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# Going Beyond Poverty: Parents' Decisions About Child Labor And Schooling

**Committee:** 

Peter Ward, Supervisor

Bryan Roberts, Supervisor

Javier Auyero

Raul Madrid

Leticia Marteleto

Kamran Asdar Ali

# Going Beyond Poverty: Parents' Decisions About Child Labor And Schooling

by

## Patricia Murrieta, B.A.; M.A.

## Dissertation

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## Dedication

A Emilio, Diego y Santiago, los niños que más quiero

A Leonardo, mi compañero de vida y locuras

A mi suegra, mis padres y mis hermanos

por su cariño y apoyo incondicional durante todos estos años

To all children who are working when they should be playing...

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#### Going Beyond Poverty: Parents' Decisions About Child Labor And Schooling

Patricia Murrieta, Ph.D.

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This dissertation focuses on the analysis of child labor in Mexico. It examines how families make decisions about child labor and schooling in a context of poverty and marginalization. I argue that the impact of poverty is mediated by cultural and social factors that determine activities done by children. The dissertation explores work opportunities available for children in rural and urban areas, and how these opportunities shape decisions. In some cases, urban life has become something desired; in others, there is a lack of opportunity to attend school. But in all cases, poverty is a constant. The cost of schooling can be very high; even when public education is available, many families are not able to afford it. However, poverty in itself does not necessarily leads to child labor; culture and prejudices about gender roles, mediate the perceived cost of schooling. This research demonstrates important differences between the activities that boys and girls perform, as a result of the ideas that their parents have of what a child "must do" because of being a boy or a girl. It also highlights the influence of culture and personal history in the decision making process.

Finally, in addition to highlighting the importance of a human rights perspective and a gender-based approach, this research underlines the importance of including a definition of child labor that goes beyond economic activities, and considers unpaid domestic work and marginal activities as part of the definition, in order to be able to better understand parents' decisions about child labor and schooling.

## **Table of Contents**

List of Tablesxv			
List of Figures xvii			
Chapter 1	1 Introduction1		
1.1	Beyond Poverty4		
1.2	Why Should We Keep Talking About Child Labor?		
1.3	Research Aims11		
1.4	Method12		
1.5	Outline Of Dissertation		
Chapter 2	2 Child Labor and Informality25		
2.1	From Formal To Informal Labor Transformations Of The Meaning Of Child Work27		
2.2	Informality: What Does It Means And What Is Its Relationship With Child Labor?44		
2.3	Informality In Mexico48		
2.4	Children In The Informal Labor Market61		
2.5	Linking The Relationship Between Child Labor And Informality		
Chapter 3	3 Child Labor And The Perceived Cost Of Schooling69		
3.1	Why Do Children Work?73		
3.2	To Work Or To Study: Who Decides?74		
3.3	Child Labor And The Cost Of Schooling77		
3.4	Between Egoism And Altruism		

	3.5	Other factors that influence parental decisions about child labor and schooling	87
	3.6	Relationship between child labor and schooling	99
	3.7	The Limitations of a Labor Market Regulation Approach to Child Labor	100
Cha	pter 4	4 Determinants of Child Labor in Mexico	104
	4.1	Child Labor in Numbers	105
	4.2	Relationship Between Child Labor And Income: The Model	117
	4.3	Results	129
	4.5	Variations Between These Models And Previous Work	142
	4.4	Moving Forward	143
Cha	pter 5	5 Analyzing child labor by age and gender	145
	5.1	From Formal To Informal: Differences Between Those Who Can Work In The Formal Sector And Those Who Cannot	147
	5.2	"Men To Work And Women To Serve" Differences Between Boys And Girls	159
	5.3	What Numbers Suggest and Their Limitations	177
Chapter 6 Going Beyond Poverty: The Intersection Between Culture and Work Opportunities179			
	6.1	Context and Methodology	182
	6.2	Social Factors That Influence School Desertion and Favor Child Labor: The Community of Santa Ana	185
	6.3	The Influence of Culture and Gender in Parents' Decisions about Child Labor and School Attendance: The case of Families that Work on the Street	204
	6.4	The Integration of the Rural and the Urban	221

Chapter 7 Going Beyond Poverty: The Rural		
	odels: My experience in the Coffee Plantation Rincón	
	tion and Work for Migrant Children: The Case of grant Agricultural Workers of Cihuatlán, Jalisco236	
7.3 Return	ing to Poverty250	
Chapter 8 Conclusions: The Need to Move Forward255		
	eed For An Integrated Policy For The Eradication Of Labor	
8.2 Educat	tion With Quality And Inclusive	
8.3 Legisla	ating the Legislable	
	eed to Define The Worst Forms of Child Labor rico	
8.5 The U	rgent Need to Reconsider Human Rights and Gender278	
8.6 Going	Beyond Poverty: What We Still Need To Think About	
Appendix		
STATA out	put 1	
STATA out	put 2	
STATA out	put 3	
STATA output 4		
STATA out	put 5	
References		

## List of Tables

Table 2.1:	Classification of working activities of adolescents and children
Table 2.2:	Percentage of monthly income by source
Table 2.3:	Boys and girls in non-agricultural informal activities by age group and sector
Table 3.1:	Boys and girls between 5 and 17 years old by level of well-being
Table 3.2:	Boys and girls between 5 and 17 years old by level of wellbeing in rural and urban areas
Table 3.3:	Difference in level of wellbeing between rural and urban areas, using a lineal regression
Table 4.1:	Children's participation in economic activities, domestic work and studying, by age group and gender108
Table 4.2:	Age groups, occupation, duration of regular workday and income of working children in economic activities, by gender111
Table 4.3:	Contribution to household income, reason why they work and consequences of not working of working children in economic activities, by gender
Table 4.4:	Children between 5 and 17 years old doing domestic work113
Table 4.5:	Rates of working children between 5 and 17 years old in economic activities and domestic work
Table 4.6:	Description of variables, means and standard error123
Table 4.7:	Marginal effects and odds ratio for logit regression models predicting child work (standard errors in parentheses), 2009130
Table 4.8:	OLS Regression Coefficients of working hours by type of work, 2009

Table 5.1:	Description of variables and means (with standard error in parenthesis), by age group, 2009
Table 5.2:	Marginal effects (with standard errors in parentheses) and odds ratio for logit regression models predicting child work by age group, 2009
Table 5.3:	OLS Regression Coefficients of working hours by type of work and age, 2009153
Table 5.4:	Description of variables, means and standard errors163
Table 5.5:	Marginal effects (with standard errors in parentheses) and odds ratio for logit regression models predicting child work by sex, 2009
Table 5.6:	OLS Regression Coefficients of working hours by type of work and sex, 2009
Table 5.7:	OLS Regression coefficients for working hours in Economic Activities and domestic work by Gender and different levels of wellbeing, 2009
Table 8.1:	Worst forms of Child Labor in México, Secretariat of Work and Social Provision (STPS)272
Table A.1.	Marginal effects and odds ratio for logit regression models predicting child work in economic activities, by level of wellbeing (standard errors in parentheses)
Table A.2.	Marginal effects and odds ratio for logit regression models predicting child work in economic activities, domestic work and marginal activities, by level of wellbeing (standard errors in parentheses)
Table A.3.	Marginal effects and odds ratio for logit regression models predicting child work out of necessity, by level of wellbeing (standard errors in parentheses)

# List of Figures

Figure 2.1:	Men and women's participation in the informal market by sector
Figure 4.1:	Main reasons why children do not attend school by gender106
Figure 4.2:	Proportion of working chidren between 5 and 17 years old, by sex, based on two different definitions of work (1) Just economic activities, and (2) Economic activities, domestic work and marginal activities
Figure 6.1:	Number of students enrolled in Santa Ana's middle school during the 2011-2012 school year200
Figure A.1:	Income per capita, normality test (with STATA)

## CHAPTER 1

## INTRODUCTION

During the last three decades there has been a growing trend to ban and eradicate child labor. This position has been adopted by different international organizations and by an important number of countries. This trend was strengthened by the recognition of children's rights. Despite the different efforts, governments and organizations have not been able to eradicate child labor in many places, especially those activities that expose children and adolescents to serious hazards, affect their health and their development or reduce school attendance.

Both, the increasing recognition of children rights around the world and the failure of child labor eradication policies, have encouraged an important amount of research and literature in the area. A main fact within this literature is the general consensus about poverty as a key factor behind the phenomena of child labor. In general, the literature argues that there is a positive correlation between poverty and child labor. If family income decreases, labor supply within the household will rise; a greater number of household members will work, including children. Child labor is also more admissible in societies with high levels of poverty; culturally it is more accepted and formal institutions tend to be softer when child labor is regulated.

This relationship, however, has not been deeply studied. The literature considers this correlation as a simple fact, but there are important questions that have not been answered yet. Why not all children in poor families work? How do the families decide their younger members must work or not?

To understand better the phenomena of child labor we must answer these questions. We need to understand why poverty does not always encourage child labor, and how decisions within the family are taken; how culture becomes a bound that mediates the relationship between poverty and child labor. This work seeks to advance in answering these questions and in the understanding of the phenomena of child labor. In the Mexican case poverty has not a linear relationship with child labor. My main aim is to explain how this relationship is shaped by different factors including family background and perceptions about gender.

This study seeks to bring together two different viewpoints. It's about the general and the particular: of what happens at a national level and what can be explained through quantitative analysis, but it is also about people's stories, their fears and needs, their prejudices and challenges. In other words, it seeks, following the suggestion of Banerjee and Duflo (2011), to think fully about child labor "*again*"; it seeks to think about child labor as they do about poverty, as "a set of concrete problems that, once properly identified and understood, can be solved one at a time" (Banerjee & Duflo, 2011, p. 19). It seeks to think again why we can't reduce child labor in a significant way; why child labor results in boys and girls leaving school; it seeks to go beyond poverty and better understand parental decisions by considering their fears, their prejudices, and their needs.

Results of the research reported on in this dissertation show that poverty increases the cost of schooling, but not based on a linear relationship. In many circumstances child labor will take place even when income increases. The existence of a flexible school system and an informal labor market that facilitates work done by children also increase the cost of schooling. The quantitative results show that in addition to income, parents' education and marginality are the main variables that influence parents' decisions about work and schooling. However, the qualitative analysis suggests that culture mediates the effects of economic variables on the probability of working. This research also shows that living in a rural area is not a significant variable in determining child labor, and suggest a more significant influence of cultural pressure for girls to stay home instead of working or studying, especially when introducing domestic work as part of the definition.

Two main findings related with gender differences need to be underscored. First is the apparent increased labor undertaken by girls that is a function of the link between mothers and daughters—for example, many women do not like to be selling on the streets alone, so they take younger girls with them, such that they end helping them sell goods or asking for money. Second, the self imposition of roles that keeps girls working at home and decrease the likelihood of continuing with their studies.

The comparison of case studies helps to outline important differences based on gender and culture. In addition to illustrating different faces of migration, case studies also show the influence of role models based on the place of residence and on the way in which the idea of gender roles are shaped differently by personal life stories.

3

#### **1.1 BEYOND POVERTY**

There is sufficient theoretical and empirical evidence to show that child labor is especially associated with poor homes (see for example Beneria, 1992; Chant S., 1991; Levinson, Moe and Knaul, 2001); and that it is strongly associated with common familiar traits in homes with scarce resources, such as the education of the parents or the size of the home (see for example Edmonds, 2008). In the same manner, other factors influence the decision of sending children to school or to work, for example: owning their own business (Bhalotra & Heady, 2003; Basu, Das, & Dutta, 2010); lack of access to credit, land, or possessions (Ranjan, 2001; Guarcello, Mealli, & Rosati, 2003); or family traits (Patrinos & Psacharopoulos, 1997; Levy V., 1985; Hazan & Berdugo, 2002).

The literature consistently demonstrates that child labor has been used extensively by many families as a mechanism to face critical economic situations (Beneria, 1992; Edmonds, 2008). Guarcello, Kovrova and Rosati (2008) show that a large number of children were found working on lands that went through floods and loss of crops in Cambodia (Guarcello, Mealli, & Rosati, 2003). In Venezuela, Blanco and Valdivia (2006) found a very strong connection between child labor and decline in Gross Domestic Product.

There is also a very strong relationship between child labor and education. Some authors believe that children stop attending school because they have to work, while others say that school absence is a consequence of children having to work at an early age. This divergence in the explanation of the correlation between child labor and education leads to two different ways of approaching child labor. One identifies child labor as the cause of non-attendance and early dropout, educational lag or inequality (Fuller, Singer, & Keiley, 1995; Buchmann & Hannum, 2001; Gunnarsson, Orazem, & Sánchez, 2006; Heady, 2003; Buchmann, 2000); the other analyzes time allocation within the household (see for example Edmonds, 2008; Udry, 2006).

However, the empirical evidence frequently shows that there is an underestimation of other factors that also influence child labor in a significant way, and that do not necessarily correspond to economic conditions. The preferences of the parents with regard to the time distribution of their children depend on the perception they have of the benefits their children have when they attend school (Rosati & Rossi, 2003). The preferences as well as the perceptions depend on factors that go beyond poverty; they are influenced by social-structural factors (Buchmann & Hannum, 2001) that cannot simply be explained by the parents' education, their poverty or their home traits.

Even so, very few analyses have incorporated family values and prejudices based on gender in an attempt to explain parental decisions about child labor and schooling, in a better way. One of the few exceptions is the work of Parish and Willis (1993), who used the life cycles of women to explain their decisions to quit school. In a similar way, Fuller, Singer and Keiley (1995) analyzed mothers' social commitment as a deciding factor for schooling of the girls in Africa. However, none of these authors incorporated questions in their analysis that identify the stated preconceptions. The work of Buchmann (2000) is one of the few studies that consider parental perceptions and prejudices associated with gender.

This emptiness in the literature is due in great part to the lack of quantitative and qualitative data that allows this type of analysis. Differently from other studies, Buchmann conducted her own survey with families from Kenya to analyze parental decisions about their children's schooling and labor. This allowed the analysis of the impact of the ideology, religion, and parental expectations of the future, among other things, on the decision of sending their children to school and/or work. No other research that I know has considered family ideology and gender-based values to understand parents' decisions about child labor and schooling, even when research has shown that decisions to work (or not to work) can be a social act embedded in culture (Beşpinar-Ekici, 2007), and when comparative studies have shown important differences due to cultural aspects (Ray, 2000).

In synthesis, child labor is a result of economic, institutional, demographic and cultural factors. However the majority of the studies are centered on the economic aspects and to a lesser extent, on demographic and institutional aspects. The analysis of cultural and social factors has been left aside, despite the subjective dimension of these aspects making it harder to intervene in the matter of public policy. Cultural factors are important not only because they influence the impact of child labor even when there is a high level of economic development, but also because the impact of social protection and of conditional transfers policies are limited by cultural factors that don't allow the substitution of child income by money transfers (see for example Murrieta, Gatica,

Álvarez, & Ramírez, 2009). This is because the activities that children carry out are, in some cases, the result of social values that recognize child labor as something positive and important for their development, as a form of discipline and education and that makes them more responsible. In others, the stated activities are the result of the social representations of what a man and woman must do or what is the correct thing to do given the age and sex of the child. The generation of expectations about a different future—i.e. a future that can be achieved through education and that can lead to better paid jobs than those of their parents—is also among the factors that influence child labor in a different way.

This is why in this work I seek to analyze the influence of culture, family ideology and prejudice associated with gender, on the decisions parents make with regard to child labor. I consider that, in Mexico, as in other countries, social, cultural, and economic factors help explain the differences that are present among boys and girls that work. As Tisdell (2002) explains, the possibility of using economic theories to explain preferences and family behaviors depends on the social and cultural context in which these theories will be applied. Through the analysis of informal work in Mexico, and of other common forms of work, I am trying to explain the relationship between child labor and the informal context, which makes child labor easy; in which poverty, family and culture are variables that intervene in the stated relation. I agree with López and Salles (2006), who stress the need to go in depth into empirical evidence, without leaving aside statistical analysis, and thus my interest in using qualitative and quantitative data. The first allows me to look at the diversity of social conditions that influence the decisions

that are taken inside the homes; the second allows me to comprehend the relationship between poverty and child labor in a general way (López & Salles, 2006). With the objective of understanding the particularities that men and women face, I do this through the perspective of gender.

#### 1.2 WHY SHOULD WE KEEP TALKING ABOUT CHILD LABOR?

Even though research on child labor in Mexico has increased in the last decades, there are still many aspects that need to be understood. Existing research has underscored the need to incorporate a definition of child labor that includes non-market oriented activities such as household work (Knaul, 2001), which has not been done. Studies also show important differences between rural and urban areas, but cultural aspects have not been included. Motivations behind parents' decisions about schooling and child work have not been studied. New data on child labor and time allocation has been collected and poorly used. With the exception of the work of López Villavicencio (2005), all the studies are centered on the analysis of labor and school attendance in youngsters between 12 and 17 years old; and none of them, not even López Villavicencio, uses the Module of Child Labor from the National Survey of Occupation and Employment (ENOE, Encuesta Nacional de Ocupación y Empleo) which enables us to extend the analysis beyond the National Survey on Household Income and Expenditure (ENIGH, Encuesta Nacional de Ingreso Gasto en Hogares).

Child labor is important not just because of its implications for the wellbeing of children (as human rights' advocates argue); it is important because of its effects on

economic development. Child labor creates poverty traps (Basu & Van, 1998; Basu, 2000; Baland & Robinson, 2000) that facilitate the intergenerational transmission of poverty (Gunnarsson, Orazem, & Sánchez, 2006). Working children are less likely to attend school and, therefore, to get better earnings when they get older. It also hinders development, because child labor decreases school attendance and worsens health and nutrition. It is well known that education is a major factor in economic and social development (Gereffi & Fonda, 1992). The connections between child labor, schooling and human capital have been empirically established, as has their correlation with economic growth, income inequality and poverty.

My study attempts to contribute to the study of child labor and the understanding of determinants of work by combining research on child time allocation with research on values and beliefs. Given the need for children's income, the value parents place on education, their beliefs about gender roles, their sex-stereotypes and their expectations of the long-term returns on education, all play a significant role in parents' decision about schooling and child labor. I follow Buchmann's (2000) work by introducing three broad theoretical perspectives to elaborate my hypotheses: (1) the household-production framework; (2) resource-constraint arguments;, and (3) cultural arguments (Buchmann, 2000, p. 1351). The household-production framework stresses long-term family welfare as central to educational decisions. It is based on Becker's idea of altruistic parents, who try to maximize family wealth and redistribute it among family members according to their preferences (Becker & Tomes, 1976). Educational decisions are based on wealth maximization, and consequently, investments in education are due to differences in returns to schooling. Therefore, "altruistic parents should invest in more education for children with greatest academic potential, and if the labor market offers better employment opportunities to men, they are more likely to educate sons than daughters" (Buchmann, 2000, p. 1352). In a society in which sex-stereotypes are prevalent and where gender-appropriate activities are socially defined, I would expect to find a greater investment in sons' education. But given the resource constraints, the tradeoff between child labor and school participation is not clear. This study aims to understand those factors that favor schooling when there is a strong need to increase income.

Some perspectives point out that resource constraints limit parental altruism. In many developing countries child labor is a significant survival strategy of poor families. In these cases, "poor families cannot afford to act on calculations of future returns to education" (Buchmann, 2000, p. 1352). In Mexico, informal labor market facilitates children's work. A common and "easy" activity for them is selling on the streets; therefore, the tradeoff between working and studying when living day to day, is higher; that's why a significant amount of children work and study at the same time.

Cultural arguments underscore the importance of patriarchal lineage patterns in the promotion of preferential treatment of sons. In some countries approved roles for women limit parents' interest in their education. The belief that boys have greater academic abilities than girls (Amara, 1987) or the existence of patriarchal norms (Brinton 1993, Greenhalgh 1985, Salaff 1981), favors sons' education. In Mexico studies haven't incorporated cultural arguments in the study of child labor. Buchmann's findings suggest that "parents who feel that education is not worth the cost are less committed to educating their children" (Buchmann, 2000, p. 1369). Mandatory education and free public education reduces costs of attending school, but resource constraints and an accessible and flexible labor market increases the perceived cost of schooling. This research incorporates cultural arguments in the perception of costs of schooling in order to better understand determinants of child time allocation in Mexico. As Delap (2001), argues, and I concur, understanding the intricate causal chains between economic and cultural forces can only be achieved through the use of in-depth qualitative data to complement quantitative information; household decisions "are complex and cannot be explained by mono-causal theories" (Delap, 2001, pp. 17-18).

Only by identifying the issues that determine child labor and from cultural aspects that define the way in which economic factors influence parental decisions, can we begin to implement public policies that facilitate the decrease of child labor. We haven't clearly identified the worst forms of child labor in Mexico. We know that we want to improve the welfare of these children, but we haven't yet figured out how. We want to guarantee their rights but we do not comprehend in what way we are violating them. This is why the analysis of child labor in Mexico is important.

### **1.3 RESEARCH AIMS**

Four main questions guide this research:

1. How does the informal market, in interaction with the school system, facilitate child labor?

2. Which factors influence child labor in México?

11

3. How do culture and family values influence parents' perception about costs of schooling?

4. How does prejudice about boys' and girls' differences influence parents' decisions about work and schooling?

My first question aims to analyze the characteristics of the informal labor market in relation to the school system, which facilitates child labor. I analyze the conditions that in this case make it easy for children to work and study at the same time, increasing the opportunity cost of schooling. The second question tries to grasp the applicability of the luxury and substitution axioms when controlling by income level, and sets the stage for introducing other variables into the analysis. It tries to identify the general determinants of child labor for the case of Mexico. The last two questions directly target norms and values unrelated to economic considerations that shape educational and labor decisions. The third question assesses the influence of experience and culture over preferences about schooling. The last question helps explain the effects of gender stereotypes on children's participation in the labor market and school attendance. The objective is to better understand how noneconomic variables influence child time allocation.

### **1.4 МЕТНО**

In order to accomplish my investigation, I use quantitative as well as qualitative methods. For the description of the informal labor market (chapter 2) I use two principal databases: The National Survey of Occupation and Employment (ENOE) and the

National Survey of Micro-Businesses 2008 (ENAMIN). For the statistical analysis about the determinants of child labor in Mexico I use the Module of Child Labor 2009 (MTI 2009), a complement of the National Survey of Occupation and Employment (ENOE). The Module of Child Labor presents information about the Socio-Demographic characteristics and economic and non-economic activities of the population from 5 to 17 years of age. It is a representative survey on a state and national level. One of the big advantages of the Module of Child Labor in respect to the prior surveys is that besides providing information about economic activities, it gives us information about domestic labor. The size of the sample helps working with grouped variables in the database.

To help analyze the differences between those children that could work in the formal sector and those who don't, I divided the database in two large groups: boys under the age of 14, and boys from 14 to 17 years old. In a similar way, to analyze differences based on the gender, I separated the database in two groups: men and women.

This research is based upon more qualitative analysis. Given that the statistical data do not allow us to comprehend how decisions are made in the home in regards to child labor and schooling attendance, I propose to use case studies in order to explain how this process takes place; to explain how social and cultural factors influence these decisions. I seek to exemplify the very different contextual realities that result in the work that the minors do and that allow a more nuanced understanding of the complexities. I use four cases. Two cases explore child labor in rural areas: the case of son and daughters of migrant agricultural workers in Cihuatlán and the case of children who live in a coffee plantation. In order to explore "the urban" I take the experience of families who work on

the streets of Guadalajara and the particularities that young adolescents face when they have few possibilities of continuing with their studies in a context surrounded by gangs and a lack of working options. All these experiences allowed me to incorporate aspects that influence decisions about work and schooling, such as: migration, exploitation, ways of living in both the country and the city, expectations about the future and gender based prejudices, among others.

During the summer of 2009 I carried out the evaluation of the municipal social assistance program *Rescue of families in street situation of the metropolitan zone of Guadalajara*. The process of evaluation of the program allowed me to interview sixty families that worked or had worked (in the last two years previous to the evaluation) in the streets of the city of Guadalajara. Also, during that period I was doing ethnographic work in the city streets. Working with families helped me observe the family context of the children that work in the streets, focus on the decisions about the activities that boys and girls do in the streets as well as in their homes.

Besides the survey that I conducted as part of the evaluation, I also did in-depth interviews with families from Guadalajara, as well as families that come from Oaxaca whose principal activity is selling candy in the streets or working as gardeners. These families were contacted through the DIF system in Guadalajara. At first, I tried to interview all the families that from 2007 to 2009 had participated in the program. However, I could only interview 66 out of 110 families who participated voluntarily. In the case of the indigenous families, I had the help of a translator that helped me translate from Mixteco to Spanish. In some cases, their adolescent children helped with the interpretation. When the families required help, there was a representative of DIF Guadalajara available.

Some of the sections of the survey were especially important for my research: the description of the household characteristics, the family structure, family background, perceptions of the cost of going to school, expectations with regard to the future of the children, and prejudice based on gender. The interviews with the families that worked on the streets allowed me to observe closely the dynamics between informal labor, the educational system and child labor, as well as the importance of their culture and family background with regard to the decision of sending their children to school and/or work.

Another reality of urban labor was observed through the fieldwork I did in Santa Ana Tepetitlán, a marginal community (a neighborhood with high levels of violence and poverty) in the Metropolitan area of Guadalajara. Differently from what I observed with families that worked in the streets, in this neighborhood I could see the difficulties that these youngsters have to face in order to continue with their studies, and therefore, the pressure they go through to start working at a young age. The research in this neighborhood was conducted in the winter of 2012. With the objective of obtaining information about the main challenges that adolescents in Santa Ana face while trying to continue with their studies, I conducted focus groups that made up as follows: teenagers that currently are part of gangs, teenagers that participate in political groups, youngsters involved with the church, and adults (the great majority of the adults are parents or activists of the colonia). The information obtained through the focus groups is complemented with other interviews from adults and teenagers that don't belong to any of the mentioned groups, and whose participation was marginal.

An open call was made for the focus groups. Banner posters were hung in the main plaza of the neighborhood and in some of the adjacent streets. Also, with the support of the Board of Social Development of Zapopan and from SUBSEMUN, flyers were distributed in surrounding homes. Finally, another group was formed through the local priest. The sessions lasted two or three hours, and the number of groups was determined by the saturation point. By the sixth focus group, with teenagers actively involved in political groups, the information obtained was starting to get repetitive, and for this reason I decided not to continue further with the focus groups. The participants and the characteristics of the groups varied, with an average of 15 persons per group. The session that was most attended was the one that was carried out with gang members, which involved young people, parents, and children.

The interviews with migrant farmers were undertaken with some students in May of 2012 as part of an examination of child labor in Cihuatlán, Jalisco.<sup>1</sup> Besides visiting the camps of the farmers, we conducted several interviews with parents, children, and teachers of the Kindergarten and Elementary Education Program for Boys and Girls of Families of Migrant Farmers (PRONIM). Here we carried out a total of 40 interviews. The main objective was the comprehension of the relationship between education, migration, and child labor. The main problem we faced while doing this part of the research was the impossibility of interviewing during work in the fields, and for this

<sup>&</sup>lt;sup>1</sup> This work was part of the research done by two of my students, who did their research on farmer migrant children of migrant farmers in Cihuatlán, Jalisco; this study was jointly conducted.

reason, the interviews were conducted in the campsite and the school. At the same time, this had the advantage of allowing us to observe the dynamics inside the homes, and the conditions under which these children live and study.

The data that illustrates what happens in El Rincón was gathered less systematically. I use information that I got during my stay in the community in the 1990s, when I lived there for a year, and from my subsequent visits to the community.<sup>2</sup>

The incorporation of these very different experiences has the purpose of showing the particularity of situations that cannot be explained simply through using quantitative methods. Only from the interviews is it possible to comprehend the nature of social life, the culture and the values that are faced through behavior. In the same manner, the interviews allow the comprehension of how people perceive and interpret what happens in their environments (Weiss, 1994). The interviews help show people's values, thoughts, and feelings.

Besides trying to strengthen the arguments that arise from the quantitative data, I use qualitative analysis to compare cases with the purpose of understanding social processes in a more nuanced way, for example, to exemplify the differenced between rural and urban situations, and/or gender differences. This is why I use as many crosscase analyses as within-case analyses. The latter is especially important in order to comprehend the causal process through which culture operates (Collier, Mahoney, & Seawright, 2004).

 $<sup>^{2}</sup>$  I went back to the community 2 times, in 2000 and 2010. My last contact with people of the community took place during the summer of 2012, when I was able interview one of the boys that migrated illegally to the United States in 2008. He gave me updated information about current activities of other members of the community.

#### **1.5 OUTLINE OF DISSERTATION**

Once the transformations of the concept of child labor in Mexico are explained from something that is socially accepted-and even imperative from a rational perspective-to something not desirable and therefore eradicable, in the following chapter I analyze the characteristics of the labor market that facilitate the existence of child labor in Mexico. I lay out the informal sector as the context in which practically all of the labor that children undertake is developed. I begin my analysis by discussing the general characteristics of informality, and explore the dynamics that allow the existence of the informal market in Mexico. During the last two decades, the contrast between formal and informal market has decreased significantly, increasing the proportion of informality and expanding the different options in which children are participating. I argue that child labor in the informal market goes beyond "microenterprises" as defined by INEGI, and that they are participating in more activities than just begging or doing domestic work, neither of which is considered a form of labor; working, for example, as jornaleros (farm laborers) or small producers at home. Informality facilitates child labor because it offers the flexibility required for children to work and attend school, or to work without being seen, which within the formal labor market would be almost impossible. The existence of an informal economy means that, on the one hand, an important part of the relationship between economy and work escapes regulation, which allows the hiring and exploitation of children. On the other hand, a labor market that doesn't need a qualified workforce allows for the incorporation of children and adolescents more easily. However, I end the discussion stressing the complexity of child labor issues by arguing that the lack of employment regulation is not a necessary pre-condition for the existence of child labor, since child labor occurs in the domestic sphere or can be self-generated.

In Chapter 3, I analyze the different perspectives that have marked research on child labor. This revolves around two principal questions: why do children work? And what are the consequences of children working? These questions have been added to other questions, for example: What are the factors that influence child labor? Or who decides that children will work? This chapter constitutes an important part on the theoretical framework that underpins this study. There have been three main answers with regard to the reasons for which children work: poverty, relative returns from schooling, and parental preferences in child time allocation decisions (Edmonds, 2008). Some authors believe that children work because their families can't satisfy their basic needs; if it were possible, they wouldn't make them work (Basu & Van, 1998). Others explain it as a survival strategy (Brown, Deardorff, & Stern, 2003), while others underline the children's contribution to the family income and analyze it as an opportunity cost (Psacharopoulos, 1997; Menon, Pareli, & Rosati, 2005).

This chapter also provides the basis for the definition of the variables used in chapters four and five. Following Becker (1965), I assume that parents are altruistic and are only sending their kids to work when it is really necessary and that attending or not attending school is part of the maximization of family resources. In this manner, I assume that child labor is the result of a subjective evaluation by children and their parents—a subjectivity that I analyze in a more detailed manner in chapter Six. Therefore, in chapter

three, I lay the foundation that justifies the analysis of child labor by age and gender; and here I underline the importance of incorporating social and cultural factors for the analysis of child labor, all factors I analyze in more detail in chapter six. I conclude this chapter reflecting on the need to decrease the costs of education and the importance of identifying the determinants of child labor as necessary requirements in the process of eradication of the worst forms of child labor in Mexico.

In chapters four and five I present an econometric analysis of the determinants of child labor. Specifically, in Chapter 4, by presenting the main factors that influence child labor, I set the basis for the analysis of age and gender of Chapter 5, and I describe the methodology used for the econometric analysis. Given the problem of endogeneity between child labor and education and the high level of school attendance in Mexico, I leave the variable of education aside-since it is widely known to have a negative correlation with child labor-and I include as independent variables, children's characteristics, such as age and gender, and the characteristics of their homes and place of residence. The relationship between income and the probability of working isn't lineal, especially when we include domestic work as part of the definition. Even though all of the variables are significant in terms of the possibility of doing economic activities and/or domestic work as the income increases, the effect of the variables on these activities decreases. The only variable that in every case maintains a negative correlation with the probability of working is parents' education. The differences between boys and girls are evident. In the case of domestic work, it is most likely for girls to work. When there is the need of sending a child to work or when economic activities outside the home are exclusively analyzed, the probability of working is higher for boys. Just as expected, as age increases the probability of working in the formal labor market, also increases. This relationship is more fully addressed in chapter five.

The ways in which boys and girls are incorporated into the labor market is determined, among other things, by the legislation that has tried to impose age limits on formal child labor. This has increased informal work among children, and, therefore, a lack of awareness of the activities that children execute. The Module of Child Labor of ENOE analyzes the activities that children do, since it includes information about the activities of children under 12. However, the use of the whole data set together does not allow to understand how those factors that influence on the probability of doing child labor, influence differently in younger and older children; this is, how do differences between children that are able to participate in the formal labor market and children who are not able to work formally, take place. For example, if having older siblings or living with both parents has a different effect on children under 14 years old with respect to children who are 14 years old or older. Something similar happens with the analysis of child labor by gender; the presence of other family members influences differently the probability of working, of boys and girls.

For this reason, in chapter 5, I repeat the previous econometric analysis, but this time do so by groups. In the first exercise, I separate the sample by age and I place children younger than 14 in a group, and boys and girls between 14 and 17 years old in another. In this manner I am able to observe the differences between those children that have access to formal work with those that don't. Later, I separate the sample, this time

based on gender. This lets me identify the variations in the determining factors of child labor between boys and girls, and covers one of the biggest gaps in the literature: namely the lack of analysis of the impact of child labor on girls (International Labour Office, ILO, 2013).

