0.00	0.00	0.00	0.00	0.74	0.75	0.74	0.73
55-64 years	0.24	0.22	0.24	0.25	0.00	0.00	0.00	0.00	0.76	0.77	0.76	0.75
65 years or older	0.19	0.18	0.19	0.20	0.00	0.00	0.00	0.00	0.81	0.82	0.81	0.80

\*/ A multinomial logistic model was estimated without taking into account the “Don’t earn any income” reply option. The sample data spanned from January 2003 to November 2014. The probability values were obtained using the means for the unemployment rate, the annual percentage variation in the IGAE, annual headline inflation and the *ex-post* real interest rate.

Source: BBVA Research with INEGI data

Table 2

**Probabilities estimated by the model with added macroeconomic variables for a male with an educational level above high school and who lives in the Touristic region\***

Age/Marital Status	Yes				Don't know				No			
	Cohabitation or married	Separated or divorced	Widower	Single	Cohabitation or married	Separated or divorced	Widower	Single	Cohabitation or married	Separated or divorced	Widower	Single
15-24 years	0.63	0.61	0.63	0.64	0.00	0.00	0.00	0.00	0.37	0.39	0.37	0.36
25-34 years	0.58	0.55	0.57	0.59	0.00	0.00	0.00	0.00	0.42	0.45	0.42	0.41
35-44 years	0.49	0.46	0.48	0.50	0.00	0.00	0.00	0.00	0.51	0.54	0.52	0.50
45-54 years	0.44	0.42	0.44	0.45	0.00	0.00	0.00	0.00	0.56	0.58	0.56	0.55
55-64 years	0.42	0.39	0.41	0.43	0.00	0.00	0.00	0.00	0.58	0.60	0.58	0.57
65 years or older	0.35	0.33	0.35	0.36	0.00	0.00	0.00	0.00	0.65	0.67	0.65	0.64

\*/ A multinomial logistic model was estimated without taking into account the “Don’t earn any income” reply option. The sample data spanned from January 2003 to November 2014. The probability values were obtained using the means for the unemployment rate, the annual percentage variation in the IGAE, annual headline inflation and the *ex-post* real interest rate.

Source: BBVA Research with INEGI data

<sup>7</sup> The apparent differences in savings affordability among the various educational levels or between men and women could actually be reflecting the differences in the average income of these groups.

<sup>8</sup> See Appendix C for the results corresponding to other educational levels.

Table 3

**Probabilities estimated by the model with added macroeconomic variables for a male with an educational level above high school and who lives in the Industrial region\***

Age/Marital Status	Yes				Don't know				No			
	Cohabitation or married	Separated or divorced	Widower	Single	Cohabitation or married	Separated or divorced	Widower	Single	Cohabitation or married	Separated or divorced	Widower	Single
15-24 years	0.56	0.54	0.56	0.57	0.00	0.00	0.00	0.00	0.44	0.46	0.44	0.43
25-34 years	0.51	0.48	0.50	0.52	0.00	0.00	0.00	0.00	0.49	0.52	0.49	0.48
35-44 years	0.42	0.39	0.41	0.43	0.00	0.00	0.00	0.00	0.58	0.60	0.58	0.57
45-54 years	0.38	0.35	0.37	0.38	0.00	0.00	0.00	0.00	0.62	0.64	0.63	0.61
55-64 years	0.35	0.33	0.35	0.36	0.00	0.00	0.00	0.00	0.65	0.67	0.65	0.64
65 years or older	0.29	0.27	0.29	0.30	0.00	0.00	0.00	0.00	0.71	0.73	0.71	0.70

\*/ A multinomial logistic model was estimated without taking into account the "Don't earn any income" reply option. The sample data spanned from January 2003 to November 2014. The probability values were obtained using the means for the unemployment rate, the annual percentage variation in the IGAE, annual headline inflation and the *ex-post* real interest rate.

Source: BBVA Research with INEGI data

Table 4

**Probabilities estimated by the model with added macroeconomic variables for a male with an educational level above high school and who lives in the Medium development region\***

Age/Marital Status	Yes				Don't know				No			
	Cohabitation or married	Separated or divorced	Widower	Single	Cohabitation or married	Separated or divorced	Widower	Single	Cohabitation or married	Separated or divorced	Widower	Single
15-24 years	0.55	0.53	0.55	0.56	0.00	0.00	0.00	0.00	0.45	0.47	0.45	0.44
25-34 years	0.50	0.48	0.50	0.51	0.00	0.00	0.00	0.00	0.50	0.52	0.50	0.49
35-44 years	0.41	0.39	0.41	0.42	0.00	0.00	0.00	0.00	0.59	0.61	0.59	0.58
45-54 years	0.37	0.35	0.37	0.38	0.00	0.00	0.00	0.00	0.63	0.65	0.63	0.62
55-64 years	0.34	0.32	0.34	0.35	0.00	0.00	0.00	0.00	0.66	0.68	0.66	0.65
65 years or older	0.28	0.27	0.28	0.29	0.00	0.00	0.00	0.00	0.72	0.73	0.72	0.71

\*/ A multinomial logistic model was estimated without taking into account the "Don't earn any income" reply option. The sample data spanned from January 2003 to November 2014. The probability values were obtained using the means for the unemployment rate, the annual percentage variation in the IGAE, annual headline inflation and the *ex-post* real interest rate.

Source: BBVA Research with INEGI data

Table 5

**Probabilities estimated by the model with added macroeconomic variables for a male with an educational level above high school and who lives in the Low development region\***

Age/Marital Status	Yes				Don't know				No			
	Cohabitation or married	Separated or divorced	Widower	Single	Cohabitation or married	Separated or divorced	Widower	Single	Cohabitation or married	Separated or divorced	Widower	Single
15-24 years	0.55	0.52	0.54	0.56	0.00	0.00	0.00	0.00	0.45	0.48	0.46	0.44
25-34 years	0.49	0.47	0.49	0.50	0.00	0.00	0.00	0.00	0.51	0.53	0.51	0.50
35-44 years	0.40	0.38	0.40	0.41	0.00	0.00	0.00	0.00	0.60	0.62	0.60	0.59
45-54 years	0.36	0.34	0.36	0.37	0.00	0.00	0.00	0.00	0.64	0.66	0.64	0.63
55-64 years	0.34	0.32	0.34	0.35	0.00	0.00	0.00	0.00	0.66	0.68	0.66	0.65
65 years or older	0.28	0.26	0.28	0.29	0.00	0.00	0.00	0.00	0.72	0.74	0.72	0.71

\*/ A multinomial logistic model was estimated without taking into account the "Don't earn any income" reply option. The sample data spanned from January 2003 to November 2014. The probability values were obtained using the means for the unemployment rate, the annual percentage variation in the IGAE, annual headline inflation and the *ex-post* real interest rate.

Source: BBVA Research with INEGI data

By comparing the probabilities from Tables 1, 2, 3, 4 and 5, it can be noted that the respondents in the Touristic region tend to answer more positively regarding their savings affordability than those from other regions. There is also a higher probability of answering more positively when the educational level is higher (see Tables in Appendix C). This last result likely reflects the positive correlation between the educational level, income and savings.

As for the age-interval in which the respondent falls, from the Tables above it can be seen that the probability of being positive concerning savings affordability diminishes with age. Unlike the other socio-demographic variables, the marital status does not seem to have a significant impact on this probability.

Tables 6, 7, 8, 9 and 10 show how the response probabilities for question 10 of the ENCO's basic questionnaire are affected by the socio-demographic factors for a female with an educational level above high school and who lives in one of the five economic regions into which the country has been divided.

Table 6

**Probabilities estimated by the model with added macroeconomic variables for a female with an educational level above high school and who lives in the High development region\***

Age/Marital Status	Yes				Don't know				No			
	Cohabitation or married	Separated or divorced	Widow	Single	Cohabitation or married	Separated or divorced	Widow	Single	Cohabitation or married	Separated or divorced	Widow	Single
15-24 years	0.35	0.33	0.35	0.36	0.00	0.00	0.00	0.00	0.65	0.67	0.65	0.64
25-34 years	0.30	0.28	0.30	0.31	0.00	0.00	0.00	0.00	0.70	0.71	0.70	0.69
35-44 years	0.23	0.22	0.23	0.24	0.00	0.00	0.00	0.00	0.77	0.78	0.77	0.76
45-54 years	0.20	0.19	0.20	0.21	0.00	0.00	0.00	0.00	0.80	0.81	0.80	0.79
55-64 years	0.19	0.17	0.18	0.19	0.00	0.00	0.00	0.00	0.81	0.83	0.81	0.81
65 years or older	0.15	0.14	0.15	0.15	0.00	0.00	0.00	0.00	0.85	0.86	0.85	0.85

\*/ A multinomial logistic model was estimated without taking into account the "Don't earn any income" reply option. The sample data spanned from January 2003 to November 2014. The probability values were obtained using the means for the unemployment rate, the annual percentage variation in the IGAE, annual headline inflation and the *ex-post* real interest rate.

