

# **Documentos de Trabajo**

## Socio-Economic Determinants of Hunger in Latin American Countries

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## Socio-economic determinants of hunger in Latin American countries

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## Abstract

This paper studies the influence of socio-economic variables on hunger prevalence in 18 Latin American countries using the database of Latinobarometro survey, developed by Latinobarometro Corporation. With this objective we estimate an ordered probit model. The results show that on average, only 52% of respondents indicated that they had never experienced lack of enough food in the last 12 months, which suggests that hunger is still a relevant problem in the region.

Large heterogeneity across countries was found. Although the percentage of people who often experienced lack of food only corresponded to 2% for the countries in the southern part of Latin America (Uruguay, Chile, Argentina and Brazil), it reached values higher than 10% for several countries in Central and North America (Honduras, Dominican Republic, Guatemala, Nicaragua, El Salvador, and Mexico). These results indicate the need to implement public policies aimed at improving access to enough food in Latin America in order to achieve the goal of eradicating hunger by 2025 (FAO, 2015b).

Keywords: hunger; Latin America; Latinobarometro; access to food

## Resumen

Este documento estudia la influencia de las variables socioeconómicas sobre la prevalencia del hambre en 18 países de América Latina utilizando la base de datos de la encuesta Latinobarómetro, desarrollada por Latinobarometro Corporation. Con este objetivo estimamos un modelo probit ordenado. Los resultados muestran que, en promedio, solo el 52% de los encuestados indicó que nunca había experimentado la falta de alimentos suficientes en los últimos 12 meses, lo que sugiere que el hambre sigue siendo un problema relevante en la región.

Se encontró una gran heterogeneidad entre los países. Aunque el porcentaje de personas que a menudo experimentaba falta de alimentos solo correspondía al 2% para los países del sur de América Latina (Uruguay, Chile, Argentina y Brasil), alcanzó valores superiores al 10% para varios países del centro y norte América (Honduras, República Dominicana, Guatemala, Nicaragua, El Salvador y México). Estos resultados indican la necesidad de implementar políticas públicas dirigidas a mejorar el acceso a suficientes alimentos en América Latina para alcanzar el objetivo de erradicar el hambre para 2025 (FAO, 2015b).

Palabras clave: hambre; Latinoamérica; Latinobarómetro; acceso a alimentos.

JEL: I31, I32, O54.

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#### **1. Introduction**

Access to sufficient, safe and nutritious food is a key determinant of health and a basic human right (FAO, 2013). Hunger can be defined as the uneasy or painful sensation caused by insufficient food consumption, which is related to lack of macronutrients and micronutrients for a fully productive, active and healthy life (FAO, 2008; World Food Programme, 2009). Hunger is the most severe form of food insecurity as it implies that people do not have access to enough food to meet their basic needs (FAO, 2008).

Severe hunger has been negatively related to several health problems, such as coronary heart disease, lower respiratory infections, diarrheal diseases and chronic pulmonary diseases (Victora et al.; 2008, Bhutta et al., 2008; King et al., 2008). Besides, severe hunger poses several long term challenges on the human capital of countries by decreasing people's school achievement, economic productivity, learning capacity, and their overall wellbeing (World Food Programme, 2009).

Although substantial progress to eradicate hunger worldwide has been made, approximately 793 million people worldwide still suffer from hunger and struggle to cover their basic food intake to have an active and healthy life (FAO, 2015a). The vast majority of these people live in developing regions, such as Africa, Asia, Latin American and the Caribbean (FAO, 2015a; IFAD and WFP, 2015a). In the specific case of Latin America and the Caribbean, although robust economic development and successful social protection policies have led to a remarkable reduction in hunger (meeting both the World Food Summit and Millennium Development Goal targets by large margins), 5.5% of the population still suffer hunger (FAO, IFAD and WFP, 2015a).

The eradication of hunger by 2030 is one of the major targets of the Sustainable Development Goals, adopted by the United Nations in 2015 (FAO, IFAD and WFP, 2015b). In the specific case of Latin America & the Caribbean, the goal is even more ambitious as the Community of Latin American and Caribbean States (CELAC) adopted in January 2015 the challenge of fully eradicating hunger by 2025 (FAO, 2015b).