However, the processes that finally determine the differences between males and females in their decisions about economic activities and in their negotiations over decisions cannot be adequately explored through the quantitative analysis. As I insist in the conclusions to Chapter Five, trying to explain child labor from a gendered perspective with statistical data is risky, and does not reflect the experiences that influence the process of negotiation, even when trying to analyze separately those who are old enough to work in the formal market and those who are not. This is why the objective of chapters six and seven is to go more deeply into the factors that influence the children's decision to work. Beginning with the stories collected during different periods of fieldwork, I analyze the cultural and social factors that influence child labor, and that allow the understanding of the processes in which such work is given.

Social and cultural factors are not necessarily more important than economic rationality in explaining child labor, but there's no doubt that economic needs and children's economic activities are shaped by social and cultural factors. Those who have faced the difficulties of not finding a job due to lack of education, usually value the education of their children in such a way that they avoid, as much as possible, their children having to work. Those who see that finishing junior high school does not help to get a better job in their community prefer to quit school and start working at a young age. What kind of job will they have? A job that is socially acceptable. Chapter six has the objective of exploring various factors that determine the incorporation of children into labor, such as gender, migration, and the expectations that children have about a life different from their parents in urban areas.

Chapter seven is especially useful to explore the inter-connection between the rural and the urban. The increased presence of agricultural producers has intensified rural-rural migration; but rural migration has also resulted from new life-models available through the increased interlink between the rural and the urban, shaping children's alternatives to work and schooling. In this chapter, I explore the influence of role models that results from the closest link between the urban and the rural, a link mediated by gender roles that limit available models for girls. I discuss social and economic conditions that influence parental decisions about child labor and schooling in a context of limited economic and educational resources.

In the last chapter I go back to the need to rethink child labor. I begin with the analysis of the relationship between education and work, and I underline the importance of improving the quality of education as a mechanism of reducing child labor. However, as I mentioned in the previous chapters, the factors that determine child labor also include poverty; therefore, we can't simply conclude with an argument in favor of education and deny all the other factors that influence the probability of children having to work. This is why I return to the International Labor Office's recommendation 146 on the minimum age for admission to work (International Organization of Labor, 1973) as part of the conclusions. I lay out four major deficiencies in Mexican public policy on child labor: (1)

an integrated policy of eradication that considers structural factors that help prevent the need of children having to work; (2) the consolidation of a high quality education and inclusive system that could help children stay in school; (3) the implementation and the fulfillment of laws that protect the jobs of adolescents and prohibit the labor of minors; and (4) the identification of the worst forms of child labor at a state level with the purpose of providing a targeted policy of eradication of the worst forms. All of these are deficiencies that we must consider if we want a better quality of life for these children.

I end my research reflecting on the importance of including a human rights perspective and a gender based approach to understanding child labor; and set some questions that should guide further research.

## CHAPTER 2

## **CHILD LABOR AND INFORMALITY**

Children carry out many different activities for which they sometimes receive payment, or which allow other family members to work, in many cases because it is necessary. Some take care of siblings, do domestic chores or participate in the family economy by making handcrafts. Others work in mines, sell on the streets, or engage in commercial sexual activities. When work is potentially harmful to children's well-being, it is considered *child labor*, a concept that is always associated with activities that have a negative impact on children. In most countries, few activities are considered appropriate work for children and, therefore, can be referred to as child work.

Since the ratification of International Labor Organization (ILO) Conventions number 138 and 182, child labor has been considered illegal in most cases, and something that should be eradicated. Consequently, in some countries child labor exists only informally, because in informality restrictions can be avoided. This is the case in Mexico, where work done by persons under 14 years old is forbidden by law, and the conditions under which older children can participate as labor force are limited.

Informality facilitates child labor because economic actors circumvent government legislation and hire children even when they haven't reached the lawful minimum age for employment. Child labor is also feasible because informality often takes place concealed from the authorities, out of their sight, or in public areas such as avenues, plazas, sidewalks, and even buses, under special negotiations between authorities and vendors, which facilitates hiding. This is the case of child labor in Guadalajara, Monterrey, and Mexico City, where most children work selling on the streets and within the main city markets, "concealed" by the familiarity that street vending poses for most people in the city. Others work in places such as *ladrilleras* (brick kilns) and small workshops, where authorities easily overlook child labor.

In Mexico, as in other countries, informality exists in part because "governments are incapable or unwilling to enact legislation to protect workers [and] discipline employers" (Fernández-Kelly & Shefner, 2006, p. 2), and also because of increased pressure, of all sorts, over work. Due to corruption and political clientelism, many employers do not comply with government regulations; on the streets, patron-client relationships allow street merchants to use walkways and parks, in many cases in exchange for votes. In addition, low salaries and urban-rural migration have pushed people to work in more than one place or send other family members to work, reducing work opportunities in the formal sector and increasing pressure on the labor market.

This chapter analyses the link between child labor and the informal market. I begin my analysis discussing the general characteristics of informality. I continue by reviewing the informal market in México and exploring the dynamics that facilitate its existence. As part of this section, I discuss the decreasing contrast between formal and informal jobs, and describe children's participation in microenterprises, underscoring the risk of analyzing child labor from this perspective only, since child labor is more than economic activities. I argue that informality facilitates child labor because it offers the

flexibility required for children to work and attend school, or to work without being seen, which within the formal labor market would be almost impossible. However, I end the discussion stressing the complexity of the child labor issue, arguing that the lack of regulation is not necessary a pre-condition for its existence, since it can also take the form of domestic work or self-employment.

# 2.1 FROM FORMAL TO INFORMAL LABOR... TRANSFORMATIONS OF THE MEANING OF CHILD WORK

"Acquiring the habit of useful, constant occupation and a feeling that inhibits idleness guarantees that the individual will be willing to contribute to any activity, no matter how modest it is, collaborating with collective, as well as personal, well-being. This habit and this feeling will only be conquered when the individual feels grief and pain when idle. Only then will work have become a virtue."

El maestro Rural, March 15, 1933, p. 31 (Sosenski, 2010, p. 209)

In Mexico, the way parents value work done by children has changed significantly in the last century. While in the 19<sup>th</sup> century, labor was considered an educational activity for children, it is now considered something that puts their well-being at risk. Initially, it was thought that children should work and learn a trade as soon as possible. Not having to work was seen as something negative, as a possible source of trouble (Sosenski, 2010). The implementation of mandatory education by the post-revolutionary government did not reduce the interest of parents in work. Many parents would expect children to work and study at the same time. However, today any type of

work done by children under 14 years old is considered inappropriate and harmful to their well-being.

During the 19th century and the three first decades of the 20th century, child work was considered important for children's development; many parents saw it as a way to acquire good habits, to learn. In addition to the value seen in work, during and after the Revolution, many families were forced to use child labor as a form of subsistence; work was seen by the new governments as necessary for the reconstruction process of the nation. Young people were able to have formal jobs. From the age of nine, they were allowed to work in factories. However, during this same period, parents' interest in education increased. For the Mexican government, work and education needed to go "hand in hand". Industrialization needed a specialized labor force. Children from lowincome sectors had to develop an interest in and abilities for manual work; those from middle and upper classes had to get a university degree, so they could perform other types of jobs that were also necessary for the country's economic development (Sosenski, 2010). The government was responsible for facilitating the coexistence of compulsory education with good working conditions so that every citizen could become "literate, hardworking, productive, healthy and nationalist" (Sosenski, 2010, p. 45). It was a completely different way of understanding child labor.

The Political Constitution of 1917 set the basis for the coexistence of child labor and schooling. It gave children the right to work and provide for their own well-being. This implied the possibility of working and having an income for themselves or their families. However, even when it went against the right to work, the constitution also imposed restrictions on child work by establishing a minimum age of access to work, which in that period was twelve years old. But, even with these restrictions, child work continued being socially accepted; it was still considered as something that happened in the best interests of the child and the family. This perception did not change significantly until the end of the Maximato (1928-34) and the beginning of Cardenismo (1934-40).

Even when legislators were able to identify the negative aspects of working conditions faced by children in factories and workshops, for the first post-revolutionary governments it was practically impossible to forbid child labor. This impossibility was due in part to the fact that work done by children was also seen as a right, as stated in the Constitution. Therefore, at that time, a full elimination of child labor would violate individual rights; it was impossible to deny children the right to work. As stressed in the quote above, during this period work was seen as a virtue, and. therefore, there was no good reason to limit it.

Even though the right to work as stated in article 123 of the political Constitution did not change, the idea of work as something that was always positive for children changed significantly during the era of Cardenismo. During this period, economic, labor and education reforms were implemented, influencing general perceptions about child labor and schooling. The main impact resulted from education reforms. Even when work done by children was still considered formative, education was valued as the best way to change society and achieve development; therefore, education for all was enforced. The "socialist-education" meant education for everyone, and made way for the proliferation of educational projects in both rural and urban areas. Rural schools were extended and bilingual education was implemented in some indigenous communities. This increase in the valuation of education took place at the same time that the belief in work as necessary for children's development was put into question.

A series of events in favor of children and against child labor occurred around the world, in which Mexico got slowly involved: the first Pan-American Child Congress in 1916, the Geneva Declaration in 1924, the creation of the Inter-American Children Institute in 1927, and the incorporation of Mexico into it in 1935. Even when at the beginning of the discussions it was thought that children could work, shortly after, the need to protect children from exploitation was emphasized. By 1959, in the Declaration of the Rights of the Child, work was assumed to be something completely negative, because it compromised some of its tenets: "that a child should grow and develop in health and have the right to adequate nutrition, housing, recreation, medical services, education, and moral and material security" (UNICEF, 1986, p. 2).

In Mexico, as in many other parts of the world, the struggle against exploitation was followed by the continued discussion about what should be considered exploitation. This discussion was framed by a popular belief in work as a good way to avoid children's delinquency and also by a national movement in favor of education. Many families believed that work was a good way to keep children out of trouble and that, even when work in factories was a moral hazard for them, it was better than work on the streets or too much free time. In some cases, compulsory education and the different programs implemented by the government provided an alternative for those families who did not depend on child labor for subsistence; but still, there was a preference for work over free time.

Between the 1920's and the 1930's, post-revolutionary governments began developing a significant amount of programs aimed at increasing school attendance and improving the working conditions of women and children. In 1921, President Obregón created the Secretariat of Public Education (SEP); three years later, he formed the Federal Board for the Protection of Children (Junta Federal de Protección a la Infancia). In 1929, the Department of Labor had a round table to analyze the working conditions of women and children. However, none of these actions sought to eliminate child labor; the objective was just to "regulate, restrict and improve working conditions" (Sosenski, 2010, p. 52).

The first significant shift in the meaning of work took place in 1931, with the creation of the Federal Labor Law; which restricted work done by children under twelve years, at the same time that it gave older children the same rights that adults had. The Federal Labor Law recognized children's rights to be considered as those of any other worker. With this law, all individuals over twelve years old got the right to become members of the labor union and, therefore, receive the same benefits as any other worker. However, only children over sixteen years old could enter into a contract by their own will; younger children were required to get authorization from their parents or legal guardians. Those who were learning in workshops and factories were also protected and regulated. It was stipulated that any child working in a workshop or factory, even when he was learning, needed to receive a stipend and could not be abused in any way. Work

hours should be restricted and working conditions improved. The creation of the learning contract and the implementation of a minimum wage were important because they formalized the learning process of children and recognized it as child work (Sosenski, 2010). Finally, with the implementation of the Regulation of unhealthy and hazardous work for women and children (1934), some activities were forbidden and working conditions were limited.

These regulations began to improve the working conditions of children in the manufacturing sector. However, at the same time, in many places employers did not respect the law and informal labor began to grow. Regulations did not benefit children doing agricultural activities and children working on the streets; neither did it help to recognize domestic or street activities as child work. Domestic work was seen as "help" in the house and, in general, children working on the streets were considered "vendors," which was not seen as work because there were no wages involved (Sosenski, 2010). Any definition and regulation of child labor was framed by the work contract, so any activity that did not include wages was not considered as labor, and was therefore not regulated or even recognized. Thus, even when formal work was gradually restricted, child labor did not decrease. Work in factories and workshops diminished, but work within the informal sector increased significantly, though a significant part of it was not officially recognized because of the confusing definitions of child work.

#### Current meaning of child labor and its worst forms, in Mexico

Even though Mexico hasn't ratified The Minimum Age Convention (Convention 138) established by the International Labor Organization in 1973, since 1962 the Mexican government modified the Federal Labor Law and established fourteen years old as the minimum age for admission to employment or work, and limited the workday of children between fourteen and sixteen years old to six hours. In 1974, the Mexican Constitution was modified and any job done by persons under sixteen years old during the night, after 10 pm, and in those circumstances in which it could jeopardize their health and safety, became illegal. Currently, the Federal Labor Law prohibits the employment of children between fourteen and sixteen years old who have not completed their compulsory education, with the exception of those cases in which the appropriate authority considers that there is compatibility between studies and work (Art. 22, Ley Federal del Trabajo, Cámara de diputados 2006). Therefore, any activity done by children under fourteen years old, or which does not respect these regulations is considered child labor.

Article 175° of the Federal Labor Law states that persons under sixteen years old are not allowed to work:

- i. In places where alcoholic beverages are sold for immediate consumption.
- ii. Performing activities, which may affect their morals or decency.
- iii. On the streets, unless special authorization is granted by the appropriate authorities.
- iv. In underground or underwater activities.

33

- v. In dangerous and unhealthy activities.
- vi. Performing activities that surpass their strength and that may inhibit or hinder their normal physical development.
- vii. In non-industrial establishments after ten o'clock at night.
- viii. In other situations prescribed by law.

Article 176 defines, in general terms, dangerous and unhealthy activities that cannot be performed by children, and basically refers to activities that occur in places where the air could be polluted by toxic substances or where toxic materials are used as main components, any of which could have a negative effect over mental and physical development and therefore, put their health and well-being at risk. However, it leaves the final definition of these types of jobs to employers or other agencies, which has allowed a continuous disregard of regulations.

In terms of working hours, the Federal Labor Law determines that all individuals under sixteen years old must work a maximum of six hours to be divided in two threehour periods (Art. 177); they need to rest for at least one hour after every three hours, and are not allowed to work overtime (Art. 178). In any case, work done by children is restricted by school attendance. Article 180 states that the time for work needs to be organized in such a way that children are able to fulfill their school activities. Finally, the law lists some specific jobs that should not be carried out by children.

After the ratification of Convention 182, Mexico committed itself to work on the definition of the most harmful forms of labor. However, Mexican institutions have not been successful in doing so. Until now, just general prescriptions about unhealthy and

hazardous work have been described. Even though there is some clarity about the jobs that shouldn't be done by children, Mexican legislation doesn't specify which jobs should be eliminated and doesn't differentiate between child labor and child work; any type of work is considered *trabajo infantil*. The International Labor Organization, like many countries, uses the term "child labor" when referring to work that is harmful for children. It always has a negative connotation and implies that "children involved should not be working". As stated by UNICEF, it refers to children working "before they have reached the lawful minimum age for employment in their country" (UNICEF, 2005, p. 7). The term "child labor" is used by UNICEF, World Bank and by many international organizations that have ratified conventions 138 and 182.

Currently, these organizations use the term "child work" or "children's work" to convey the entire spectrum of work and related activities done by children, while "child labor" refers to a subset of children's work that is harmful for children and that should be eliminated. Forms of slavery, forced labor, forced participation in armed conflicts, commercial sexual exploitation, participation in illicit activities, and hazardous work that jeopardizes the lives, health, or morals of those involved are considered the worst forms of child labor (UNICEF, 2005). Nonhazardous work varies from country to country and is strongly related to culture.

The term "economically active children," as used by INEGI (2009b), refers to "productive activities undertaken by children, whether for the market or not, paid or unpaid, for a few hours or full time, on a casual or regular basis, legal or illegal; it excludes chores undertaken in the child's own household" (ILO, International Labour Organization, 2006, p. 6). It is used for statistical purposes and includes "children who have worked at least one hour in any day during a seven-day reference period" (ILO, International Labor Organization 2006, p. 6). In 2004, the ILO estimated the existence of 317.4 million economically active children between five and seventeen years old, 217.7 million of whom could be regarded as child laborers. Of the latter, 126.3 million engaged in hazardous work (ILO, International Labour Organization 2006), mainly in developing countries.

Based on its nature, the conditions under which it takes place and its character, an activity can be considered child work or child labor. In general, the only characteristic which changes between cultures is the ascribed character of the activity; in some countries, domestic work can be considered educational while in others can be seen as non-educational (Ordóñez Bustamante & Bracamonte Bardález, 2005). The term "nature" refers to the degree of risk it poses to children's health and security (physical and mental). Based on its nature an activity can be safe or threatening. Some examples of work that is safe based on its nature are selling goods, making simple manufactured goods such as ceramics, taking care of cars, or helping in restaurants. Ordóñez and Bracamonte (2005) describe two different types of unsafe activities: (1) those which are not necessarily forbidden by law, but that could result in harm for children—as an example, they give the use of a circular saw in carpentry—and (2) hazardous and high risk activities that are always harmful for children in a long or short term, for example, work in mines or underground activities. All activities that fall under this category are forbidden by the International Labor Organization and by all countries that have ratified convention 182.

Table 2.1 Classification of working activities of adolescents and children

		NATURE		
		Not harmful	Harmful	
			Risky	Harmful or high risk
CHARACTER	EDUCA- TIONAL	Educational not harmful Example: Handmade ceramics	Educational but risky because of its nature Example: Carpenter's apprentice	Educational but dangerous because of its nature Example: production of handmade bricks
	NON-EDUCA- TIONAL	Non-educational Not harmful Example: office or domestic work	Non-educational and risky because of its nature Example: street vending	Non-educational and dangerous because of its nature
When working				
conditions are inadequate, the former can be transformed into:		Risky because of bad working conditions	Increased risk because of bad working conditions	Dangerous by nature and with additional risk because of bad working conditions

Source: Ordóñez Bustamante and Bracamonte Bardález 2005, 3. Cells were filled by author to underscore the worst forms of child labor and, therefore, the characteristics of work that needs to be eliminated.

Working conditions can be classified as adequate or inadequate. Activities that by nature are not harmful can become one of the worst forms of child labor under certain working conditions, as is the case with street vending. Selling itself is not harmful; however, selling in the streets exposes children to bad weather conditions, pollution, and the risk of being hit by a car. In general, risk conditions are established by local legislation. Some examples are: extended working hours, working during the night or too early in the morning, payment based on piecework (it promotes exploitation), working without hygiene measures and labor security, working hours that do not facilitate school attendance, and activities that represent a risk for the moral, physical, and mental development of children.

Finally, child labor can be educational or non-educational. Certain types of work facilitate the development of abilities and human capital that can help later in life. Table 2.1 describes work classifications based on nature, conditions, and character, and the relationship between these three aspects. It helps to better explain how bad working conditions transform work classifications. Grey squares help underscore the worst forms of child labor and, therefore, those forms that need to be eliminated.

Child work encompasses all sorts of activities. Following the ILO's definition of child labor, in Mexico, as described by the Federal Labor Law, all work done by children under fourteen years old, and by older children who are under sixteen and haven't finished basic education, is considered child labor. Therefore, most children in Mexico are not able to work in the formal sector; which means they lack the possibility of working under the protection of the government, which ideally should mean "under the best possible conditions." Since child work has lost its formative value, it is always seen as something bad for children; it is continuously condemned by authorities and non-governmental organizations. However, this complete rejection of child labor denies what they consider its main cause: the economic need of complementary income. NGO and government activities have been oriented towards the elimination of child labor by establishing age bans that restrict children's access to formal jobs, and not to the solution

of its causes. As a result, child labor has increased, facilitated by the growth of the informal sector, where government regulations can be evaded, thus worsening the working conditions of children.

Even though Mexico hasn't ratified convention 138, it has committed to "pursue a national policy designed to ensure the abolition of child labor and to raise progressively the minimum age for admission to employment or work to a level consistent with the fullest physical and mental development of young people" (ILO, International Labour Organization, 2006c). But it hasn't committed to the implementation of regulations that could facilitate child work in such a way that it wouldn't jeopardize health and development. If labor fulfills a need, why shouldn't this need be recognized and therefore facilitated in a safe and positive way? Mexican legislation hasn't effectively restricted street vending or agricultural activities, even when these activities are regulated under Article 175 of the Federal Labor Law, partly because of the difficulty in enforcing these regulations, but also in part because families need children's work. In summary, family needs and the impossibility of local governments enforcing the law have facilitated informal work and children's participation in activities that represent a risk for their health and development, and which have not been regulated by the government.

It is important to end this section by stressing two important tasks that are yet to be done in order to have a functional, updated definition of child labor in Mexico. First, in order to differentiate between "child labor" and "child work", it is necessary to understand the cultural patterns that define child labor. There is a need to define whether domestic work is labor or a responsibility, as promoted by the National Commission of Human Rights<sup>1</sup> (CNDH, 2011), whether children should work because it is a virtue, or whether they should be just studying, playing, getting enough rest, and spending time with their friends. Finally, there is a need to acknowledge that the changes in the definition of child labor have increased the work of young persons in the informal sector, where there is a lack of regulation of working conditions, and, therefore, where they can be more easily exploited. Working in a family business in which children help while doing no hazardous activities, such as cleaning tables in family restaurants, selling stationery for a couple of hours in a nearby store, helping a veterinarian with basic activities, or doing crafts, when they are well paid (that is, when they receive the same payment an adult would receive for the same activity) can enhance children's education and skills, and can help families to supplement income. If this change is not recognized and cultural patterns identified, it will be harder to regulate and therefore, to protect children from the worst forms of child labor.

#### Child labor in academic works and my use of the concept.

Like institutions, academic work also reflects a lack of agreement as to what child labor is. Most research is based on the ILO's definition of child labor, but applies it in different and confusing ways. For example, in Pakistan, child labor is understood as

<sup>&</sup>lt;sup>1</sup> In February of 2011, the National Commission of Human Rights organized a radio spot to promote the respect of children's right in Mexico. This is the transcript of part of the spot:

<sup>--&</sup>quot;Mom, do I have rights?

<sup>--</sup>Of course, you have rights and responsibilities. You have the right of a family, and the responsibility of respecting it.

<sup>--</sup>Children have the right to receive medical attention and to have a peaceful place to live. But they also have the responsibility of helping at home. They have the right to enjoy culture.

<sup>--</sup>They have the right to go to school, but also the duty of studying, (...)" (the spot continues). (CNDH 2011)

wage labor, while in Vietnam it means "market work that is harmful to the future wellbeing of children," independently of being paid or not (Edmonds, 2008, p. 3617). Some of this confusion has to do with the difficulty posed by the division between positive and negative work. As some authors have emphasized, it is really difficult to be precise about the difference between "child labor" and "child work" (James, Jenks, & Prout, 1998).

Most research on child labor and schooling is focused on market-oriented activities; that is, activities that involve the "direct production of economic goods and services (...) whether for the market, for barter, or for home consumption, the production of all other goods and services for the market and, in the case of households which produce such goods and services for the market, the corresponding production for own consumption" (ILO, 2000, p. 1). A non-market oriented activity is used "to denote participation in the supply of goods and services to family members or other members of the community that fall outside of the scope of the official definition of economic goods and services" (Edmonds, 2008, p. 3615). Theoretically, this definition includes domestic chores or domestic work, but, in practice, the lack of data available on time allocation and domestic work has only allowed the analysis of market-oriented activities.

That is one of the reasons a significant part of child work has remained unacknowledged or unexplained, misrepresenting the activities of girls (Evenson, Popkin, & King-Quizon, 1980; De Tray, 1983; De Graff, Bilsborrow, & Herrin, 1996; Kambhampati & Rajan, 2008). As Levinson et al. argue, the standard definition of work misrepresents the opportunity cost of schooling, especially for girls, "because it excludes the value of household production and child care," which in many cases is done by girls (Levinson, Moe, & Knaul, 2001, p. 169). In Mexico, gender roles favor girls performing domestic work and caring for adults in the household. When the family owns a small business or needs children's work, it is common for girls to quit schooling and participate in housework, in many cases substituting for their mother's work at home (Levinson, Moe, & Knaul, 2001), situations frequently overlooked by statistics.

Even though recently collected data on child labor in Mexico includes domestic work, most research has used traditional definitions of child labor. In this study, I use Levinson, Moe and Knaul's (2001, p. 168) definition of child labor, which includes "work undertaken inside or outside the home for the production of marketable goods and services, with or without remuneration" (emphasis by me). This implies the inclusion of domestic work "undertaken in the child's own home that does not directly lead to the production of commercial goods or services" (Levinson, Moe, & Knaul, 2001, p. 168), but that enables other members of the household to provide market goods and services. This is usually the case when parents have difficulty combining work outside the home with looking after children (i.e. when the mother is not able to take care of her own children because she is working in someone else's house as domestic worker; or when she works at home ironing someone else clothes, which doesn't allow her to attend to her children). Most of the time this work is done by older children, who become responsible for doing domestic work while their parents work outside the home. In Mexico, children work in workshops as well as in their homes, for others, or for their own families. Some of their activities are market oriented, but others are not, which is why this definition helps to better understand child labor in Mexico.

However, I go further by including marginal activities, as defined by INEGI (2007), to explain child labor. Marginal activities include begging, cleaning windshields, and selling pity, among other activities. These activities are characterized by a one-way transaction in which the service is not asked for; it is not the result of demand. In a strict sense, they are not authentic economic transactions. Since these children are exposed to the same risks and perform similar activities as children who work selling on the streets, and because they are also a source of family income, marginal activities need to be incorporated in the definition of child labor if we want to explain it better. This change in the definition of child labor (compare, for example, with Levinson, Moe, & Knaul, 2001; López Villavicencio, 2005; or Christenson & Juarez, 1987) is especially important in the case of small children since it is one of the main activities they perform, even when there are many risks associated with it.

Finally, it is important to stress that marginal activities become an option when formal labor is not. If marginal activities are not included in the research, the record of children's movements between formal and informal work is not accurate, since those who get an income begging on the streets and do not attend school will seem to have quit working when they have actually moved to an activity that implies greater risks. So, even though current definitions of child labor do not include marginal activities (see for example INEGI, 2009), I include them in this research as child labor within the informal sector, because they are activities that provide an income and, therefore, influence the way in which other family members participate in the labor market, and because they share many characteristics with the informal market that facilitate its existence. Marginal activities are not regulated by the state, they are flexible and allow for working and studying at the same time, and since they are not recognized as a type of work, they hide the real numbers behind child labor.

## 2.2 INFORMALITY: WHAT DOES IT MEANS AND WHAT IS ITS RELATIONSHIP WITH CHILD LABOR?

There is not a clear agreement on what informality is. However, almost all work done by children fits within current concepts of informality. Children are not allowed to work formally; therefore, when they are employed by firms, they are usually subcontracted or contracted outside state regulations; they have no access to social security and medical benefits, and most of the time they do not even have a contract..

Informality is related to the lack of regulation by the state, in activities that should be regulated (Castells & Portes, 1989), such as the small-scale production of food and drinks. Self-employment and unremunerated family work are also considered informal work because they involve low-productivity (Per05). However, it is the lack of regulation, and in the last case of visibility, that facilitates child labor.

Informal work encompasses a wide range of activities linked with production, distribution or employment. Although the lack of state regulation facilitates the supply of illegal goods and services such as small-scale prostitution, coca production, drug trafficking, or immigrant smuggling, informality is not inherently illegal (Fernández-Kelly & Shefner, 2006); especially when it is related with self-employment. The possibility of "*getting around the law*," enables employment of children under the age

permitted by law or under conditions that are illegal. Also, parents' participation in the informal market facilitates child work.

Informality cannot be explained just as a consequence of poverty. It is associated with capitalist growth and population concentration, which decreases the proportion of available jobs in the formal labor market. An example of this is the relationship between GDP and informality. Mexico has a real GDP higher than other countries that have a lower share of informal employment in all non-agricultural employment (OECD Development Centre, 2009). In Mexico, as in many developing countries, informality expanded as a consequence of the extremely fast process of urbanization that took place from the end of the Second World War to the 1990's (Roberts, 1995; Portes & Schauffler, 1993). However, even when urban growth has declined, the proportion of labor supply with respect to available jobs is still high. During the last trimester of 2013, the rate of unemployment in Mexico<sup>2</sup> was 5.22 (INEGI, 2013a). In this same period the estimation of employed population within the informal sector was 28.1%;<sup>3</sup> that is, those working on their own in agriculture for self-consumption, employed in unregistered small firms or microenterprises (firms with fewer than 6 workers), or working in larger registered firms but without social security and medical benefits (INEGI, 2013b).

There are many possible ways of classifying workers within informal employment. Informal employment can result from a lack of access to formal work, but

<sup>2</sup> It is important to underscore that oficial preliminary reports of unemployment rates show a different value for those unemployed during the last trimester of 2013; 4.47% at the national level (INEGI, 2013b). However, the value obtained directly from INEGI's webpage is higher.

<sup>(</sup>www3.inegi.org.mx/sistemas/temas/default.aspx?s=est&c=25433&t=1).

<sup>&</sup>lt;sup>3</sup> Rate calculated against those who are employed. When we calculate the rate just for those who do not work in agriculture, the informality rate is 32.6.

also from a personal decision in which informal labor is seen as an advantage. In his analysis of informal employment in Mexico, Maloney (1999) pinpoints two factors that, in general, discourage workers from choosing formal salaried work: labor taxes and the greater flexibility of informal work. In many countries, labor taxes exceed the cost of not having social benefits. When such protections are inefficient, the incentive to pay taxes is low or inexistent. Work flexibility facilitates doing other things in addition to work, such as studying, taking care of children or having a complementary job, which in many cases is a plus.

Based on these characteristics, Maloney (1999) discusses three common modalities of informality: self-employed, informal salaried, and contract workers. Selfemployed workers "own informal firms, with or without additional employees." In some cases, they have previously worked in the formal sector, but in many cases they have not. A significant number of informal workers in Mexico are considered "upper-tier" or "voluntary workers," persons who "previously worked in formal employment, where they gained the skills and savings to set up their own informal enterprises" (Fields 1990, cited by OECD Development Center 2009, 70), but who are constrained by the choices available to them.

However, recent literature has also highlighted many other reasons that influence individuals and firms in their decisions to remain within the informal sector. These reasons may be "financial, such as compliance costs or the value-for-money of social security services, or non-financial, such as greater freedom in self-employment or entrepreneurship" (Jütting & de Laiglesia, 2009, p. 21).

In Mexico, an informal firm is one with fewer than sixteen employees, who do not have social security or medical benefits, or a firm with fewer than six workers (INEGI, 2013b). Street vendors usually report themselves as self-employed with which they are considered micro-entrepreneurs, even though they do not own a firm. Many small family enterprises could not properly be considered informal firms, but are also registered in the informal sector as both self-employed and micro-enterprises. Some children work in small factories and informal firms. Basically, children do not work by contract; therefore, their job is much more unstable and under worse conditions than work done by adults. As informal salaried workers, adults and children receive "neither the benefits of self-employment nor the benefits of formal employment" (Maloney, 1999, p. 277).

Contract workers in the informal sector are skilled workers paid by legal contract, commission, or task. Often, they are linked to larger firms and "do not receive a regular wage or salary" (Maloney, 1999, p. 277). If they receive some benefits, they are subject to the duration of the specific task. Contracts are temporary and even though they could be recurrent, they do not guarantee stability.

In Mexico, different conceptualizations of informality have been used to generate the national surveys. In general, INEGI uses two approaches to explain informality: firm size and workers' access to social security and medical benefits. However, in the National Survey of Microenterprises (ENAMIN, 2009) done by INEGI, informality was defined as small-scale firms and self-employment. The definition excluded contract workers in large firms who do not have access to social benefits, as described by Maloney (1999), but included some of the activities that in the Module of Child Labor (INEGI, 2009b) and the National Survey of Occupation and Employment (INEGI, 2011) are considered marginal activities, not informal work. In neither case is domestic work considered informal work.

### 2.3 INFORMALITY IN MEXICO

Informality in Mexico grew significantly during the 20th century, in part as a consequence of rapid urbanization and an accelerated rural-urban migration process (Roberts, 1995), and also because of a decrease in the purchasing power of the population that favored the consumption of products sold through the informal market. However, it has also grown in periods of economic prosperity. It has been seen that when purchasing power increases, street vending also increases, because of the presence of readily available products that can be easily purchased by economically empowered people. In other words, in addition to urban processes, the informal sector can expand as a result of both economic prosperity and economic crisis, especially in those countries in which the economy is based on services. In Mexico, informality has grown in periods where the GDP has both increased and decreased, and it currently represents 58% of the labor force (Levy, 2010).

The period of import substitution policies was a period of increased selfemployment and small-scale enterprises. Policies aimed to protect local industry facilitated informal small-scale production and outsourcing (Roberts B., 2011). It was a period of dynamism for the informal sector, due in part to the absence of state regulation (Roberts B., 2011). During this period, formal and informal markets were in many cases linked by the production process: small-scale enterprises were producing for larger firms. These were also years of economic prosperity in which the demand for goods and services produced outside the limits of government regulation increased (Fernández-Kelly and Shefner 2006). Higher-income families were able to pay for some services and products they could not afford in periods of economic crisis.

With economic crises, opportunities within the formal market are reduced and the demand for less expensive products increases. In Mexico, economic recession pushed housewives and children into the labor force (Chant, 1991), and increased the consumption of low price products such as *piratería*<sup>4</sup> or formally imported products, which benefited from import tariff reductions and were even less expensive through the informal market than in retail stores. Free trade undermined the relationship between formal and informal market that proliferated during the Import Substitution period. With cheap imports, small-scale production became less competitive.