Source: BBVA Research with INEGI data

Table 7

**Probabilities estimated by the model with added macroeconomic variables for a female with an educational level above high school and who lives in the Touristic region\***

Age/Marital Status	Yes				Don't know				No			
	Cohabitation or married	Separated or divorced	Widow	Single	Cohabitation or married	Separated or divorced	Widow	Single	Cohabitation or married	Separated or divorced	Widow	Single
15-24 years	0.55	0.53	0.55	0.56	0.00	0.00	0.00	0.00	0.45	0.47	0.45	0.44
25-34 years	0.49	0.47	0.49	0.50	0.00	0.00	0.00	0.00	0.50	0.53	0.51	0.49
35-44 years	0.40	0.38	0.40	0.41	0.00	0.00	0.00	0.00	0.59	0.62	0.60	0.58
45-54 years	0.36	0.34	0.36	0.37	0.00	0.00	0.00	0.00	0.63	0.66	0.64	0.63
55-64 years	0.34	0.32	0.34	0.35	0.00	0.00	0.00	0.00	0.66	0.68	0.66	0.65
65 years or older	0.28	0.26	0.28	0.29	0.00	0.00	0.00	0.00	0.72	0.74	0.72	0.71

\*/ A multinomial logistic model was estimated without taking into account the "Don't earn any income" reply option. The sample data spanned from January 2003 to November 2014. The probability values were obtained using the means for the unemployment rate, the annual percentage variation in the IGAE, annual headline inflation and the *ex-post* real interest rate.

Source: BBVA Research with INEGI data

Table 8

**Probabilities estimated by the model with added macroeconomic variables for a female with an educational level above high school and who lives in the Industrial region\***

Age/Marital Status	Yes				Don't know				No			
	Cohabitation or married	Separated or divorced	Widow	Single	Cohabitation or married	Separated or divorced	Widow	Single	Cohabitation or married	Separated or divorced	Widow	Single
15-24 years	0.48	0.46	0.48	0.49	0.00	0.00	0.00	0.00	0.52	0.54	0.52	0.51
25-34 years	0.42	0.40	0.42	0.43	0.00	0.00	0.00	0.00	0.57	0.60	0.58	0.56
35-44 years	0.34	0.32	0.34	0.35	0.00	0.00	0.00	0.00	0.66	0.68	0.66	0.65
45-54 years	0.30	0.28	0.30	0.31	0.00	0.00	0.00	0.00	0.70	0.72	0.70	0.69
55-64 years	0.28	0.26	0.28	0.29	0.00	0.00	0.00	0.00	0.72	0.74	0.72	0.71
65 years or older	0.23	0.21	0.23	0.23	0.00	0.00	0.00	0.00	0.77	0.79	0.77	0.77

\*/ A multinomial logistic model was estimated without taking into account the "Don't earn any income" reply option. The sample data spanned from January 2003 to November 2014. The probability values were obtained using the means for the unemployment rate, the annual percentage variation in the IGAE, annual headline inflation and the *ex-post* real interest rate.

Source: BBVA Research with INEGI data

Table 9

**Probabilities estimated by the model with added macroeconomic variables for a female with an educational level above high school and who lives in the Medium development region\***

Age/Marital Status	Yes				Don't know				No			
	Cohabitation or married	Separated or divorced	Widow	Single	Cohabitation or married	Separated or divorced	Widow	Single	Cohabitation or married	Separated or divorced	Widow	Single
15-24 years	0.47	0.45	0.47	0.48	0.00	0.00	0.00	0.00	0.53	0.55	0.53	0.52
25-34 years	0.42	0.40	0.42	0.43	0.00	0.00	0.00	0.00	0.58	0.60	0.58	0.57
35-44 years	0.33	0.31	0.33	0.34	0.00	0.00	0.00	0.00	0.67	0.69	0.67	0.66
45-54 years	0.30	0.28	0.29	0.30	0.00	0.00	0.00	0.00	0.70	0.72	0.70	0.69
55-64 years	0.27	0.26	0.27	0.28	0.00	0.00	0.00	0.00	0.72	0.74	0.73	0.72
65 years or older	0.22	0.21	0.22	0.23	0.00	0.00	0.00	0.00	0.78	0.79	0.78	0.77

\*/ A multinomial logistic model was estimated without taking into account the "Don't earn any income" reply option. The sample data spanned from January 2003 to November 2014. The probability values were obtained using the means for the unemployment rate, the annual percentage variation in the IGAE, annual headline inflation and the *ex-post* real interest rate.

Source: BBVA Research with INEGI data

Table 10

**Probabilities estimated by the model with added macroeconomic variables for a female with an educational level above high school and who lives in the Low development region\***

Age/Marital Status	Yes				Don't know				No			
	Cohabitation or married	Separated or divorced	Widow	Single	Cohabitation or married	Separated or divorced	Widow	Single	Cohabitation or married	Separated or divorced	Widow	Single
15-24 years	0.46	0.44	0.46	0.47	0.00	0.00	0.00	0.00	0.54	0.56	0.54	0.53
25-34 years	0.41	0.39	0.41	0.42	0.00	0.00	0.00	0.00	0.59	0.61	0.59	0.58
35-44 years	0.33	0.31	0.32	0.34	0.00	0.00	0.00	0.00	0.67	0.69	0.67	0.66
45-54 years	0.29	0.27	0.29	0.30	0.00	0.00	0.00	0.00	0.71	0.73	0.71	0.70
55-64 years	0.27	0.25	0.27	0.28	0.00	0.00	0.00	0.00	0.73	0.75	0.73	0.72
65 years or older	0.22	0.20	0.22	0.22	0.00	0.00	0.00	0.00	0.78	0.80	0.78	0.78

\*/ A multinomial logistic model was estimated without taking into account the "Don't earn any income" reply option. The sample data spanned from January 2003 to November 2014. The probability values were obtained using the means for the unemployment rate, the annual percentage variation in the IGAE, annual headline inflation and the *ex-post* real interest rate.

Source: BBVA Research with INEGI data

If we compare Tables 6, 7, 8, 9 and 10 with the corresponding Tables for males (Table 6 with Table 1, Table 7 with Table 2, etc.), we can see that the probability of answering positively regarding savings affordability is lower for women. This is likely to be due to the income differences there might be between genders.

Regarding the influence that macroeconomic variables might have on Mexicans' affordability to save, it was found that five of them have statistically significant effects. As economic theory would predict, the unemployment rate and annual headline inflation make savings less affordable while increases in the *ex-post* real interest rate incentivizes it. On the other hand, the fiscal reform has had an adverse impact whereas the labor reform seems to have helped such affordability. The explanation for the latter phenomenon could have something to do with the job formalization process promoted by the labor reform, which has made it possible to allocate a portion of income to the various private and public savings available vehicles.

## Conclusions

Among the most important findings from analyzing the question of whether or not respondents can afford to save, we have the following: i) the respondents from the Touristic, Medium development, Industrial and Low development regions tend to reply more positively than those in the High development region; ii) the higher the educational level of the respondent, the higher the probability of being positive about savings affordability; iii) such probability is lower for women; iv) it can be seen that the probability of answering affirmatively diminishes with the respondent's age-interval; v) those surveyed whose marital status is unmarried partnership or married, separated or divorced, and widowers or widows are less likely to answer positively than singles; vi) the unemployment rate, annual headline inflation and the fiscal reform adversely affect the ability to save of Mexican consumers whereas the real *ex-post* interest rate and the labor reform help to make savings more viable.

The results of the analysis carried out in this paper are derived from estimated values using a multinomial logit model with a defined econometric specification, which was based on socio-demographic variables modeled as dummy variables and on certain macroeconomic variables. Moreover, the ENCO is a survey designed to represent households nationwide and in no way it is representative of any of the socio-demographic characteristics such as the region, gender, educational level, marital status or the age-interval to which respondents belong. Consequently, the above results should be interpreted bearing these limitations in mind.



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## Appendix A

Using the mathematical notation employed by Wooldridge (2002), the multinomial logit model consists of the following: let  $y$  be a random variable which can take the values  $k = 0, 1, \dots, C - 1$  where  $C$  is a positive integer and represents the total number of classes; let  $x$  be a  $(1 \times N)$  vector of explanatory variables with the first element equal to unity. Then the multinomial logit model has response probabilities

$$P(y = k|x) = \frac{\exp(x\beta_k)}{1 + \sum_{h=1}^{C-1} \exp(x\beta_h)}, \quad k = 1, \dots, C - 1, \quad (\text{A.1})$$

where  $\beta_k$  is  $N \times 1$ ,  $k = 1, \dots, C - 1$ . Given that the response probabilities have to add up to one, then

$$P(y = 0|x) = \frac{1}{1 + \sum_{h=1}^{C-1} \exp(x\beta_h)}. \quad (\text{A.2})$$

The model given by equations (A.1) and (A.2) was applied to the responses to question 10 to determine whether the region, educational level, gender, marital status and/or age-interval corresponding to respondents as well as other macroeconomic variables might have an influence on their ability to save. This was implemented using dummy variables for the regions, genders, marital status, different educational levels and age-intervals that were arbitrarily defined.