The causes of hunger are complex, multifactorial and largely vary among countries, ranging from short-term factors, such as natural disasters, political conflicts, economic instability, to long-term factors, such as population growth, climate change, limited natural resources (Nah & Chau, 2010). In the majority of Latin American countries, the main long term factors underlying hunger are not related to limited natural resources (Instituto Nacional de Estadística, 2015). In this sense, the main challenge to eradicate hunger in the

region is related to improving income distribution and facilitating access to sufficient, safe and nutritious food, particularly of the most vulnerable part of the population (FAO, 2015c).

Accurate targeting of the vulnerable population can contribute to the development of effective interventions aimed at reducing hunger and alleviating their consequences (Barret). In this sense, the identification of risk factors, predictors and protective factors of hunger play a key role (Pérez-Escamilla & Segall-Corrêa, 2008). Previous studies have identified socio-economic factors as the most relevant determinants of inadequate access to food (Corral et al., 2000; Barrett, 2010; Rossi et al, 2016). Besides, households with children, living under poverty conditions, located far from urban areas, headed by single mothers or ethnic minorities have been reported to have the highest risk of suffering from hunger and food insecurity. Education has been identified as a protective factor to hunger as it could facilitate economic access to food, improve employment opportunities, as well as provide knowledge and skills for better utilization of food sources (Nah & Chau, 2010; Bhutta, et al., 2008; Bocquier et al., 2015).

In this context, the aim of the present work was to evaluate the influence of socioeconomic variables on hunger prevalence in 18 Latin American countries.

#### 2. Methodology

The present study used the database of Latinobarometro survey 2013, developed by Latinobarometro Corporation (www.latinobarometro.org). The survey was conducted between May 31<sup>st</sup> and June 30<sup>th</sup>, 2013 in 18 Latin American countries: Argentina, Bolivia, Brasil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Hondura, México, Nicaragua, Paraguay, Perú, Uruguay and Venezuela. In each country, probabilistic sampling was performed to obtain national-representative samples of 1000-1204 respondents. The organization provides a weighting factor to enable comparison of results across countries regardless of their population size. Respondents were older than 18 years in all countries, with the exception of Brazil and Nicaragua, where they were older than 16 years. Additional details about the Latinobarometro survey can be found at http://www.latinobarometro.org/latContents.jsp

The questionnaire includes a total of 95 questions related to democracy and politics and 27 additional socio-demographic questions. One of the questions of this last group is related to hunger prevalence, measured as lack of access to food: "*In the last 12 months,* 

how often have you or your family not have enough to eat?" The response options were: "Never (1), Rarely (2), Sometimes (3) or Often (4)". Responses to this question were used to estimate the influence of socio-demographic variables on hunger prevalence.

An ordered probit model was used to investigate the influence of socio-economic variables on likelihood of a person experiencing lack of access to food. The following set of explanatory variables from the Latinobarometro database were considered: country, age, gender, marital status (1 if married, 0 if not), religion (catholic, evangelist and others ), education level (illiterate, incomplete primary school, complete primary school, incomplete high school, complete high school, and college), employment status (1 if employed, 0 if not), race (white, afro-descendent, mestizo and indigenous) and deprivation index. The deprivation index was built on the basis of possession of the following assets: more than one room, refrigerator, house owner, computer, washing machine, residential telephone, cellular, car, drinking water, hot water and sewage. Details of the deprivation index methodology are provided by Borooah (2001). Descriptive statistics of the socio-demographic variables included in the model are provided in Table 1.

Description	Mean	Std. Dev.
Age	40.307	16.518
Gender		
Female	0.515	0.499
Marital status		
Married	0.564	0.496
Religion		
Catholic	0.672	0.470
Evangelist	0.199	0.399
Others	0.128	0.335
Education level		
lliterate	0.087	0.282
Incomplete primary school	0.179	0.384
Complete primary school	0.164	0.371
Incomplete high school	0.145	0.352
Complete high school	0.233	0.422
College	0.191	0.393
Employment status		
Employed	0.585	0.493
Race		
White	0.328	0.470
Afro-descendant	0.045	0.207
Mestizo	0.467	0.499
Indigenous	0.075	0.263
Deprivation index	0.241	0.190
Observations	20,	204

Table 1. Descriptive statistics of the socio-demographic variables included in the study.