However, informality continues to be significant in Mexico. In 2006, Chen calculated that informal employment, broadly defined, comprised one-half of non-agricultural employment in Latin America (Arvin-Rad, Basu, & Willumsen, 2010), of which approximately 35% was informal wage employment. In general, a country with a small industry in relation to the economically active population and high levels of economic inequality facilitates the growth of informality. Inequality guarantees the existence of two groups: one that needs to produce or do something in order to guarantee

<sup>&</sup>lt;sup>4</sup> *Piratería* refers to illegal copies of music, movies and other products.

basic subsistence, and another with the required economic surplus to pay for the goods and services provided by the first group. Also, the new forms of linkage that have resulted from global commodity chains have favored informality. Both formal establishments and global commodity chains are increasingly complementing formal work with contract labor and outsourced production, in an attempt to increase competitiveness by reducing production costs.

Mateo is twelve years old. He began working in a small shoe factory when his father abandoned him and his brothers. Don Manuel lets him clean up the place in exchange for a small stipend. In this way, Mateo can work and study at the same time. He has no contract, and, therefore, doesn't receive any employment benefits; but he has a small income to share with his family that in other circumstances would not be possible to have. Daniel got his bachelor's degree at the National Autonomous University of Mexico. After many years working full time for a big company, he is now working by contract. Even with a bachelor's degree and a significant amount of experience from his previous position in one of the main businesses in his area, he currently works by project for a smaller company that doesn't let him work with someone else if he wants to keep receiving projects. Therefore, he never knows for sure when he is going to have some income. Since he is participating in a form of outsourced production, he doesn't have employment benefits. Given current employment conditions in the formal sector, many workers such as Daniel prefer being self-employed to being "formally" employed. However, even when there is a lot of uncertainty in his job, he doesn't want to engage formally in seeking new employment because he could lose the only source of income he has. Right now there are not very many work opportunities in Mexico, so he prefers not to risk his current job, with the danger of ending up with no income at all. Daniel has two children to care for. Moreover, given the fact that in many companies, contracts are offered for just three months, with no rights to social benefits, the opportunity cost of quitting is too high.

Informal work takes many forms and implies different ways of organizing within the family and/or as part of other microenterprises in which children can be easily incorporated. Janet wakes up every day at 4 a.m. to prepare the *tacos* she is going to send for sale at four different points of Guadalajara. Julieta, her sister-in-law, is in charge of selling them on one of the corners of Santa Tere. Julieta used to have her own business, but when she left for the United States for a couple of years, she got rid of her bicycle and her pots. Now that she is back she doesn't have enough money to be independent. That's why she asked her brother for an opportunity to work. But not all workers are family members. Juan's neighbor and José are not part of the same family. It doesn't matter if Julieta sells everything before 2 p.m. because she needs to wait for her brother to finish, so she can return the bicycle and the pots; she also needs to help clean everything. She sells around two hundred pesos (some seventeen dollars) on a daily basis, 50% of which she gives to Juan. This means that if she is able to work six days a week, and sells everything, in one month she will have an income of 400 dollars, at the most. When Maria and Ana get organized to make cloth dolls, their cousins and nephews help assemble different doll parts and paint their faces. When most of the dolls are finished, almost every family member helps to sell them. The best clients are found amongst family and friends. Sometimes they sell the dolls and some other things in their garage. Their activity is irregular, because they do not do it as a survival strategy; it is just a way to get a higher income.

Economic recession and unemployment have favored the growth of informality; but it has also been favored by economic inequality, weak regulatory structures, and the high costs of being in the formal sector. Alma had a hard time trying to keep her workshop going. She had fewer than 15 employees who received social security benefits. The introduction of Chinese clothes in Mexico increased competition and forced her to reduce her prices. However, the cost of rent, taxes, and the social security payment of her employees was higher than her earnings. So she decided to close her workshop and pay her workers a settlement with the sewing machines and other equipment she had. She tried to give each of them the tool they used in the production process. In this way, Alma has been able to continue sewing school sweaters without all the expenses associated with having a formal enterprise. Every time she is asked to make new sweaters, she calls Doña Bertha and asks her to cut up the sweaters from the linens made by Don Juan. Alma buys the yarn, takes it to Don Juan's house, Gilberto-who has worked with her for more than fifteen years as her husband's driver—picks up the linens from Don Juan's house, and takes them to Bertha's house. Bertha cuts the pieces and sends them to Claudia, who uses the overlocker to assemble the sweaters. Finally, Gilberto picks them up and takes them to the school where they are going to be sold directly by the school owner. Alma has been doing this for more than fifteen years now. She is no longer concerned about having a steady income because of permanent expenses. Each person is responsible for keeping his or her equipment in good condition if they want to have work. Her investment and her responsibilities are less than before. She provides the yarn, asks someone to move the intermediate products from one house to the other, and sends the final product to the place where it is going to be sold. She only sees what they are doing when there is a big problem with the production, which is rare. Everyone is paid when the school pays; basically, there is no personal investment involved.

Informality has also been encouraged by the time-consuming legal steps required to create a formal establishment. In Mexico, many small schools of art, dance or music are not registered and operate outside the law, even when they distribute publicity. Since most persons do not ask for a formal receipt, they are not required to be registered or to report all their activity. Similarly, schools that do not have a program that needs to be recognized by the Secretariat of Education are also able function without any formal registration or income report. Marcela rented a big place where she was working as a psychotherapist. The place was large enough to have small groups. Three years ago she gave a specialization course for fifteen students—good enough to have an income of one thousand dollars for just one morning of work. Even though it is harder to get students when school is informal, in many cases, the cost of registering is higher.

In Mexico, the idea of the public space as something that "everyone has the right to use as they please" explains the existence of informal labor on the streets. Even though many persons do not like to have vendors and windshield cleaners on the streets, as well as small businesses on their sidewalks, authorities allow them to stay because the free use of public space by all citizens is considered a constitutional right (Herrera, 2011).

Many city centers in Mexico are characterized by the presence of the so-called "viene, viene".<sup>5</sup> Most of them use buckets or *huacales*<sup>6</sup> to reserve parking spots on the streets. There is no difference between streets with parking meters or without them; the "viene, viene" or franeleros (as they are also called) put boxes, heavy tires, bottles with water or *huacales* equally in both types of places. If there is a parking meter, they usually tell you: "Don't worry, do not put one in [referring to coins], it doesn't work." If you hesitate, they continue, "if needed, I'll put some in, I have some coins here," and show you a hand with the coins. If you ignore them and put some coins in, sometimes they will continue, "look, I always move the cars from the School, they leave their keys with me and if there is an empty spot I move it there"<sup>7</sup> (pointing out some places where there is no parking meter). Recently, it has become a better option to move the cars from the parking meters. Most of the time there is a policeman in the same block, watching and trying to get something from the *franeleros*. If *franeleros* keep the cars in places with parking meters, they have to insert coins all the time, and it becomes a bad business. Policemen stay there because they expect to receive their part of the earnings, "Now they tell you how much you have to give them [they determine the amount of their participation], but now they

<sup>&</sup>lt;sup>5</sup> "Viene, viene" is the expression used to help someone while parking. It means that you can move back and it is usually followed by the movement of the hand asking the driver to move more. Nowadays, it is also used to refer to those persons who reserve places on the streets and take care of cars that park in the reserved spot.

<sup>&</sup>lt;sup>6</sup> Boxes made out of wood strips and used to carry fruit, which are easy to find in the trash cans or dropped outside of the city markets. They are also sold very cheap at places where fruit is sold.

<sup>&</sup>lt;sup>7</sup> "No se preocupe, ni le ponga, no sirve…" (…) "…si se necesita yo le pongo…aquí tengo monedas",(…) "mire, yo siempre muevo los carros del colegio, me dejan las llaves y si se desocupa un espacio se lo paso para allá" (From an informal conversation with a *franelero* outside the Colegio de Jalisco in Guadalajara, December 2010)

even threaten you with staying all day beside the parking meter" (Martínez, 2009, p. w/n).

In many cases, lack of security and the lack of parking spaces facilitates the presence of *franeleros*. During the nights, many people prefer to have someone watching over their car. It is better to pay two dollars for someone to take care of the car than to be worried about it while drinking a beer, even when they are not sure if those persons are going to stay taking care of the car the whole time (Martínez, 2009). What many do not know is that many times children are sitting on the sidewalk, falling asleep while "taking care" of their car (as I saw Joel one day who was supposed to be taking care of the cars at a bar, I guess it was around one in the morning, too late for a boy that was no more than 10 years old). Sometimes, people's fear of *franeleros* gives place to a forced acceptance of their presence; many persons prefer to give them the two, three or four dollars, depending on what they ask, rather than running the risk of having their window broken and their car-stereo stolen; and since policemen are not able to do anything against their threats, it is better to get the sympathy of the *franeleros* and give them some money.

Based on the National Survey of Microenterprises, ENAMIN 2008 (INEGI, 2009), 82 percent of the persons with microenterprises work by themselves (are not employed in someone else's business). It is relatively easier for women to engage in commerce than in other sectors (see figure 2.1). Selling on the streets or city markets allows children to be with them. This prevalence of women in the commerce sector is more evident among indigenous women; men from indigenous communities are less

55

likely to work selling on the streets than someone who grew up in a non-rural community (see chapter 6 for an example of this).

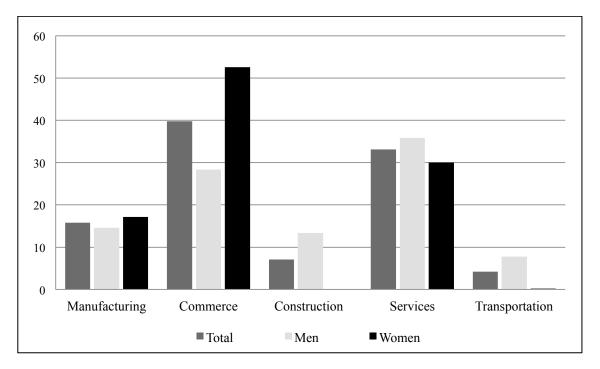


Figure 2.1. Men's and women's participation in the informal market by sector

Source: Done by author with data from ENAMIN 2008

More than 52 percent of the women's income comes from selling things made by others. Just a small percentage, less than nine percent, makes what they sell (ENAMIN, 2008). This means that the highest share of income obtained through informal work is based on the resale of products and the provision of services (see table 2.2). In general, women and children have a lower income than men; they are less independent and are usually working under a family member, who in most cases is the husband or the father. More than half of the women working in the informal sector do it because they need to complement their family income, while men do it because they want to be economically independent or want to improve their income.

	Total 100	Men 100	Women 100
Sale of manufactured products	9.61	9.63	9.54
Maquila services	0.29	0.27	0.39
Services rendered (including materials)	56.37	61.12	36.66
Sale of goods purchased for resale	33.31	28.60	52.85
Other incomes	0.42	0.39	0.56

Table 2.2 Percentage of monthly income by source

Source: ENAMIN 2008

A common barrier to participation in the formal labor market for men and women is a criminal record from having been in a prison or penitentiary. Tomas was in jail once because he got involved in a street fight. Even though he was there no more than six months, he now has a criminal record that makes it almost impossible for him to get a job. Prior to being in jail, he was working at a shoe factory. He learned the art of shoe making from childhood; his father was also a craftsman. Working on his own requires an economic investment that he is not able to afford. Since he got out of jail, his best option has been working on the streets as windshield cleaner.

Like many other sectors, the informal sector has suffered the effects of the economic crisis. The informal production and sale of goods and services has increased, increasing competition in both the formal and informal markets. As a result, the informal workers' sales have decreased. In addition to competition, they face higher prices for inputs and goods (INEGI, 2009). The crisis has also increased the presence of children in the streets as companions of their parents. Many families don't have the necessary income to send their children to school, nor do they have a place to leave them while at work. However, child work within the informal sector includes many activities other than just selling on the streets.

#### The decreasing contrast between formality and informality.

As previously discussed, informal labor includes salaried workers with no social benefits (illegal according to Mexican law), people who receive payment for tasks done, and self-employed people. There are two kinds of informal enterprises, those that employ non-salaried workers (i.e. those who receive a commission for doing an activity), and those who hire salaried workers but do not offer social security as required by law. Not all informal workers have a salary; and not all types of informality imply low salaries and poverty. For example, the only difference between many psychotherapists in Mexico and the people who sell food or drinks outside their houses is their income. Both can be self-employed, work in their homes, not register an income, and not pay taxes, which is also the case with persons who sell candies or food from their homes; however, psychotherapists earn five times more than vendors.<sup>8</sup>

For workers, formal and informal jobs can be equally good or bad; in many cases there is no difference between one and the other. This lack of difference makes

<sup>&</sup>lt;sup>8</sup> For many years I worked as a psychotherapist; most of the time I used a room in my house that no one else was using. When I had an income of 25 dollars per hour, a neighbor was selling snow cones outside her house. She was able to have the same income as I, but worked more hours, and only if there was no rain. I had no expenses, while she needed to buy fruit and ice that, if not sold, would be a loss of money.

informality attractive and facilitates the decision to move from one sector to the other. In Mexico, mobility between the formal and the informal sector is high; it is even higher for people with low salaries (Levy, 2010). But mobility does not depend only on salary. When the difference between the formal and the informal sectors increases, people tend to move into the formal sector; especially when, in addition to good salary, it offers stability and guarantees access to health services and minimal benefits. In opposition, the decreasing contrast between formality and informality favors the expansion of the informal sector. Moreover, when informal workers can get social benefits from other family members that have a formal job, or when social protection is deficient, the incentive to participate in the formal sector decreases.

In Mexico, formal labor has changed significantly in the last two decades; the contrasts between the formal and informal sectors have decreased, as have the advantages of having a formal job. For some authors, this change is a negative consequence of the free market. Centeno and Portes (2006) argue that the implementation of free markets in Latin America has given place to the weakening of labor standards and state protection. The formal sector has become increasingly low-paid and insecure (Pérez Sainz, 2005); informal self-employment has become a "desirable" alternative to formal labor. In other words, formal employment has become closer in working conditions to informal work.

Insecurity has become an operative characteristic of private sector labor recruitment. Currently, many employers in Mexico are offering only three-month contracts, which reduces working benefits and increases uncertainty over the possibility of keeping a stable job for a long period of time. In other cases, companies prefer to hire external workers who are paid by work completed, rather than hourly, and do not have working benefits, which significantly reduces company expenses. Since most contracts are short term, the need to fire people and to pay benefits required by law is reduced. Thus, companies increase their earnings and profits.

This weakening of the formal sector has come hand in hand with an increased cost in social security and an increased investment in social protection by the government (Levy, 2010). Formal workers pay for their social security services. Part of their salary is used to pay social security and medical services through the national system of social security (i.e. IMSS, ISSSTE or INFONAVIT), while informal workers have free access to them (they can use the national basic health service implemented for those who have no access to health services through an employer, the "Seguro popular"), which makes informality more attractive. Since workers move between formality and informality, if they know there is no guarantee they'll be able to pay the minimum fee required to access credit for housing, they would prefer not to pay the quotes and have a higher salary even though it is illegal. Even more, if they know that they still have access to free health services through informal work, why should they continue working in the formal sector, when working conditions are not necessarily better? This "informalization" of formality is increasing the participation of adults in the informal market. In addition, the economic crisis and the lack of stable jobs have increased families working on the streets, and the possibility of "hiding" children within the formality of informality. So, if informality continues moving closer to the working conditions and social protections that

characterize formality, informality can continue growing and therefore, facilitating the increase of child labor.

#### **2.4 CHILDREN IN THE INFORMAL LABOR MARKET**

Child labor represents eight percent of the total population of Mexico. With bans on the minimum age of access to work, informality becomes the easiest way for children to avoid regulations. Among the different non-agricultural activities that can be performed by children, working in a family business is one of the easiest to carry out when trying to avoid trouble with the law. However, parents' need to have their children around also facilitates the presence of children on the streets.

Based on the National Survey of Microenterprises (ENAMIN 2008), in 2008 the Secretariat of Labor estimated that 970,495 boys and girls between twelve and nineteen years old were participating in the informal labor market. However, this estimate is significantly lower than current approximations regarding child labor. Based on the module on working children in Mexico (MTI 2009), in 2009 almost 3,014,800 children between five and seventeen years old were working in Mexico (11% of children within this age range), while 16,933,346 were doing domestic work and studying (60% of children within this age rank), more than twice the number of children that were just studying (8,053,875, 29%). These large differences in numbers result from the differences in the phenomenon that each data set is describing.

According to estimates of INEGI, in 2009 there were over three million children between five and seventeen years old working in Mexico. Based on the general

61

characteristics of both data sets, it seems that gender differences are also marked in the informal sector. Based on my own calculations, with data from the National Survey of Micro-enterprises (ENAMIN 2008) and the Module of Child Labor (MTI, 2009), the proportion of younger women participating in microenterprises, with respect to men, is higher than the proportion of women in the agricultural sector.

Increasingly, small children and women are seen working as windshield cleaners on the streets; however, the probability of finding an adult male doing it is still higher. The proportion of girls and boys working in services, with respect to its group, is the same; however, in absolute numbers, boys significantly exceed girls. In contrast, one out of two women works selling food or drinks, which means that more women are employed in the sale of products than men. Table 2.3 shows the distribution of boys and girls in non-agricultural informal activities, divided by age group and sector. It shows the distribution of both boys and girls between twelve and thirteen years old (15 %) and between fourteen and nineteen years old (85%) who participate in the informal sector. Based on age, the primary differences observed are the absence of younger persons working in construction and transportation—which is not surprising, since both activities require attributes such as being strong, having a minimum age to drive or being able to use some tools, just to give some examples, that are usually found in more mature people—and the main presence of small children in commerce.

	Total Distribution	Manufacturing	Construction	Commerce	Services	Trans- portation 100%
Total boys and girls	100%	17.93%	5%	45.71%	30.79%	.57%
Under 14 years	15.23%	16.63%	0.28%	54.55%	28.54%	0%
Between 14 and 19 years old	84.77%	18.16%	5.85%	44.12%	31.19%	0.68%
Male	54%	18.53%	9.21%	40.21%	31.04%	1.02%
Under 14 years	15.40%	19.67%	0.51%	48.45%	31.36%	0% 0%
Between 14 and 19 years old	84.60%	18.32%	10.79%	38.70%	30.98%	1.21%
Female	46%	17.24%	0.14%	52.07%	30.50%	0.05%
Under 14 years	15.04%	13.04%	0%	61.76%	25.20%	0%
Between 14 and 19 years old	84.96%	17.98%	0.16%	50.35%	31.44%	0.06%

Table 2.3 Boys and girls in non-agricultural informal activities by age group and sector

Source: Done by author with data from ENAMIN 2008

The ENAMIN suggests important differences based on gender. Although the principle activity of males is linked with commerce, more girls participate in this sector than boys. The area in which each group participates is also different. For example, girls do not sell auto parts. Most activities in the commercial sector involve selling without a local business, which means that a large part of this activity takes place on the streets, door to door or on sidewalks, with small improvised stands outside their homes. Among all the activities associated with informality previously described, selling food, candies, and drinks is the easiest activity for younger persons to carry out because the risk of losing money when the business is not successful is very low; families don't need too

much money to begin, they can work together, and it is easy for children to do it. Often, this activity is just an extension of their parents' activity. Juana goes everyday with her mother to the main market in the city. There is no one with whom she can stay while her mother works. She spends her time playing with other children or selling with her mother. The day is too long to be just playing and, when there are no other children around, she enjoys helping her. When the there is much need, Maria sends Juana to another corner, in order to sell more. In addition, Maria knows that Juana will sell more than she, because she is just a child. In general, adults are more tolerant of and sympathetic to children, which makes it easier for them to sell (Murrieta, 2008).

Gender based differences also occur in the manufacturing sector. Girls do not make furniture and boys do; instead, girls make textiles and clothes. Children who are twelve or thirteen years old basically just participate in the preparation of food. Different but related ideas about gender roles could explain this pattern and exemplify genderbased differences. In Mexico, sewing and embroidering have always been considered female activities. In most communities around the country, women make handmade fabrics and do embroidery. From the time they are small, girls begin using the backstrap loom, and as they get older they learn to make more elaborate embroideries and to use other kinds of looms. Boys do not learn to trim; when they get big enough they can weave using a handloom. Women are generally excluded from activities that require carrying heavy things, as required in the manufacture of furniture. It is not clear why boys have a significantly higher participation in the manufacture of non-metallic mineral-based products; however, production of this kind of goods in many cases is linked with mining and extractive activities, which are not considered suitable activities for women, especially when they are younger.

The participation of children in the service sector is also significant. Basically, boys and girls participate in housing services, either preparing food or helping with accommodation. It is more common to find girls giving personal services than boys; boys are more frequently engaged in maintenance and repair services. Lastly, women under nineteen years old do not participate in the construction sector nor in transportation, with few exceptions,. In both cases, the boys' participation is usually related to other family members working in the same sector. An example of this is what happened with Juan. When he quit school, Toño decided to take him to work. He was employed by his aunt's employer, in the construction of a small room in her house. He knew she was going to accept Juan working with him. Since it was an informal job, there were no regulations that could prevent him from taking Juan to work. Construction work is easy for boys when a family member does it, because it frequently takes place in the informal sector.

Finally, it is important to underscore again that flexibility in the informal sector makes it easier for children to work and study at the same time; it also facilitates moving from one activity to another. It is more common to find children working on the streets throughout the summer than during school sessions. During school sessions, it is more common to find only small children in the mornings, and school-aged boys and girls in the afternoons. Based on the number of families and children working on the streets of Guadalajara, it is easy to tell whether school is in session or not. Similarly, during the holidays it is more common to find families and middle-aged persons selling Christmas ornaments and toys.

#### 2.5 LINKING THE RELATIONSHIP BETWEEN CHILD LABOR AND INFORMALITY

Given current resistance to child labor, informality has become the only option for children under fourteen years old. Informality and marginal activities have the flexibility necessary to allow continued schooling when it is possible or when it is a priority for the family. The problem is that flexibility increases the opportunity cost of schooling, with which the probability of continued attendance decreases.

An increase in the opportunity cost of schooling becomes problematic when education is seen as necessary "for gainful employment and full participation" in society (UNESCO, 2000, pág. 8). Moreover, the probability of having an income, which in some cases can be higher than that of other family members, also increases the opportunity cost of schooling and the probability of working; and we cannot deny that many forms of work done by younger persons have a negative effect on their development. The lack of adequate rest, the impossibility of socializing or playing with other children, the absence of enough time for studying or doing homework, among other things, allow the transformation of "work" into "labor," which, I have been arguing, is problematic. This, in addition to the belief in the existence of a modern dynamic labor market that will facilitate the incorporation of educated persons, has pushed societies toward the implementation of policies aimed to guarantee both the elimination of child labor and the access to quality education for all (UNESCO, 2000). There is no doubt that informal employment is persistent and even increasing. If the informal market persists, will it be easier for younger persons to work; and why not, if they have the need? Child work has been seen as part duty, part character-shaping; therefore, if family need of an additional income persists in a context where child labor is facilitated by informality, why should society forbid work done by children?

However, many families need the income earned by children. Therefore, child labor cannot be eliminated or forbidden without offering better alternatives; if it is, families will find the way to get that income, even against the law. Besides, child work in Mexico has been seen as part duty, part character shaping; and even as human rights advocates are promoting the elimination of child labor, many families and even children, see working as a possibility and a right. Therefore, just limiting formal employment for younger persons may paradoxically threaten good working conditions and increase the possibility of exploitation. Child work would tend to disappear and will become child labor. It seems that in any case, the child work/labor issue is a puzzle that is becoming increasingly difficult to disentangle.

Nevertheless, despite the difficulties associated with the relationship between child work and child development, there are some things that need to be done. Given the fact that child work is a family need, current legislation on child labor must be reviewed. All of its forms need to be regulated, so children are able to receive as much protection as possible. If child work is a reality that is difficult to change in the short run, then formal employment should be favored over informal work. It is important to make formal job options available with the aim to guarantee a decrease in the worst forms of child labor. Work done by children in the construction sector is a good example of the benefits posed by regulation. The best salaries received by working children are in this sector of the economy; it is also where they have fewer accidents and better protection when accidents occur. In contrast, commerce—which is seen as one of the most acceptable forms of child labor—is the sector where girls have more accidents and a lower income.

However, the dynamics behind child labor are so complex that the formalization or regulation of child work will not necessarily reduce child labor. A lack of job opportunities for adults can make way for children's work to substitute for parents' work within the household, or the need to send small children to the streets because parents are not able to provide an income. Children's participation in the labor market is full of particularities. In the next chapters, I go further to understand the relation between child labor and cost of schooling as a way to introduce the analysis in subsequent chapters.

### CHAPTER 3

## CHILD LABOR AND THE PERCEIVED COST OF SCHOOLING

"Jose is already working with his dad. He no longer wanted to continue in High school. He is doing the right thing! Why waste time in school when business is going well for them? "

(Referring to Jose's dad's auto repair shop)<sup>l</sup>

In this chapter, the focus changes from the nature of child labor to the factors, material and attitudinal, that lead people to embrace child labor. Is going to school worth it or not? What does a child get by attending school? What are the long-term benefits that can, at any given time, justify an investment in education? In Mexico, six out of ten individuals who start high school graduate; and of these, fewer than 19% start a bachelor's degree program (INEGI, 2005). When family income is high, investing in education does not require much assessment. However, when the family income is low, the decision between investing in education or not becomes much more difficult. As the family income decreases, the need to decide between investing in education or not: whether the children are working, in school and working, or just drop out of school and are not engaged in economic activities. This translates, respectively, to the possibility that the children can: provide an

<sup>&</sup>lt;sup>1</sup> A conversation I heard by accident at a gas station in Mexico City. The conversation was between two women who work pumping gasoline. ("José ya está trabajando con su papá. Ya no quiso seguir en la prepa. ¡Hace bien! ¿Para qué pierde tiempo en la escuela si ya en el negocio les va bien?")

income, work to pay for school, decrease family spending, or help with the household chores so that another family member can work. In any case, when the family income decreases, the cost of attending school increases. That's one of the reasons why many authors claim that child labor is deeply rooted in poverty (Beneria, 1992; Chant S., 1994; Roberts B., 1995) and inversely linked to education (Edmonds E., Child Labor, 2008; Levinson, Moe, & Knaul, 2001; López Villavicencio, 2005; Udry, 2006).

This correlation between child labor and poverty is well established in the literature (see for example Levinson, Moe and Knaul 2001, Canagarajah and Nielsen 2001, Cockburn 2001, Delap 2001, Toor 2001). However, theoretical analyses appear to differ increasingly from empirical analysis. The theory has emphasized the negative relationship between income and child labor, while the empirical evidence suggests a smaller effect of poverty on the work done by children, especially in places where the family has a small business (Bhalotra & Heady, 2003; Basu, Das, & Dutta, 2010).

Despite the increasing difference between the theoretical and empirical work, both in Mexico and abroad, the relationship between child labor and schooling has resulted in the implementation of social programs based on conditional cash transfers, where compliance is based on school attendance by the children. However, despite the positive impact of programs like PROGRESA (Parker & Skoufias, 2001; Rubalcava, Teruel, & Thomas, 2004), other social programs have not achieved the same impact: not all programs have been able to reduce child labor and increase children's schooling. An example of this is the *Rescue Program for Families Working on the Streets of Guadalajara*, which failed to increase school attendance and to reduce child labor significantly (Murrieta, Gatica, Ramírez, & Álvarez, 2009). Despite the economic transfer and a possible child income replacement from such transfer, the impact on child labor was not as expected. In large part, this may be because the relationship between poverty reduction and reduction of child labor is not a linear relationship. Rogers and Swinnerton (2004), on the one hand, and Ravallion and Wodon (2000), on the other, argue that the range in which you can have a real impact on school attendance is small given that there are many factors involved in deciding whether or not to send children to school.

One of the factors that significantly influenced the lack of positive results from the program was the lack of impact on the perceived cost of schooling. The program helped reduce the cost of attending school driven by the need to purchase school supplies, uniforms, transportation vouchers, etc. However, the program failed to reduce the perceived cost of schooling in terms of parent's perception of education returns. That is, in some cases, financial support decreased the need for income from the children, though most parents did not change their perception of the importance of education and the possibility of studying and working at the same time. Nor did they change their perception of the possibility of engaging in an activity other than street work. Very few considered working elsewhere in order to keep their children off the streets and at least guarantee economic stability to avoid the need for child labor. This resulted from, among other things, the lack of employment opportunities, as well as from not knowing alternatives and the means to achieve them.

The inefficiency of the program, and the lack of clarity of the relationship between child labor and poverty, make it imperative to analyze other factors-beyond simply poverty itself- that influence the decision to send the children to school and/or to work. Hence, the aim of this chapter is to review the literature and analyze those factors that could help explain the lack of change in parents' perception about child labor and schooling, with the principle aim of identifying those factors that, based on the literature, could help to better explain the determinants of child labor in Mexico.

To achieve my objective, in this chapter I analyze the relationship between child labor and perceived cost of schooling. This is understood as the economic cost of attending school, along with the parents' subjective perception regarding the income that their child could obtain if they worked instead of going to school. I begin with an overview of the literature on child labor. And in order to identify the main variables used in the analysis of the cost of schooling and child labor, I discuss the different positions concerning the decision making process regarding the children's allocation of time: who determines whether or not a child should go to school or work? Once the role of the parents in deciding the allocation of children's time is established, I deepen the relationship between child labor and opportunity cost, highlighting those factors that influence child labor. It is important to stress that this is not an exhaustive review of the literature (to do so one can view Edmonds' work (2008), among others); the goal of this chapter is to summarize the arguments that justify the variables used in the following chapter, where I use an econometric model to analyze the determinants of child labor in Mexico. In turn, this chapter outlines the arguments justifying the variables and the analysis in Chapters Four and Five.

72

#### **3.1 WHY DO CHILDREN WORK?**

Some authors believe that child labor exists because individuals cannot find other means to deal with an extreme situation; work done by children becomes a necessary survival strategy (Edmonds E., 2008; Beneria, 1992). But child labor is not an activity exclusively of the poor. Although poverty is strongly related to child labor, children work in different places and for different reasons; multiple factors influence the existence of child labor and the conditions under which such work takes place. In other words, there is no clear causal explanation for why children work.

However, the literature highlights three main arguments. The most common and simplified argument is poverty. If you increase household income, the need for a financial contribution from the children decreases (Basu & Van, 1998), and families are able to invest in their children's education. Human capital theorists have taken over poverty arguments and focused their work on the study of parental decisions about children's allocation of time (Knaul, 2001). Labor markets, the family, the net return on education, and poverty are some of the factors that have been identified as determinants in the decisions regarding children's allocation of time (Basu & Van, 1998; Baland & Robinson, 2000; Buchmann, 2000; French, 2010).

The second argument states that child labor is determined by economic and social factors such as technology implementation or legislation. From this perspective, establishing a minimum age of access to employment and mandatory education can reduce child labor. Finally, a third line of argument has focused on the transformations that the concept of childhood has had, where child labor is analyzed as a result of not upoholding the rights of children. Today, childhood definitions incorporate the right of children not to

work, the need to treat boys and girls equally, and to give everyone the same opportunities (Cunningham, 1995). If before child work was a right (see Chapter Two), now it is considered a barrier to the achievement of other rights, and an obstacle in their development.

The development of those arguments has given place to the identification of some variables that influence children's probability of working. In the case of Mexico, Christenson et.al (1987), and Brizzio's (1996) have stressed the importance of parents' education, family income, family size, and the presence of female heads of household as determinants in the probability of child labor. Binder and Scrogin (1999) found a correlation between the time young people devote to work and the presence of females as heads of household. When analyzing school attendance and achievement, Levinson, Moe and Knaul (2001) found a negative relationship between child labor and schooling in youths between twelve and seventeen years old.

#### **3.2 TO WORK OR TO STUDY: WHO DECIDES?**

Beyond family income, what determines whether a child will work or study? While it is true that poverty is a determinant of child labor, it is also true that not all children from low-income families work or drop out of school. In Mexico, more than 90% of school-age children attend school; of these, at least 35% live in poverty. This means that we can say that a little more than 70% of families living in poverty send their children to school. What does this difference depend on? One way to explain this stems from the perceived cost of schooling, that is, how much parents believe that a child could earn instead of going to school (Levinson, Moe, & Knaul, 2001). As mentioned in the previous

chapter, this amount is higher when there is an informal labor market accessible to children, as is the case of Mexico. Notwithstanding, the decision to work depends not only on the opportunity to work: a child's income, the parents' education, and family structure, among other factors, influence how and what decisions are made.

According to Cigno y Rosati (2002), children work for three main reasons: poverty, the relative return on child time in schooling (i.e. the expected benefits from going to school), and parental preferences. The relative return on child time in schooling depends largely on the returns of education, parental value of play, child time in home production, formal labor income, and direct costs of schooling. Edmonds (2008) stresses the importance of the assessment made by parents of the long term well-being of their children; the meaning they give to education and play as part of the child's well-being; the child's productivity in family activities; the cost of attending school, and the income opportunities available to children. In either case, it is assumed that parents make the final decision.

If parents make the decision, their preferences necessarily influence the outcome. These preferences are determined by a personal story in which the parent's education and family demographics are interwoven. For example, it is likely that those families who have experienced challenges to improve their income due to lack of education value their children's education more. It is also likely that those families who have lived in the countryside place a lower value on education, given that they have depended less on classroom knowledge to survive. In most rural communities there are no preschools; thus, parents may not see it as necessary to send children under six to school (Murrieta, 2012). Therefore, we can state that based on economic need and personal experience, among other factors, parents determine the best use of their children's time.