## Appendix B

This appendix shows the results of the econometric estimates for three specifications: i) the model with only socio-demographic factors; ii) the model with socio-demographic factors and macroeconomic variables; and iii) the model with socio-demographic factors and dummy variables to control for any possible monthly seasonality in responses.

The econometric estimates for the response “Yes” are shown next.

Table 1B  
**Logit model estimation: odds ratios for the response “Yes”**

	Socio-demographic factors	With macroeconomic variables added	With monthly dummy variables added
<b>Intercept</b>	0.36 *** (-48.4)	0.82 *** (-2.9)	0.36 *** (-38.7)
<b>Touristic</b>	2.20 *** (29.3)	2.26 *** (30.0)	2.20 *** (29.3)
<b>Industrial</b>	1.69 *** (31.1)	1.70 *** (31.5)	1.69 *** (31.1)
<b>Medium development</b>	1.63 *** (28.1)	1.66 *** (29.0)	1.63 *** (28.2)
<b>Low development</b>	1.56 *** (18.7)	1.60 *** (19.7)	1.56 *** (18.7)
<b>None or preschool</b>	0.27 *** (-37.9)	0.25 *** (-40.2)	0.27 *** (-37.9)
<b>Elementary or secondary</b>	0.46 *** (-75.3)	0.43 *** (-78.9)	0.45 *** (-75.3)
<b>High school</b>	0.70 *** (-28.1)	0.68 *** (-30.4)	0.70 *** (-28.1)
<b>Woman</b>	0.72 *** (-36.6)	0.72 *** (-35.8)	0.72 *** (-36.6)
<b>Cohabitation or married</b>	0.97 ** (-2.4)	0.96 *** (-3.5)	0.97 ** (-2.4)
<b>Separated or divorced</b>	0.87 *** (-6.7)	0.88 *** (-6.6)	0.87 *** (-6.7)
<b>Widower or widow</b>	0.97 (-1.2)	0.95 * (-1.8)	0.97 (-1.2)
<b>15-24 years</b>	2.17 *** (44.8)	2.12 *** (43.2)	2.17 *** (44.9)
<b>25-34 years</b>	1.74 *** (38.5)	1.71 *** (36.7)	1.74 *** (38.5)
<b>35-44 years</b>	1.21 *** (13.1)	1.19 *** (11.8)	1.21 *** (13.1)
<b>55-64 years</b>	0.88 *** (-6.9)	0.90 *** (-6.0)	0.88 *** (-6.9)
<b>65 years or older</b>	0.66 *** (-19.0)	0.68 *** (-17.9)	0.66 *** (-19.0)
<b>Unemployment rate</b>		0.85 *** (-18.1)	
<b>IGAE's annual variation (%)</b>		1.00 (0.2)	
<b>Annual headline inflation (%)</b>		0.96 *** (-5.0)	
<b>Ex-post real interest rate (%)</b>		1.05 *** (11.1)	
<b>Labor reform</b>		1.04 ** (2.0)	
<b>Fiscal reform</b>		0.96 * (-1.8)	
<b>Pseudo R<sup>2</sup></b>	0.06	0.07	0.06
<b>Correct class predictions (%)</b>	72.476	72.579	72.507

This table gives odds ratios and t statistics in parenthesis. In the case of socio-demographic factors, odds ratios greater than (less than) one would indicate that the coefficient of the probability of answering “Yes” over the probability of answering “No” for a region, educational level, marital status, age-interval or gender is greater (less) than the ratio corresponding to the region, educational level, marital status, age-interval or gender which has been omitted in the econometric specification. As far as the macroeconomic variables are concerned, odds ratios greater (less) than one would mean a positive (negative) influence of the variable on the ratio of the probability of answering “Yes” over the probability of answering “No”.

\* Significant to 10%; \*\* to 5%; \*\*\* to 1%.  
 Source: BBVA Research with INEGI data

In the previous Table it can be seen that the odds ratios are not very sensitive to the addition of macroeconomic variables or dummy variables to control for monthly seasonality of respondents' answers. On the other hand, the model with macroeconomic variables proved to be the one which best predicts the responses within the sample. Nonetheless, it is important to point out that the statistical significances for the labor and tax reforms could be due to the omission of other key variables.

The results of the econometric estimates for the "Don't know" response are given in the Table below.

Table 2B

**Logit model estimation: odds ratios for the response "Don't know"**

	Socio-demographic factors	With macroeconomic variables added	With monthly dummy variables added
<b>Intercept</b>	0.01 *** (-37.9)	0.04 *** (-7.1)	0.01 *** (-29.9)
<b>Touristic</b>	0.55 *** (-2.6)	0.57 *** (-2.4)	0.55 *** (-2.6)
<b>Industrial</b>	0.80 ** (-2.3)	0.81 ** (-2.1)	0.80 ** (-2.3)
<b>Medium development</b>	1.12 (1.2)	1.17 (1.6)	1.12 (1.2)
<b>Low development</b>	0.35 *** (-4.9)	0.37 *** (-4.7)	0.35 *** (-4.9)
<b>None or preschool</b>	0.96 (-0.2)	0.81 (-1.3)	0.96 (-0.3)
<b>Elementary or secondary</b>	0.81 *** (-2.9)	0.73 *** (-4.2)	0.81 *** (-2.9)
<b>High school</b>	0.88 (-1.4)	0.82 ** (-2.1)	0.88 (-1.4)
<b>Woman</b>	0.90 (-1.6)	0.91 (-1.4)	0.90 (-1.6)
<b>Cohabitation or married</b>	0.97 (-0.3)	0.95 (-0.7)	0.97 (-0.3)
<b>Separated or divorced</b>	1.08 (0.6)	1.07 (0.5)	1.08 (0.6)
<b>Widower or widow</b>	1.07 (0.4)	1.04 (0.3)	1.07 (0.4)
<b>15-24 years</b>	1.56 *** (3.6)	1.46 *** (3.1)	1.57 *** (3.6)
<b>25-34 years</b>	1.55 *** (4.4)	1.47 *** (3.8)	1.55 *** (4.4)
<b>35-44 years</b>	1.27 ** (2.4)	1.22 ** (2.0)	1.27 ** (2.4)
<b>55-64 years</b>	1.02 (0.2)	1.06 (0.5)	1.02 (0.2)
<b>65 years or older</b>	0.96 (-0.3)	1.01 (0.1)	0.96 (-0.3)
<b>Unemployment rate</b>		0.79 *** (-4.1)	
<b>IGAE's annual variation (%)</b>		0.96 *** (-2.8)	
<b>Annual headline inflation (%)</b>		0.84 *** (-3.2)	
<b>Ex-post real interest rate (%)</b>		1.05 (1.6)	
<b>Labor reform</b>		0.29 *** (-6.1)	
<b>Fiscal reform</b>		0.91 (-0.3)	
<b>Pseudo R<sup>2</sup></b>	0.06	0.07	0.06
<b>Correct class predictions (%)</b>	72.476	72.579	72.507

This table gives odds ratios and t statistics in parenthesis. In the case of socio-demographic factors, odds ratios greater than (less than) one would indicate that the coefficient of the probability of answering "Don't know" over the probability of answering "No" for a region, educational level, marital status, age-interval or gender is greater (less) than the ratio corresponding to the region, educational level, marital status, age-interval or gender which has been omitted in the econometric specification. As far as the macroeconomic variables are concerned, odds ratios greater (less) than one would mean a positive (negative) influence of the variable on the ratio of the probability of answering "Don't know" over the probability of answering "No".

Source: BBVA Research with INEGI data

Similarly to what was observed for the “Yes” response, the odds ratios are not very sensitive either to the addition of macroeconomic variables or dummy variables to control for monthly seasonality of the answers from respondents.

The models with only socio-demographic factors and those which add macroeconomic variables constitute nested models. Consequently, they qualify for an analysis of variance (ANOVA) to determine whether the macroeconomic variables provide incremental information to the multinomial logit model estimation. The tests showed the statistical significance of including these variables.

## Appendix C

This appendix presents the results for the following educational levels: high school, primary or secondary (middle school), none or pre-school. The results associated with men are in Tables 1C to 15C while those for women are in Tables 16C to 30C.