Source: Authors' analysis from Latinobarometro Survey, 2013

## 3. Results

## 3.1. Lack of access to food in Latin American countries

On average, 52% of the respondents living in Latin American countries had never experienced lack of food, whereas 6% indicated that they had experienced this situation often in the last twelve months (Table 2). If often and sometimes responses are aggregated, the percentage of people lacking access to sufficient food reached 24% of the individuals in Latin America (Table 2).

	Proportion	Standard Error	[95% Confidence Interval]	
Never	0.5181	0.0038	0.5107	0.5255
Rarely	0.2395	0.0032	0.2333	0.2458
Sometimes	0.1818	0.0029	0.1761	0.1876
Often	0.0606	0.0018	0.0571	0.0642

**Table 2.** Proportion of responses to the question "In the last 12 months, how often have you or your family not have enough to eat?"

Source: Authors' analysis from Latinobarometro Survey, 2013

If focus is placed in the two extreme situations, i.e. people who indicated that "often" and "never" had not had enough food in the last 12 months, large heterogeneity among Latin American countries can be observed (Figures 1 and 2). Honduras was the country that showed the highest percentage of people expressing that had not had enough food in the last 12 months (16%), followed by the Dominican Republic, Guatemala, Nicaragua, El Salvador and México (Figure 1). On the contrary, Uruguay, Argentina, Brazil and Chile had the lowest percentages (around 2%), followed by Ecuador (3%).

Regarding the percentage of people who expressed that had never not had enough food in the last 12 months, Paraguay, Chile, Argentina, Brazil and Uruguay showed the highest percentages (between 69% and 80%). However, Uruguay and Brazil were significantly different from Paraguay. At the other extreme, the countries in the worst situation in relation to sufficient access to food were the Dominican Republic and Nicaragua (only approximately 25% of the population indicated that they had never had food shortages in the last 12 months). In a slightly better situation were Mexico, El Salvador, Honduras and Guatemala, which showed percentages of people who had always had sufficient access to food in the last 12 months ranging between 31 and 33% (without significant differences between them).



**Figure 1.** Percentage of people who indicated that often had not had enough food to eat in the last 12 months in 18 Latin American countries.

Source: Authors' analysis from Latinobarometro Survey, 2013

**Figure 2.** Percentage of people who indicated that had never had not enough food to eat in the last 12 months in 18 Latin American countries.



Source: Authors' analysis from Latinobarometro Survey, 2013.

### 3.2. Influence of socio-demographic variables on lack of access to food

Results of the ordered probit estimation are shown in Table 3. Column (1) presents the coefficients of the estimation and column (2) to (5) present the marginal effects based on the estimation of the ordered probit model.

Except for marital status, all the variables considered in the model had a significant effect on the likelihood of experiencing lack of access to enough food in the last 12 months. Results are discussed considering the marginal effects with respect to the situation "never having experienced lack of enough food in the last 12 months" and to the situation "having often experienced lack of enough food in the last 12 months".

As shown in Table 3, females, older people, as well as deprived people (according to the deprivation index) were more likely to had often experienced lack of enough food in the last 12 months and less likely to had never experienced this situation. Religion and race also significantly influenced both probabilities. Being catholic decreased probability of often experiencing lack of access to enough food and increased probability of never experiencing this situation. Meanwhile, being white, black and half-blood significantly decreased probability of not having access to enough food compared to indigenous people (Table 3).

Educational level decreased likelihood of experiencing lack of access to enough food when participants completed primary school. Likelihood of experiencing lack of enough food did not significantly differ for participants with incomplete primary school and illiterate participants. As shown in Table 3, the protective effect of education on having experienced lack of enough food increased with educational level, as evidenced by differences in the marginal effects.

Socio-economic situation also had a large influence on probability of experiencing lack of access to food. As shown in Table 1, the probability of never/often having experienced lack of enough food was significantly influenced by being employed and the deprivation index.

Regarding the relative importance of the evaluated socio-economic variables, education and deprivation index had the largest effect on probability of experiencing food shortage frequently. University degree decreased this probability by 2.7 percentage points (pp), whereas deprivation of assets increased the probability of insecurity by 12.5 pp. On the contrary, the variables with the largest effect on probability of never experiencing lack

of enough food were gender and deprivation index. Probability of never experiencing lack of enough food was reduced by 4 pp by being female and 64 pp by having deprivation.

Regarding differences among countries, results showed that except for Brazil all countries significantly differed from Uruguay. Respondents in all the remaining 16 countries were more likely to have often experience lack of enough food in the last 12 months than Uruguayan respondents and less likely to had never experienced a food shortage situation (Table 3).