75

It is important to underline that parental involvement in decisions about their children's time allocation does not necessarily imply a complete subordination of the children to the preferences that are imposed on them. Some authors have claimed that many children work because they want to, especially older children (French, 2010; Murrieta P., 2008). However, in terms of household income distribution, the literature has shown that the decision is significantly influenced by the parents. While it is not fully known who makes the decisions within the household, they found that in Mexico, the hours children spent at work vary depending on the decision-making power that the mother has at home. This is especially true for daughters (Reggio, 2011; Levinson, Moe, & Knaul, 2001; Basu, 2006): the greater the mother's decision-making power, the fewer hours girls work. In many cases, greater decision-making power or influence on family decisions by mothers is a result of greater participation by women in the labor market, coupled with their household financial contribution (see for example, Strauss and Duncan 1995, Riley 1997). Similarly, parental education was found to be negatively correlated with the possibility that a child will work (Christenson & Juarez, 1987; Buchmann, 2000; Parish & Willis, 1993; Basu, Das, & Dutta, 2010).

In some places, the decision-making process over what children should do is more complex. The decision to work or to go to school is not necessarily imposed solely by the father or mother's preferences. In many homes, the extended family and, in fewer cases, the children, participate in the decision. Complementary to this, some authors have found that despite family constraints, a significant number of working children are able to decide how to use their money (Brewis & Lee, 2010). This makes it possible to have the children decide their own activities, as is the case with many street children (Murrieta 2008). However, research on the decision-making power of working children is just emerging. This has led to research whose main focus is parental decision-making, where the parents are assumed to be altruistic; this means that parents look after the needs of all members of the family through calculated decisions in which the utilities of the whole family are taken into consideration when deciding what is the best for all (Becker, 1965).

Based on this assumption, the literature has tried to explain the variables that influence parental decisions. In general, the following have been noted: (1) the influence of both parents' education (Levinson, Moe, & Knaul, 2001; Christenson & Juarez, 1987); (2) maternal decision-making power (Reggio, 2011); (3) the presence of women as heads of households (López Villavicencio, 2005); (4) the value parents place on education (Buchmann, 2000); (5) the parents' perceptions that their sons or daughters will have more opportunities in the labor market with an education; and, (6) the expectation parents have of receiving financial support from their children in their old age (Rogers & Swinnerton, 2004; Buchmann, 2000).

#### **3.3 CHILD LABOR AND THE COST OF SCHOOLING**

Different factors influence the cost of attending school. In some cases, having children who do not work can be considered a luxury (Basu, Das, & Dutta, 2010); in other cases, the relatively high cost of sending children to school means not being able to send them, as it is the case in India, where the costs of attending school are significantly correlated with school attendance (Hazarika & Bedi, 2009). However, the cost of schooling depends on the school transportation cost—that is, the time spent moving from one place to another including the transit fare—and the direct expenses needed for school (uniforms,

books, fees, etc.). Reducing the direct expenses in elementary school increases the probability of children being enrolled and reduces child labor. Hazarika and Bedi found that the distance between school and home provided the biggest effect. This was especially true in the case of women, who are less likely to go to school when it is far away.

The International Labor Organization (ILO) and some authors consider that child labor and school attendance are competing activities (ILO, International Labor Organization, 2006; Hazarika & Bedi, 2009). Given that there is a limited number of hours available during the day, in a sense, they are competing activities. However, many authors have also shown that child labor and school attendance are not mutually exclusive, and they could be complementary activities (Patrinos & Psacharopoulos, 1997; Ravallion & Wodon, 2000). They do not necessarily replace each other (Basu, Das, & Dutta, 2010). Certain types of work, such as informal sector jobs, disguised begging, domestic work, and household chores, are flexible enough to facilitate the ability to perform both activities at once.

Hence, children can replace the work of their parents at home without necessarily leaving school, and they can combine work and school with other non-work activities. In most cases, child labor limits the hours of study time at home or leisure hours, but rarely restricts school attendance. This is why a negative relationship between school attendance and costs of schooling cannot necessarily translate into a strong positive relationship between child labor and cost of attending school (Ravallion & Wodon, 2000). The need for double shifts in schools has resulted in shorter periods of school attendance versus longer periods of time off that can be used to play or work without having to drop out of school. In those countries where the average number of hours spent at school is four, as is the case in Mexico, children have enough time to work, play, and study at home. The possibility of replacing study time for work time allows children to work and study at the same time. As Binder and Scrogin (1999) suggest, in the western region of Mexico, working hours are mainly at the expense of leisure time. That is one of the reasons why the conditional cash transfer programs impact the cost of schooling by providing an income to help cover the cost of sending children to school, or to replace the income of the working child. However, these programs do not necessarily have an impact on domestic work.

#### **3.4 BETWEEN EGOISM AND ALTRUISM**

The evaluation made by parents between the cost of sending children to school and the long-term benefits they can obtain by studying is, for most authors, a result of parents' altruistic attitude (Ravallion & Wodon, 2000; Buchmann, 2000; Edmonds E. , 2008). In opposition, others claim that not sending children to school is a result of the parents' indifference regarding the well-being of children (Edmonds E. , 2008). They argue that parents seek to benefit from the job opportunities available to their children, even when this decision goes against the children's long-term well-being. From this perspective, child labor is the result of the demand for work from which parents seek to take advantage; and they affirm that the demand for work is the main determinant for both the child working and the way the child carries out the work (Edmonds E. , 2008).

However, despite the lack of empirical evidence favoring one or another position, and given the difficulties of measuring parental attitudes regarding their children's work, much of the literature on child labor and schooling is based on the assumption of parents' altruism towards their children (Becker, 1965). This is based on parents' calculation of what is best for the whole family, as previously argued. It also recognizes the presence of other factors that, despite the good will of parents, influence the decision of their children to attend school or not. From this perspective, lack of information or the inability to visualize the long-term benefit prompts parents to meet the present day emergencies rather than thinking of investing in a better future for their children.

Based on this assumption, children will work only if the family is unable to meet their basic needs (Basu and Van 1998). Likewise, if the household income increases, the need for the child's income decreases, and parents can send their children to school. For Becker (1965), parents are altruistic to the extent that they are interested in their children's well-being and they allocate a portion of the family budget to ensure this well-being. But altruistic behavior implies parent's interest in maximizing family resources on behalf of all family members, not on behalf of individual family members (Buchmann, 2000). For Becker and Barro, this behavior is a result of the impact of the children's utility on the utility of parents (Schluter & Wahba, 2010). That means the children's well-being results from a calculated strategy aimed to facilitate parental well-being; if a child has access to education it is more probable for him to have a better income in adulthood and, therefore, it is easier for him to take care of his parents in their old age.

A major confusion regarding the altruistic parent axiom has to do with the lack of clarity about the concept of altruism proposed by Becker (1965). He defined altruism as utility interdependence: altruistic parents are concerned with the well-being of their children because the children's utility function becomes part of the parents' utility function (Becker & Barro, 1988). From this perspective, the resource maximization within the household is the result of an altruistic attitude. This is not altruism without conditions; to

the contrary, it is an altruism that arises from the benefit that a parent can obtain given their children's benefit. This definition has generated a number of arguments in favor of parental selfishness, significantly adding to the debate between the two perspectives. Despite this debate, empirical research has failed to determine the validity of one perspective over the other.

Parental generosity is often limited by the collective interest, meaning the need to maximize the family benefit. Some authors argue that there are times when trying to benefit the majority of the family members can go against the future well-being of some of its members. An example of this is when older siblings drop out of school to help pay for their younger siblings' schooling. The need to maximize family benefits can also put some children in jobs that endanger their physical and moral soundness. If the child's income is greater when working on the street, the family may decide to send them to work on the street instead of keeping them in school. Similarly, there may be instances in which the child is left to work at home so that one or both parents can work outside of the home. This is especially true when parents' marginal revenue is higher than that of their children. Domestic work is important to the family in terms of quality of life. When the domestic work performed by the child is central to the family, this increases the likelihood that the child will drop out of school to care for the household. Finally, there may be a case in which the parents prefer that their children work in jobs which pay more, notwithstanding the price their children can pay, such as selling drugs or prostitution.

However, it is unclear if situations like the one I describe above are the result of family resource maximization or self-interest. In defense of altruism, Buchmann (2000) challenges the idea of selfishness and raises the possibility that exploitation of some children is the result of needing to support all family members. Similarly, some authors consider that exploitation or work may be a result of lack of internalization of the long-term negative consequences that result from child labor and not attending school (Edmonds E., 2008). In that case, the axiom of the altruistic parent remains valid.

Basu, Das, and Dutta (2010) argue that, in general, parents avoid sending their children to work if their financial circumstances allow it. However, the evidence has not been conclusive, and has not been able to determine whether this axiom is realized or not. Based on the results of the Public Report on Basic Education in India, published in 1999, Edmonds (2008) argues that not all parents want to invest in their children's education, affirming that parents are not necessarily looking out for the greater good of their children. In that report, 37% of the parent respondents indicated that they have never enrolled their children in school, due to lack of interest in their children's education (Edmonds E. , 2008). However, despite this response, there is no evidence to affirm that the parents have internalized the cost of working instead of attending school. From the perspective of those who recognize parents' altruistic behavior, the axiom still holds.

Assuming altruistic behavior among parents facilitates analysis because altruism is considered a characteristic of human nature and social reproduction; therefore, it is a general cultural principle that facilitates comparative analysis. It enables us to understand why, despite the difficult situation in Mexico—an economic crisis, growing unemployment, worsening of working conditions, just to mention some examples—people seem to be behaving altruistically.

#### Could altruistic behavior be assumed in the case of Mexico?

There is little empirical evidence to assume true altruistic behavior by parents, but in Mexico, the existing data suggests the existence of parental interest in the well-being of their children, especially in terms of education. According to a survey by the Ministry of Social Development regarding the opinion of the poor, parents positively value their children's education. Most poor people in this country believe that, once food and access to the basic services of electricity, water, and gas are met, it is necessary to invest in education. The majority of poor people give priority to education over health and clothing; and seventeen out of a hundred consider that, before investing in electricity, water, and gas, it is important to invest in education (SEDESOL, 2003). This data might explain the high rate of elementary school attendance in Mexico. However, despite parental preference regarding their children's education, they cannot always send them to school, nor sacrifice the child's income for improved school performance. Hence, although there is preference for education, low income in Mexico (Levinson, Moe, & Knaul, 2001), and to a lesser extent the lack of household wealth, remain a major cause of child labor (López Villavicencio, 2005).

One research project has been carried out that provides evidence against the hypothesis of selfish parents. Schluter and Wahba (2010) demonstrate altruism in poor families living in rural areas. Using data from PROGRESA, they reject the hypothesis of the selfish parent in poor families from non-urban areas. They find that parents benefiting from this program spend more money on goods for their children than those who do not receive program benefits. Furthermore, spending on goods for adults is held constant. If we take into account this evidence, and consider both the school attendance rate in Mexico

(which is greater than 90%), and the fact that 84% of children live in a household where the per capita income is under the basic well-being level established by CONEVAL<sup>2</sup> (see table 3.1)—meaning families are not able pay for both the basic food basket and non-nutritional needs—we can hypothesize that, in fact, in the case of Mexico, altruistic behavior occurs. Therefore, we can expect that parents will send their children to work only when truly necessary. According to data from the MTI 2009, 64 out of every 100 children between the ages of five and seventeen living in rural areas have a monthly income below the minimum poverty line. Less than half (48%) in urban areas are able to ensure their well-being (Table 3.2).

There are significant differences between the countryside and the city. The difference in well-being between rural and urban areas is .11 percentage points, with a significance of 99%. In terms of income, overall boys and girls living in urban areas have proportionately a better quality of life than those living in rural areas. The proportion of children living in households with a per capita income above the poverty line is higher in the first case (see Table 3.2 and 3.3). Similarly, the proportion of households with an income below the well-being level is even greater for those children who live in the country; hence, we can assume that in most cases child labor is a real need, and that parents send their children to work because they really need their child's work. The answer to the

<sup>&</sup>lt;sup>2</sup> In October of 2009 the monthly cost of the Canasta Alimentaria (Basic Food Basket) was \$691.76 Mexican pesos per person (51.85 US dollars); while the monthly cost of the basic food basket in urban areas was \$974.75 Mexican pesos (73 US dollars), which is equivalent to the minimum well-being line (*línea de bienestar mínimo*). The level of well-being (*línea de bienestar*) equals the total monthly cost of both, the basic food and non-nutritional needs per person, which in 2009 was \$2,075.21 Mexican pesos (156 US dollars) in urban areas and \$1,315.02 Mexican pesos (99 US dollars) in rural areas. (CONEVAL, 2010)

question posed at the beginning of this section should be yes, we could assume altruistic behavior for the case of Mexico, given the poverty level in which most of the households of the children live, and the proportion of children that attend school.

Table 3.1 Boys and girls between 5 and 17 years old by level of well-being

	Total Population	Below the minimum well-being line*	Above minimum well- being, but below the well-being line**	Above the well- being line***
Girls	49,426	25,469	15,264	8,693
Boys	51,596	26,644	15,827	9,124
Total	101,021	52,113	31,091	17,817

Source: Calculations based on data from MTI 2009 and estimates from the CONEVAL Well-being Level (*Línea de Bienestar*)

\* All who live in the countryside and have an income less than \$691.76 Mexican pesos (52 US dollars) or living in urban areas and having an income less than \$974.75 Mexican pesos (73 US dollars).

\*\* Those living in the countryside and have an income less than \$1,315.02 Mexican pesos (99 US dollars), but equal to or greater than \$691.76 Mexican pesos (52 US dollars), and those living in urban areas and have an income less than \$2,075.21 Mexican pesos (156 US dollars), but equal to or greater than \$974.75 Mexican pesos (73 US dollars).

\*\*\* All who live in the countryside and have an income greater than or equal to \$1,315.02 Mexican pesos (99 US dollars) or living in urban areas with an income greater than or equal to \$2,075.21 Mexican pesos (156 US dollars).

#### Table 3.2 Boys and girls between 5 and 17 years old by level of well-being in rural and

<b>Rural Population</b>		Below the minimum well-being line*	Above minimum well- being, but below the well-being line**	Above the well-being line***	
Girls	10,456	6,678	2,410	1,368	
Boys	10,952	7,010	2,499	1,443	
Total	21,408	13,688	4,909	2,811	
Urban Population		Below the minimum well-being line*	Above minimum well- being, but below the well-being line**	Above the well-being line***	
Girls	38,970	18,791	12,854	7,325	
Boys	40,643	19,634	13,328	7,681	
5	<i>,</i>				

#### urban areas

Source: Calculations based on data from MTI 2009 and estimates from the Well-being Line of CONEVAL (*Línea de Bienestar*)

\* All who live in the countryside and have an income less than \$691.76 Mexican pesos (52 US dollars) or living in urban areas and have an income less than \$974.75 Mexican pesos (73 US dollars).

\*\* Those living in the countryside and have an income less than \$1,315.02 Mexican pesos (99 US dollars), but equal to or greater than \$691.76 Mexican pesos (52 US dollars), and those living in urban areas and have an income less than \$2,075.21 Mexican pesos (156 US dollars), but equal to or greater than \$974.75 Mexican pesos (73 US dollars). \*\*\* All who live in the countryside and have an income greater than or equal to \$1,315.02 Mexican pesos (99 US dollars). dollars) or living in urban areas with an income greater than or equal to \$2,075.21 Mexican pesos (156 US dollars).

# Table 3.3 Difference in level of well-being between rural and urban areas, using a lineal regression

Difference between Rural and urban	Beta
Girls	11495***
Boys	11522***

\*\*\*p<0.01 (two-tailed test)

# 3.5 OTHER FACTORS THAT INFLUENCE PARENTAL DECISIONS ABOUT CHILD LABOR AND SCHOOLING

Parents' decisions about child labor and schooling are not just the result of a relationship between poverty and altruism, and are not just a one-person decision. Based on rational choice theory, child labor is also the result of a calculated decision in which children's productivity is also considered. However, the perceived cost of schooling and, therefore, any decision regarding child labor and school attendance has behind its motivations and prejudices that are embedded in culture and which at the end, influence significantly children's allocation of time.

#### Children's productivity in family activities

Parent's decision regarding sending their children to school or to work does not only depend on family income level. When the per capita income is below the basic wellbeing level, the need to increase their income is undeniable. However, given the need to also maximize the benefits of all family members, parents see it as necessary to put to work the family members who are most productive, regardless of age. Productivity is determined by the characteristics of the labor market and the opportunity to participate in family activities. This means that the greatest benefit to the family will be obtained by working outside the home, or by doing work inside the home that allows others to work and earn a higher income outside. In either case, it aims to maximize the family income. Unable to participate in the formal labor market, productivity of children under fourteen in family activities increases. This may explain why domestic work prevails over economic activities in children under fourteen years old (Edmonds E. , 2003). Very little has been said in terms of children's productivity in the formal sector. Given that productivity is a function of wages and labor demand, restrictions on the employment of children under fourteen years old decreases children's productivity in the formal market, increasing children's productivity at home. This is especially the case when children replace adults in the household who are working outside the home. Some authors have found that the presence of corporations that forbid child labor decreases the school children's productivity. In Vietnam, the results obtained by Edmonds (2003) suggest that children are less likely to participate in economic and paid activities in those populations where there is a greater presence of large private corporations or government employers. However, it is unclear in these cases whether the decline in child labor is due to parents' access to wages that are better than their children's wages, or to a lack of employment opportunities for children resulting from laws that deny them formal work. In both cases economic productivity of the children declines, which is not surprising since they are denied entry to the sector with higher productivity, the formal sector.

In Mexico, the impact of formal work in reducing child labor is minimal, given the existence of the informal market. The possibility of working in the informal sector increases the probability of child labor, especially when the expected wage is similar to the wage they can get in the formal sector.

The ability for a child to replace work with schooling is strongly related to productivity. If parents feel it is optimal to make their children work harder, they will also consider that the best option is for their children to spend less time in school (Hazarika & Bedi, 2009). This decision depends on the possibility of replacing parental work, and on children's marginal income. Therefore, we could say that in the cities such as those in

Vietnam, where there are large corporations and government employers, parental productivity is probably greater than their children's. However, if both parents are working outside the home, the domestic labor of children may become more necessary. Also, in places where there is easy access to an informal market with good wages, children's productivity increases. Similarly, when families have a family business or own agricultural land, children's productivity increases. This happens frequently, with children working in the fields, or in small family businesses in urban areas.

In terms of productivity, there has been an attempt to argue that children are particularly suitable for certain types of work, and that this explains their presence in certain productive sectors. However, academic research has not found enough evidence to prove this. One of the few studies that examines child productivity is that of Levinson and Moe (2001), focused on the rug manufacturing industry in India. However, they did not find sufficient empirical evidence to argue in favor of the children's productivity in developing hand embroidery. In fact, they found that the adults were more productive than the children.

Given the declining presence of children in the formal paid sector, the argument regarding children's productivity according to their abilities has been dropped. This has given way to analyzing the comparative advantages of children to those of adults in a variety of activities. For example, in *Power and Resistance, the permanence of street children in Mexico City (2008)*, Murrieta describes how on the streets it is easier for small children disguised as beggars to obtain an income than for adult males.

Children's productivity does not only depend on earned income and/or the possibility of replacing the parents' work. It also depends on necessities within the home,

which can sometimes include fetching water, collecting firewood, etc. When children have to work less in these types of activities, it is easier to go to school.

In poor households, acquiring agricultural lands increases the participation of children, given the families' inability to pay a third party to do the work (Bhalotra & Heady, 2003; Basu, Das, & Dutta, 2010). Likewise, in many rural areas, children work more during the harvest periods. During this time, the cost of sending children to school increases due to earnings lost when attending school. Something similar happens in households with self-employment or small business (Edmonds & Turk, 2004). The possibility that the child can help with production or by providing a service reduces the household production costs.

Interesting results have been found in terms of productivity of children and their interaction with the adult labor market. Both culture and gender are significant variables in the labor market interaction. Grant and Hamermesh (1981) found that, in the United States, young men replace the work of women, while in relation to other men, they complement it. Similarly, children end up replacing the work of their mothers, especially in the home. The relationship between children's productivity and the adult male labor market is not the same as the relationship between children's productivity and the labor market for women (Grootaert & Patrinos, 1998). Similarly, the relationship between adult wages and hours spent at work are not the same in different countries. For example, Peruvian women contribute a much larger share of their earnings to the home than Pakistani women. In the same way, households in Pakistan are much more dependent on children's earnings than households in Peru (Ray, 2000). In the case of Mexico, there is no clear relationship

between household needs and income. However, the descriptive data suggests that children possibly take over women's work in the home.

Therefore, the cost of attending the school depends on both parental evaluation of what is best for the whole family, and the child's productivity in the home. If parents want the best for their children, they will avoid putting them to work, especially if the children's productivity at home is low. This often happens with young children, who are less productive than older siblings. With age productivity increases; for girls it is higher in the home, and for boys it is higher in paid jobs.

However, productivity and income are not the only factors influencing child labor. The assessment made by parents regarding play and education, in relation to their children's well-being, also influences the distribution of children's time. If parents believe that play and education are important, they will ensure that their children have time to do both, even when they need the children's work. The results of Buchmann's (2000) work on the value of education and schooling suggests that it is less likely that parents who do not value education will send their children to school, despite the fact that the more education means a better life. Some parents consider work essential to children's development, and believe that the learning gained through work cannot be obtained through educational institutions. The focus on work as a tool for education can make it easier for parents to replace children's leisure or study time with working time. The results obtained by Hazarika and Bedi's work in Pakistan (2003) and their research in India (2009), suggest that the different effects on the changes in cost of schooling are due to the distinct parental attitudes regarding work and education.

### Parental attitudes and motivations

Despite all the work that has been done on child labor and schooling, the real reason why parents send their children to school or out to work is still unknown. While I have emphasized the importance of income, the productivity of children, and parents' altruistic attitude, nobody has directly explored the motivations of parents regarding child labor and schooling, except for Buchmann (2000). Nor have they considered parental preferences with regard to different types of work. Buchmann (2000) found that in Kenya some of the parents send their children to school to ensure their own long-term well-being; however, research in this area is far from pinpointing parents' motivations for preferring education over work or vice versa. To a large extent, this is due to lack of data on parental motivations.

The difficulty in explaining parental motivations primarily has to do with the type of existing data. Except for Buchmann—and more recently Jones and Chant (2009)— most research on child labor and schooling has been based on national surveys that do not consider the reasoning behind parents' decisions. In general, these attitudes have been explained based on family composition and parental profiles (gender, education and religion). In the econometric literature, Edmonds (2008, p. 3669) cites three different approaches to studying the influence that parents' attitudes have on decisions about work. The first focuses on the correlation between the parents' background and the children's activities. The second perspective considers gender bias; while the third perspective relates to average community behavior, and individual decisions made at the household level regarding work and schooling.

92

From these perspectives, the main explanatory variables used in the econometric analysis are: income, gender of the child, parental education, gender of head of household, the order of the child in the family, religion, and type of family (Fuller, Singer and Keiley 1995, Gunnarsson, Orazem, and Sanchez 2006, Knaul 1995, Delap 2001, DiMaggio 1994, Jones and Chant 2009, to give a few examples). Major hypotheses have arisen from these studies, but challenges to determining a cause-effect relationship have not allowed for further conclusions.

It is challenging to try to capture the variations in attitudes or the gender bias influencing the decision to send children to school or to put them to work. The influence of parents on children's time distribution is significant, even in those cases in which children have the opportunity to make their own decisions. Parental beliefs and norms are embedded in most of the actions carried out by children. In cultures where family is valued above the individual, identity—and therefore, what is "right" to do for women and children—is defined primarily in terms of family values (Beşpinar-Ekici, 2007). Therefore, the decisions that have an impact on family resources are strongly influenced by parental beliefs and norms.

#### **Cultural differences**

Despite the altruistic behavior previously described, economic circumstances impact each family differently. There is a point at which, despite the good will of the parents, they will decide to send their children to work even when it goes against the child's well-being. There are also times when more than one child is available as an economic resource; in such cases, it is necessary to decide which of the children should work. In both cases the decision depends not only on the economic factors. As Cunningham (1995) and Delap (2001) argue, economic factors are often mediated by cultural values and practices that explain the variations in the determinants of child labor and schooling.

For Delap (2001), socio-cultural factors are more important than economic rationality. The value that each country gives to accumulation of human capital through education and the expectations placed on men's and women's roles in society are expressions of culture, and the context in which parents make decisions about child labor and schooling. In Nicaragua, the probability of attending school is greater for women than for men. In many Latin American countries, it is common for older girls to care for their younger siblings while also being required to attend school. For many parents, this is the means to improving their children's quality of life in the long term. However, in Pakistan the probability that a girl will study is lower than that of a boy (Rosati & Rossi, 2003). In Mexico, it is also less likely for a girl to attend school because they have to work at home (Levinson, Moe, & Knaul, 2001). Moreover, in some countries school attendance is determined by religion and parents' long-term expectations (Buchmann, 2000).

Weiner's (1991) work is one of the earliest and best examples of the relationship between child labor and culture. In his book, *The Child and the State in India*, he analyzes the belief system that leads to a very low rate of literacy in India. He argues that poverty is a less relevant explanation than the visions of the social order regarding children's participation in the labor market. For most middle-class people in India, excessive or inadequate education of the poor can disrupt the existing social order; therefore, children of lower social classes should be trained through work. In her work on Kenya, Buchmann (2000), examines parental perceptions as a function of educational assessment, gender prejudices, and religion. She finds that parental concern for their own well-being in old age significantly increases the likelihood that a child will attend school; but maternal doubt regarding the value of education decreases this probability. Similarly, the data suggests that when parents perceive discrimination against women in the labor market (therefore, a lower rate of return), they are less likely to send their daughters to school than their sons. Even when it is more likely that a girl will complete more years of education than a boy, there are many factors that limit the ability to achieve this; when resources are limited, discrimination based on gender is more prevalent.

One of the most recent works on the influence of parental beliefs and values on child labor is the research of Jones and Chant (2009), focused on the paid and unpaid work of men and women in Gambia and Ghana, and its interrelationship with the acquisition of human, financial, and social capital. They found that "strong socialized expectations in the family systems of respect and duty towards elders, and the idea that children should start "giving back" to their parents as soon as they are able (usually by their early teens)" motivates young people's work, even among better-off individuals (Jones & Chant, 2009, p. 190). This is especially important for Muslims who believe that giving to their parents is a blessing; the more you give, the more blessings you will have in life. The sense of family and duty to their parents makes children of Gambia autonomous in their job decisions. There are few parents who oppose their children's decisions even when they recognize that they can be a negative ones for their children. Similarly, children in Ghana do not want to give an image of being "lazy," which is not socially accepted. Therefore, as soon as the children can, they begin to work. In both countries, young people begin to work out of duty

and obligation, "most marked among girls, among elder siblings, and among migrants raised in rural areas" (Jones & Chant, 2009, p. 190).

However, despite the variations between these places, very few studies have included culture as one of the significant variables that explain child labor and schooling. In large part, this is because of the difficulties involved in explaining these differences with quantitative data, or how expensive it would be to carry out a qualitative analysis that could explain the behavior of an entire social group. These challenges have led to the interpretation of cultural variations from the standpoint of parental profiles, differences between rural and urban areas, or comparisons between different countries. That could explain why, with the exceptions of the work of Weiner (1991), Buchmann (2000) and Jones and Chant (2009), no one else has directly examined the relationship between culture and child labor. It is important not to lose sight of Delap's (2001) argument when discussing the work of Boyden focused on child labor in Peru: "in circumstances when the child is not the final economic resource of the household, a decision has been made about which household members' Labor should be utilized;" in some places the belief about "leisure daemon" may be a cause of child labor on the streets (Delap 2001, 5).

### Men and women are not equal

One of the main differences in the distribution of children's time has to do with the role that society gives to individuals based on their sex. For example, what tasks are appropriate for a woman, and what tasks are for a man? As argued, the distribution of children's time assumes that all family members are assigned tasks that provide greater benefits for everyone in the home (Delap, 2001). Therefore, the sexual division of labor is

a logical response to women's reproductive role, and having her focus on caring for younger siblings is expected.

Some authors argue that given the social need to prepare them for adult life, the participation of children in the labor market is similar to that of adults. Even though it is not clear how working practices of young people become gendered, it is not possible to deny the role that socialization by working women in a household and cultural practices, play in determining child labor participation (Jones & Chant, 2009).

In Mexico, as in many other countries, domestic labor is deemed fundamentally to be 'women's work'. Beşpinar-Ekici (2007) shows that even when many educated and young women in Mexico participate in "egalitarian" gender roles, "they still believe that childcare and some housework is primarily their responsibility" (Beşpinar-Ekici, 2007, p. 139). This prejudice underlies many of the differences between boys' and girls' participation in child labor and schooling found in many places (i.e. Jones and Chant 2009, Knaul 1995, 2001, Delap 2001, Buchmann 2000). In Gambia and Ghana, as in many other societies, doing domestic work at an early age is seen as a way of forming adult women who later life will have to take care of their own households. In Gambia, women's 'femininity' is associated with taking care of men who are close to them. Women are not allowed to negotiate self-sacrificial norms (Jones & Chant, 2009). Something similar takes place in Latin America, especially in rural areas.

Furthermore, in some countries the double burden is also socially defined by gender. In Ghana, maternal identity is also based on women's contribution to the household income. Women are expected to contribute to household income and also to take care of

97

domestic work. This has two consequences: daughters need to take the "excess" burden, and they also internalize a strong expectation of working, as they get older.

Other gender-based prejudices also influence the allocation of children's time. In India, not only social and cultural norms impede girls' enrollment in school: parental concern for their daughters' security en route to school also reduces school attendance and increases domestic work (Hazarika & Bedi, 2009). In some Bangladeshi slum communities, chastity during puberty is especially important for girls, so they are protected from working in public places. If girls have to work, they are engaged in occupations that restrict them to the private sphere. Even when small girls participate in firewood collection, as they get older they do not get involved in income-generating work, and are made responsible for cooking and food preparation, while boys are made responsible for shopping and firewood collection (Delap, 2001). This concern with women's sexuality, underscored by patriarchal traditions and market forces, may worsen women's economic and social position, increasing gender inequality (Boserup, 1970; Nash & Fernández-Kelley, 1983; Bespinar-Ekici, 2007). In this context, the return to experience, which usually is an asset for boys, could be, as in Colombia, lower for women; and the penalties for dropping out of school and for combining school and work more severe (Knaul, 2001, p. 69).

Therefore, despite the difficulty of measuring parental motives and parental assessments, the literature has found sufficient evidence to claim that household characteristics, parental profile, and where a family lives significantly influence the decision-making process when considering whether to send children to work or school, or deciding to have the children conduct activities within or outside the home. It is also

98

undeniable that culture and gender biases influence the likelihood that a woman or a man will work or study.

#### **3.6 Relationship Between Child Labor And Schooling**

Despite the large body of research on child labor and schooling, the relationship between school attendance and work is not clear. A working child is less likely to attend school; school attendance decreases the likelihood that a child will work. As already mentioned, a child may decide to go to school regardless, and not work because he doesn't want to work, or because in his home education is valued. The child could also choose to work: out of necessity, because they want to learn an occupation, or because they do not want to go to school. The relationship between child labor and school attendace can occur in different ways and for different reasons. It is not a linear or unidirectional relationship.

After the Convention on the Rights of the Child in 1989 and the World Conference on Education for All (1990), the negative link between child labor and education became an unquestioned assumption of policy, intensifying the fight against child labor and the promotion of education (Sakurai, 2006). Regardless of endogeneity, child labor has become the independent variable of school attendance and achievement, and school attendance in the independent variable of child labor.

In Ghana, the children who work and go to school at the same time decrease their school performance because they do not have time to study outside of school or to rest (2003). Child labor also affects the learning ability of children (Gunnarsson, Orazem, & Sánchez, 2006). However, it has also been found that the impact of child labor at early ages is more negative than child labor when children are older. A part-time job in high school or

college does not have the same negative effect as one in elementary school. The negative effects of working during high school or college are associated with working hours. But the effects of youth work on achievement are contradictory; some studies have found no relationship between these two variables (Binder & Scrogin, 1999; Patrinos & Psacharopoulos, 1997).

Either way, it is important to recognize that there is a link and that definitely the time devoted to human capital production is undermined by child labor even when school attendance is not decreased. Study time and the number of school years completed decrease with child labor. As Gunnarsson, Orazem, and Sanchez argue, "child labor has a significant opportunity cost in the form of forgone human capital production" (2006, p. 50).

#### **3.7 THE LIMITATIONS OF A LABOR MARKET REGULATION APPROACH TO CHILD LABOR**

When children need to work instead of attending school, they are not able to get the necessary skills to succeed in adulthood. Furthermore, life expectancy decreases considerably if individuals are exposed to poor working conditions for long periods of time;. Child labor is also problematic because of the risks children face when forced to work in situations that they do not want, when they are exploited, or they have to work in conditions that endanger their life. Therefore, for both the International Labor Organization (1998; 2006) and for UNICEF (2005), child labor should not be accepted in any form.

Current characteristics of the informal labor market in Mexico (see chapter 2) do not help to reduce the opportunity cost of schooling. There are an increasing number of children working in domestic service, in the markets as loaders, or selling things on the street. Agricultural work has also not been reduced significantly. The conditional cash transfers have increased school attendance, especially in the countryside (Parker & Skoufias, 2001); however, the transfers have not reduced the same proportion of work done by children.

In many urban areas, young adults do not have enough job opportunities; this is worse in poor economies. Therefore, even without age bans, children have fewer opportunities in the formal market than teens or young adults. However, failure to implement bans on employment age increases the likelihood of the exploitation of children. Some companies or businesses may demand more than they should in order to get the greatest return for their work, thereby putting children's health and physical soundness at risk. In Mexico, it has been found that some retail grocery stores hire twelve year old children as dispatchers and force them to do things outlawed for children under that age, according to the regulations of the Secretary of Labor.<sup>3</sup>

Restrictions in the labor market may lead to different results. They do not necessarily reduce the cost of attending school, or promote the decision to send the children to school. As French (2010) argues, these types of restrictions do not necessarily lead to a greater number of study or play hours; to the contrary, they often lead to an increase in housework responsibilities, and for many children it becomes a heavy load. All of this is coupled with the negative consequences of not having children protected by the law, since theoretically they should not work in the formal sector.