Table 1C

**Probabilities estimated by the model with added macroeconomic variables for a male with a high school education and who lives in the High development region\***

Age/Marital Status	Yes				Don't know				No			
	Cohabitation or married	Separated or divorced	Widower	Single	Cohabitation or married	Separated or divorced	Widower	Single	Cohabitation or married	Separated or divorced	Widower	Single
15-24 years	0.34	0.32	0.33	0.35	0.00	0.00	0.00	0.00	0.66	0.68	0.66	0.65
25-34 years	0.29	0.27	0.29	0.30	0.00	0.00	0.00	0.00	0.71	0.73	0.71	0.70
35-44 years	0.22	0.21	0.22	0.23	0.00	0.00	0.00	0.00	0.78	0.79	0.78	0.77
45-54 years	0.19	0.18	0.19	0.20	0.00	0.00	0.00	0.00	0.81	0.82	0.81	0.80
55-64 years	0.18	0.16	0.18	0.18	0.00	0.00	0.00	0.00	0.82	0.83	0.82	0.82
65 years or older	0.14	0.13	0.14	0.14	0.00	0.00	0.00	0.00	0.86	0.87	0.86	0.85

\*/ A multinomial logistic model was estimated without taking into account the "Don't earn any income" reply option. The sample data spanned from January 2003 to November 2014. The probability values were obtained using the means for the unemployment rate, the annual percentage variation in the IGAE, annual headline inflation and the *ex-post* real interest rate.

Source: BBVA Research with INEGI data

Table 2C

**Probabilities estimated by the model with added macroeconomic variables for a male with primary or secondary schooling and who lives in the High development region\***

Age/Marital Status	Yes				Don't know				No			
	Cohabitation or married	Separated or divorced	Widower	Single	Cohabitation or married	Separated or divorced	Widower	Single	Cohabitation or married	Separated or divorced	Widower	Single
15-24 years	0.24	0.23	0.24	0.25	0.00	0.00	0.00	0.00	0.75	0.77	0.75	0.75
25-34 years	0.21	0.19	0.21	0.21	0.00	0.00	0.00	0.00	0.79	0.81	0.79	0.78
35-44 years	0.15	0.14	0.15	0.16	0.00	0.00	0.00	0.00	0.84	0.86	0.85	0.84
45-54 years	0.13	0.12	0.13	0.14	0.00	0.00	0.00	0.00	0.87	0.88	0.87	0.86
55-64 years	0.12	0.11	0.12	0.13	0.00	0.00	0.00	0.00	0.88	0.89	0.88	0.87
65 years or older	0.09	0.09	0.09	0.10	0.00	0.00	0.00	0.00	0.90	0.91	0.91	0.90

\*/ A multinomial logistic model was estimated without taking into account the "Don't earn any income" reply option. The sample data spanned from January 2003 to November 2014. The probability values were obtained using the means for the unemployment rate, the annual percentage variation in the IGAE, annual headline inflation and the *ex-post* real interest rate.

Source: BBVA Research with INEGI data

Table 3C

**Probabilities estimated by the model with added macroeconomic variables for a male with no schooling or a pre-school education and who lives in the High development region\***

Age/Marital Status	Yes				Don't know				No			
	Cohabitation or married	Separated or divorced	Widower	Single	Cohabitation or married	Separated or divorced	Widower	Single	Cohabitation or married	Separated or divorced	Widower	Single
15-24 years	0.16	0.14	0.15	0.16	0.00	0.00	0.00	0.00	0.84	0.85	0.84	0.84
25-34 years	0.13	0.12	0.13	0.13	0.00	0.00	0.00	0.00	0.87	0.88	0.87	0.86
35-44 years	0.09	0.09	0.09	0.10	0.00	0.00	0.00	0.00	0.90	0.91	0.90	0.90
45-54 years	0.08	0.07	0.08	0.08	0.00	0.00	0.00	0.00	0.92	0.92	0.92	0.92
55-64 years	0.07	0.07	0.07	0.08	0.00	0.00	0.00	0.00	0.93	0.93	0.93	0.92
65 years or older	0.06	0.05	0.06	0.06	0.00	0.00	0.00	0.00	0.94	0.95	0.94	0.94

\*/ A multinomial logistic model was estimated without taking into account the "Don't earn any income" reply option. The sample data spanned from January 2003 to November 2014. The probability values were obtained using the means for the unemployment rate, the annual percentage variation in the IGAE, annual headline inflation and the *ex-post* real interest rate.

Source: BBVA Research with INEGI data

Table 4C

**Probabilities estimated by the model with added macroeconomic variables for a male with a high school education and who lives in the Touristic region\***

Age/Marital Status	Yes				Don't know				No			
	Cohabitation or married	Separated or divorced	Widower	Single	Cohabitation or married	Separated or divorced	Widower	Single	Cohabitation or married	Separated or divorced	Widower	Single
15-24 years	0.53	0.51	0.53	0.54	0.00	0.00	0.00	0.00	0.47	0.49	0.47	0.46
25-34 years	0.48	0.46	0.48	0.49	0.00	0.00	0.00	0.00	0.52	0.54	0.52	0.51
35-44 years	0.39	0.37	0.39	0.40	0.00	0.00	0.00	0.00	0.61	0.63	0.61	0.60
45-54 years	0.35	0.33	0.35	0.36	0.00	0.00	0.00	0.00	0.65	0.67	0.65	0.64
55-64 years	0.33	0.31	0.32	0.34	0.00	0.00	0.00	0.00	0.67	0.69	0.67	0.66
65 years or older	0.27	0.25	0.27	0.28	0.00	0.00	0.00	0.00	0.73	0.75	0.73	0.72

\*/ A multinomial logistic model was estimated without taking into account the "Don't earn any income" reply option. The sample data spanned from January 2003 to November 2014. The probability values were obtained using the means for the unemployment rate, the annual percentage variation in the IGAE, annual headline inflation and the *ex-post* real interest rate.

Source: BBVA Research with INEGI data

Table 5C

**Probabilities estimated by the model with added macroeconomic variables for a male with primary or secondary schooling and who lives in the Touristic region\***

Age/Marital Status	Yes				Don't know				No			
	Cohabitation or married	Separated or divorced	Widower	Single	Cohabitation or married	Separated or divorced	Widower	Single	Cohabitation or married	Separated or divorced	Widower	Single
15-24 years	0.42	0.40	0.42	0.43	0.00	0.00	0.00	0.00	0.58	0.60	0.58	0.57
25-34 years	0.37	0.35	0.37	0.38	0.00	0.00	0.00	0.00	0.63	0.65	0.63	0.62
35-44 years	0.29	0.27	0.29	0.30	0.00	0.00	0.00	0.00	0.71	0.73	0.71	0.70
45-54 years	0.26	0.24	0.26	0.26	0.00	0.00	0.00	0.00	0.74	0.76	0.74	0.73
55-64 years	0.24	0.22	0.24	0.24	0.00	0.00	0.00	0.00	0.76	0.78	0.76	0.76
65 years or older	0.19	0.18	0.19	0.20	0.00	0.00	0.00	0.00	0.81	0.82	0.81	0.80

\*/ A multinomial logistic model was estimated without taking into account the "Don't earn any income" reply option. The sample data spanned from January 2003 to November 2014. The probability values were obtained using the means for the unemployment rate, the annual percentage variation in the IGAE, annual headline inflation and the *ex-post* real interest rate.

Source: BBVA Research with INEGI data

Table 6C

**Probabilities estimated by the model with added macroeconomic variables for a male with no schooling or a pre-school education and who lives in the Touristic region\***

Age/Marital Status	Yes				Don't know				No			
	Cohabitation or married	Separated or divorced	Widower	Single	Cohabitation or married	Separated or divorced	Widower	Single	Cohabitation or married	Separated or divorced	Widower	Single
15-24 years	0.29	0.28	0.29	0.30	0.00	0.00	0.00	0.00	0.71	0.72	0.71	0.70
25-34 years	0.25	0.23	0.25	0.26	0.00	0.00	0.00	0.00	0.75	0.76	0.75	0.74
35-44 years	0.19	0.18	0.19	0.20	0.00	0.00	0.00	0.00	0.81	0.82	0.81	0.80
45-54 years	0.16	0.15	0.16	0.17	0.00	0.00	0.00	0.00	0.83	0.85	0.84	0.83
55-64 years	0.15	0.14	0.15	0.16	0.00	0.00	0.00	0.00	0.85	0.86	0.85	0.84
65 years or older	0.12	0.11	0.12	0.12	0.00	0.00	0.00	0.00	0.88	0.89	0.88	0.88

\*/ A multinomial logistic model was estimated without taking into account the "Don't earn any income" reply option. The sample data spanned from January 2003 to November 2014. The probability values were obtained using the means for the unemployment rate, the annual percentage variation in the IGAE, annual headline inflation and the *ex-post* real interest rate.