	Coefficient	Marginal Effects			
	Hunger prevalence	Never	Rarely	Sometimes	Often
VARIABLES	(1)	(2)	(3)	(4)	(5)
Age	0.020***	-0.008***	0.002***	0.004***	0.002***
	(0.003)	(0.001)	(0.000)	(0.001)	(0.000)
Age*Age	-0.000***	0.000***	-0.000***	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Female	0.102***	-0.040***	0.012***	0.021***	0.008***
	(0.019)	(0.008)	(0.002)	(0.004)	(0.002)
Marital status (Married)	-0.012	0.005	-0.001	-0.002	-0.001
	(0.020)	(0.008)	(0.002)	(0.004)	(0.002)
Catholic	-0.064**	0.026**	-0.007**	-0.013**	-0.005*
	(0.032)	(0.013)	(0.004)	(0.007)	(0.003)
Evangelist	0.019	-0.008	0.002	0.004	0.002
-	(0.036)	(0.014)	(0.004)	(0.007)	(0.003)
Incomplete primary	-0.055	0.022	-0.007	-0.011	-0.004
	(0.038)	(0.015)	(0.005)	(0.008)	(0.003)
Complete primary	-0.107***	0.042***	-0.013**	-0.021***	-0.008***
	(0.040)	(0.016)	(0.005)	(0.008)	(0.003)
Incomplete high school	-0.147***	0.058***	-0.019***	-0.029***	-0.010***
	(0.042)	(0.016)	(0.006)	(0.008)	(0.003)
Complete high school	-0.237***	0.094***	-0.031***	-0.046***	-0.016***
	(0.041)	(0.016)	(0.006)	(0.008)	(0.003)
College	-0.431***	0.167***	-0.060***	-0.081***	-0.027***
	(0.044)	(0.016)	(0.007)	(0.007)	(0.002)
Employed	-0.044**	0.018**	-0.005**	-0.009**	-0.003**
	(0.021)	(0.008)	(0.002)	(0.004)	(0.002)
White	-0.142***	0.056***	-0.017***	-0.028***	-0.010***
	(0.030)	(0.012)	(0.004)	(0.006)	(0.002)
Afro-descendant	-0.082*	0.033*	-0.010*	-0.016*	-0.006*
	(0.047)	(0.019)	(0.006)	(0.009)	(0.003)
Mestizo	-0.068**	0.027**	-0.008**	-0.014**	-0.005**
	(0.027)	(0.011)	(0.003)	(0.005)	(0.002)
Deprivation index	1.626***	-0.647***	0.191***	0.331***	0.125***
	(0.055)	(0.022)	(0.008)	(0.012)	(0.005)
Argentina	0.363***	-0.143***	0.029***	0.077***	0.037***
	(0.062)	(0.024)	(0.003)	(0.013)	(0.008)
Bolivia	0.539***	-0.209***	0.031***	0.115***	0.063***

**Table 3.** Results of the ordered probit model analyzing the influence of socio-demographic variables on access to food in the last 12 months in 18 Latin American countries.