Dwibedi and Chaudhuri (2010) consider that children's income opportunities can be reduced through economic reforms favoring foreign capital. They show that the influx of foreign capital can mitigate the incidence of child labor by increasing the rate of return on

<sup>&</sup>lt;sup>3</sup> This was discussed during the meetings held by the Secretary of Labor of Jalisco, with the working group for the erradication of child labor in Jalisco, in July of 2012.

education and reducing the income opportunity for children. Foreign investment can promote the need for more skilled labor through the introduction of new technology. It can also reduce the pay rate, thereby reducing the income opportunity for children and the cost of schooling.

Despite the lack of clarity about the best way to reduce child labor and the vast diversity of contexts and ways in which it develops, many countries have taken a child labor abolitionist perspective. Local policies have been implemented based on the recommendations from the International Labor Organization. From this perspective, the children's full potential is achieved only if they are kept away from work at a young age. For Myers (2001), this position has two fundamental concerns: one with a humanitarian characteristic (which is based on children's rights), and another with an economic characteristic. The first has to do with a notion of childhood as a period in which children should be happy and protected (Masuhama, 2006). Happiness is measured by the ability to play, to attend school, and belonging to a family that provides the child security such a home, food, and health. From the economic standpoint, the greatest fear is the impact of child labor on the adult labor market. There is a fear that children will "replace adults with lower wages, increase unemployment and underemployment, worsen work conditions, decrease adult wages; eventually perpetuating or even worsening and deepening the poverty of the working class" (Myers 2001; Levinson, Anker, Ashraf and Barge 1996; cited by Masuhama 2006: 16). Masuhama (2006) rightly argues that from this perspective there are no recognized positive effects of child labor. It denies the possibility of acquiring skills through work and, what is worse, it "ignores the fact that in many cases the economic contribution of children is critical to the families' survival and that most working children combine school attendance with work" (Masuhama, 2006, p. 17).

The International Labor Organization in conjunction with UNICEF, the World Bank, and a number of non-government organizations (NGOs) has concentrated all of their efforts in promoting this position. Through various means of pressure, these organizations have assigned national governments the task to sign, ratify, and do whatever it takes to eradicate child labor, especially its worst forms (Invernizzi & Milne, 2002).

It is surprising that in Mexico, despite the vast literature on child labor, it is unknown what factors, besides poverty, influence the incidence of child labor. Yet, the child labor eradication proposal promoted by the International Labor Organization has been followed. This has resulted in the establishment of minimum work ages and the implementation of social programs based on conditional cash transfers to encourage school attendance, but these measures have not had the desired effect. In other words, this is tantamount to saying that "child labor has been prescribed a general/generic medicine for a disease that has unknown causes." This means you assume that the medicine can work, but it may not necessarily be the best medicine to cure the problem.

In the next chapter, I analyze the determinants of child labor in Mexico in order to identify the factors that significantly influence its incidence. I also analyze characteristics of the children, their families, and the communities in which the children live, and compare variations in how each one influences men and women. Similarly, I compare the behavior of the variables used in two distinct groups: children under eleven, and children aged twelve years or older.

# CHAPTER 4

## **DETERMINANTS OF CHILD LABOR IN MEXICO**

The International Labor Organization distinguishes three different causes of child labor (INEGI, 2009b). Those that are more evident and easier to perceive are considered *immediate causes* and they act directly over the children and their families; two common examples are economic poverty and the economic crises that result from family problems. Values and situations that predispose a family or community to accept or even promote child labor are considered *underlying causes*. *Root causes* are related to the economy and society as a whole; they are the context in which child labor flourishes and, therefore, where it can be controlled. There is no doubt that poverty in Mexico is a root cause of child labor and that informality is an underlying cause. However, child labor is not just the result of poverty and informality; there are other factors that influence activities done by children.

In this chapter, I explore other underlying causes of child labor in Mexico from a quantitative perspective. I analyze the factors that influence the probability that child labor will occur. In the first section I conduct a descriptive analysis of child labor in Mexico using the Child Labor Module data of the National Survey of Occupation and Employment (Encuesta Nacional de Ocupación y Empleo, ENOE 2009). In the second section, I carry out an econometric analysis of the relationship between child labor and

income. To accomplish this, I take into account the characteristics of the child, the family, and the place of residence. As part of this analysis, I compare different definitions of work done by children. I use these definitions to argue in favor of the need to include unpaid domestic work as part of the definition of child labor. I claim that a definition based solely in economic activities hides an important part of work done by small children and girls. I also discuss the impact of income on the probability of working. Results suggest significant differences between boys and girls, and based on age, differences that I analyze in the next chapter.

#### 4.1 CHILD LABOR IN NUMBERS

In 2009, INEGI estimated that, in Mexico, seven out of ten children between five and seventeen years old do some kind of work, including domestic work for their own families, with the presence of girls being a little bit higher than that of boys. Most children, especially boys, work in farming activities, while girls are more commonly found in domestic work, trade, or services, and working on their own. Even though some older children work in the formal sector, most work done by children takes place in informal sectors and/or in the household.

In Mexico, as in many countries around the world, child labor has become an important way to deal with poverty. When family income is not good enough to support the whole family, children need to work even at the expense of school attendance. But, as previously discussed, the literature about the relation between child labor and schooling hasn't been conclusive. It is not clear if working activities decrease school attendance, or

if dropping out of school increases child labor. As previously argued, the high rate of school attendance suggests that Mexican families value education. In Mexico, at least 90% of school age children, that is, children between five and seventeen years old, attend school. However, the schooling rate for working children is lower.

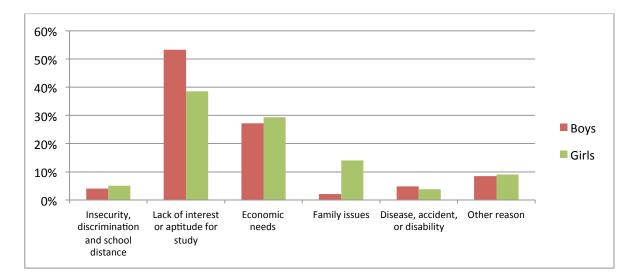


Figure 4.1. Main reasons why children do not attend school by gender

Source: Tabulados básicos, MTI 2009, (INEGI 2009c)

The reasons why working children drop out of school also suggest a non-causal relation between child labor and schooling. Figure 4.1 shows the primary reasons children do not attend school. Based on the Module of Child Labor 2009 (Módulo de Trabajo infantil, INEGI 2009), most working children quit school as a result of lack of interest or aptitude for studying (as defined by their parents), especially in the case of boys (53 %). More girls than boys are affected by economic needs (29%), family reasons (14%) and insecurity, discrimination, and school distance (5%). Few boys quit school

because of family reasons (2%) or insecurity (4%). So, it can be argued that it is more probable for boys to decide whether they want to continue studying than it is for girls, who are more directly affected by family decisions. With age, economic needs become a more prevalent reason for dropping school, especially in the case of girls. Similarly, lack of interest increases with age; it becomes the main reason for girls to drop out of school when they are between ten and thirteen years old.

As in the informal market, general descriptions of child labor in Mexico also suggest gender-based differences between boys and girls in terms of quality and quantity of work. Table 4.1 shows these differences. There are more boys than girls working in Mexico. Fourteen out of 100 boys between five and seventeen years old work, twice as many as girls. Based on descriptive analyses, it seems that child labor is more a male than a female problem; it is more common for boys to be engaged in a triple burden<sup>1</sup> (working, doing housework, and studying) than for girls. As shown in table 4.1, the main difference between boys and girls is the time used for domestic work and studying (see also table 4.2 and 4.4). There are more boys than girls attending school only; at the same time, there are more girls than boys doing domestic work only.

<sup>&</sup>lt;sup>1</sup> Most of the time, the idea of the triple burden is used to describe those situations in which a person does all: participates in paid work, housework, and child care. In the literature on child labor the triple burden refers to being doing work outside the home, housework, and schooling at the same time.

	Population	A	ge groups	
	between 5 and 17 years old	5 and 9 years old	10 and 13 years	14 and 17 years
National	28,247,936	10,533,535	8,694,711	9,019,690
Participating in economic activities	1.50%	0.02%	0.32%	4.38%
Participating in economic activities and doing domestic work	2.73%	0.04%	0.61%	7.92%
Participating in economic activities and studying	1.75%	0.47%	1.73%	3.27%
Participating in economic activities, domestic work and studying	4.69%	1.20%	5.10%	8.37%
Just studying	28.51%	51.67%	20.90%	8.80%
Just domestic work	4.40%	0.75%	1.85%	11.12%
Domestic work and studying	55.54%	44.88%	68.99%	55.03%
Other activities	0.87%	0.97%	0.50%	1.11%
Boys	14,331,752	5,324,733	4,477,614	4,529,405
Participating in economic activities	2.81%	0.03%	0.60%	8.25%
Participating in economic activities and doing domestic work	3.08%	0.08%	0.64%	9.01%
Participating in economic activities and studying	2.85%	0.61%	2.73%	5.61%
Participating in economic activities, domestic work and studying	5.33%	1.32%	6.15%	9.25%
Just studying	31.78%	53.33%	25.31%	12.82%
Just domestic work	2.73%	0.77%	1.37%	6.38%
Domestic work and studying	50.18%	42.75%	62.45%	46.80%
Other activities	1.24%	1.11%	0.74%	1.88%
Girls	13,916,184	5,208,802	4,217,097	4,490,285
Participating in economic activities	0.16%	0.00%	0.02%	0.47%
Participating in economic activities and doing domestic work	2.37%	0.00%	0.57%	6.81%
Participating in economic activities and studying	0.62%	0.32%	0.67%	0.90%
Participating in economic activities, domestic work and studying	4.02%	1.08%	3.97%	7.49%
Just studying	25.15%	49.97%	16.22%	4.75%
Just domestic work	6.12%	0.74%	2.37%	15.90%
Domestic work and studying	61.06%	47.05%	75.94%	63.34%
Other activities	0.49%	0.83%	0.24%	0.34%

Table 4.1. Children's participation in economic activities, domestic work and studying, by age group and gender

Source: Tabulados básicos, MTI 2009, (INEGI 2009c)

In both cases, most children do domestic work and study. This implies that if we do not consider domestic chores child work, we are not considering a significant part of child labor. Nevertheless, if child work does not restrict school attendance it should not be considered child labor. In both table 4.2 and 4.4, it can be seen that most children work fewer than 15 hours a week, which gives reasonable time for doing other things in addition to attending school, which requires just four hours per day. Based on the possibility of attending school, domestic work should not be considered child labor; however, the conditions under which it takes place and other restrictions that result from working could make us consider it labor. Often, time spent on work counts against time that could be used for play or rest. And also, when working hours in domestic work are added to working hours in economic activities, the time available for other activities is reduced.

In general, boys work more than girls, although the proportion of small children who are working is slightly higher in the case of girls. This could be explained by a higher number of younger girls that accompany their mothers. It is important to emphasize that, based on data from the Module of Child Work (Módulo de Trabajo Infantil, MTI 2009), a high proportion of boys and girls do not receive any income for their work (47% and 48% respectively, see table 4.2), and just a really small percentage work on their own, fewer than 4% at the national level. The rest are subordinate workers, performing activities mainly in services. The lack of remuneration is higher for boys within the agricultural sector, and for girls in commerce; but in any case activities that take place in agriculture, commerce, and services, are many times unpaid. It is also interesting to observe that more boys work on their own in services (48%) and commerce (20%), while the 4% of girls that work on their own do so in commerce (52%) and manufacturing (25%) (INEGI, 2009c). As one can observe in the streets of Guadalajara, it

is more common to see girls and women selling on the streets than boys, who more frequently work with their parents as gardeners, mechanics, or carrying boxes in city markets (Coordinación de Protección a la Infancia, 2007a; 2007b).

Most work done by children in rural areas is unpaid. In contrast, boys that work in construction are generally paid, even when they are subordinate workers. However, if a girl does any type of work related to construction, it is less likely for her to receive payment. It could be argued that the sector in which boys are more likely to be paid is construction, while the opposite can be argued in the case of girls, who receive no payment in construction or agriculture.

Children in agriculture, commerce, and services lack a regular working schedule, which could be seen as an advantage for children wishing to attend school and do other activities, such as domestic work and play. Since in construction working schedules are more structured, it is harder for children to work and attend school at the same time. That could be one of the reasons why in construction younger children are able to work between 25 and 34 hours per week (INEGI, 2009c). However, it is in agriculture where children work more hours.

Population 5-17 years		National		Mo	ore urban are	eas	Le	Less urban areas			
old in economic activities	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls		
Age groups	3,014,800	2,016,888	997,912	896,857	573,068	323,789	2,117,943	1,443,820	674,123		
5 to 9 years old	6%	5%	7%	6%	5%	6%	6%	5%	8%		
10 to 13 years old	22%	23%	22%	19%	19%	19%	24%	24%	24%		
14 to 17 years old	72%	72%	71%	76%	76%	75%	70%	71%	68%		
Occupation groups	3,014,800	2,016,888	997,912	896,857	573,068	323,789	2,117,943	1,443,820	674,123		
Industrial workers, artisans and assistants	22%	24%	17%	27%	34%	16%	19%	20%	18%		
Merchants and employees of established businesses	22%	16%	34%	29%	25%	35%	19%	12%	33%		
Street vendors in services and other activities	6%	5%	9%	9%	8%	10%	5%	4%	9%		
Workers in domestic service	4%	1%	11%	4%	1%	10%	4%	1%	11%		
Workers in personal services	12%	11%	12%	21%	22%	19%	8%	7%	9%		
Farmworkers	30%	39%	11%	1%	2%	0%	42%	54%	16%		
Other workers	5%	4%	6%	9%	8%	10%	3%	3%	3%		
Not specified	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Duration of regular workday, full week	3,014,800	2,016,888	997,912	896,857	573,068	323,789	2,117,943	1,443,820	674,123		
Less than 15 hours	27%	25%	31%	28%	25%	32%	27%	25%	31%		
15 to 24 hours	16%	14%	18%	15%	13%	19%	16%	15%	17%		
25 to 34 hours	8%	7%	9%	9%	8%	10%	7%	6%	8%		
35 or more hours	32%	35%	26%	36%	40%	28%	30%	32%	26%		
No regular working hours	18%	19%	15%	12%	12%	10%	21%	22%	17%		
Not specified	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Income level	3,014,800	2,016,888	997,912	896,857	573,068	323,789	2,117,943	1,443,820	674,123		
No income <sup>1</sup>	47%	47%	48%	31%	26%	41%	54%	56%	51%		
One minimum salary <sup>2</sup>	25%	24%	28%	30%	32%	25%	23%	20%	30%		
More than one minimum	18%	19%	17%	23%	24%	22%	16%	16%	15%		
salary, but less than two <sup>3</sup> More than two minimum salaries, but less than three <sup>4</sup> More than three minimum salaries	6% 2%	7% 2%	3% 1%	10% 3%	12% 4%	2%	4% 1%	5% 2%	2% 1%		
Not specified	2%	1%	2%	3%	3%	3%	1%	1%	1%		

Table 4.2 Age groups, occupation, duration of regular workday and income of working children in economic activities, by gender.

Source: Tabulados básicos, MTI 2009, (INEGI 2009c) <sup>1</sup> Includes employed children who do not receive an income and those who are paid in kind <sup>2</sup> \$53.19 Mexican pesos or \$4.08 US dollars, per day <sup>3</sup> Higher than \$4.08 dollars, but less than \$8 dollars, per day <sup>4</sup> Higher than \$8 dollars, but less than \$12 dollars per day <sup>5</sup> More than \$12 dollars per day

Table 4.3 Contribution to household income, reason why they work and consequences of
not working of working children in economic activities, by gender

Population 5-17 years old in		National		More urban areas			Less urban areas			
economic activities	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	
Contribution to household income	3,014,800	2,016,888	997,912	896,857	573,068	323,789	2,117,943	1,443,820	674,123	
Part of their income or all their income goes to their family	34%	36%	29%	40%	46%	30%	31%	32%	28%	
Doesn't contribute to the family income <sup>1</sup>	66%	64%	71%	60%	54%	70%	69%	68%	72%	
Reason why they work	3,014,800	2,016,888	997,912	896,857	573,068	323,789	2,117,943	1,443,820	674,123	
The household needs their economic contribution	12%	12%	12%	11%	11%	13%	12%	12%	12%	
The household needs their work	29%	27%	32%	17%	14%	23%	33%	33%	35%	
To learn a skill	20%	24%	13%	17%	19%	13%	22%	26%	13%	
To pay for their school and/or their own expenses	23%	22%	26%	33%	36%	27%	20%	17%	25%	
Don't want to attend school	4%	5%	2%	4%	6%	1%	4%	4%	2%	
Other reason	12%	10%	15%	18%	15%	22%	9%	8%	12%	
Consequences of not working										
For the Household	3,014,800	2,016,888	997,912	896,857	573,068	323,789	2,117,943	1,443,820	674,123	
They would have to hire someone to replace the child work	5%	5%	4%	3%	3%	4%	6%	6%	5%	
Household income would be affected	17%	18%	15%	17%	18%	15%	17%	18%	15%	
Other consequence	22%	23%	21%	15%	15%	15%	25%	26%	23%	
There would be no consequences	55%	53%	59%	64%	63%	65%	51%	49%	56%	
Not specified	1%	1%	1%	1%	1%	1%	1%	1%	1%	
For the child	3,014,800	2,016,888	997,912	896,857	573,068	323,789	2,117,943	1,443,820	674,123	
There would be no money for his clothes and/or entertainment	30%	30%	30%	39%	43%	33%	26%	25%	29%	
Wouldn't learn a trade and would become irresponsible	19%	24%	10%	11%	14%	7%	23%	28%	11%	
Would go back to school or would do domestic work	3%	2%	5%	2%	1%	3%	3%	2%	7%	
Other consequence	6%	6%	5%	6%	6%	6%	6%	6%	4%	
There would be no consequences	41%	38%	48%	40%	36%	49%	42%	39%	48%	
Not specified	1%	1%	1%	1%	1%	2%	1%	1%	1%	

Source: Tabulados básicos, MTI 2009, (INEGI 2009c) <sup>1</sup>Some of these income is used self-consumption, for their own school expenses or their own use and is not reported as a contribution to the family income.

	National			More urban areas			Less urban areas		
	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls
Age groups	19,029,318	8,789,520	10,239,798	8,387,347	3,958,149	4,429,198	10,641,971	4,831,371	5,810,600
5 to 9 years old	26%	27%	25%	25%	25%	24%	27%	29%	25%
10 to 13 years old	35%	36%	34%	35%	36%	34%	35%	36%	34%
14 to 17 years old	39%	37%	41%	41%	39%	42%	38%	35%	40%
School attendance	19,029,318	8,789,520	10,239,798	8,387,347	3,958,149	4,429,198	10,641,971	4,831,371	5,810,600
Attends school	89%	91%	88%	92%	92%	92%	87%	89%	86%
Do not attend school	11%	9%	12%	8%	8%	8%	13%	11%	14%
Not specified	0%	0%	0%	0%	0%	0%	0%	0%	0%
Hours used in									
domestic work (8)	19,029,318	8,789,520	10,239,798	8,387,347	3,958,149	4,429,198	10,641,971	4,831,371	5,810,600
Less than 15 hours	86%	93%	80%	89%	93%	84%	84%	94%	77%
15 to 24 hours	8%	4%	11%	7%	4%	9%	9%	4%	13%
25 to 34 hours	2%	1%	4%	2%	1%	3%	3%	1%	5%
35 or more hours	2%	0%	4%	2%	0%	3%	3%	0%	5%
Not specified	1%	1%	1%	1%	1%	1%	1%	1%	1%

Table 4.4. Children between 5 and 17 years old doing domestic work

Source: Tabulados básicos, MTI 2009, (INEGI 2009c)

In addition to long working hours, agriculture has the disadvantage of being the worst paid job. Most children who work in agriculture (73%) do not receive any kind of payment, and if they do, it is under 4 dollars per day. The best incomes for girls also come from the formal sector in construction; but since it is formal work, the percentage of girls working in this sector is almost nonexistent. Girls are not paid when they participate in informal construction work. In general, younger women have lower incomes than younger men, in both cases an average of less than one minimum salary. Agriculture and commerce are the two sectors in which the most children do not have an income.

We can observe in table 4.3 that even though most arguments stress the correlation between family income and child labor, just 34% of working children in Mexico share their income with the family. From that 34%, half of them give all of the money they earn to their family, while the rest give out half or less. This could be related to the reason why children work. Just a small proportion of children (15%) reported working because their family needs their economic contribution. However, it seems contradictory that, while more girls report working because their family requires their income, a smaller proportion of girls than boys contribute to family expenses (table 4.3).

One of the main arguments against child labor has to do with the risk of having an accident. In general, selling food and providing services seem to be non-harmful activities. However, based on data from the Module on Child Labor (INEGI 2009c), most work accidents take place in agriculture (33%), manufacturing industry (22%), services (21%) and commerce (16%). Even when boys are more susceptible to having an accident than girls (of every ten children that have an accident, eight are boys and two girls), few accidents take place in construction, and they almost always receive medical attention. In general, boys are significantly more exposed to risks than girls, but data suggest that girls are less likely to receive medical attention, especially when working in services or commerce, where they also suffer more accidents. Even though boys seem to receive more medical attention, those who work in services are also less likely to be attended.

Even though most children work in inadequate places (mines, heights, places without light or ventilation, streets, bars, etc.), there are relatively few accidents. At least nine out of ten children work in non-adequate places (INEGI, 2009c). Based on the

conditions under which they work, the proportion of accidents is slightly higher for boys (6.5%) who work in inadequate places than for girls (3.15%), but the average rate of accidents in adequate places (4.5%) and accidents in places that are not good for children is not significant (5.4%). One of the main problems is that they do not use any kind of protection while working.

National data suggests that most children work because their work is needed by their family and at home, and not because the primary need is the money they can get while working. This is especially the case for girls, as it can be seen in table 4.3. There is a clear difference between the requirement for boys and girls to learn a skill. This is the second most important reason why young men work, while more girls work to pay their school and expenses, particularly when they get older (table 4.3). It is interesting to see that even though most children drop out of school because they feel they do not have an aptitude for studying (figure 4.1.), just 5% of children work because they do not want to go to school.

In general, boys and girls in urban areas work more hours and have better incomes than those in less urbanized areas (table 4.2). Almost 96% of working girls in rural areas perceive less than 4 dollars per day. Of these, 51 percent have no income at all; the case for boys is worse, since 56 out of 100 are not paid. In rural areas, more children work because their family needs their work or their income (table 4.3). So, it can be argued that child labor in less urban areas represents more of a survival strategy than in urban areas, in which more factors are involved. And even when the consequences of not working are not clear, rural areas depend more on it.

In summary, current data on child labor suggests that children do not necessarily quit school because they need to work. In general, families require children's work more than money, especially in the case of girls. Few children work as a way to stay out of school, and school attendance among working children is generally high. Actually, many children work to pay their school and daily expenses. Even though most boys and girls work selling food and drinks, or manufacturing goods, incomes in these areas are the lowest; these are also the places where they face more risks because of the working conditions or exposure to dangerous substances, tools, or equipment, among other things. As younger people get older, interest in working to learn an occupation decreases, and the need to work because of a need of economic resources also increases. This is especially significant for boys between ten and thirteen years old. Interest in attending school also decreases with age.

As table 4.5 suggests, in less urbanized areas the link between child labor and poverty is more evident. The rate of occupation is higher, while children's income is lower and the need for it is greater; also, more girls work and do not attend school. In rural areas, working conditions are better than in large cities. In urban areas, more children work in inadequate places, face more risks while working, and work more hours. However, in rural areas children have more accidents. Finally, in rural areas domestic work has a higher negative effect on children. More children work for long hours and do not attend school.

	National		More urban areas			Less urban areas			
	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls
Rates calculated against the popula	tion aged	5 to 17	years						
Rate of children in economic activities (employed)	10.7	14.1	7.2	7.1	9.0	5.2	13.6	18.2	8.8
School absenteeism rate	9.5	9.8	9.1	6.8	7.4	6.3	11.6	11.8	11.4
	Rates calculated against population in economic activities (employed), aged 5 to 17 years								
Rate of employed children that do not attend school	39.7	41.8	35.3	37.9	41.7	31.1	40.4	41.9	37.3
Rate of employed children that work 35 hours or more per week	31.9	34.6	26.4	35.9	40.4	28.1	30.2	32.3	25.6
Rates calculated against the populat	Rates calculated against the population aged 5 to 17 years, doing domestic work								
Rate of population doing domestic work that do not attend school	10.6	9.5	11.5	8.0	7.6	8.2	12.7	11.0	14.1
Rate of population in household chores for 35 hours or more er week	2.4	0.4	4.1	1.9	0.4	3.2	2.7	0.4	4.7

Table 4.5 Rates of working children between 5 and 17 years old in economic activities and domestic work

Source: Tabulados básicos, MTI 2009, (INEGI 2009c)

## 4.2 RELATIONSHIP BETWEEN CHILD LABOR AND INCOME: THE MODEL

These descriptive data suggest a strong relationship between child labor and income, yet it also seems likely that other factors influence parents' decision to allow their children to work or not. As argued in the literature, child labor is also influenced by characteristics of the child, the family, and the place of residence; the probability of working or not depends on the correlation of many factors. Therefore, based on the descriptive data and on the existing literature, we can expect a higher probability of working the older the child, especially in the case of boys. We can also expect that the presence of women as heads of household and the educational level of the head of household will decrease such probability. The literature also suggests that the presence of older siblings can help reduce the probability of having younger children working. This is consistent with previous results that suggest that the presence of younger siblings increases the likelihood of working for older siblings.

The main objective of this section is to analyze to what extent the association between income and child labor is affected by the fact that the head of households with more education tend to prevent young children from working—especially in the case of economic activities. It is necessary to understand the way in which child labor differs depending on the characteristics of the household, the child, and the town in which they live.

### The Method

To analyze the effect these factors have on the probability that a child will work, I use two different models. First, I use a logit model to analyze the probability of working or not. The logit model or logistic regression allows us to establish the relationship between a dichotomous dependent variable (in this case child labor) and a set of predictor variables. It models the logit-transformed probability as a linear relationship with the predictor variables. In formal terms, y is a Dummy variable indicating failure/success with 0/1 and p is the probability that y is 1, p = prob (y = 1). In this case, y is the probability of working and can only take two values: (1) when the boy or the girl works and (0) when they do not work; both are mutually exclusive categories. yi =  $\begin{cases} 1 \text{ if the child } i \text{ works} \\ 0 \text{ if he doesn't} \end{cases}$  with the probability of  $\pi i$  and  $1-\pi i$ , respectively.

x1, x2... xk are predictor variables. The logistic regression of y over x1, x2, ..., xk estimates the value of the parameters for  $\beta 0, \beta 1, \beta 2, ..., \beta k$ , via maximum likelihood method.

$$logit(p) = log(p/(1-p)) = \beta_0 + \beta_1 * x_1 + \beta_2 * x_2 + \dots, \beta_k * x_k$$

This can be abbreviated as Logit  $(\pi i) = \alpha + \beta x_i + \varepsilon$ 

In terms of probability this equation can be translated in the following way:

$$P = \exp(\beta_0 + \beta_1 x_1 + \beta_2 x_2, \dots, \beta_k x_k) / (1 + \exp(\beta_0 + \beta_1 x_1 + \beta_2 x_2, \dots, \beta_k x_k))$$

I use a second model to analyze the relationship between income and working hours. I use Ordinary Least Squares to regress working hours against income. When using domestic work as part of the description, descriptive data suggest that the one of the principle differences between boys and girls is the amount of time spend working. In order to better observe the differences between boys and girls, when using child labor as domestic work and economic activities, I use hours in economic activities, doing domestic work, and doing both. By this analysis I try to see if using working hours, rather than a dummy variable for working or not, helps to better describe child labor.

### The Data

To carry out both estimations, I used the data of the Child Labor Module, (MTI, its acronym in Spanish) of the National Survey of Occupation and Employment (ENOE, its acronym in Spanish) 2009. The MTI 2009 is the third module that has been carried out

by INEGI as an annex to ENOE. The main objective of the module is to obtain the latest information on the socio-demographic characteristics of the children between five and seventeen years of age who are engaged in economic, domestic, and school activities nationwide. The sample is nationally representative and was obtained from the sample of households in the ENOE with the presence of children in the selected age range. The survey was conducted during the fourth quarter of 2009, and 103,262 households were interviewed; the estimate was based on 101,021 observations.

The Child Labor Module divides the children into two main categories: employed (*ocupados*) and unemployed (*no ocupados*). The first are those engaged in economic activities, "activities intended for the production of goods and services for the labor market or for subsistence production" (INEGI, 2009b, p. 47). The unemployed includes those engaged in marginal activities, domestic chores, or schooling. Unlike the first two modules, in this module it is possible to identify marginal activities and work on the streets; I include these in my definition of work and I describe them further on. The MTI 2009 is the first module to differentiate these activities and the second to include both rural and urban population; therefore, it is the first module with sufficient complete information to analyze child labor in its different nuances.

### The variables

To estimate the relationship between child labor and personal characteristics of the household and the community, I consider fourteen variables as predictors of child labor (one of them being an interaction term; see table 4.6). The first variable used is income. I use two different measures of income: per capita income and the squared per capita income. To calculate the per-capita income, I used the sum of the income of all members of the family (variable precoded by INEGI) without children's income, divided by the total number of household members. This measurement is problematic, since the relationship between the income of the child and the income of other family members could be exponential, which creates a non-linear relationship between income and child labor. However, it is the best measure of income available.

The use of the squared per capita income is based on preliminary results. The first results showed a positive correlation between income and child labor, which is not intuitive. Therefore, I analyzed income by well-being level, as previously described, and it showed to be non-monotone; finally, I corroborated the nonlinearity with a graph (see appendix, figure 1). I also used the logarithm of income, but the best-fitting model was when using squared per capita income. Finally I added the variable Well-being (Bienestar) as control variable, and in two cases the model was improved. In order to corroborate the decision of incorporating the squared per capita income and Well-being as control variable, I used three different goodness of fit measures, for the logistic regression. First, in all of the models I use a classification table of sensitivity and specificity and the ROC (Receiver Operating Characteristic) Curve, which displayed a lack of power of the model when including domestic work as part of the definition. I used the Hosmer-Lemeshow test to measure the goodness of fit when using economic activities, though it has been described as problematic by some authors—see for example, Allison's discusion about the Hosmer-Lemeshow test for logistic regression (Allison,

2013). I used this test considering that the size of the sample increases the power of the tests. I also took into consideration that when the logit is non-monotone increasing (decreasing), as seems to be the case, the possibility of having more power to detect lack-of-fit due to model misspecification increases (Hosmer, Hosmer, Le Cessie, & Lemeshow, 1997). Nonetheless, the literature has been the main basis for variable selection.

In order to analyze the characteristics of the context in which child labor takes place, I use level of marginality of the place of residence and identify those households in rural areas. As for characteristics of children, I take into account age and gender. Among the household characteristics, I consider both the presence of older siblings and the presence of younger siblings. I also include the level of schooling and the gender of the head of household; the fact that the head of household performs an economic activity, the presence of both parents, and the presence of other relatives in the home. Finally, since being in a less urban area decreases the probability of being engaged in economic activities, I added an interaction term between being in rural areas and the effect of the occupation of the household head. However, in all cases I made the selection based first on the discussion presented in the previous chapter.

It is important to mention that although some studies have focused on the relationship between child labor and schooling (Buchmann, 2000; Edmonds, 2008; López Villavicencio, 2005), in this study I decided not to include school attendance as an independent variable since there is a major problem of endogeneity. It is unclear whether

child labor causes children to leave school or if school attendance has a negative effect on child labor.