Source: BBVA Research with INEGI data

Table 7C

**Probabilities estimated by the model with added macroeconomic variables for a male with a high school education and who lives in the Industrial region\***

Age/Marital Status	Yes				Don't know				No			
	Cohabitation or married	Separated or divorced	Widower	Single	Cohabitation or married	Separated or divorced	Widower	Single	Cohabitation or married	Separated or divorced	Widower	Single
15-24 years	0.46	0.44	0.46	0.47	0.00	0.00	0.00	0.00	0.54	0.56	0.54	0.53
25-34 years	0.41	0.39	0.41	0.42	0.00	0.00	0.00	0.00	0.59	0.61	0.59	0.58
35-44 years	0.33	0.31	0.32	0.34	0.00	0.00	0.00	0.00	0.67	0.69	0.67	0.66
45-54 years	0.29	0.27	0.29	0.30	0.00	0.00	0.00	0.00	0.71	0.73	0.71	0.70
55-64 years	0.27	0.25	0.27	0.28	0.00	0.00	0.00	0.00	0.73	0.75	0.73	0.72
65 years or older	0.22	0.20	0.22	0.22	0.00	0.00	0.00	0.00	0.78	0.80	0.78	0.78

\*/ A multinomial logistic model was estimated without taking into account the "Don't earn any income" reply option. The sample data spanned from January 2003 to November 2014. The probability values were obtained using the means for the unemployment rate, the annual percentage variation in the IGAE, annual headline inflation and the *ex-post* real interest rate.

Source: BBVA Research with INEGI data

Table 8C

**Probabilities estimated by the model with added macroeconomic variables for a male with primary or secondary schooling and who lives in the Industrial region\***

Age/Marital Status	Yes				Don't know				No			
	Cohabitation or married	Separated or divorced	Widower	Single	Cohabitation or married	Separated or divorced	Widower	Single	Cohabitation or married	Separated or divorced	Widower	Single
15-24 years	0.36	0.33	0.35	0.36	0.00	0.00	0.00	0.00	0.64	0.66	0.64	0.63
25-34 years	0.31	0.29	0.31	0.32	0.00	0.00	0.00	0.00	0.69	0.71	0.69	0.68
35-44 years	0.24	0.22	0.23	0.24	0.00	0.00	0.00	0.00	0.76	0.78	0.76	0.76
45-54 years	0.21	0.19	0.21	0.21	0.00	0.00	0.00	0.00	0.79	0.81	0.79	0.79
55-64 years	0.19	0.18	0.19	0.20	0.00	0.00	0.00	0.00	0.81	0.82	0.81	0.80
65 years or older	0.15	0.14	0.15	0.16	0.00	0.00	0.00	0.00	0.85	0.86	0.85	0.84

\*/ A multinomial logistic model was estimated without taking into account the "Don't earn any income" reply option. The sample data spanned from January 2003 to November 2014. The probability values were obtained using the means for the unemployment rate, the annual percentage variation in the IGAE, annual headline inflation and the *ex-post* real interest rate.

Source: BBVA Research with INEGI data



Table 9C

**Probabilities estimated by the model with added macroeconomic variables for a male with no schooling or a pre-school education and who lives in the Industrial region\***

Age/Marital Status	Yes				Don't know				No			
	Cohabitation or married	Separated or divorced	Widower	Single	Cohabitation or married	Separated or divorced	Widower	Single	Cohabitation or married	Separated or divorced	Widower	Single
15-24 years	0.24	0.22	0.24	0.25	0.00	0.00	0.00	0.00	0.76	0.78	0.76	0.75
25-34 years	0.20	0.19	0.20	0.21	0.00	0.00	0.00	0.00	0.80	0.81	0.80	0.79
35-44 years	0.15	0.14	0.15	0.16	0.00	0.00	0.00	0.00	0.85	0.86	0.85	0.84
45-54 years	0.13	0.12	0.13	0.13	0.00	0.00	0.00	0.00	0.87	0.88	0.87	0.86
55-64 years	0.12	0.11	0.12	0.12	0.00	0.00	0.00	0.00	0.88	0.89	0.88	0.88
65 years or older	0.09	0.08	0.09	0.09	0.00	0.00	0.00	0.00	0.91	0.91	0.91	0.90

\*/ A multinomial logistic model was estimated without taking into account the "Don't earn any income" reply option. The sample data spanned from January 2003 to November 2014. The probability values were obtained using the means for the unemployment rate, the annual percentage variation in the IGAE, annual headline inflation and the *ex-post* real interest rate.  
Source: BBVA Research with INEGI data

Table 10C

**Probabilities estimated by the model with added macroeconomic variables for a male with a high school education and who lives in the Medium development region\***

Age/Marital Status	Yes				Don't know				No			
	Cohabitation or married	Separated or divorced	Widower	Single	Cohabitation or married	Separated or divorced	Widower	Single	Cohabitation or married	Separated or divorced	Widower	Single
15-24 years	0.46	0.43	0.45	0.47	0.00	0.00	0.00	0.00	0.54	0.56	0.54	0.53
25-34 years	0.40	0.38	0.40	0.41	0.00	0.00	0.00	0.00	0.59	0.62	0.60	0.58
35-44 years	0.32	0.30	0.32	0.33	0.00	0.00	0.00	0.00	0.68	0.70	0.68	0.67
45-54 years	0.28	0.27	0.28	0.29	0.00	0.00	0.00	0.00	0.71	0.73	0.72	0.71
55-64 years	0.26	0.24	0.26	0.27	0.00	0.00	0.00	0.00	0.74	0.75	0.74	0.73
65 years or older	0.21	0.20	0.21	0.22	0.00	0.00	0.00	0.00	0.79	0.80	0.79	0.78

\*/ A multinomial logistic model was estimated without taking into account the "Don't earn any income" reply option. The sample data spanned from January 2003 to November 2014. The probability values were obtained using the means for the unemployment rate, the annual percentage variation in the IGAE, annual headline inflation and the *ex-post* real interest rate.  
Source: BBVA Research with INEGI data

Table 11C

**Probabilities estimated by the model with added macroeconomic variables for a male with primary or secondary schooling and who lives in the Medium development region\***

Age/Marital Status	Yes				Don't know				No			
	Cohabitation or married	Separated or divorced	Widower	Single	Cohabitation or married	Separated or divorced	Widower	Single	Cohabitation or married	Separated or divorced	Widower	Single
15-24 years	0.35	0.33	0.35	0.36	0.00	0.00	0.00	0.00	0.65	0.67	0.65	0.64
25-34 years	0.30	0.28	0.30	0.31	0.00	0.00	0.00	0.00	0.70	0.72	0.70	0.69
35-44 years	0.23	0.22	0.23	0.24	0.00	0.00	0.00	0.00	0.77	0.78	0.77	0.76
45-54 years	0.20	0.19	0.20	0.21	0.00	0.00	0.00	0.00	0.80	0.81	0.80	0.79
55-64 years	0.19	0.17	0.18	0.19	0.00	0.00	0.00	0.00	0.81	0.83	0.81	0.81
65 years or older	0.15	0.14	0.15	0.15	0.00	0.00	0.00	0.00	0.85	0.86	0.85	0.85

\*/ A multinomial logistic model was estimated without taking into account the "Don't earn any income" reply option. The sample data spanned from January 2003 to November 2014. The probability values were obtained using the means for the unemployment rate, the annual percentage variation in the IGAE, annual headline inflation and the *ex-post* real interest rate.  
Source: BBVA Research with INEGI data

Table 12C

**Probabilities estimated by the model with added macroeconomic variables for a male with no schooling or a pre-school education and who lives in the Medium development region\***

Age/Marital Status	Yes				Don't know				No			
	Cohabitation or married	Separated or divorced	Widower	Single	Cohabitation or married	Separated or divorced	Widower	Single	Cohabitation or married	Separated or divorced	Widower	Single
15-24 years	0.23	0.22	0.23	0.24	0.00	0.00	0.00	0.00	0.76	0.78	0.77	0.76
25-34 years	0.20	0.18	0.20	0.20	0.00	0.00	0.00	0.00	0.80	0.81	0.80	0.79
35-44 years	0.15	0.14	0.15	0.15	0.00	0.00	0.00	0.00	0.85	0.86	0.85	0.85
45-54 years	0.13	0.12	0.13	0.13	0.00	0.00	0.00	0.00	0.87	0.88	0.87	0.87
55-64 years	0.11	0.11	0.11	0.12	0.00	0.00	0.00	0.00	0.88	0.89	0.88	0.88
65 years or older	0.09	0.08	0.09	0.09	0.00	0.00	0.00	0.00	0.91	0.92	0.91	0.91

\*/ A multinomial logistic model was estimated without taking into account the "Don't earn any income" reply option. The sample data spanned from January 2003 to November 2014. The probability values were obtained using the means for the unemployment rate, the annual percentage variation in the IGAE, annual headline inflation and the *ex-post* real interest rate.  
Source: BBVA Research with INEGI data

Table 13C

**Probabilities estimated by the model with added macroeconomic variables for a male with a high school education and who lives in the Low development region\***