	(0.061)	(0.022)	(0.002)	(0.013)	(0.010)
Brazil	0.036	-0.014	0.004	0.007	0.003
	(0.063)	(0.025)	(0.007)	(0.013)	(0.005)
Chile	0.361***	-0.143***	0.029***	0.077***	0.037***
	(0.078)	(0.030)	(0.003)	(0.017)	(0.010)
Colombia	0.910***	-0.333***	0.012*	0.183***	0.138***
	(0.062)	(0.018)	(0.006)	(0.010)	(0.015)
Costa Rica	0.591***	-0.228***	0.030***	0.126***	0.073***
	(0.061)	(0.022)	(0.002)	(0.013)	(0.011)
Dominican R.	1.315***	-0.434***	-0.042***	0.221***	0.256***
	(0.059)	(0.012)	(0.009)	(0.005)	(0.019)
Ecuador	0.535***	-0.208***	0.032***	0.114***	0.063***
	(0.060)	(0.022)	(0.001)	(0.013)	(0.010)
El Salvador	1.004***	-0.358***	-0.001	0.195***	0.164***
	(0.059)	(0.016)	(0.007)	(0.008)	(0.016)
Guatemala	0.885***	-0.324***	0.012**	0.178***	0.134***
	(0.061)	(0.018)	(0.006)	(0.010)	(0.015)
Honduras	0.884***	-0.324***	0.012*	0.178***	0.134***
	(0.067)	(0.020)	(0.007)	(0.011)	(0.016)
Mexico	1.132***	-0.393***	-0.015*	0.209***	0.198***
	(0.060)	(0.015)	(0.008)	(0.007)	(0.017)
Nicaragua	1.041***	-0.369***	-0.004	0.199***	0.174***
	(0.060)	(0.016)	(0.007)	(0.008)	(0.016)
Panama	0.710***	-0.269***	0.025***	0.149***	0.095***
	(0.059)	(0.020)	(0.003)	(0.011)	(0.012)
Paraguay	0.228***	-0.091***	0.022***	0.048***	0.021***
	(0.065)	(0.026)	(0.005)	(0.014)	(0.007)
Peru	0.621***	-0.239***	0.030***	0.132***	0.078***
	(0.062)	(0.022)	(0.002)	(0.012)	(0.011)
Venezuela	0.727***	-0.275***	0.026***	0.152***	0.097***
	(0.060)	(0.020)	(0.004)	(0.011)	(0.012)
Constant cut1	1.170***				
	(0.090)				
Constant cut2	1.946***				
	(0.091)				
Constant cut3	2.920***				
	(0.093)				
Observations	18,688	18,688	18,688	18,688	18,688

Standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

#### 4. Discussion

Access to sufficient food is a basic human right (FAO, 2013). Although remarkable efforts have been made to reduce hunger in Latin America, results from the present work shows that it is still a relevant problem. Using self-reported data from the Latinobarometro survey 2013 in 18 countries, the percentage of people who often have not had enough food to eat in the last 12 months was estimated in 6%. This value matches the estimation of hunger prevalence provided by FAO, IFAD and WFTP (2015a) for Latin America in 2014-2016 (5.5%). However, it should be acknowledged that continued political commitment has enabled a reduction in hunger prevalence from 14.7 to 5.5. in 25 years (FAO, 2015c).

Results at the country level were highly similar to hunger prevalence data provided by FAO (2015c). Hunger is considered the most severe form of food insecurity (FAO, 2008). In this sense, hunger prevalence values for several countries are in agreement with previous studies reporting the prevalence of severe food insecurity (Salles-Costa et al., 2008; Muñoz-Astudillo et al., 2010; Álvarez Uribe, 2010; Bernal & Lorenzana, 2007; Rosso et al., 2015; Pérez Escamilla et al., 2007). However, it should be highlighted that the percentage of people reporting to never having experienced lack of food does not correspond to food security, as it does not take into account the quality of food. In this sense, the percentages reported in Figure 2 are higher than the prevalence of food security (Salles-Costa et al., 2008; Muñoz-Astudillo et al., 2010; Álvarez Uribe, 2010; Bernal & Lorenzana, 2007; Rosso et al., 2015; Pérez Escamilla et al., 2007; Rossi et al., 2017).

Large heterogeneity among countries in hunger prevalence was found, as the percentage of people often experiencing lack of food ranged between 2% and 16%. In particular, South American countries tended to show lower percentages of people having experienced lack of food in the last 12 months compared to countries in Central America or the Caribbean. This marked difference between South America and Central America and the Caribbean has been previously reported. According to the estimates provided by FAO (2015c), the Caribbean region of Latin America shows the highest prevalence of hunger in Latin America (19.8%), followed by Central America (6.6%) and finally South America (<5%). These results suggest that the goal of fully eradicating hunger in the region by 2025 (FAO, 2015b) will be difficult to meet and that policies that facilitate access to enough food to the most vulnerable segment of the population are still necessary, particularly in several countries in Central America and the Caribbean.

Latin America produces enough food to feed its entire population, which indicates that policies to fight hunger should focus on improving access to food and re-distributing food purchasing power. According to Chavas (2017), this can be achieved by several strategies targeted at the most vulnerable segments of the population: reducing the cost of food through food stamps or targeted discounts, increasing income through income transfer programs and/or economic development, and through food aid programs. These strategies have been successfully implemented in Brasil and Uruguay and have led to marked reductions in hunger prevalence (da Silva et al., 2012; Ministerio de Desarrollo Social, 2015). However, it should be highlighted that focus should not be placed exclusively on access to enough quantity of food, as nutritional quality is also needed to achieve food security (FAO, 2013).