Name	Description	Mean	Std.Err.
Dependent Variables: used for th	e logit models		
Employed	Dummy variable coded 1 if children is engaged exclusively in economic activities.	0.104	0.306
Economic and non- economic activities	Dummy variable coded 1 if children perform either economic and non-economic activities (this is, domestic work and marginal activities) or both.	0.708	0.454
Work out of necessity	Dummy variable coded 1 if children work because their work or their income is needed for the household.	0.075	0.264
Dependent Variables used for the	e OLS regression models		
Working hours in economic activities	Total amount of working hours in economic activities, per week.	2.5	9.73
Working hours in non- economic activities	Total amount of working hours in domestic work, marginal activities and unpaid work, per week.	.89	4.14
Working hours in economic activities and domestic work	Total amount of working hours in both: economic activities and domestic work, per week.	1	5.03
Independent variables:			
<i>Income</i> Per cápita income	Family income not including the child's income, divided by the total family members, in US dollars (exchange rate 12.89 mxn pesos)	96.64	0.343
Characteristics of Children Age	Children's age in years.	11.15	3.731
Being a boy	Dummy variable coded as 1 if male, otherwise coded 0.	0.510	0.499
Characteristics of head of househ Having a male head of household	<i>bold</i> Dummy variable coded as 1 if male, 0 if otherwise.	0.779	0.415
Schooling of head of household	Highest educational level obtained by the head of household.	4.040	1.669

Table 4.6. Description of variables, means and standard error

Name	Description	Mean	Std.Err.
Head of household in economic activities	Dummy variable coded as 1 if the head of household is engaged in economic activities, otherwise coded 0.	.83479	.37136
Family composition			
Older siblings	Total number of older siblings.	0.675	0.921
Younger Siblings	Total number of younger siblings	1.675	0.002
Presence of both parents	Dummy variable coded as 1 if both parents living at home, otherwise coded 0.	0.605	0.489
Other family members in the same household	Dummy variable coded as 1 if they share the home with other members of the family, otherwise coded 0.	.28971	.45363
Characteristics of the place of re Level of marginality	<i>esidence</i> Categorical variable coded according to INEGI's levels of marginality. The following values can be obtained: 1 very low, 2 low, 3 medium, 4 high and 5 very high.	1.732	1.072
Rural	Dummy variable coded as 1 if it is a rural zone, otherwise coded 0.	0.212	0.408
Control variable for regressions	in the appendix (tables $A.1,A,2$ and $A3$ )		
Wellbeing*	Categorical variable coded 1 if monthly income of those living in the countryside is under 52 US dollars or under 73 US dollars for those living in urban areas; coded 2 if monthly income in rural areas is between 53 and 99 US dollars, and between 74 and 156 US dollars in urban areas; and coded 3 if income is higher than 99 US dollars in rural areas and 156 US dollars in urban areas.	1.660	0.002

Table 4.6. Description	of variables, mear	ns and standard error
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\* See chapter 3 for a complete explanation on how the wellbeing line is established

As I mentioned previously, most estimates on child labor in Mexico are based on the definition of occupation of the ENOE. and these limit their description to the relationship between school attendance or income, and doing economic activities. With the exception of Christensen and Juárez (1987), no previous research includes domestic work, and much less takes into account children under 12 years old. Utilizing INEGI data, López Villavicencio (2005) examines child labor as one of the factors that influence the likelihood of school attendance for children between 6 and 17 years old; the author does not include information about economic activities for children under 12 years old. In order to fill these literature gaps, in this research I use two different definitions of child labor. The first is the simplest definition of work; it is equivalent to the definition of employed (*ocupados*) from INEGI, and it includes only people carrying out economic activities. The second definition includes both economic activities as well as noneconomic and domestic work. This means that, in addition to economic activities and domestic work, I include actions "carried out to meet the personal basic needs of the home or the community, as well as those activities to obtain revenue, but not imply the production of goods or the generation of services" (INEGI 2009b, 47). This definition includes marginal and disguised begging activities, and I refer to them in Table 4.6 as *economic and non-economic activities*.

#### The need to use other measures of child labor

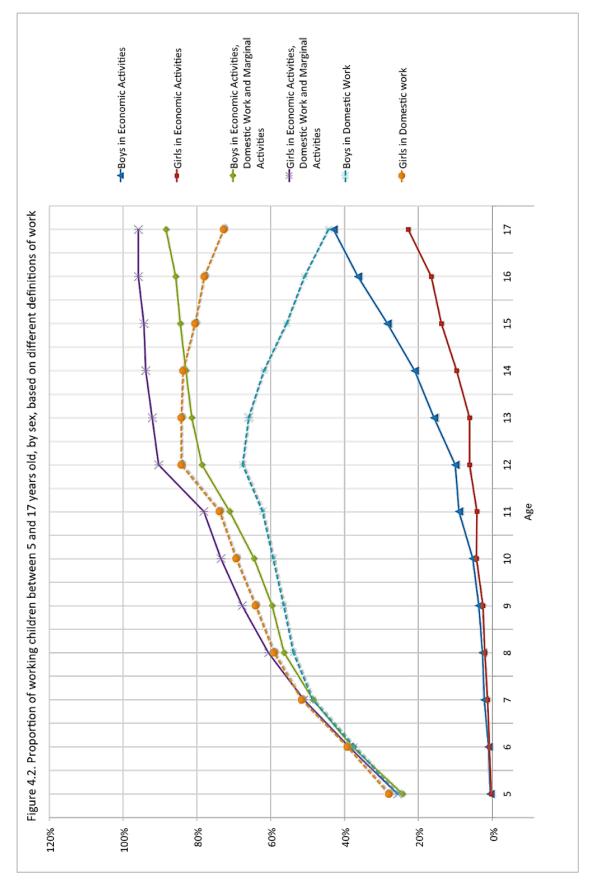
The problem of analyzing a definition based solely on work status is that there is an underestimation of child labor, especially of the work done by children under fourteen years old, who are concentrated in non-labor market activities. This definition also does not take into account domestic work, and this minimizes the work done by girls. In contrast, a wider definition that includes domestic chores overestimates child labor since it includes those who worked at least one hour in activities within the home. This is problematic because working one or two hours does not necessarily mean that they are engaged in child labor as defined in Chapter 2, and as defined by the International Labor Organization (ILO). In this case, children who perform an activity that is often considered formative—such as making their bed or cleaning up the kitchen, for example—could be counted as children performing child labor, even if this is not the case. This difficulty in choosing an adequate definition of child labor is due in part to the lack of better data, but also to the attempt to use statistics that can be universally applied and which are based on the methodology proposed by the ILO, and not necessarily by the situations confronted by each country.

The use of each of these definitions tells a very different story about child labor among children. An example of this can be seen in figure 4.2; it shows the variation in the proportion of boys and girls who work according to the definition used. As observed, when only economic activities are considered, the proportion of boys working is greater than girls. In contrast, by incorporating domestic work as part of the definition, this relationship is reversed, resulting in a higher proportion of girls engaged in work. Likewise, the total of both boys and girls increases significantly when a broader definition is used. While four out of every one hundred women age eleven perform economic activities, seventy-eight of every one hundred carry out what I call *economic and non-economic activities*; i.e., they perform economic activities, domestic work, and/or marginal activities. In the case of boys, when I include the broader definition in the same age range, eight out of every one hundred are involved in economic activities, and seventy-one out of one hundred perform some sort of economic or non-economic activity. It is interesting to see that, with age, both boys and girls move from domestic work to performing economic activities. Therefore, in order to compensate for under and over-estimation of child labor, and to better observe differences between boys and girls, I also use working hours in economic activities and domestic work (as described in table 4.6). Using working hours is important because important gender based differences that are not visible when not including working hours.

Besides the differences that occur depending on the definition of child labor used, I am interested in analyzing the difference between those children who report working due to necessity and those who work even when they do not need to. Hence, in addition to analyzing child labor from two different definitions, I compare the determinants of child labor of these two definitions with the determinants of work because of necessity. My goal is to know what factors behave differently when there is really a need to work, i.e. when we can assume that there is no way for the child to stop working without affecting the well-being of the household.

For this purpose I built the variable *work out of necessity* (see Table 4.6) from three variables of the ENOE: the reason for working, the consequences for the household if the child stops working, and the consequences for the child. I included the following answers with respect to the reason for working: the household needs their financial contribution, or the household needs their work. The consequences for the household related to work due to necessity include needing to hire someone to work in place of the child, and the effect on household income. Finally, the lack of money for the child's schooling, clothing, or fun contribute to the child's need to work.

127



Source: Made by author with data from the Module of Child Labor (MTI 2009, INEGI)

#### 4.3 RESULTS

For the first part of my analysis, I estimate the relationship between child labor and income using the three aforementioned definitions of work. Based on preliminary results, I observed a non-linear relationship between income and child labor; the linear model seemed inadequate, even for approximation. Based on the scatter diagram between working hours and income, I decided to try different nonlinear polynomial regression models. The best fit took place with a quadratic regression model. I added the squared per-capita income. As mentioned, in most cases a threshold was found from which the relationship between income and child labor changed its direction. Table 4.7 shows the increasing and then decreasing correlation between income and child labor.<sup>2</sup> They show that even when we use different definitions of child labor, the probability of working among the poor increases as income increases, but at certain point, this relationship in the probability of working changes direction, and the probability of working decreases as income increases. This suggests that there exists a minimum level of family income required to impact the probability of reducing work done by children.

 $<sup>^{2}</sup>$  In order to better observe this distribution, I analyze the correlation between income and child labor for each level of well-being. These logit regression models can be found on the appendix and help identify a smaller rank in which the threshold can be found. It also allowed me to see that in some cases the relationship is not just convex or concave; it has an "s" form.

Economic	Activities	Economic Activities, domestic work and marginal activities		Work because their work or income is needed	
Marginal effects	Odds Ratio	Marginal effects	Odds Ratio	Marginal effects	Odds Ratio
0.0002***	1.005***	0.0001***	1.0007***	0.0002***	1.006***
(.00001) 000003*** (.0000)	(.0003) 1.0000*** (.0000)	000003*** (.0000)	(.00014) .999998*** (.0000)	(.00001) 000002*** (.0000)	(0.0003) 99999*** (0.0000)
0.0161***	1.3998***	0.0492***	1.3044***	0.0108***	1.502***
(.0002)	(.0067)	(.0004)	(.0035)	(.0002)	(0.0095)
0.0424***	2.3941***	-0.0808***	0.6454***	0.0212***	2.205***
(.0012)	(.0566)	(.0028)	(.0100)	(.0008)	(0.0600)
-0.0083***	0.8472***	-0.0122**	0.9355*	-0.0055***	0.821***
(.0019)	(.0312)	(.0047)	(.0241)	(.0012)	(0.0339)
-0.0108***	0.7974***	-0.0047***	0.9750***	-0.0067***	0.776***
(.0004)	(.0062)	(.001)	(.0052)	(.0003)	(0.0069)
0.0197***	1.6025***	0.0372***	1.2147***	0.0072***	1.345***
(.0016)	(.0682)	(.0050)	(.0309)	(.0011)	(0.0638)
-0.0062**	0.8801**	-0.0183**	0.9052**	-0.0076***	0.757***
(.0023)	(.0412)	(.0064)	(.0316)	(.0015)	(0.0395)
-0.0016	0.9682	-0.0170***	0.9124***	0.0021***	1.083***
(.0009)	(.0177)	(.0016)	(.0077)	(.0006)	(0.0240)
0.0068***	1.1516***	.0145***	1.0813***	0.0042***	1.172***
(.0005)	(.0125)	(.0020)	(.0119)	(.0003)	(0.0140)
-0.0064**	0.8722**	-0.0417***	0.8023***	-0.0055***	0.803***
(.0020)	(.0385)	(.0064)	(.0266)	(.0012)	(0.0393)
0.0088***	1.2017***	0.0223***	1.1278***	0.0043***	1.176***
(.0006)	(.0145)	(.0017)	(.0102)	(.0004)	(0.0163)
0.0042	1.0902	-0.0078	0.9591	0.0009	1.034
(.0036)	(.0784)	(.0088)	(.0452)	(.0022)	(0.0831)
0.0197***	1.4442***	0.0095	1.0532	0.0127***	1.521***
(.0045)	(.1087)	(.0092)	(.0530)	(.0029)	(.1282)
-7.150***		-1.7363***		-8.264*** (.1186)	
	· ·	(.0517) 101,021		101,021	
		75.43%		92.66% 0.8521	
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Table 4.7. Marginal effects and odds ratio for logit regression models predicting child work (standard errors in parentheses), 2009

\* p < .05, \*\* p < .01, \*\*\* p < .001. Standard errors appear in parentheses.

Source: 2009 Module of child labor, ENOE

Some authors argue that family assets, or capital, increase activities done by children. This results from the need for labor supply when the household is not able to hire someone else to do the work. So, when families have a small business or more land for agriculture, children are more easily involved in work. This can easily happen when the household head performs economic activities or when the family sells on the streets. So, in those cases, family income will be higher and also, it is more likely that children work.

The odds of working are .005 greater for children with a low income relative to children with higher income, as shown in table 4.7. In other words, the risk of working decreases by 4.39 percent when per capita income increases 10 dollars. This means that a household income in a large family needs to increase more than that in order to reduce the probability of having children working. This is important since, as suggested in the literature, it directly relates to the effect of conditional cash transfer programs on child labor. When the conditional cash transfers are not high enough to compensate for children's income, they will have an impact on school attendance and health (which are related to the conditions imposed by the programs), but not necessarily on child labor (Ravallion & Wodon, 2000; Basu & Van, 1998; Edmonds, 2008). For the case of the Progresa program in Mexico, Skoufias and Parker (2001) found a higher decrease in the probability of working for children receiving conditional cash transfers when the opportunity cost of schooling is low: when children's income is not high and therefore, can be compensated by the cash transfers. However, the impact of these transfers decreases as the possibility of entering to formal employment increases.

This implies that providing an economic support lower than required to reduce the opportunity cost of schooling probably does not have an impact on the likelihood of children working. In a similar way, but in the opposite direction, when financial support is too high, it does not necessarily generate the same proportional changes regarding the likelihood of reducing child labor. Therefore, more money may be given than necessary to help improve those in a poverty trap, as defined by Banerjee and Duflo (2012), with which poverty alleviation wouldn't be efficient.

Evidence in favor of this argument can be observed when doing the same regressions with the data divided by level of well-being (see table 4.6 for an explanation of how the variable is constructed). Tables A.1, A.2, and A.3 in the appendix show a non-linear relationship between income and the probability of working. In the case of very poor people (meaning the poorest among those people with a monthly income under fifty-two dollars) a ten dollar increase in per capita income decreases the odds of working by almost 97% (table A.1 in the appendix). However, the same increase in income is not likely to reduce the odds of working when the per-capita income of a family is between 53 and 99 US dollars in a rural area and between 74 and 156 US dollars in urban areas (table A.1 in the appendix); in this case, the odds of working as income increases also increase. The odds of working do not decrease even when income has reached a basic level of well-being. Even though it is not clear when the relationship gets inverted, given the small effect of the income per capita squared, it can be suggested that income needs to be high in order to significantly reduce the odds of working.

This non-linear relationship between income and child labor is more evident when introducing domestic work and marginal activities as part of the definition of child labor (see table A.2 in the appendix). In this case, the correlation between income and child work for those under the minimum level of well-being is positive; a ten-dollar increase in per-capita income increases by 4.2% the odds of doing economic activities, domestic work, or marginal activities. For those with a slightly higher income, changes in per-capita income have no effect on the odds of working. An increase in income does not decrease the likelihood of working until families have reached a level of well-being. In summary, it is not possible to affirm that an increase in income reduces, in all cases, the probability of working, especially when including domestic work and marginal activities as part of the definition. There is not a linear relationship between income and child labor.

It is not surprising to see that the probability of working in economic activities increases with age. The odds of working in economic activities are 40% greater for older children relative to younger; this is related to a higher possibility of working in the formal sector. As children get older, the possibility of working in the formal sector increases. However, if we consider domestic work as part of the definition, the odds of working with a one-unit increase in age (one year difference), while holding other variables constant, decreases (odds ratio = 1.3044). This means that a higher proportion of small children participate in domestic work and marginal activities (see appendix STATA outputs 1 and 2).

Results also suggest differences in children activities based on gender. Using economic activities as definition of child labor, the odds of working are 140% higher for boys relative to girls; when using domestic work and marginal activities, the odds of working are higher for girls (the odds ratio when male = 1, and domestic work is considered, are .6454). Also, when we just consider those who really need to work, independently of the activity they perform, the odds of working for boys are 105% higher than for girls.

While some authors have found evidence to affirm that the presence of women as heads of households reduces child labor (Levinson, Moe, & Knaul, 2001), in this case, when children live in households where men are the heads of household, the odds of carrying out economic activities are .85, .94 when including domestic work. For both definitions, the odds of working decrease when men are present. Previous studies have found that when a woman is the head of household and there is not a grown man with whom to share the household responsibility (88% of the households with female head in this sample), they "find support in other members of the household to sustain the family." Mostly, the support comes from the children (Poder Ejecutivo Federal, 1995, p. 79). This means that the lack of economically active men increases the probability of children's participation to generate income for the household (Rubalcava & Murillo, 2006).

Education of the household head is also a significant variable that decreases the odds of working, independent of the definition used. The odds of working in economic activities are .8472 times greater for a unit increase in the education of the household head (.9750 when including domestic work and .776 when they work because they need

to, as shown in table 4.6). When the household head has completed at least one year of high school, the probability of working decreases from 16 percent (when they have never attended school) to 7 percent. However, if we consider domestic work, the probability of working for the same amount of schooling, will decrease just 2 percent. This means that a higher level of education has a bigger impact on economic activities, suggesting a different valorization of domestic work (see appendix STATA outputs 3 and 4).

Children are not exempt from the influence exercised by their parents' activities. When the household head caries out economic activities, either in a family business or as an employee, the probability of working increases in all cases; but the odds of working in economic activities (odds ratio: 1.60) are higher than the rest (1.21 for economic and non-economic activities and 1.34 for children who need to work), suggesting a pulling effect to similar activities. However, these odds decrease when children live with both parents. Results in appendix (STATA output 5) show that, for somebody who lives with both parents (or guardians), being the household head in economic activities, only increases the predicted chances of working in the same or similar activities by 3.5 percent. The average odds of working when children live with both parents are .8801 for economic activities, .9052 when including domestic work, and .757 when they work because of need.

There are many speculations about the effects of having more siblings in the same household. Some authors argue that older children work in order to facilitate school attendance of smaller siblings (Edmonds, 2008); others consider that, in many cases, small children are not able to attend school because the family does not have enough

money to keep all at school (Banerjee & Duflo, 2012). Results show that both possibilities can be true. The presence of older children decreases the odds of working, while having younger brothers and sisters increase the likelihood of working. However, the primary effect results from the presence of younger children. Moreover, having older siblings has no effect when we just consider economic activities; its effect relates to domestic work and marginal activities. For every child without older siblings working in economic and non-economic activities, less than one child with older brothers and sisters works (.9124). However, having younger siblings increases the odds of working in economic activities by 15%, relative to those without; it goes down to 8% when including domestic work. This difference in the changes of odds that results from the definition used suggests that most children whose probability of working increases because of having younger siblings are more likely to work in economic activities. This change in odds is also mediated by the presence of other family members, which in all cases decreases the likelihood of working. This change in odds is higher for children who do economic activities; the odds ratio when children live with other family members is .8722 for economic activities and .8023 for economic and non-economic activities. In other words, results suggest that extended family decrease the odds of working in economic activities, but not necessarily in domestic work, while having younger brothers and sisters increases the probability of working in economic activities.

Even though a significant amount of child labor takes place in agriculture, it is not the fact of being in a rural area that increases the odds of working, but being in a situation of marginality. The odds of working in economic activities increase 20% (a little bit less when including domestic work, 12%) for children who live in places with high level of marginality, relative to those in less marginalized places.

It is important to underscore that when a child needs to work the effect of most variables is similar to the effect of the same variables when regressing economic activities. The only difference is a smaller change in the odds ratio. The only variable that behaves in a completely different manner is the presence of older siblings. Having older siblings increases the odds of working because of need by 8 percent.

#### Introducing working hours: Regressions with Ordinary Least Squares

When we include domestic work and marginal activities, the multiplicity of factors influencing child labor is the result, in part, of the above-mentioned overestimation (see the section titled *definition of child labor*). This overestimation is largely due to the way statistics accounts for work. As previously mentioned all activities are counted if they were carried out at least one hour during the week prior to the survey. This applies equally for economic activities, domestic work, and marginal activities. This definition of child work, on the basis of a small period of time, is especially problematic for a society in which household chores carried out by minors and especially by women are seen as formative and, therefore, necessary, and where learning a trade is also seen as something positive. Many boys and girls who report carrying out domestic work are simply contributing what many perceive to be the needs of the home: makings their beds, washing their dishes, or sweeping the yard. These activities do not necessarily influence

the child's development negatively; therefore, as defined by the International Labor Organization, they should not be considered child labor.

Also, using domestic work is especially problematic when we want to understand child labor in relation to poverty. Domestic work could imply that child labor is an urban problem and not necessarily a rural one (especially when using a dummy variable for work). Apparently, there are fewer children doing domestic work in rural areas. It does not provide a clear relationship between poverty and child labor. This kind of measurement overestimates child labor. It is wrong to think that domestic work is negative or that it can be considered as such, at least not all the domestic work that is reported on the surveys. Based on working hours, 80% of girls work fewer than 15 hours per week, while 93% of boys do so (see table 4.4). But even if we are overestimating domestic work, we should not stop taking it into consideration. This overestimation also takes place when using only economic activities as a dummy variable; a significant number of children work fewer than 15 hours per week (see table 4.2). Although we do not know precisely how much of the reported domestic work is exploitation, we also do not know how much of it is not.

Therefore, in order to avoid overestimation due to the use of work condition as main variable, in this section I use working hours in economic activities, non-economic activities. and both. As already argued, using working hours of domestic work demonstrates significant differences between boys and girls, especially when unpaid domestic work is included, since it is one of the principle activities done by girls. In Table 4.7, I compare ordinary least square regression coefficients of working hours in economic activities with domestic work and with working hours in both.

Even though most of the results are similar to those in table 4.7, interesting differences were found between the ordinary least squares and the logistic regression models. The non-monotone relationship seen in the logit regression models applies for working hours in economic activities, but not for hours in domestic work. This suggests a problem of endogeneity between income and the current definition of economic activities. Economic activities as defined by INEGI imply an economic transaction, which in most cases is a payment. Therefore, there is a correlation between economic activities and per-capita income. That could explain why, when I use only non-economic activities the correlation between child work and income is linear and negative; meaning that for a one unit increase in per-capita income, we would expect a .0008-unit decrease in working hours of non-economic activities. Linearity is lost when including both types of activities.

Using working hours instead of work condition allows us to observe a movement from unpaid to paid activities, influenced by age (see table 4.8). As age increases, working hours in economic activities increase by almost .72, at the same time that working hours in non-economic activities decreases by .11. A ten-year-old child would be expected to work one hour more in non-economic activities than a child of nine years of age, while the difference between the two of them, if performing economic activities, would be expected to be just .7 hours.

	Economic activities <sup>a</sup>	Non-economic	Economic and non-	
		activities <sup>b</sup>	economic activities	
Per capita Income	0.0150***	-0.0008**	0.0141***	
i i i i	(.0005)	(.0003)	(.0006)	
Squared per capita income	-0.00002***	-0.0000007	-0.000016***	
1	(.0000)	(.0000)	(.0000)	
Age	0.7171 ***	-0.1144***	0.5964***	
	(.0091)	(.0052)	(.0103)	
Male	1.9010***	-0.8691***	1.0297***	
	(.0571)	(.0328)	(.0651)	
Male household head	-0.1890*	-0.0705	-0.2565*	
	(.0954)	(.0547)	(.1086)	
School level of household	-0.6566***	-0.0758***	-0.7304***	
head	(.0198)	(.0114)	(.0225)	
Household head in	0.4614***	0.4499***	0.9683***	
economic activities	(.0956)	(.0549)	(.1089)	
Lining with hoth generate	-0.7028***	-0.1269	-0.8518	
Living with both parents	(.1253)	(.0719)	(.1428)	
Older siblings	-0.1320***	-0.1546***	-0.3003***	
Older slotlings	(.0347)	(.0199)	(.0395)	
Younger siblings	0.5657***	0.2296***	0.7931***	
i ounger stornigs	(.0349)	(.0200)	(.0397)	
Living with other family	-0.3576**	0.11629	-0.2649	
members	(.1189)	(.0682)	(.1355)	
Mana in a 114-	0.3576***	0.1227***	0.4816***	
Marginality	(.0329)	(.0189)	(.0375)	
Rural	-0.1449	0.1270	0.05664	
Kulai	(.1764)	(.1012)	(.2009)	
Interaction between living	× ,		~ /	
in rural area and household	.7641***	0.0745	0.7779***	
head in economic activities	(.1879)	(.1078)	(.2140)	
Constant	-5.6329***	3.7668***	-1.7593	
Constant	(.1931)	(.1108)	(.2199)	
Observations	101,021	101,021	101,021	
R-squared	0.1298	0.0169	0.0929	

Table 4.8. OLS Regression Coefficients of working hours by type of work, 2009

\*p < .05; \*\*p < .01; \*\*\*p < 0.001

<sup>a</sup> All paid work and production for self consumption; it includes paid domestic work.

<sup>b</sup> Includes non-market oriented activities such as domestic work at home, taking care of other children or the elderly—unpaid work—and marginal activities (these mean work on the streets begging, taking care of cars, etc., activities in which there is not an economic transaction)

Note: standard errors in parentheses

Source: 2009 Module of child labor, ENOE

Gender differences were also observed in the OLS regression models. It is 1.9 times more likely for a boy to do economic activities, while the probability of doing noneconomic activities, relative to girls, is -.87. If we considerer working hours in both activities, boys are expected to work 1.03 more hours than girls. The presence of a male household head does not have an effect on the probability of working in unpaid activities, while it decreases working hours in economic activities. The educational level of the household head also influences the probability of working, as does the work he or she does. In all cases, a higher level of education decreases the probability of working, especially in the case of paid work (decreases almost .66 times). The impact of education on domestic work and marginal activities or community work is smaller (.076)

One of the important differences observed between models is the effect of being with both parents. When we consider working conditions only, the presence of both parents seem to decrease the probability of working (table 4.7); however, when we use hours to account for child labor (table 4.8), we can observe that living with both parents decreases the probability of working for payment, but does not influence unpaid work. Also, living with older siblings reduces the amount of hours working, seen in the logistic regression only when including domestic work. Ordinary least squares show an impact on working hours in any type of work. Something similar happens when we analyze the presence of extended family. The effect seen in the logistic model (table 4.7) is mainly the result of the impact of that variable over economic activities. With OLS it is easier to see a differentiated impact based on the type of work. The presence of other family members does not have effect on domestic work or community work. It was surprising to find no effect of rural living on working hours. I was expecting to find some effect due to work in agriculture. The lack of effect could be influenced by the period in which the survey was done, and by temporal migration of field workers; since the Module of Child Labor is a household survey and migrant field workers stay in temporal shelters which are not surveyed.

#### 4.5 VARIATIONS BETWEEN THESE MODELS AND PREVIOUS WORK

It is important to underline that the difference in the results obtained has primarily to do with the way in which income is measured. However, it also has to do, with the age of the children in the sample, and with the definition of child labor used in previous works. As correctly demonstrated by Levinson, Moe and Knaul (2001), this significantly changes the correlation between child labor and schooling. To measure the relationship between income and child labor, López Villavicencio (2005) uses the household income logarithm without taking into account the income of the child, which equals both my measurement of per capita income as well as the measurement used by Christenson and Juárez (1987). In all three cases, a continuous variable does not show the trend of the curve correctly. For this case, the best transformation of income was obtained by the square of income. Levinson, Moe and Knaul (2001) use wages as a determinant variable in the distribution of time between work, schooling, or doing both. This is not equivalent with my measurements of income.

With the exception of López Villavicencio (2005), previous research analyzes child labor and schooling from the National Survey of Income Expenditure (Encuesta

Nacional de Ingreso Gasto, ENIGH), and this only obtains information on child labor for children over the age of twelve. Moreover, both Levinson et.al (2001) and Binder and Scrogin (1999) provide as analysis for urban areas only. López Villavicencio (2005) incorporates data on schooling for children between six and seventeen years old. However, as already mentioned, ENIGH excludes information about work for children under twelve years old; this makes its estimate biased and less detailed than the measurements presented here.

#### 4.4 MOVING FORWARD

We can conclude that there are no significant differences between the probability of working in economic activities and working because of need. This can be due to the fact that economic activities, by definition, imply a payment, and most of the time the need to work is associated with the need for an extra income. Also, when children work because their work or income is needed, the coefficients in the regression model are smaller, meaning that the effect of the variables decreases relative to the logit model for economic activities. Significant differences within the models are also related to the incorporation of marginal activities and un-paid domestic work as part of the definition of child labor, and to the use of working hours instead of considering someone who works one hour per week equivalent to someone who works fifteen hours or more. Taking working hours into consideration provides a better picture of the problem, and also makes it easier to observe variations among gender and age. Based on current analysis we cannot deny differences based on gender and age. Boys' probability of working in unpaid activities is smaller than that of girls; girls are more engaged in domestic work and caring for other people. Also, as children grow, it is more likely that they will engage in economic activities. This could be due in part to the fact that, as they get older, it is easier to move from informality to formality.

The work done in this chapter indicates that gender and age are important, but does not allow us to observe how the determinants of child labor behave different according to each group. Therefore, in the next chapter I go further to analyze differences based on age and gender. My main aim is to get better insight into the influence of gender roles on parents' decisions about child labor, and also to compare variations between preliminary works and this work—variations, which I argue are based on the lack of data for children under twelve years old.

### CHAPTER 5

#### ANALYZING CHILD LABOR BY AGE AND GENDER

In theory, the regulation of child labor should help reduce the work done by children, since their age implies that they should be studying and not working. In Mexico, as in most countries, regulation has meant the establishment of age bans that prohibit child labor for children under fourteen years old. However, the regulation of child labor has shifted children's activities from the formal to the informal sector, an area in which children's work can escape regulation. This apparent lack of visibility has led to a denial and/or ignorance of the activities that the youngest children carry out. Consequently, for years, this has resulted in the lack of data on the children's participation in the labor market.

For this reason, previous studies have not analyzed the differences that can occur between children who can work legally, meaning those who can access the formal labor market, and those who cannot (cfr. with Levinson, Moe, & Knaul, 2001, or Abler, Rodríguez, & Robles, 1998). It is not possible to see if parental education or living in rural areas has the same effect on younger and older children, for example. Therefore, in the first part of this chapter I split the data between children who have access to the formal labor market, and those who are forced to work in the informal sector. I divide the sample from the Module of Child Work (Módulo de Trabajo Inantil, MTI 2009) into two large groups: a group of children under fourteen (68,242 boys and girls), and another composed of children between fourteen and seventeen (32,779 minors). I then repeat the regressions done in chapter four.

My main aim is to observe the behavior of the variables per group, with the assumption that the ability to access formal employment, or not, has a different effect on the probability of working, given that the opportunity cost of schooling is greater for those who can access the formal labor market. My hypothesis is that access to the formal market decreases the effect of some variables. If this is true, establishing age bans that restrict children's access to formal jobs would be important for those variables in which we can have some influence and help reduce child labor, such as level of marginality, parental education, or income. However, age bans can also restrict child work of younger children to unpaid work and to activities not protected by law, increasing children's vulnerability to exploitation.

In the second part of this chapter, I analyze differences based on gender. As with age, gender has always been used as a dichotomous independent variable, and the way in which different control variables or income influence each gender separately has never been analyzed. My hypothesis is that household composition influences the odds of work for boys relative to girls differently; that there is a socially accepted belief that women should be working at home and taking care of children (as suggested by Beşpinar-Ekici, 2007), and that this social-acceptance explains some of the variations between boys and girls and the type of work they perform. In the previous chapter it was possible to observe that being male or female generates important differences in the probability of working, especially when domestic work is integrated and unpaid work observed. Thus, the aim of this chapter is to further understand the age and gender variations that result from existing definitions of child labor (the age divide between labor or work) and from variations associated with prejudice based on gender. The quantitative analysis of this chapter is the basis for the qualitative work I present in Chapter Six.

# 5.1 FROM FORMAL TO INFORMAL: DIFFERENCES BETWEEN THOSE WHO CAN WORK IN THE FORMAL SECTOR AND THOSE WHO CANNOT

In order to analyze whether the differences observed in the previous chapter really have to do with differences between those who can work in the informal market and those who cannot, in this section I run previous models on two different groups: i) children under fourteen years old; and ii) children between fourteen and seventeen years of age. These two groups were determined based on the minimum age for admission to employment in Mexico, as stated in Article 175 of the Federal Labor Law. Edmonds (2005) argues that participation rates may be determined by the comparative advantage in household production that older children have in relation to younger children. In Mexico, this comparative advantage is given by the minimum age for admission to employment, which is why I divide the sample this way.

The variables and regression models are the same as those used for the entire database; therefore, I do not repeat this description here. However, the means between the two groups are not necessarily the same, and these are outlined in table 5.1.

Name	Name Description		Between 14 and 17 years old Mean	
		Mean (Std. Err.)	(Std. Err.)	
Observations		68,242	32,779	
Dependent Variables use	d for the logit models			
Dependent variables use		0.42	2220	
Economic activities	Dummy variable coded 1 if children is engaged exclusively in economic activities	.043 (.0008)	.2329 (.0023)	
Economic and non- economic activities	Dummy variable coded 1 if children perform either economic and non-economic activities (this is, domestic work and marginal activities) or both.	.621 (.0019)	.8916 (.0017)	
Work out of necessity	Dummy variable coded 1 if children work because their work or their income is needed for the household.	.024 (.0006)	.1823 (.0021)	
Dependent Variables use	d for the OLS regression models			
Working hours in	Total amount of working hours in economic	.36	6.95	
economic activities	activities, per week.	(.0120)	(.0860)	
Working hours in non-economic activities	Total amount of working hours in unpaid domestic work, marginal activities and other type of unpaid work, per week.	2.62 (.0184)	1.54 (.0050)	
Working hours in economic activities and domestic work	Total amount of working hours in both: economic activities and non-economic activities, per week.	3.02 (.0124)	8.5 (.0910)	
Independent variables:				
Income				
Per capita income	Family monthly income not including the child's income, divided by the total family members, in US dollars (exchange rate in 2009, 12.89 mxn pesos)	92.06 (.4089)	100.02 (.6275)	
Characteristics of childre	en			
Age	Children's age in years.	9.07 (0.0098)	15.50 (0.0062)	
Being a boy	Dummy variable coded as 1 if male, otherwise coded 0.	.512 (.0019)	.5087 (.0028)	
Characteristics of head of household				
Gender of head of household	Dummy variable coded as 1 if male, otherwise coded 0.	.789 (.0015)	.7565 (.0023)	
Schooling of head of household	Highest educational level obtained by the head of household.	4.067 (.0064)	3.9864 (.0093)	
Work status of head of household	Dummy variable coded as 1 if the head of household is engaged in economic activities, otherwise coded 0.	.836 (.0014)	.8316 (.0021)	

Table 5.1 Description of variables and means (with standard error in parenthesis), by
age group

Name	Description	Under 14 years	Between 14 and 17 years old	
		Mean (Std. Err.)	Mean (Std. Err.)	
Family composition				
Presence of both parents	Dummy variable coded as 1 if both parents living at home, otherwise coded 0.	.620 (.0019)	.5718 (.0027)	
Older siblings	Total number of older siblings.	.901 (.0038)	.2048 (.0025)	
Younger siblings	Total number of younger siblings.	.475 (.0028)	1.09 (.0061)	
Other family members in the same household	Dummy variable coded as 1 if they share the home with other members of the family, otherwise coded 0.	.285 (.0017)	.2976 (.0025)	
Characteristics of the p	lace of residence			
Level of marginalization	Categorical variable coded according to INEGI's levels of marginalization . The following values can be obtained: 1 very low, 2 low, 3 medium, 4 high and 5 very high.	1.7409 (.0041)	1.7155 (.0059)	
Rural	Dummy variable coded as 1 if it is a rural zone, otherwise coded 0.	.2163 (.0016)	.2028 (.0022)	

Table 5.1 Description of variables and means (with standard error in parenthesis), by age group

Table 5.1 shows important differences between the two groups, starting with the type of work in which each group is engaged. The proportion of older children doing economic activities (.23 percent) is five times higher than the proportion of children under fourteen years engaged in the same type of activities (.04 percent). However, the difference between groups is smaller when we include non-economic activities, .62 percent for younger children and .89 percent for older children. This suggests a prevalence of smaller children in unpaid activities. This difference is more evident and clearer when we observe the working hours according to type of work. On average, smaller children work a little bit more than half an hour per week in economic activities (.36), while older children work almost 7 hours per week. The difference in hours spent

working in non-economic activities is smaller: 2.62 hours per week for young children, and 1.54 hours for older children. In other words, a smaller proportion of younger children work in this type of activities, but they spend more hours—relative to older children—doing unpaid work (which in terms of the International Labor Organization, would be "*child labor*" or exploitation because of the lack of payment). However, adding up hours of work independently of type of activity, older children spend double the time working that minors do. The rest of variable-means do not change significantly.