Age/Marital Status	Yes				Don't know				No			
	Cohabitation or married	Separated or divorced	Widower	Single	Cohabitation or married	Separated or divorced	Widower	Single	Cohabitation or married	Separated or divorced	Widower	Single
15-24 years	0.45	0.43	0.45	0.46	0.00	0.00	0.00	0.00	0.55	0.57	0.55	0.54
25-34 years	0.40	0.37	0.39	0.41	0.00	0.00	0.00	0.00	0.60	0.62	0.60	0.59
35-44 years	0.31	0.29	0.31	0.32	0.00	0.00	0.00	0.00	0.69	0.71	0.69	0.68
45-54 years	0.28	0.26	0.28	0.29	0.00	0.00	0.00	0.00	0.72	0.74	0.72	0.71
55-64 years	0.26	0.24	0.26	0.26	0.00	0.00	0.00	0.00	0.74	0.76	0.74	0.74
65 years or older	0.21	0.19	0.21	0.21	0.00	0.00	0.00	0.00	0.79	0.81	0.79	0.79

\*/ A multinomial logistic model was estimated without taking into account the "Don't earn any income" reply option. The sample data spanned from January 2003 to November 2014. The probability values were obtained using the means for the unemployment rate, the annual percentage variation in the IGAE, annual headline inflation and the *ex-post* real interest rate.  
Source: BBVA Research with INEGI data

Table 14C

**Probabilities estimated by the model with added macroeconomic variables for a male with primary or secondary schooling and who lives in the Low development region\***

Age/Marital Status	Yes				Don't know				No			
	Cohabitation or married	Separated or divorced	Widower	Single	Cohabitation or married	Separated or divorced	Widower	Single	Cohabitation or married	Separated or divorced	Widower	Single
15-24 years	0.34	0.32	0.34	0.35	0.00	0.00	0.00	0.00	0.66	0.68	0.66	0.65
25-34 years	0.30	0.28	0.29	0.30	0.00	0.00	0.00	0.00	0.70	0.72	0.71	0.70
35-44 years	0.23	0.21	0.22	0.23	0.00	0.00	0.00	0.00	0.77	0.79	0.77	0.77
45-54 years	0.20	0.18	0.20	0.20	0.00	0.00	0.00	0.00	0.80	0.82	0.80	0.80
55-64 years	0.18	0.17	0.18	0.19	0.00	0.00	0.00	0.00	0.82	0.83	0.82	0.81
65 years or older	0.14	0.13	0.14	0.15	0.00	0.00	0.00	0.00	0.86	0.87	0.86	0.85

\*/ A multinomial logistic model was estimated without taking into account the "Don't earn any income" reply option. The sample data spanned from January 2003 to November 2014. The probability values were obtained using the means for the unemployment rate, the annual percentage variation in the IGAE, annual headline inflation and the *ex-post* real interest rate.  
Source: BBVA Research with INEGI data

Table 15C

**Probabilities estimated by the model with added macroeconomic variables for a male with no schooling or a pre-school education and who lives in the Low development region\***

Age/Marital Status	Yes				Don't know				No			
	Cohabitation or married	Separated or divorced	Widower	Single	Cohabitation or married	Separated or divorced	Widower	Single	Cohabitation or married	Separated or divorced	Widower	Single
15-24 years	0.23	0.21	0.23	0.24	0.00	0.00	0.00	0.00	0.77	0.79	0.77	0.76
25-34 years	0.19	0.18	0.19	0.20	0.00	0.00	0.00	0.00	0.81	0.82	0.81	0.80
35-44 years	0.14	0.13	0.14	0.15	0.00	0.00	0.00	0.00	0.86	0.87	0.86	0.85
45-54 years	0.12	0.11	0.12	0.13	0.00	0.00	0.00	0.00	0.88	0.89	0.88	0.87
55-64 years	0.11	0.10	0.11	0.12	0.00	0.00	0.00	0.00	0.89	0.90	0.89	0.88
65 years or older	0.09	0.08	0.09	0.09	0.00	0.00	0.00	0.00	0.91	0.92	0.91	0.91

\*/ A multinomial logistic model was estimated without taking into account the "Don't earn any income" reply option. The sample data spanned from January 2003 to November 2014. The probability values were obtained using the means for the unemployment rate, the annual percentage variation in the IGAE, annual headline inflation and the *ex-post* real interest rate.

Source: BBVA Research with INEGI data

Table 16C

**Probabilities estimated by the model with added macroeconomic variables for a female with a high school education and who lives in the High development region\***

Age/Marital Status	Yes				Don't know				No			
	Cohabitation or married	Separated or divorced	Widow	Single	Cohabitation or married	Separated or divorced	Widow	Single	Cohabitation or married	Separated or divorced	Widow	Single
15-24 years	0.27	0.25	0.27	0.28	0.00	0.00	0.00	0.00	0.73	0.75	0.73	0.72
25-34 years	0.23	0.21	0.23	0.23	0.00	0.00	0.00	0.00	0.77	0.79	0.77	0.76
35-44 years	0.17	0.16	0.17	0.18	0.00	0.00	0.00	0.00	0.83	0.84	0.83	0.82
45-54 years	0.15	0.14	0.15	0.15	0.00	0.00	0.00	0.00	0.85	0.86	0.85	0.85
55-64 years	0.13	0.12	0.13	0.14	0.00	0.00	0.00	0.00	0.86	0.87	0.87	0.86
65 years or older	0.10	0.10	0.10	0.11	0.00	0.00	0.00	0.00	0.89	0.90	0.89	0.89

\*/ A multinomial logistic model was estimated without taking into account the "Don't earn any income" reply option. The sample data spanned from January 2003 to November 2014. The probability values were obtained using the means for the unemployment rate, the annual percentage variation in the IGAE, annual headline inflation and the *ex-post* real interest rate.

Source: BBVA Research with INEGI data

Table 17C

**Probabilities estimated by the model with added macroeconomic variables for a female with primary or secondary schooling and who lives in the High development region\***

Age/Marital Status	Yes				Don't know				No			
	Cohabitation or married	Separated or divorced	Widow	Single	Cohabitation or married	Separated or divorced	Widow	Single	Cohabitation or married	Separated or divorced	Widow	Single
15-24 years	0.19	0.18	0.19	0.20	0.00	0.00	0.00	0.00	0.81	0.82	0.81	0.80
25-34 years	0.16	0.15	0.16	0.16	0.00	0.00	0.00	0.00	0.84	0.85	0.84	0.83
35-44 years	0.12	0.11	0.12	0.12	0.00	0.00	0.00	0.00	0.88	0.89	0.88	0.88
45-54 years	0.10	0.09	0.10	0.10	0.00	0.00	0.00	0.00	0.90	0.91	0.90	0.90
55-64 years	0.09	0.08	0.09	0.09	0.00	0.00	0.00	0.00	0.91	0.92	0.91	0.91
65 years or older	0.07	0.06	0.07	0.07	0.00	0.00	0.00	0.00	0.93	0.93	0.93	0.93

\*/ A multinomial logistic model was estimated without taking into account the "Don't earn any income" reply option. The sample data spanned from January 2003 to November 2014. The probability values were obtained using the means for the unemployment rate, the annual percentage variation in the IGAE, annual headline inflation and the *ex-post* real interest rate.

Source: BBVA Research with INEGI data

Table 18C

**Probabilities estimated by the model with added macroeconomic variables for a female with no schooling or a pre-school education and who lives in the High development region\***

Age/Marital Status	Yes				Don't know				No			
	Cohabitation or married	Separated or divorced	Widow	Single	Cohabitation or married	Separated or divorced	Widow	Single	Cohabitation or married	Separated or divorced	Widow	Single
15-24 years	0.12	0.11	0.12	0.12	0.00	0.00	0.00	0.00	0.88	0.89	0.88	0.88
25-34 years	0.10	0.09	0.10	0.10	0.00	0.00	0.00	0.00	0.90	0.91	0.90	0.90
35-44 years	0.07	0.06	0.07	0.07	0.00	0.00	0.00	0.00	0.93	0.93	0.93	0.93
45-54 years	0.06	0.05	0.06	0.06	0.00	0.00	0.00	0.00	0.94	0.94	0.94	0.94
55-64 years	0.05	0.05	0.05	0.06	0.00	0.00	0.00	0.00	0.95	0.95	0.95	0.94
65 years or older	0.04	0.04	0.04	0.04	0.00	0.00	0.00	0.00	0.96	0.96	0.96	0.96

\*/ A multinomial logistic model was estimated without taking into account the "Don't earn any income" reply option. The sample data spanned from January 2003 to November 2014. The probability values were obtained using the means for the unemployment rate, the annual percentage variation in the IGAE, annual headline inflation and the *ex-post* real interest rate.