The influence of socio-demographic variables on hunger prevalence was assessed using an ordered probit model. Results showed that deprivation index was the strongest predictor of hunger prevalence in Latin American countries. Previous studies have also reported strong negative association between food insecurity and household income in different countries (Bocquier et al., 2015; Carter et al., 2010; Interlenghi & Salles-Costa, 2014; Sarlio-Lahteenkorva & Lahelma, 2001; Rossi et al., 2017; Tingay et al., 2003). This is consistent with the fact that hunger has been mainly attributed to inequalities in income distribution (Chavas, 2017) and stresses the importance of implementing policies aimed at improving the availability of money for food purchase in the most vulnerable population.

Educational level significantly influenced likelihood of having experienced lack of food in the last 12 months, in agreement with several studies reporting that people with less years of formal education is more likely to experience food insecurity than well educated people (Bocquier et al., 2015; Salles-Costa et al., 2008; Rossi et al., 2016; Interlenghi & Salles-Costa, 2014; Panigassi et al., 2008). The negative association between hunger prevalence and educational level can be explained considering the inverse relationship between education and social-economic status (Grusky & Ku, 2008). In the present work education had a protective effect compared to illiteracy when respondents completed at least primary school. This protective effect increased as educational level increased (Table 3).

Consistently with other studies, individuals reporting having experienced lack of enough food were more frequently women (Bocquier et al., 2015; Salles-Costa et al., 2008; Carter et al., 2010; Hamelin et al., 2002; Nord et al., 2008). The higher likelihood of

women experiencing severe food insecurity has been explained by the fact that women tend to deprive themselves to protect the rest of their family, and particularly their children, from experiencing hunger. In addition, women have been reported to be overrepresented among the poorest populations (Vizcarra Bordi, 2008), which makes it necessary to target programs aimed at improving access of food at women, as well as to as well as to develop long-term actions to reduce gender inequalities in the region.

Regarding age, likelihood of having experienced lack of enough food in the last 12 months significantly increased with age. Previous studies conducted in developed countries have reported the highest prevalence of food insecure people among younger or middle-age people, which has been associated to their lower income (Bocquier et al., 2015; Carter et al., 2010). However, socio-economic conditions for older adults in Latin America are different from those in developed countries (ECLAC, 2003). Considering that food insecurity among older adults has been associated to frailty (Pérez-Zepeda et al., 2016), food programs targeted at this population group seem necessary to facilitate access to food and consequently improve their health status.

In the present study, hunger prevalence was found to be higher among indigenous people compared to white, afro-descendant and half-blood people. The most plausible explanation for this difference is that indigenous people usually have higher poverty rates than the general population and consequently suffer more frequently from food-related diseases (FAO, 2015c). Similar results have been reported by Carter et al. (2010) for food insecurity among Māori and Pacific people in New Zealand.

With respect to religion, results from the present study showed that people that profess catholic religion had an increased probability of never having experience lack of enough food and a reduced probability of experiencing food shortage compared to non-Catholic people. This result could be related to the potential positive network effects of Catholics in Latin America (Guiso et al., 2003; Iannaccone, 1998).

## **5.** Conclusions

The objective of the present study was to analyze the lack of access to enough food in Latin America using the 2013 Latinobarometro Survey. On average, only 52% of respondents indicated that they had never experienced lack of enough food in the last 12 months, which suggests that hunger is still a relevant problem in the region.

Large heterogeneity across countries was found. Although the percentage of people who often experienced lack of food only corresponded to 2% for the countries in the southern part of Latin America (Uruguay, Chile, Argentina and Brazil), it reached values higher than 10% for several countries in Central and North America (Honduras, Dominican Republic, Guatemala, Nicaragua, El Salvador, and Mexico). These results indicate the need to implement public policies aimed at improving access to enough food in Latin America in order to achieve the goal of eradicating hunger by 2025 (FAO, 2015b).

Results from the probit-model showed that several socio-demographic variables influenced the likelihood of experiencing lack of access to enough food in Latin America. In particular, age, gender, religion, educational level, employment status, race and deprivation were significant determinants of hunger prevalence. This suggests that programs aimed at improving access to food in Latin America should take into account these variables to identify the most vulnerable segments of the population.

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