Independent of the number of hours spent at work, other important differences among groups (not shown on the table, but observed with the micro-data from the 2009 Module of Child Labor) are the average income per hour and the rate of school attendance. Children between fourteen and seventeen years old receive an average of 85 cents per hour (10.90 Mexican pesos in 2009), around 100 dollars per month, while younger children earn on average 20 cents per hour (2.65 Mexican pesos in 2009), an average of 12.53 dollars per month (Microdata of the MTI, 2009). School attendance rate decreases with age, at its highest for children in third grade (9 years old) with a rate of almost 99%, and its lowest for high school. Only 63.92% of children who are seventeen years of age, attend school.

Some of these differences can be explained through tables 5.2 and 5.3, which show the results of the models by age group. The first table corresponds to the estimates of the probability of working depending on income for children under fourteen years old (model I), and for youth between fourteen and seventeen years old (model II), while table 5.3 presents the OLS regression coefficients of working hours by type of work and age. The main advantage of dividing data in two groups is the possibility of analyzing changes in coefficients and odds in more detail. Working with the entire sample minimizes some of the variable effects. Also, when the effect is too small it gets lost. For example, I concluded from the regression models in Chapter Four that child labor was associated with marginality, but not with being in a rural area. By grouping the sample, I found that living in a rural area increases the probability of doing non-economic activities by .56 for older children, while it makes no difference for children under fourteen years old, or in the case of economic activities. Therefore, there is also a significant relation between work done by older children and living in a rural area.

As in previous models, per capita income showed a quadratic relationship with the odds of working (table 5.2). In the current model, the odds of working as income increases is 1.01 for children between fourteen and seventeen years old and 1.002 for smaller children. This means a difference of .8 percent in odds between both groups. When introducing domestic work and marginal activities, this difference disappears suggesting younger children's higher participation in unpaid domestic work and marginal activities, relative to older children. However, when using working hours (table 5.3), it is possible to see that per capita income has a positive correlation with economic activities<sup>1</sup> (.0014 for small children and .0347 for older children), but a negative correlation with non-economic activities (-.001 for small children and -.0015 for older children), something similar to what was seen when using the entire sample.

<sup>&</sup>lt;sup>1</sup> Which, as I already explained in Chapter Four, could underscore a problem endogeneity that has to do with the definition of economic activities; since economic activities imply an economic transaction that in most cases is payment with money or goods.

	Economic Activities		Economic activities, Domestic work and Marginal activities	
	Under 14 years old	Between 14 and 17 years old	Under 14 years old	Between 14 and 17 years old
Per capita Income	.00005***	.0009***	.0002***	.0001***
i ei eupitu meome	(.00001)	(.00005)	(.00001)	(.00003)
	1.002	1.01	1.001	1.001
Squared per capita income	00000001***	000001***	0000004***	0000001***
Squarea per capita meome	(.0000)	(.0000)	(.0000)	(.0000)
	.999	.999	.999	.999
Age	.0082***	.0578***	.0720***	.0097***
1160	(.0002)	(.0022)	(.0009)	(.0014)
	1.38	1.44	1.36	1.12
Male	.0171***	.1533***	0693***	0979***
wide	(.0011)	(.0045)	(.0039)	(.0033)
	1.95	2.64	.74	.32
Male household head	0063**	0227**	0164*	0027
Wate nousenoid nead	(.0020)	(.0073)	(.0066)	(.0048)
	.79	.87	.93	.97
School level of household head	0040***	0413***	0038**	0056***
School level of household head	(.0003)	(.0015)	(.0014)	(.0010)
	.85	.77	.98	.93
Usuashald has din sasa amis	.0151***	.0561***	.0361***	.0303***
Household head in economic	(.0014)	(.0067)	(.0068)	(.0055)
activities	2.08	1.47	1.17	1.39
T:: : : : : : : : : : : : : : : : : : :		0329***		0338***
Living with both parents	.0012		0051	
	(.0022)	(.0091)	(.0091)	(.0063)
~	1.05	.81	.98	.66
Older siblings	0026***	.0174**	0231***	0048
	(.0006)	(.0053)	(.0020)	(.0034)
	.90	1.12	.90	.94
Younger siblings	.0027***	.0252***	.0156***	.0050**
	(.0006)	(.0019)	(.0032)	(.0015)
	1.11	1.17	1.07	1.06
Living with other family	0020	0236**	0391***	0339***
members	(.0020)	(.0081)	(.0088)	(.0070)
memoers	.92	.86	.84	.69
Marginality	.0049***	.0278***	.0245***	.0175***
e	(.0005)	(.0024)	(.0023)	(.0020)
	1.21	1.19	1.11	1.23
Rural	.0066	.0064	0173	.0076
	(.0039)	(.0139)	(.0122)	(.0091)
	1.28	1.04	.93	1.09
Interaction between living in	.0059	.0675***	.0194	0059
rural area and household head	(.0040)	(.0168)	(.0127)	(.0107)
	1.24	1.48	1.09	.93
in economic activities				
Constant	-7.1659***	-7.5565***	-2.2003***	.9297**
Constant	(.1564)	(.2319)	(.0604)	(.2853)
Observations	68,242	32,779	68,242	32,779
Correctly predicted	95.68%	78.60%	69.11%	89.16%
Area under ROC curve	0.7699	0.7339	0.7274	0.6782

Table 5.2. Marginal effects (with standard errors in parentheses) and odds ratio for logit regression models predicting child work by age group, 2009

\*p < .05; \*\*p < .01; \*\*\*p < 0.001 (two-tailed tests) Note: Marginal effects dy/dx reported; and standard error in parenthesis Source: 2009 Module of child labor, ENOE

	Economic	e activities <sup>a</sup>		conomic vities <sup>b</sup>		c and non- c activities
	Under 14 years old	Between 14 and 17 years old	Under 14 years old	Between 14 and 17 years old	Under 14 years old	Between 14 and 17 years old
Per capita Income	.0014***	.0347***	0001	0015**	.0012**	.0331***
i ei cupita meome	(.0002)	(.0014)	(.0003)	(.0006)	(.0004)	(.0015)
Squared per capita income	000002***	00003***	000001**	.0000003	000003***	00003***
	(.0000)	(.0000)	(.0000)	(.0000)	(.0000)	(.0000)
Age	.1819 ***	2.5789***	.0019	.4196***	.1762***	3.004***
	(.0051)	(.0765)	(.0079)	(.0311)	(.0095)	(.0813)
Male	.2735***	5.1662***	5450***	-1.5211***	2719***	3.6388***
	(.0236)	(.1608)	(.0364)	(.0653)	(.0442)	(.1710)
Male household head	0760	5192*	1416*	.1347	2037**	4001
	(.0401)	(.2580)	(.0621)	(.1049)	(.0752)	(.2744)
School level of household head	0968***	-1.6626***	1072***	0488*	2013***	-1.711***
	(.0082)	(.0543)	(.0128)	(.0221)	(.0155)	(-0578)
Household head in economic activities	.1647***	1.0515***	.3789***	.6565***	.5513***	1.7138***
	(.0399)	(.2631)	(.0617)	(.1069)	(.0747)	(.2798)
Living with both parents	0351	-1.6423***	18148*	1944	2635**	-1.820***
	(.0539)	(.3270)	(.0834)	(.1329)	(.1428)	(.3478)
Older siblings	0076	.8295***	1866***	1496	2105***	.6956**
	(.0124)	(.1890)	(.0192)	(.0768)	(.0233)	(.2'22)
Younger siblings	.0975***	1.0383***	.3498***	.1538***	.4451***	1.1907***
	(.0177)	(.0757)	(.0275)	(.0308)	(.0333)	(.0806)
Living with other family members	1058*	7932*	4725***	1.1359***	6293***	.3611
	(.0514)	(.3083)	(.0791)	(.1253)	(.0963)	(-3279)
Marginality	.1244***	.7929***	.26168***	1726***	.3875***	.6208***
	(.0329)	(.0932)	(.0209)	(.0379)	(.0254)	(.0992)
Rural	0123	6479	12371	.5568**	0667	0079
	(.0730)	(.4928)	(.1129)	(.2003)	(.1368)	(.5241)
Interaction between living in rural area and household head in economic activities	.1339 (.0776)	2.1624*** (.5269)	.2416* (.1201)	2541 (.2142)	.3262* (.1454)	1.8248** (.5605)
Constant	-1.4262***	-33.908	2.9285***	-4.6341***	1.6338	-38.637***
	(.0829)	(.2683)	(.1283)	(.5155)	(.1553)	(1.349)
Observations	68,242	32,779	68,242	32,779	68,242	32,779
R-squared	0.0350	0.1285	0.0173	0.0369	0.0311	0.1211

## Table 5.3. OLS Regression Coefficients of working hours by type of work and age, 2009

\**p* < .05; \*\**p* < .01; \*\*\**p* < 0.001

<sup>a</sup> All paid work and production for self-consumption; it includes paid domestic work.

<sup>b</sup> Includes non-market oriented activities such as domestic work at home, taking care of other children or the elderly unpaid work—and marginal activities (these mean work on the streets begging, taking care of cars, etc., activities in which there is not an economic transaction)

Note: standard errors in parentheses

Source: 2009 Module of child labor, ENOE

Nevertheless, dividing the sample shows differentiated effects by age. The positive effect of income is higher for older children relative to younger ones, by 3.3%, while the difference in the negative effect of income over working hours in non-economic activities is just .1 percent.

Age coefficients also suggest a higher effect of age in older children. The odds ratio of work in economic activities for younger children increases by 38% when age increases by one year, while it increases by 44% for older children. This is not surprising, as it responds to the natural process of integration into the labor market, which in Mexico permits work activities legally from age fourteen forward (children who are twelve or thirteen years old can work only in special circumstances). The proportional increase in odds is higher for children who have access to formal employment. This can also be seen when using working hours. The regression coefficients of working hours in economic activities are 2.58 for older children (significantly higher than the respective coefficient in the general model, .72, in table 4.7) and .18 for children under 14, .53 percentage points lower than the coefficient for the entire sample (table 4.7 in Chapter Four). There is no doubt that with age children move from unpaid work to economic activities. Age bans just postpone this movement, but do not prevent child labor. Actually, if we take those cases in which a need for work exists, it can be observed that children under fourteen are more likely to seek alternatives such as selling candy on the streets, doing domestic work or joining their parents to carry out activities in the countryside (microdata from the MTI, 2009).

Being a boy fourteen years old or older increases the odds of working in economic activities by 164% relative to girls, but by only 32% when we also consider non-economic activities. The change in odds ratio when including domestic work can be explained by observing activities separately and including working hours in the OLS regression models. When we include working hours, the probability of working more hours in economic activities increases by 516% for older boys and by 27% for small children, relative to girls (table 5.3). This means that a boy not only has a higher probability of working in economic activities, but also that the proportion of working hours is much higher than the working hours of girls, meaning a higher probability of having an income. In addition, boys under fourteen years old are 54% less likely to be engaged in unpaid work than girls, and older children are 152% less likely to be doing those sorts of activities.

Results suggest a prevalence of older boys in economic activities and a greater proportion of girls in unpaid work, which in most cases means domestic work. In other words, a higher proportion of girls, relative to boys, are engaged in *child labor* as defined by the International Labor Organization (2013), a hidden type of work usually underseen by other studies (in comparison, for example, with work done by Levinson, Moe and Knaul, 2001 or López Villavicencio, 2005). This is important because differences based on age can be explained as a result of the opportunity cost of schooling. which is higher for a person who can legally work and, therefore, expect a higher salary. This is consistent with those authors who argue that both the labor market and the rate of return on education influences parental decisions about their children's allocation of time (Basu & Van, 1998; INEGI, 2009; Buchmann, 2000; French, 2010). However, differences between boys and girls, independent of age, are just explained by gender- based ideas of what a girl is expected to do.

An adult male as head of the household decreases the odds of working for both younger and older children (Odds ratio >1) (shown in table 5.2). However, it doesn't influence the amount of working hours of small children in economic activities, even when it decreases those of older children by almost 52% (table 5.3). In contrast, their presence reduces the probability of small children doing unpaid work by 14%, while it has no effect on the working hours of older children. When I sum up working hours in both types of activities, we can see that the effect is just significant for smaller children (-.2037). However, if the household head is also engaged in economic activities, the odds of working increase for all children, even as the proportion by which the probability of working increases changes by age group, being higher in all cases for older children. It seems that in some cases parents' work facilitates child labor, while in others, children substitute for parents' work at home.

Parents' education is also a significant variable in the reduction of child labor. When using working hours, the higher impact of education on the probability of older children working in economic activities becomes evident (166% versus 9% of smaller children). However, independent of the activity in which children are engaged, working hours increase in a higher proportion for older children (171%, when considering all working hours), than for younger children (.55% considering all working hours). Living with both parents decreases the odds of older children working to .81 for economic activities, and .66 for economic and non-economic activities. Nevertheless, it only decreases working hours of paid work (-1.6423). In the case of younger children, the effect is a 18% decrease in working hours spent in non-economic activities.

Results suggest a pulling effect towards paid work from older brothers and sisters over their siblings that have reached the legal age for work. The odds that children who are of legal employment age and who have older brothers and sisters will work in economic activities are 12% higher than the odds of those who do not have older brothers or sisters. Also, the probability of working more hours increases by 83 percent. They also show a higher probability of having older children working; children under fourteen years old who have older siblings are less likely to work (odds ratio < 1.0). But having younger siblings increases both the odds of working and the amount of hours spent working in both age groups, independent of the type of work (see tables 5.2 and 5.3).

In general, having other family members in the same household decreases the working hours children spent in economic activities, 10% for younger children and 79% for older children. Some authors argue that extended family usually replaces domestic work (González de la Rocha, 1994b). However, results reveal a positive correlation with working hours in domestic work for older children. The presence of extended family increases older children's working hours spent in non-economic activities by 113%, primarily in domestic work in their own households. My hypothesis is that this effect is higher for girls than boys, a hypothesis that I explore in the next section. Nevertheless, this can also be due to the manner in which that variable is constructed. The presence of

extended family may also include family members who are not necessarily productive, as in the case of a grandchild, an elderly person who cannot work, or any other family members with health problems or a disability (Villarreal & Shin, 2008). In those cases, older children need to help with the caring of resident members of the extended family;<sup>2</sup> but again, these kinds of activities are usually done by girls, as suggested by the microdata of the Module of Child Labor (INEGI, 2009).

#### **Between Formality And Informality: A Preliminary Conclusion**

To compare children under fourteen years old with children between fourteen and seventeen years old means comparing children who can legally work in the formal sector with those who cannot. Therefore, it is not surprising that the greatest contrast between these groups can be seen when we analyze type of work separately (table 5.3). All formal work implies economic activities, even though a significant part of it takes place within informality.<sup>3</sup> By definition, non-economic activities are unpaid activities (INEGI, 2009b). When there is the need for a child to work, the difference in age is less important than when there is not a need. However, when there is a need to work, young children usually replace their parents' work at home.

This comparison also shows an underestimation of child work in older children and an overestimation of work done by small children, especially when introducing

<sup>&</sup>lt;sup>2</sup> This manner of accounting for extended family is not necessarily a good one. A better measure of the presence of extended family as a mechanism for reducing child labor should include a measurement similar to that used by Villarreal and Shin (2008), to analyze the role of family networks in the economic situation of women in households in Mexico. They use a variable that includes only the adult extended family members.

<sup>&</sup>lt;sup>3</sup> For a better discusion of this, see Chapter Two.

working hours. It also shows a more complex dynamic in parental decisions about child labor. Variables do not equally determine the probability of working for older and younger children. However, this comparison suggests gender differences in the process of incorporation into the labor market, but does not explain them. Therefore, in the next section I provide a deeper analysis of differences based on gender. Since the characteristics of the sample do not allow me to split the data based on both gender and age, I only divide between male and female. In future research, it would be necessary to analyze differences based on both variables at the same time.

# 5.2 "Men To Work And Women To Serve..." Differences Between Boys And Girls

In previous chapters, I argued that most child labor statistics reflect only the economic activities performed by children. This excludes all children who carry out nonlabor market activities such as domestic work, or care of other family members. I also tried to emphasize how defining child labor in this manner underestimates the activities girls carry out, since the vast majority performs unpaid domestic work. Many girls take care of younger siblings, cook, and clean; they care for other family members who need special attention, and even carry wood or water. The vast majority engages in activities that, by not being paid, are not taken into account or valued by either parents or the national statistical systems.

However, this underestimation is not simply the product of a narrow definition of child labor. It is also the product of a differentiation in gender roles—assigned to children at home and in society, between girls, who assume the burden of domestic work, and boys, who at an early age are taught to work to support the family financially. As shown in Chapter Four, in Mexico more girls than boys perform domestic work, a role congruent with gender stereotypes. This difference, which initially is very small, increases considerably with age. Differentiation between boys and girls begins before age seven, and is defined around the age of twelve years old. From a very young age, through social interactions and games, children learn what "they need to do" to be a man or a woman (PLAN, 2009). They learn early in life what is expected of them, solely due to being a girl or a boy.

In many places, these gender-based differences have resulted in significant differences between men and women in adulthood. Differentiation becomes more evident during school age, but increases in adolescence (Kurz & Prather, 1995), influencing children's development into adulthood. In many cultures, adolescence involves opening up the world for men, but imposing restrictions on women. While "boys gain autonomy, mobility, job prospects; girls are systematically deprived of these opportunities. They have restricted mobility and are susceptible to early or forced marriage and early pregnancy" (PLAN, 2009, p. 10). There are very few countries and societies where women have the same opportunities as men (OIT-IPEC, 2009).

In Mexico, this differentiation has led to a greater proportion of girls—rather than boys—carrying out domestic work and not attending school. There are more girls who spend over 35 hours a week on domestic work, and a greater number of boys engaged in economic activities for over 35 hours per week. Girls can work outside the home, as long as the jobs are considered safe, such as packing supplies in supermarkets and pharmacies. Boys face more risk; it is more common for them to sell door to door in the neighborhoods where they live, sell on the street, work in small businesses, carry loads, or wash cars (Brewis & Lee, 2010). It is not common to see girls washing cars on the streets. However, the probability of dropping out of school due to lack of money or family issues is higher for girls than for boys. Likewise, insecurity, discrimination, and the distance between home and school are reasons that most often hinder school attendance for girls as compared to boys. For women, the house and the family should be first; for men, work and income should be first (INEGI, 2009b).

Besides being exposed to risks that any boy can face while working at a young age, girls face additional risks of discrimination simply because they are female. In many cultures, families attach greater value to the education of boys than of girls (Buchmann, 2000; IE, OIT, 2009; PLAN, 2009). The pressure on domestic work also limits the access of girls to school; therefore, in a medium term it restricts them from the possibility of having a better job. In many places, in times of economic crisis girls leave school first (PLAN, 2009). When a girl becomes pregnant in undesirable circumstances, she will usually face the negative aspects of the pregnancy without support from the baby's father or from her parents, and possibly the contempt of her family as well. Furthermore, girls are more likely to be victims of human trafficking and exploitation, of prostitution, and of domestic work (IE, OIT, 2009).

Given the disadvantages faced by girls, the International Labour Organization (ILO) declared 2009 as the year in which efforts would focus on the eradication of the

work that girls do, and prompted efforts to increase awareness regarding the differences between boys and girls. However, despite the interest in defending the rights of girls and promoting the fight against the work they do, most of the existing data is general, and does not take into account gender differences.

The models reviewed in the previous section take into account the difference in the probability of working depending on gender and show some important differences, particularly when including domestic work as part of the definition (tables 4.6 and 4.7 in Chapter Four). However, the inclusion of gender as a variable does not allow us to observe the differences in the behavior of the other variables for boys and girls separately. For example, it does not explain the effect of living with both parents for a girl as compared to a boy. We do not know whether the presence of a male head of household influences boys and girls differently. In this section, I analyze the implications that living with other family members or having older siblings has on girls as opposed to boy. In other words, I compare the determinants that child labor has on each gender.

To do this, I generated two databases: one for girls and another for boys, leaving a sample of 49,426 for girls and 51,595 for boys; both are statistically comparable. In each case, 51% of children live in households with income below the minimum level of wellbeing; 30% live in households with a per capita income above the minimum, but still below the level of well-being; and only nineteen out of one hundred have reached levels of wellbeing (cfr. with Chapter Three). Finally, as with age, I ran regressions for each. Besides allowing the analysis of the relationship between gender and domestic work, this allows comparison of the two groups with each other for each of the proposed definitions. As in previous models, I used *personal and household variables* (income, age, educational level, and activities of the head of household; the presence of older and younger siblings and extended families in the same household; the presence of both parents) and variables associated with the place of residence (levels of urbanization and marginalization), all described in Table 5.4. As in previous models, I added an interaction term between the occupation of the household head and living in a rural area.

N		Girls	Boys
Name	me Description		Mean (Std. Err.)
Observations		(Std. Err.) 49,426	51,595
Dependent Variables used j	for the logit models		
Economic activities	Dummy variable coded 1 if children is engaged exclusively in economic activities	.0705 (.0012)	.1375 (.0015)
Economic and non- economic activities	Dummy variable coded 1 if children perform either economic and non-economic activities (this is, domestic work and marginal activities) or both.	.7468 (.0020)	.6727 (.0021)
Work out of necessity	Dummy variable coded 1 if children work because their work or their income is needed for the household.	.0520 (.0010)	.0979 (.0013)
Dependent Variables used j	for the logit models		
Working hours in economic activities	Total amount of working hours in economic activities, per week.	1.53 (.0340)	3.43 (.0500)
Working hours in domestic work	Total amount of working hours in unpaid domestic work, marginal activities and other type of unpaid work, per week.	2.72 (.0274)	1.84 (.0187)
Working hours in economic activities and domestic work	Total amount of working hours in both: economic activities and non-economic activities, per week.	4.28 (.0435)	5.29 (.0522)
Independent variables: Ingreso			
Per cápita income	Family monthly income not including the child's income, divided by the total family members, in US dollars (exchange rate in 2009, 12.89 mxn pesos)	93.85 (.4886)	95.41 (.4826)
Characteristics of children			
Age	Children's age in years.	11.16 (.0168)	11.15 (.0164)

Tabla 5.4. Description of variables, means and standard errors

Name	Description	Girls	Boys
Name	Description	Mean (Std. Err.)	Mean (Std. Err.)
Characteristics of head of	household	, , , , , , , , , , , , , , , , , , ,	· · · · ·
Gender of head of household	Dummy variable coded as 1 if male, 0 if otherwise.	.7757 (.0019)	.7820 (.0018)
Schooling of head of household	Highest educational level obtained by the head of household.	4.040 (.0074)	4.042 (.0073)
Work status of head of household	Dummy variable coded as 1 if the head of household is engaged in economic activities, otherwise coded 0.	.8342 (.0016)	.8353 (.0016)
Family composition			
Presence of both parents	Dummy variable coded as 1 if both parents living at home, otherwise coded 0.	.6016 (.0022)	.6072 (.0021)
Older siblings	Total number of older siblings.	.6711 (.0041)	.6794 (.0040)
Younger siblings	Total number of younger siblings.	.6863 (.0042)	.6648 (.0040)
Other family members in the same household	Dummy variable coded as 1 if they share the home with other members of the family, otherwise coded 0.	.2938 (.0020)	.2857 (.0019)
Characteristics of the plac	e of residence		
Level of marginalization	Categorical variable coded according to INEGI's levels of marginalization . The following values can be obtained: 1 very low, 2 low, 3 medium, 4 high and 5 very high.	1.734 (.0048)	1.731 (.0047)
Rural	Dummy variable coded as 1 if it is a rural zone, otherwise coded 0.	.2115 (.0018)	.2123 (.0018)

## Tabla 5.4. Description of variables, means and standard errors

It is important to underscore that even when the means of the characteristics of the child, the household, and the place of residence are very similar for boys and girls, there are important differences in the odds of working, and the time spent in each type of work. More boys work in economic activities (7% more) than girls, while there are more girls (75%) in non-economic activities than boys (67%). On average, boys spend almost double the amount of time in economic activities that girls do (3.43 working hours per

week for boys, versus 1.53 hours per week for girls), even when the difference between them when adding working hours in both types of activities is just one hour. This is due to the fact that girls spend more time doing unpaid domestic work (2.72, while boys on average work 1.84 hours in non-economic activities). These differences are significant and can be better explained with the regression models. Tables 5.5 and 5.6 compare the odds of working and the time spent at work of girls and boys.

Table 5.5 shows the marginal effects of two different definitions of child labor for boys, when compared to girls . Results presented in Table 5.6 coefficient estimates of the OLS regression for working hours in economic activities, domestic work, and both. As has been argued, with logit regression models we are able to predict the odds of working when including domestic work, in contrast to a definition that excludes unpaid work. With ordinary least square regression models, I compare differences based on the amount of time spent at work. As I already stated at the beginning of the chapter, I argue that a socially accepted belief that women should be working at home and taking care of children, and a lack of valuation of unpaid domestic work hide an important part of work done by girls, work that, given the number of hours devoted to it and the lack of payment, most of the time should be considered child labor—but is not.

I go further by analyzing prejudice by income level. Some authors argue that prejudice is more prevalent among members of working class than among members of middle or upper class (Carvacho, et al., 2013). Though I am not able to work with social class, I use income to see how some variables change based on level of wellbeing, as done by Küper, Wolf, and Zick (2010), underscoring the link with education. It is important to underscore that I'm not assuming cultural differences based on income that could give place to an increased prevalence of prejudice. I am not taking a position of *"culture of the poverty;"* I want only to see if variables have a different effect in terms of gender disparities, based on income, differences that could be due to different necessities that result from the lack of economic resources. Carvacho, et.al, observed that both income and education predicted a wide range of prejudice in different countries; however, the predictive power of income was not present in all cases. My hypothesis is that for the case of Mexico, gender-based prejudice goes beyond income.

Before moving forward, I want to mention that even though analyzing three tables at the same time can be confusing, I decided to do so in order to better explain variations in variables due to moving from a general approach to a more specific one. Comparing changes in the variables based on the methodology used makes the analysis richer and allows for a more complete understanding of gender differences. In order to facilitate this moving back and forth between tables, I added continued references to tables in an attempt to make this process less confusing.

	Economi	c Activities		ctivities, Domesti Iarginal activities
	Girls	Boys	Girls	Boys
Per capita Income	.0002***	.0003***	.00009**	.0002***
· · · · · · · · · · · · · · · · · · ·	(.00002)	(.00002)	(.00003)	(.00004)
	1.004	1.004	1.0006	1.001
Squared per capita income	0000002***	0000003***	0000003***	0000003***
- 1	(.0000)	(.0000)	(.0000)	(.0000)
	.999	.999	.999	.999
Age	.0111***	.0228***	.0511***	.0450***
150	(.0003)	(.0003)	(.0006)	(.0007)
	1.34	1.44	1.44	1.24
Male household head	0159***	0011	0094	0141*
mare nousenoid nead	(.0027)	(.0030)	(.0059)	(.0070)
	.68	.98	.93	.93
School level of household head	0064***	0165***	0070***	0018
Senoor lever of nousenoid nead	(.0005)	(.0006)	(.0013)	(.0015)
	.84	.77	.95	.99
Household head in economic	.0155***	.0264***	.0321***	.0396***
	(.002)	(.0026)	(.0064)	(.0074)
activities	1.60	1.62	1.23	1.20
Living with both paranta	0030	0108**	0086	0276**
Living with both parents				
	(.0028)	(.0039)	(.0082)	(.0094)
	.92	.84	.98 0107***	.88
Older siblings	0018	0019		0234***
	(.0012)	(.0014)	(.0019)	(.0024)
	.95	.97	.93	.89
Younger siblings	.0043***	.0104***	.0146***	.0136***
	(.0007)	(.0009)	(.0027)	(.0029)
	1.12	1.18	1.10	1.07
Living with other family members	0060*	0073*	0317***	0508***
	(.0025)	(.0034)	(.0082)	(.0094)
	.85	.89	.81	.79
Marginality	.0056***	.0132***	.0165***	.0272***
	(.0008)	(.0010)	(.0021)	(.0025)
	1.16	1.24	1.12	1.19
Rural	.0138	.0141*	0072	0069
	(.0062)	(.0062)	(.0110)	(.0132)
	.83	1.24	.95	.97
Interaction between living in rural	.0059*	.0306***	.0139	0035
area and household head in	(.0040)	(.0075)	(.0111)	(.0139)
economic activities	1.34	1.54	1.10	1.02
	-6.4212***	-6.7723***	-2.3593***	-1.699***
Constant	(.1564)	(.1198)	(.0793)	(.0677)
Observations	49,426	51,595	49,426	51,595
Correctly predicted	92.95%	87.54%	79.10%	72.30%
Correctiv predicted	14.1570			

Table 5.5. Marginal effects (with standard errors in parentheses) and odds ratio for logit regression models predicting child work by sex, 2009

\*p < .05; \*\*p < .01; \*\*\*p < 0.001 (two-tailed tests) Note: Marginal effects dy/dx reported; and standard error in parenthesis Source: 2009 Module of child labor, ENOE

	Economic	activities <sup>a</sup>		economic vities <sup>b</sup>		c and non- c activities
	Girls	Boys	Girls	Boys	Girls	Boys
Per capita Income	.0089***	.02008***	0008	0007*	.0081***	.0194***
	(.0006)	(.0008)	(.0005)	(.0000)	(.0008)	(.0009)
Squared per capita income	000008***	00002***	000001	0000002	00001***	00002***
	(.0000)	(.0000)	(.0000)	(.0000)	(.0000)	(.0000)
Age	.4454***	.9734***	0413***	1846***	.3983***	.7819***
	(.0104)	(.0145)	(.0087)	(.0059)	(.0135)	(.0155)
Male household head	5442***	.1173	.0052	1381*	5456***	0085
	(.1094)	(.1521)	(.0912)	(.0618)	(.1416)	(.1625)
School level of household head	3767***	9069***	0974***	0581***	4669***	9678***
	(.0227)	(.0315)	(.0189)	(.0128)	(.0294)	(.0337)
Household head in economic activities	.3585**	.6449***	.6077***	.3769***	.9784***	1.0256***
	(.1095)	(.1526)	(.0913)	(.0619)	(.1418)	(.1630)
Living with both parents	4137**	9347***	1385	1210	5855**	-1.0684***
	(.1450)	(.1982)	(.1209)	(.0805)	(.1877)	(.2118)
Older siblings	0642	2146***	1532***	1483***	2238***	3836***
	(.0398)	(.0551)	(.0033)	(.0224)	(.0516)	(.0589)
Younger siblings	.3189***	.8161***	.2978***	.1604***	.6176***	.9712***
	(.0396)	(.0561)	(.0330)	(.0228)	(.0513)	(.0599)
Living with other family members	4051**	1830	.4834***	2667**	.0457	4659*
	(.1369)	(.1888)	(.1141)	(.0767)	(.1773)	(.2018)
Marginality	.2399***	.4725***	.0807*	.1632	.3176***	.6411***
	(.0376)	(.0527)	(.0041)	(.0214)	(.0487)	(.0563)
Rural	5909*	.2734	.1352	.1187	2832	.3721
	(.2012)	(.2825)	(.1678)	(.1147)	(.2606)	(.3018)
Interaction between living in rural area and household head in economic activities	.4822*** (.2145)	1.0238** (.3007)	.2780 (.1788)	1174 (.1221)	.6217* (.2777)	.9213** (.5605)
Constant	-2.6484***	-6.6719***	2.7853***	3.8569***	.2271	-2.6939***
	(.2185)	(.3046)	(.1822)	(.1237)	(.2830)	(.3254)
Observations	49,426	51,595	49,426	51,595	49,426	51,595
R-squared	0.0737	0.1688	0.0097	0.0245	0.0537	0.1298

# Table 5.6 OLS Regression Coefficients of working hours by type of work and sex, 2009

\**p* < .05; \*\**p* < .01; \*\*\**p* < 0.001

<sup>a</sup> All paid work and production for self consumption; it includes paid domestic work.