Source: BBVA Research with INEGI data

Table 19C

**Probabilities estimated by the model with added macroeconomic variables for a female with a high school education and who lives in the Touristic region\***

Age/Marital Status	Yes				Don't know				No			
	Cohabitation or married	Separated or divorced	Widow	Single	Cohabitation or married	Separated or divorced	Widow	Single	Cohabitation or married	Separated or divorced	Widow	Single
15-24 years	0.45	0.43	0.45	0.46	0.00	0.00	0.00	0.00	0.55	0.57	0.55	0.54
25-34 years	0.40	0.38	0.40	0.41	0.00	0.00	0.00	0.00	0.60	0.62	0.60	0.59
35-44 years	0.32	0.30	0.31	0.32	0.00	0.00	0.00	0.00	0.68	0.70	0.68	0.67
45-54 years	0.28	0.26	0.28	0.29	0.00	0.00	0.00	0.00	0.72	0.74	0.72	0.71
55-64 years	0.26	0.24	0.26	0.27	0.00	0.00	0.00	0.00	0.74	0.76	0.74	0.73
65 years or older	0.21	0.19	0.21	0.22	0.00	0.00	0.00	0.00	0.79	0.81	0.79	0.78

\*/ A multinomial logistic model was estimated without taking into account the "Don't earn any income" reply option. The sample data spanned from January 2003 to November 2014. The probability values were obtained using the means for the unemployment rate, the annual percentage variation in the IGAE, annual headline inflation and the *ex-post* real interest rate.

Source: BBVA Research with INEGI data

Table 20C

**Probabilities estimated by the model with added macroeconomic variables for a female with primary or secondary schooling and who lives in the Touristic region\***

Age/Marital Status	Yes				Don't know				No			
	Cohabitation or married	Separated or divorced	Widow	Single	Cohabitation or married	Separated or divorced	Widow	Single	Cohabitation or married	Separated or divorced	Widow	Single
15-24 years	0.35	0.32	0.34	0.35	0.00	0.00	0.00	0.00	0.65	0.67	0.66	0.64
25-34 years	0.30	0.28	0.30	0.31	0.00	0.00	0.00	0.00	0.70	0.72	0.70	0.69
35-44 years	0.23	0.21	0.23	0.24	0.00	0.00	0.00	0.00	0.77	0.79	0.77	0.76
45-54 years	0.20	0.19	0.20	0.21	0.00	0.00	0.00	0.00	0.80	0.81	0.80	0.79
55-64 years	0.18	0.17	0.18	0.19	0.00	0.00	0.00	0.00	0.82	0.83	0.82	0.81
65 years or older	0.14	0.13	0.14	0.15	0.00	0.00	0.00	0.00	0.86	0.87	0.86	0.85

\*/ A multinomial logistic model was estimated without taking into account the "Don't earn any income" reply option. The sample data spanned from January 2003 to November 2014. The probability values were obtained using the means for the unemployment rate, the annual percentage variation in the IGAE, annual headline inflation and the *ex-post* real interest rate.

Source: BBVA Research with INEGI data

Table 21C

**Probabilities estimated by the model with added macroeconomic variables for a female with no schooling or a pre-school education and who lives in the Touristic region\***

Age/Marital Status	Yes				Don't know				No			
	Cohabitation or married	Separated or divorced	Widow	Single	Cohabitation or married	Separated or divorced	Widow	Single	Cohabitation or married	Separated or divorced	Widow	Single
15-24 years	0.23	0.22	0.23	0.24	0.00	0.00	0.00	0.00	0.77	0.78	0.77	0.76
25-34 years	0.19	0.18	0.19	0.20	0.00	0.00	0.00	0.00	0.80	0.82	0.81	0.80
35-44 years	0.14	0.13	0.14	0.15	0.00	0.00	0.00	0.00	0.86	0.87	0.86	0.85
45-54 years	0.12	0.11	0.12	0.13	0.00	0.00	0.00	0.00	0.88	0.88	0.88	0.87
55-64 years	0.11	0.10	0.11	0.12	0.00	0.00	0.00	0.00	0.89	0.90	0.89	0.88
65 years or older	0.09	0.08	0.09	0.09	0.00	0.00	0.00	0.00	0.91	0.92	0.91	0.91

\*/ A multinomial logistic model was estimated without taking into account the "Don't earn any income" reply option. The sample data spanned from January 2003 to November 2014. The probability values were obtained using the means for the unemployment rate, the annual percentage variation in the IGAE, annual headline inflation and the *ex-post* real interest rate.

Source: BBVA Research with INEGI data

Table 22C

**Probabilities estimated by the model with added macroeconomic variables for a female with a high school education and who lives in the Industrial region\***

Age/Marital Status	Yes				Don't know				No			
	Cohabitation or married	Separated or divorced	Widow	Single	Cohabitation or married	Separated or divorced	Widow	Single	Cohabitation or married	Separated or divorced	Widow	Single
15-24 years	0.38	0.36	0.38	0.39	0.00	0.00	0.00	0.00	0.62	0.64	0.62	0.61
25-34 years	0.33	0.31	0.33	0.34	0.00	0.00	0.00	0.00	0.66	0.68	0.67	0.66
35-44 years	0.26	0.24	0.26	0.27	0.00	0.00	0.00	0.00	0.74	0.76	0.74	0.73
45-54 years	0.23	0.21	0.23	0.23	0.00	0.00	0.00	0.00	0.77	0.79	0.77	0.76
55-64 years	0.21	0.19	0.21	0.22	0.00	0.00	0.00	0.00	0.79	0.81	0.79	0.78
65 years or older	0.17	0.15	0.17	0.17	0.00	0.00	0.00	0.00	0.83	0.85	0.83	0.83

\*/ A multinomial logistic model was estimated without taking into account the "Don't earn any income" reply option. The sample data spanned from January 2003 to November 2014. The probability values were obtained using the means for the unemployment rate, the annual percentage variation in the IGAE, annual headline inflation and the *ex-post* real interest rate.

Source: BBVA Research with INEGI data

Table 23C

**Probabilities estimated by the model with added macroeconomic variables for a female with primary or secondary schooling and who lives in the Industrial region\***

Age/Marital Status	Yes				Don't know				No			
	Cohabitation or married	Separated or divorced	Widow	Single	Cohabitation or married	Separated or divorced	Widow	Single	Cohabitation or married	Separated or divorced	Widow	Single
15-24 years	0.28	0.27	0.28	0.29	0.00	0.00	0.00	0.00	0.71	0.73	0.72	0.71
25-34 years	0.24	0.23	0.24	0.25	0.00	0.00	0.00	0.00	0.76	0.77	0.76	0.75
35-44 years	0.18	0.17	0.18	0.19	0.00	0.00	0.00	0.00	0.82	0.83	0.82	0.81
45-54 years	0.16	0.15	0.16	0.16	0.00	0.00	0.00	0.00	0.84	0.85	0.84	0.84
55-64 years	0.14	0.13	0.14	0.15	0.00	0.00	0.00	0.00	0.86	0.87	0.86	0.85
65 years or older	0.11	0.10	0.11	0.12	0.00	0.00	0.00	0.00	0.89	0.90	0.89	0.88

\*/ A multinomial logistic model was estimated without taking into account the "Don't earn any income" reply option. The sample data spanned from January 2003 to November 2014. The probability values were obtained using the means for the unemployment rate, the annual percentage variation in the IGAE, annual headline inflation and the *ex-post* real interest rate.

Source: BBVA Research with INEGI data

Table 24C

**Probabilities estimated by the model with added macroeconomic variables for a female with no schooling or a pre-school education and who lives in the Industrial region\***

Age/Marital Status	Yes				Don't know				No			
	Cohabitation or married	Separated or divorced	Widow	Single	Cohabitation or married	Separated or divorced	Widow	Single	Cohabitation or married	Separated or divorced	Widow	Single
15-24 years	0.18	0.17	0.18	0.19	0.00	0.00	0.00	0.00	0.81	0.83	0.81	0.81
25-34 years	0.15	0.14	0.15	0.16	0.00	0.00	0.00	0.00	0.84	0.86	0.84	0.84
35-44 years	0.11	0.10	0.11	0.12	0.00	0.00	0.00	0.00	0.89	0.89	0.89	0.88
45-54 years	0.10	0.09	0.10	0.10	0.00	0.00	0.00	0.00	0.90	0.91	0.90	0.90
55-64 years	0.09	0.08	0.09	0.09	0.00	0.00	0.00	0.00	0.91	0.92	0.91	0.91
65 years or older	0.07	0.06	0.07	0.07	0.00	0.00	0.00	0.00	0.93	0.94	0.93	0.93

\*/ A multinomial logistic model was estimated without taking into account the "Don't earn any income" reply option. The sample data spanned from January 2003 to November 2014. The probability values were obtained using the means for the unemployment rate, the annual percentage variation in the IGAE, annual headline inflation and the *ex-post* real interest rate.

Source: BBVA Research with INEGI data

Table 25C

**Probabilities estimated by the model with added macroeconomic variables for a female with a high school education and who lives in the Medium development region\***

Age/Marital Status	Yes				Don't know				No			
	Cohabitation or married	Separated or divorced	Widow	Single	Cohabitation or married	Separated or divorced	Widow	Single	Cohabitation or married	Separated or divorced	Widow	Single
15-24 years	0.38	0.36	0.38	0.39	0.00	0.00	0.00	0.00	0.62	0.64	0.62	0.61
25-34 years	0.33	0.31	0.33	0.34	0.00	0.00	0.00	0.00	0.67	0.69	0.67	0.66
35-44 years	0.25	0.24	0.25	0.26	0.00	0.00	0.00	0.00	0.75	0.76	0.75	0.74
45-54 years	0.22	0.21	0.22	0.23	0.00	0.00	0.00	0.00	0.78	0.79	0.78	0.77
55-64 years	0.20	0.19	0.20	0.21	0.00	0.00	0.00	0.00	0.79	0.81	0.80	0.79
65 years or older	0.16	0.15	0.16	0.17	0.00	0.00	0.00	0.00	0.84	0.85	0.84	0.83

\*/ A multinomial logistic model was estimated without taking into account the "Don't earn any income" reply option. The sample data spanned from January 2003 to November 2014. The probability values were obtained using the means for the unemployment rate, the annual percentage variation in the IGAE, annual headline inflation and the *ex-post* real interest rate.

Source: BBVA Research with INEGI data

Table 26C

**Probabilities estimated by the model with added macroeconomic variables for a female with primary or secondary schooling and who lives in the Medium development region\***

Age/Marital Status	Yes				Don't know				No			
	Cohabitation or married	Separated or divorced	Widow	Single	Cohabitation or married	Separated or divorced	Widow	Single	Cohabitation or married	Separated or divorced	Widow	Single
15-24 years	0.28	0.26	0.28	0.29	0.00	0.00	0.00	0.00	0.72	0.74	0.72	0.71
25-34 years	0.24	0.22	0.24	0.25	0.00	0.00	0.00	0.00	0.76	0.78	0.76	0.75
35-44 years	0.18	0.17	0.18	0.18	0.00	0.00	0.00	0.00	0.82	0.83	0.82	0.81
45-54 years	0.15	0.14	0.15	0.16	0.00	0.00	0.00	0.00	0.84	0.86	0.84	0.84
55-64 years	0.14	0.13	0.14	0.15	0.00	0.00	0.00	0.00	0.86	0.87	0.86	0.85
65 years or older	0.11	0.10	0.11	0.11	0.00	0.00	0.00	0.00	0.89	0.90	0.89	0.88

\*/ A multinomial logistic model was estimated without taking into account the "Don't earn any income" reply option. The sample data spanned from January 2003 to November 2014. The probability values were obtained using the means for the unemployment rate, the annual percentage variation in the IGAE, annual headline inflation and the *ex-post* real interest rate.

Source: BBVA Research with INEGI data

Table 27C

**Probabilities estimated by the model with added macroeconomic variables for a female with no schooling or a pre-school education and who lives in the Medium development region\***

Age/Marital Status	Yes				Don't know				No			
	Cohabitation or married	Separated or divorced	Widow	Single	Cohabitation or married	Separated or divorced	Widow	Single	Cohabitation or married	Separated or divorced	Widow	Single
15-24 years	0.18	0.17	0.18	0.19	0.00	0.00	0.00	0.00	0.82	0.83	0.82	0.81
25-34 years	0.15	0.14	0.15	0.16	0.00	0.00	0.00	0.00	0.85	0.86	0.85	0.84
35-44 years	0.11	0.10	0.11	0.11	0.00	0.00	0.00	0.00	0.89	0.90	0.89	0.88
45-54 years	0.09	0.09	0.09	0.10	0.00	0.00	0.00	0.00	0.90	0.91	0.90	0.90
55-64 years	0.09	0.08	0.08	0.09	0.00	0.00	0.00	0.00	0.91	0.92	0.91	0.91
65 years or older	0.07	0.06	0.07	0.07	0.00	0.00	0.00	0.00	0.93	0.94	0.93	0.93

\*/ A multinomial logistic model was estimated without taking into account the "Don't earn any income" reply option. The sample data spanned from January 2003 to November 2014. The probability values were obtained using the means for the unemployment rate, the annual percentage variation in the IGAE, annual headline inflation and the *ex-post* real interest rate.  
Source: BBVA Research with INEGI data

Table 28C

**Probabilities estimated by the model with added macroeconomic variables for a female with a high school education and who lives in the Low development region\***

Age/Marital Status	Yes				Don't know				No			
	Cohabitation or married	Separated or divorced	Widow	Single	Cohabitation or married	Separated or divorced	Widow	Single	Cohabitation or married	Separated or divorced	Widow	Single
15-24 years	0.37	0.35	0.37	0.38	0.00	0.00	0.00	0.00	0.63	0.65	0.63	0.62
25-34 years	0.32	0.30	0.32	0.33	0.00	0.00	0.00	0.00	0.68	0.70	0.68	0.67
35-44 years	0.25	0.23	0.25	0.26	0.00	0.00	0.00	0.00	0.75	0.77	0.75	0.74
45-54 years	0.22	0.20	0.22	0.22	0.00	0.00	0.00	0.00	0.78	0.80	0.78	0.78
55-64 years	0.20	0.18	0.20	0.21	0.00	0.00	0.00	0.00	0.80	0.81	0.80	0.79
65 years or older	0.16	0.15	0.16	0.16	0.00	0.00	0.00	0.00	0.84	0.85	0.84	0.84

\*/ A multinomial logistic model was estimated without taking into account the "Don't earn any income" reply option. The sample data spanned from January 2003 to November 2014. The probability values were obtained using the means for the unemployment rate, the annual percentage variation in the IGAE, annual headline inflation and the *ex-post* real interest rate.  
Source: BBVA Research with INEGI data

Table 29C

**Probabilities estimated by the model with added macroeconomic variables for a female with primary or secondary schooling and who lives in the Low development region\***

Age/Marital Status	Yes				Don't know				No			
	Cohabitation or married	Separated or divorced	Widow	Single	Cohabitation or married	Separated or divorced	Widow	Single	Cohabitation or married	Separated or divorced	Widow	Single
15-24 years	0.27	0.25	0.27	0.28	0.00	0.00	0.00	0.00	0.73	0.74	0.73	0.72
25-34 years	0.23	0.22	0.23	0.24	0.00	0.00	0.00	0.00	0.77	0.78	0.77	0.76
35-44 years	0.17	0.16	0.17	0.18	0.00	0.00	0.00	0.00	0.83	0.84	0.83	0.82
45-54 years	0.15	0.14	0.15	0.16	0.00	0.00	0.00	0.00	0.85	0.86	0.85	0.84
55-64 years	0.14	0.13	0.14	0.14	0.00	0.00	0.00	0.00	0.86	0.87	0.86	0.86
65 years or older	0.11	0.10	0.11	0.11	0.00	0.00	0.00	0.00	0.89	0.90	0.89	0.89

\*/ A multinomial logistic model was estimated without taking into account the "Don't earn any income" reply option. The sample data spanned from January 2003 to November 2014. The probability values were obtained using the means for the unemployment rate, the annual percentage variation in the IGAE, annual headline inflation and the *ex-post* real interest rate.  
Source: BBVA Research with INEGI data

Table 30C

**Probabilities estimated by the model with added macroeconomic variables for a female with no schooling or a pre-school education and who lives in the Low development region\***

Age/Marital Status	Yes				Don't know				No			
	Cohabitation or married	Separated or divorced	Widow	Single	Cohabitation or married	Separated or divorced	Widow	Single	Cohabitation or married	Separated or divorced	Widow	Single
15-24 years	0.18	0.16	0.18	0.18	0.00	0.00	0.00	0.00	0.82	0.84	0.82	0.82
25-34 years	0.15	0.14	0.15	0.15	0.00	0.00	0.00	0.00	0.85	0.86	0.85	0.85
35-44 years	0.11	0.10	0.11	0.11	0.00	0.00	0.00	0.00	0.89	0.90	0.89	0.89
45-54 years	0.09	0.08	0.09	0.10	0.00	0.00	0.00	0.00	0.91	0.92	0.91	0.90
55-64 years	0.08	0.08	0.08	0.09	0.00	0.00	0.00	0.00	0.92	0.92	0.92	0.91
65 years or older	0.06	0.06	0.06	0.07	0.00	0.00	0.00	0.00	0.94	0.94	0.94	0.93

\*/ A multinomial logistic model was estimated without taking into account the "Don't earn any income" reply option. The sample data spanned from January 2003 to November 2014. The probability values were obtained using the means for the unemployment rate, the annual percentage variation in the IGAE, annual headline inflation and the *ex-post* real interest rate.

Source: BBVA Research with INEGI data

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