<sup>b</sup> Includes non-market oriented activities such as domestic work at home, taking care of other children or the elderly unpaid work—and marginal activities (these mean work on the streets begging, taking care of cars, etc., activities in which there is not an economic transaction)

Note: standard errors in parentheses

Source: 2009 Module of child labor, ENOE

g $l^a$ $l^a$ $l^a$ $l^a$ $l^a$ 0282***         .0611***         .0033         .0603         .0003         .0009	Boys         Girls           Boys         Girls           0384***         0066***           (0088)         (0017)           (0003)         (0017)           (0003)         (0017)           (0003)         (0017)           (0000)         (0000)           (0000)         (0000)           (0001)         (0000)           0391         -6664           03921         -6864           (0257)         -5600***           (0577)         (0599)           (3251)         (4102)		ċ	a		ľ			
Girls         Boys         Girls          0282***         .0611***        1712***          00334)         (.0033)         (.0009)         (.0009)           (.0000)         (.0000)         (.0000)         (.0000)           (.0000)         (.0000)         (.0000)         (.0000)          1712***	∞ * * * <sup>*</sup>		0			II°			
apita Income $0282^{***}$ $.6611^{****}$ $.1712^{****}$ cd per capita income $.0011^{****}$ $.0003$ $.0009$ $.0009$ cd per capita income $.0011^{****}$ $.0003^{****}$ $.0009$ $.0009$ cd per capita income $.0011^{****}$ $.0003^{****}$ $.0009$ $.0009$ household head $.2734^{***}$ $.0006^{****}$ $.0009$ $.0000$ level of household $.2734^{***}$ $.0064^{***}$ $.0180$ $.0000$ level of household $.2734^{***}$ $.0064^{***}$ $.0133$ $.0875^{***}$ sl blings $.0706$ $.0333$ $.0875^{***}$ $.01427$ $.0349^{***}$ g with both parents $.2383$ $2383$ $349^{***}$ $.0766^{**}$ g with other family $333$ $.0875^{***}$ $.0663^{***}$ $.0666^{***}$ g with other family $333^{****}$ $713^{***}$ $.0760^{***}$ $.0760^{***}$ g with other family $3333^{***}$ $.083^{***}$ $.0466^$			Girls	Boys	Girls	Boys	Girls	Boys	
(0034) $(0003)$ $(0000)$	* * *		.01308***	.0018	.01045	0026	0015	0015	
col per capita income $0011^{***}$ $0003^{***}$ $00000$ 0000         0000 <th cols<="" td=""><td>* * *</td><td></td><td>(.0029)</td><td>(.0013)</td><td>(.0102)</td><td>(.0036)</td><td>(.0012)</td><td>(6000.)</td></th>	<td>* * *</td> <td></td> <td>(.0029)</td> <td>(.0013)</td> <td>(.0102)</td> <td>(.0036)</td> <td>(.0012)</td> <td>(6000.)</td>	* * *		(.0029)	(.0013)	(.0102)	(.0036)	(.0012)	(6000.)
(0000)         (0000)         (0000)         (0000)         (0000)           household head $-2734^*$ $10065^{****}$ $4135^{****}$ $10065^{****}$ $4135^{****}$ household head $-2734^*$ $0064$ $(0180)$ $(000)$ $(000)$ household head $-2734^*$ $-0064$ $-6277^{**}$ $4135^{***}$ household $-2734^*$ $-0064$ $(0180)$ $(0180)$ old head in economic $(1453)$ $(2020)$ $(1934)$ $(0392)$ ehold head in economic $-0706$ $-0333$ $6875^{**}$ $-3142^{***}$ g with both parents $-2383$ $-3949$ $-0860$ $-0860$ $(1380)$ $(1381)$ $(2304)$ $(2304)$ $(269)$ g with both parents $-2383$ $-3949$ $-0860$ $-0660$ $(1380)$ $(0653)$ $(0760)$ $(0760)$ $-0660$ g with other family $-3353^*$ $-0819$ $(0760)$ $-0665$ g with other family $-3353^*$ $-0819$ $0$	* *	<u> </u>	00006	00001	00007	0000007	.0000000	.0000005	
$4387^{***}$ $1.0063^{***}$ $4135^{***}$ household head $-2734^{**}$ $10063^{***}$ $4135^{***}$ $0.147$ $(0.204)$ $(0.180)$ $0.147$ $(0.202)$ $(0.180)$ $0.147$ $(0.202)$ $(0.180)$ $0.1473$ $2.0200$ $(0.1934)$ $0.1453$ $2.0200$ $(0.934)$ $0.1453$ $(2020)$ $(0.1934)$ $0.1453$ $(2020)$ $(0.1934)$ $0.1600$ $(0.3333$ $6875^{**}$ $0.1330$ $(0.427)$ $(0.392)$ $0.1310$ $(1.110)$ $(1.310)$ $0.1333$ $6875^{**}$ $-3142^{***}$ $0.1310$ $(1.111)$ $(2.304)$ $0.1320$ $(0.320)$ $(0.320)$ $0.1130$ $(1.1811)$ $(2.304)$ $0.1894$ $-2.383$ $-3.949$ $0.1894$ $-2.386^{***}$ $-0.466$ $0.1894$ $0.2697$ $(2.689)$ $0.0533$ $0.0633$ $(0.74)$			(.00003)	(0000)	(0000)	(0000)	(0000)	(0000)	
household head $2734^{\circ$	*	.7859***	0551***	1873***	.0287	1820***	0858***	1736***	
household head $-2734^*$ $-0064$ $-6277^{**}$ I level of household $(.1453)$ $(.2020)$ $(.1934)$ old level of household $.2674^{***}$ $.4839^{***}$ $.6875^{***}$ ehold head in economic $.0706$ $.0333$ $(.1934)$ $(.1932)$ g with both parents $0706$ $0333$ $.6875^{***}$ $3122^{***}$ g with both parents $2383$ $3499$ $0860$ $660$ $1310$ $1310$ $1310$ $9142^{***}$ $2304$ g with both parents $2383$ $3949$ $2660$ $660$ $1310$ $$	*	(0670)	(0710)	(1000)	(1010)	(0010)	(1010)	(7710)	
I level of household $-2674^{***}$ $-4839^{***}$ $-3142^{***}$ ehold head in economic $-0706$ $-0333$ $6875^{***}$ ehold head in economic $-0706$ $-0333$ $6875^{***}$ g with both parents $(1310)$ $(1811)$ $(2304)$ g with both parents $-2383$ $-3949$ $-0860$ $(1384)$ $(2597)$ $(2689)$ $-0860$ $(1884)$ $(2597)$ $(2269)$ $0734$ siblings $(0633)$ $(0751)$ $(0751)$ ger siblings $(0495)$ $(0663)$ $(0761)$ g with other family $-3337$ $-2407^{***}$ $4630^{***}$ $(1374)$ $-2363$ $(0761)$ $07549$ g with other family $-3337$ $0816^{**}$ $549$ $(0751)$ $-3636$ $(0763)$ $(0761)$ g with other family $(0473)$ $(0663)$ $(0750)$ $(0773)$ $0886$ $(2101)$ $0750^{**}$ $(000)$ $(2308)$ $(2101)$ $0750^{**}$	*	.3781 (.3493)	1549 (.1268)	2061* (.0859)	.1727) (.1727)	-0284 (.1139)	.1980) (1980)	0612 (.1449)	
$-2007$ $-2007$ $-3072$ $-1006$ $-0333$ $6875^{**}$ $0.000$ $0.427$ $0.092$ $0.000$ $0.0427$ $0.092$ $0.000$ $0.0427$ $0.092$ $0.000$ $0.0233$ $6875^{**}$ $0.000$ $0.333$ $6875^{**}$ $0.000$ $0.333$ $6875^{**}$ $0.0001$ $0.1811$ $0.2004$ $0.0001$ $0.1811$ $0.2004$ $0.0001$ $0.0830$ $0.0860$ $0.0005$ $0.0633$ $0.0746$ $0.0003$ $0.0633$ $0.0740$ $0.0003$ $0.0633$ $0.0760$ $0.0003$ $0.0003$ $0.0760$ $0.0003$ $0.0633$ $0.0760$ $0.0003$ $0.0495$ $0.0603$ $0.0760$ $0.0110$ $0.0303$ $0.0760$ $0.0760$ $0.0003$ $0.0173$ $0.0603$ $0.0760$ $0.0110$ $0.0633$ $0.0760$ $0.0760$ $0.0003$ $0.0003$ $0.0760$ $0.0760$ <tr< td=""><td></td><td></td><td>1000***</td><td>**&gt;C&gt;U</td><td>WW</td><td>***0550</td><td>0730</td><td>1900</td></tr<>			1000***	**>C>U	WW	***0550	0730	1900	
shold head in economic         -0706         -0333         .6875**           ties         (.1310)         (.1811)         (.2304)           g with both parents        2383        349        0860           is blings         (.1840)         (.2597)         (.2699)           siblings        0653)         (.0683)         (.0734)           g with other family        0819         .0734)         .0754)           g with other family        3335         .2444***         .4630****           .0751)         (.0633)         (.0761)         .0754)           g with other family        3335         .2405         .0849           .0741)         .36395         .0819         .0761)           .0750)         .3663)         .0750)         .2605           .0741)         .0744**         .4024***         .4024***           .0750)         .3367         .9816**         .5451           .3367         .9816**         .5451         .1776           .0750)         .3088)         .2101)         .1776			(.0270)	(.0182)	(0350)	(0229)	(0429)	(.0322)	
ies (1310) (1811) (2304) g with both parents -2383 -3949 -0860 (1884) (2597) (2689) siblings -0624 -286*** -0466 (0505) (0683) (0734) ger siblings 2447*** 4630*** (0995) (0693) (0761) g with other family -3533* -0819 0549 ers (1743) (2405) (2605) anilty (1743) (2405) (2605) anilty (0473) (0663) (0750) -3367 9816** 5451 (2236) (3098) (2101) otion between living in 7820** 15177*** -1776		2.0001***	.3224**	.3719***	9884***	.1788	.6856*	.6770**	
g with both parents         -2383         -3949         -0860           (1894)         (2597)         (2699)         -0860           siblings         -0624         -2986***         -0466           (0734)         (0734)         (0734)           ger siblings         (0,955)         (0683)         (0734)           gr siblings         2407***         7244***         4630***           g with other family         -3333*         -0819         0549           ers         (1743)         (2405)         (2605)           nality         -2141****         5128***         4024***           nality         2141****         5128***         4024***           cton between living in         7820**         10663)         (0750)		(.5423)	(.1143)	(0770)	(.2056)	(.1338)	(2938)	(2250)	
(1894)         (2597)         (2689)           siblings         -0624         -2986***         -0466           ger siblings         -0625)         (0683)         (0734)           ger siblings         (03505)         (0683)         (0734)           ger siblings         2407***         7244***         4630***           g with other family         -3333*         -0819         0761)           ecrs         (1743)         (2405)         (2605)           nality         2141***         5128***         4024***           nality         2141***         5128***         4024***           ctro         0750)         -3367         9816**         5451           cton between living in         7820**         10538)         (2101)		-1.1711**	0914	1490	0355	2486	-2259	.1493	
siblings -0624 -2986*** -0466 ger siblings (0505) (0683) (0734) ger siblings 2407*** 7244*** 4630*** (0495) (0693) (0761) g with other family -3333* -0819 0549 ers (1743) (2405) (2605) nality 2141*** 5128*** 4024*** (0473) (0663) (0750) -3367 9816** 5451 (2236) (3098) (2101) etion between living in 7820** 15177*** -1776	(3754) (3677)	(.4592)	(.1653)	(1104)	(.2401)	(.1546)	(.2630)	(1905)	
(0.505)         (0.683)         (0.734)           ger siblings         2407***         7244***         4630***           g with other family         2407***         7244***         4630***           g with other family        3533*        0819         .0751)           ects         (.1743)         (.2405)         (.2605)           nality         2.141***         5128***         4024***           nality         2.141***         5128***         4024***	-	.1126	1959***	1879***	2063***	1397**	0873	.0105	
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(2236) (3098) (2101) ( .7820** 1.5177***1776 1	*	4.2021***	.0634	.0744	5679	1011.	.05155	.7062	
.7820** 1.5177***1776	.7881) (.8548)	(1.157)	(1951)	(.1318)	(.4692)	(.3245)	(.6122)	(.4801)	
		-2.5581*	.5518*	.0457	0844	-2772	.1227	8472	
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) (76CT') (COOF') (COO7')		(0060-)	(0107)	(+0/1)	(1417)	(00+-C")	(104+)	(onon)	
26,644 15,264		9,124	25,469	26,644	15,264	15,827	8,693	9,124	
R-squared 0.1219 0.2299 0.1412 0.2	0.2317 0.0731	0.1609	0.0135	0.0253	0.0078	0.0216	0.0117	0.0280	
p < .1; $p < .05$ ; $p < .05$ ; $p < 0.01$ Note: standard errors in parentheses									

Table 5.7 OLS Regression coefficients for working hours in Economic Activities and domestic work by Gender and different levels of wellbeing. 2009

<sup>b</sup> Those living in the countryside and have an income less than \$1,315.02 Mexican posos (99 US dollars), but equal to or greater than \$691.76 Mexican posos (52 US dollars), and those living in urban areas and have an income less than \$2,075.21 Mexican posos (156 US dollars), but equal to or greater than \$874.75 Mexican posos (73 US dollars). <sup>e</sup> All who live in the countryside and have an income greater than or equal to \$1,315.02 Mexican posos (99 US dollars) or living in urban areas "All who live in the countryside and have an income greater than or equal to \$1,315.02 Mexican posos (99 US dollars) or living in urban areas with an income greater than or equal to \$1,315.02 Mexican posos (99 US dollars) or living in urban areas with an income greater than or equal to \$1,315.02 Mexican posos (99 US dollars) or living in urban areas with an income greater than or equal to \$1,315.02 Mexican posos (99 US dollars) or living in urban areas with an income greater than or equal to \$1,315.02 Mexican posos (99 US dollars) or living in urban areas with an income greater than or equal to \$1,315.02 Mexican posos (99 US dollars) or living in urban areas with an income greater than or equal to \$1,315.02 Mexican posos (99 US dollars) or living in urban areas with an income greater than or equal to \$1,315.02 Mexican posos (99 US dollars) or living in urban areas with an income greater than or equal to \$1,315.02 Mexican posos (99 US dollars) or living in urban areas with an income greater than or equal to \$1,315.02 Mexican posos (99 US dollars) or living in urban areas with an income greater than or equal to \$1,315.02 Mexican posos (99 US dollars) or living in urban areas with an income greater than or equal to \$1,315.02 Mexican posos (99 US dollars) or live to \$1,010 Mexican posos (99 US dollars) or live to \$1,010 Mexican posos (99 US dollars) or live to \$1,010 Mexican posos (99 US dollars) or live to \$1,010 Mexican posos (99 US dollars) or live to \$1,010 Mexican posos (99 US dollars) or live to \$1,010 Mexican posos (99 US dolla

pesos (156 US dollars). Source: 2009 Module of child labor, ENOE

# Gender disparities observed in the models

Based on results in Chapter Four, I expected to find the same relationship between income and work as had been observed in previous models: a quadratic relationship, in which income is increasing and decreasing for logit models and for OLS regression models of hours of work in economic activities, and a linear relationship between income and non-economic activities. However, results in Table 5.6 indicate gender disparities.

The odds of working are basically the same between boys and girls (table 5.5); however, the main differences among groups are seen when I introduce working hours in the OLS models (table 5.6). As income increases, the greater the probability of the boy working (.02) and the lower the probability of the boy doing household chores (.07). As expected, the probability of a girl working is lower (.0089), and there is no effect of income on domestic chores or other non-economic activities. This means that as income increases, boys are more likely to stop doing domestic work or marginal activities, and increase their participation in economic activities.

Gender disparities are more evident when doing the same analysis by level of wellbeing<sup>4</sup> (Table 5.7). This is not surprising, since Carvacho, et.al (2013) find that lower levels of income and education are associated with higher levels of prejudice. Based on their work, I hypothesized important differences on the impact of income and school level of household head, based on the level of wellbeing. Results in Table 5.7 indicate

<sup>&</sup>lt;sup>4</sup> I divided both groups by level of wellbeing, as described in Chapter Three and done in Chapter Four, and did the OLS regressions of working hours by gender and level of wellbeing.

differences in gender disparity due to income: The higher the income, girls' hours spent working in economic activities decreased, while boys' working hours increased. For girls, domestic chores also increased, and, depending on the household education level, increased working hours devoted to domestic chores and marginal activities for boys.

When family income has not reached a level of wellbeing (under 99 US dollars in rural areas, or under 156 US dollars in urban areas), an increase in income decreases the probability that girls will work in economic activities. However, it increases work in non-economic activities for those girls who live in a household in which income hasn't reached the minimum level of well-being (52 US dollars in rural areas and 73 US dollars in urban areas). In all cases, it increases the probability that boys will work by 6% for the poorest households, almost 4% in those over the minimum level of well-being, and 2% for the better off-households.

But as shown by Carvacho, et al., (2013), the odds of working and the amount of hours devoted to work are mediated by parents' education. A higher education level decreases the odds of paid work for both boys and girls, and the odds of doing domestic chores for girls. When a level of wellbeing has been achieved (90 percent reduction in working hours, see Table 5.6), this impact is especially high for boys in economic activities,. But disparities are clearer when dividing by level of well-being (Table 5.7). Among the poorest, a higher education level results in a decrease of hours spent in unpaid domestic work and marginal activities. Education is also likely to increase the acceptance of boys carrying out domestic work (a level of well-being over the minimum, but not yet above the standard of well-being, increases the hours boys spend in unpaid domestic

work by 6%). Results suggest that ,as in other countries (Kambhampati & Rajan, 2008), in Mexico families with higher levels of education have less prejudice. This is due to the fact that education, in addition to promoting children's education—with which the odds of working could decrease—influences ideas about what is expected from boys and girls, and gives place to fewer constraints imposed on girls (Kambhampati & Rajan, 2008).

Differences based on gender are also suggested by the correlation between the presence of a male head of household, and the probability of working, both when I use a dummy variable (table 5.5), and when I use working hours (tables 5.6 and 5.7). The presence of a father or another male adult as head of household reduces the odds of boys doing domestic work at the same time as it reduces the odds of girls performing economic activities (in both cases the odds ratio < 1; see Table 5.5). This suggests the reproduction of the idea that men are not suited for domestic work, and that domestic work is a task for girls. This effect is more evident when using working hours (table 5.6). When a male adult is head of household the probability of girls working fewer hours outside the house decreases more than 50% (-.5442 coefficient), while it has no effect for boys. In contrast, it has no effect on the time girls spend on unpaid work or marginal activities, while it decreases the proportion of working hours for boys by 13%. It is important to underscore that, when considering total working hours in either type of work, the effect on the working hours of boys is not observed, which indicates that important information can be hidden if we just consider one method of measurement. This lack of effect becomes clearer when we divide the sample by level of well-being, since it becomes evident that the presence of a male adult as head of household decreases the hours spent by boys in domestic work only in the poorer households. As suggested previously, gender disparities are more evident in poorer households, where girls are more likely to stay working in their houses and boys are less likely to do domestic chores (table 5.7).

Activities undertaken by girls and boys will also depend upon their parents' activities. In general, children are more likely to work in economic activities when their parents engage in similar activities. In terms of odds, results do not show significant differences (1.60 for girls and 1.62 for boys, Table 5.5). Nevertheless, in poorer households, parental activity has no effect on the working hours for either boys or girls; but it has a positive effect on girls (.68) in households with an income above the minimum well-being level, but for boys, this is only true in better-off households (2.0001, Table 5.7). When analyzing non-economic activities, the only difference between boys and girls occurs in those households in which income is between 52 and 99 US dollars in a rural area, and between 73 and 156 US dollars in an urban area. In those cases, the probability of girls doing domestic chores is 98% higher, while there is no effect for boys.

One of the most striking differences between the models was observed with household variables. Living with both parents reduces boys' odds of working, even when we consider domestic chores (Table 5.5). However, when considering working hours, the probability of working less decreases more for boys (-.9347) than girls (-.4137). Furthermore, if we consider that it is significant only for richer households (see Table 5.7), we can see that this effect is even higher: 80% for girls and 117% for boys, a smaller difference between boys and girls than when all of the sample is analyzed together).

If we compare the effect that the presence of older siblings has on age with the effect based on gender, we can see that there are not significant disparities based on gender, since in all cases there the probability and the odds of working decrease when an older brother is present—which was not the case when analyzing differences by age (tables 5.2 and 5.3). However, even when this seems contradictory, the fact is that only boys in really poor households are less likely to get engaged in economic activities (table 5.7), because of the presence of older siblings.

It is expected that girls who have smaller siblings are more likely to be engaged in household work than boys (Kambhampati & Rajan, 2008); and boys more likely to be engaged in economic activities. As expected, the presence of younger siblings increases the odds of working in economic activities for boys (1.18) and girls (1.12) and also, the amount of hours spent at work (31% for girls and 82% for boys). Even though working hours in paid work increase for both (see table 5.6), as income increases it is more likely that girls will work. But for boys the probability is higher when family income is in the middle level of well-being (table 5.7). Nevertheless, the presence of small siblings increases working hours of girls by 37%, in the poorest households and 13% for boys. It is interesting to see that as income increases, the presence of younger siblings has no effect on working hours of girls, but increases working hours of boys in non-economic activities by approximately 18%.

Among household variables, the variable that showed more gender disparities was the presence of other family members; this is, of extended family. Apparently extended family decreases the odds of working, independently of the definition used (odds ratio in all cases > 1, table 5.5). However when I introduce working hours gender disparities become evident; and even more evident when dividing by level of well-being. Extended family decreases working hours in economic activities by 40% for girls, while having no effect on boys; however, boys' domestic chores and marginal activities decrease by 26% when extended family is present. If we add all working hours (in economic and non-economic activities), the probability of working decreases by almost 50%, for boys only. In the poorest households, girls are less likely to work in economic activities (.3270 coefficient, while boys are less likely to be engaged in non-economic activities. This suggests that extended family participate in economic activities, providing the additional income previously provided by girls, but their presence may increase the number of chores that need to be done, which are more likely performed by girls.

It was not surprising to find that in more marginal communities, the odds of working increase for both boys and girls. However, these odds are eight percent higher for boys than girls, not so different from the difference in odds when introducing non-economic activities as part of the definition (Table 5.5). Marginality has a higher impact on boys from poorer households. In those households where income has reached the level of well-being, disparities between boys and girls due to marginality, are minimal (Table 5.7). With the exception of very poor households, girls' working hours spent on domestic chores are not related to the level of marginality, even though it increases the hours boys spend in this sort of activity (by .0936 in the middle level of well-being and .2025 in the lowest level).

Finally, even in rural areas, gender-based differences are observed. Being in a rural area only increases the odds of work for boys, relative to those in urban areas (odds ratio = 1.24). But for children living in rural areas, parents' work in market-oriented activities significantly increases the odds of working (34% for girls and 54% for boys). When considering working hours, the probability of working in market-oriented activities decreases for girls by almost 60% in rural areas, even when parents' participation in economic activities increases the probability of working for both boys and girls. Disparities between boys and girls are more evident when dividing by the level of wellbeing. Although the probability of doing domestic work and/or marginal activities is not associated with rural areas (see Table 5.7), economic activities are. In rural areas agriculture facilitates work opportunities for children (Kambhampati & Rajan, 2008). Results show a significant association between work opportunities in agriculture and gender disparities, especially when family income is higher. In poor households, rural boys are 98% more likely to work than children in urban areas; this probability increases to 268% in households in the middle level of well-being, and to 420% in richer households. This could be the result of what Bhalotra and Heady (2003) describe as the Wealth Paradox. The common presumption is that child labor emerges from the poorest households. However, Bhalotra and Heady demonstrate that in poor rural households, having land—wealth in rural areas—increases the probability of working for children, since family income is not sufficient to pay for someone to do work that can be done by children. Therefore, the common presumption that child labor is associated with the poorest households is challenged. In this case, I'm not using wealth in the measure of well-being, but a higher income could be associated with land ownership and agricultural production.

#### 5.3. WHAT NUMBERS SUGGEST AND THEIR LIMITATIONS

Logit and OLS regression models show important differences based on groups. Results show that access to the formal market effectively modifies the effect of some variables. Once children are able to move from formality to informality, the odds of working in economic activities increase significantly. Parents with higher levels of education are less likely to avoid having older children work. The main difference between age groups is the prevalence of younger children in activities not protected by law. In some cases, this situation is associated with parental participation in informality, in which case the lack of protection by authorities could be compensated by the presence of children's' parents, who take care of them even when working conditions are not good. However, this situation could also be associated with situations of exploitation in which parents have no control, and the laws do not protect them. In any case, the lack of protection for smaller children increases their vulnerability to exploitation.

Results also show important disparities between boys and girls, confirming the hypothesis that household composition influences the odds of work for boys relative to girls differently, and that girls' participation in the labor market is influenced by the socially accepted belief that women should be working at home and taking care of children. They also show that gender disparities occur at all levels of well-being, but are more strongly marked among less educated parents and in poorer households.

They also suggest important differences based on level of marginality and urbanization, differences that are not fully explored in this chapter and that cannot be satisfactory explained based on statistical descriptions (Rubalcava & Murillo, 2006). Parental decisions about child labor take place in diverse social and cultural conditions. Trying to explain them using only statistical data is risky, and does not reflect the experiences that influence the decision process.

For these reasond, in the next chapter I use empirical evidence to explain some of the points observed from statistical work. My goal is to highlight those cultural and social factors that influence child labor and that are not clarified by statistical analysis . Although the responses of parents regarding child labor and schooling are based on cultural and social patterns, many of these patterns are diluted in everyday experiences that cannot be seen through numbers.

# **CHAPTER 6**

# **GOING BEYOND POVERTY:**

# THE INTERSECTION BETWEEN CULTURE AND WORK OPPORTUNITIES

Despite the difficulties involved in attempting to explain the attitudes of parents with respect to child labor and schooling through econometric analyses, in the previous two chapters I analyzed the correlation between child labor and poverty, controlling for variables related to characteristics of the child, family composition, and characteristics of the place of residence. In this chapter and the next, I attempt to analyze the topic in depth, through the analysis of situations that allow the observation of the influence of nonquantitative factors in the decision parents make when sending their children to study and/or work. I seek to understand the mechanism through which beliefs with regard to gender, for example, play a part in the decision that women stop working in the street when they are adolescents; that is to say, I seek to understand how or in what circumstances the decisions about how children spend their time are made. Although these circumstances are not a complete example of children's predicaments, they do allow reflection about elements that are present in many of the situations children confront, especially with regard to migration, school attendance, and gender.

In the last two chapters, I found that income is an important, but in many cases, not significant, variable in the likelihood of working. I highlighted the importance of personal factors, family members, and residential characteristics as elements that play a part in child labor, all of this based on the arguments presented in Chapter Three. As part of the context in which this work arises, in the second chapter I analyzed the importance of the informal market in Mexico as a facilitator for child labor. In this and the next chapter, I revisit some of the aspects I previously discussed through the empirical evidence I have gathered across the years. The objective is to analyze more deeply some of the factors that, in the case of Mexico, have influenced the growth of child and adolescent labor, and at the same time, in some cases, have contributed to school desertion. In both chapters, I discuss culture and work opportunities as significant variables that influence parents' and adolescents' decisions about work, and also as variables that mediate poverty as determinant of child labor.

My qualitative research covers four different locations, two colonias in the metropolitan area of Guadalajara, La Ferrocarrilera and Santa Ana, and two rural communities: El Rincón in Veracruz, and Cihuatlán in Jalisco, which I explore in the next chapter. The colonias are related to the urban context of child labor; I use the next chapter to contrast work opportunities in the city with work opportunities in rural areas. In both cases I explore aspects of both indigenous and Mexican mestizo culture. Through these situations I incorporate themes such as migration, exploitation, ways of living in both the country and the city, expectations, and working on the streets, among others.

I begin the piece by analyzing the case of young people in a colonia or "community," Santa Ana, in the metropolitan area of Guadalajara in which the few possibilities of beginning studies and the presence of street gangs encourage school desertion and early entry into the work force. In this case, I am able explore how parental motivation and the belief in alternatives to those chosen by most people, favor school attendance and decrease the probability that an adolescent works. Santa Ana is also a clear example of the importance of decreasing school desertion as a means of controlling child labor.

I revisit "the urban"— reflected in the experience of families in the metropolitan area of Guadalajara who work in the streets. During the summer of 2009, I conducted fieldwork with families who work on the streets in the Guadalajara metropolitan area. This work allowed me to identify some of the reasons girls are not often seen when child labor is analyzed and why, in this case, more men than women drop out of school. In addition to allowing me to talk about the process of rural to urban migration, the analysis of the situations of these families permits me to highlight gender differences and generate reflections about cultural differences that give rise to distinct attitudes towards child labor and schooling. The experience of the Mixtecos, helps me also to introduce the link between the urban and the rural, which I reexamine in the next chapter.

My objective is to delve into the relationship between child labor and schooling, and to complement an analysis that, as I have argued, does not reflect the particularities associated with parental decisions and the activities that children carry out. Statistical analysis suggests that parental decisions are simple and based on the best alternative available; nevertheless, these stories seek to emphasize the complexity of the daily lives of these families. It isn't just poverty or personal tragedy that determines whether a child works; in addition to that, culture, community life, and models and possibilities for a different life all play a very important role in the decision not to work and to stay in school, or to do both.

The quantitative work in chapters 4 & 5, while helpful, generated a tranche of new questions, which after further rounds of fieldwork gave rise to a series of explanations that, as explications of processes that occur simultaneously, do not necessarily have an orderly progression. Hence the themes that I address in this and the next chapters appear to be independent of each other, but taken together they attempt to explain a reality that is as complex as are a human being and social reality.

# 6.1 CONTEXT AND METHODOLOGY

# The Guadalajara Metropolitan Area

Seventy-six per cent of the population of Mexico lives in urban areas. Guadalajara is the second largest city in the country; at present it has over four million inhabitants (INEGI, 2010). In addition to being a city with an important population density, its physical area has grown significantly over the last few years, in many instances, because of the growth of irregular low-income settlements (Gilbert & Ward, 1985). The metropolitan area includes six central municipalities: Guadalajara, Zapopan, Tlaquepaque, Tonalá, El Salto, and Tlajomulco de Zuñiga, and two outlying municipalities, Juanacatlán and Ixtlahuacán de los Membrillos. Of these, the only completely urban municipality is Guadalajara (Consejo Estatal de Población y Vivienda, 2009). The majority of inhabitants of the metropolitan area are women, and 28.98% are under the age of fifteen. This indicates that there are slightly more than 1.2 million minors, 400,000 of whom live within the municipality of Guadalajara itself.

Despite being one of the municipalities rated as Highly Developed (Consejo Estatal de Población y Vivienda, 2009), Guadalajara has prominent areas of high poverty with high population density (Grajeda & Ward, 2012). This means that despite being a municipality with low indices of poverty and having a relatively small number of persons living in extreme poverty, in absolute terms there are nearly 80,000 living in conditions of nutritional poverty, 160,000 in capacity poverty, and more than half a million lacking savings or assets. This means that the problem of inequality and marginalization is as bad—or worse—than it is in many other municipalities in the country. This inequality is even worst in some of the sorrounding municipalities. The Guadalajara metropolitan area is an area of many contrasts, where extreme poverty exists alongside economic growth.

This high contrast within the population facilitates the presence of children working on the street, or of girls and young people participating in domestic labor. There exists a pool of cheap available labor, employable by those in better economic circumstances, or that can provide services informally for a very low fee, or that can offer low-cost easily sold products in the public thoroughfare; at the same time, there is a population whose economic situation allows them to demand those services and consume the products they offer.

183

# Methodology

This chapter is based on fieldwork done in the City of Guadalajara starting in 2009. It began as part of the evaluation of the social program *Rescue of families in Street situation of the metropolitan zone of Guadalajara*. During this project, I interviewed 60 families that, at the time, were working—or had worked for some period of time during the previous two years—on the streets of the municipality of Guadalajara. In some families, all of the members were working on the streets at the time of the interviews; in other cases, while parents still worked on the streets, children who once had, no longer did; in the rest of the families, only adults were working. Prior to the interviews, I conducted a survey that included, among other things, perceptions about street work and gender, costs of schooling, and gender based prejudices. Surveys and in-depth interviews were complemented with visits to their homes and ethnography on the streets. I used the census of working families of the DIF system in Guadalajara to contact families. The objective was to interview the 110 families registered; however only 66 of them agreed to participate. *Promotores* facilitated this access to families.

Some of these families were families made up of Mixtecos recently arrived in the city, while some were composed of children of Mixtecos who had, as children, come and gone between their community and the city and now live permanently in the city, where they are raising their own children. A third group of families is composed of meztizos<sup>1</sup> from Guadalajara and surrounding municipalities. These differences among the

<sup>&</sup>lt;sup>1</sup> In Mexico the term mestizo is used to mean a person who is not of pure indigenous descent. It has a current double meaning of mixed cultural heritage and descent.

groups allowed me to compare cultural factors that have, in a distinctive manner, influenced decisions around child labor and schooling of their children. In some cases, the need for girls to be chaperoned has meant that small girls spend more time in the street than boys, as they accompany their mothers, who, more often than men, dedicate themselves to selling handcrafts on the streets. In contrast, it is more common for children of recently arrived Mixtecos to be obliged to accompany their parents to work as translators from Mixteco to Spanish.

Fieldwork in Santa Ana lasted longer. In 2010, I began researching children's rights and studying the socio-economic dynamics of the colonia. However, the primary fieldwork for this section was completed during the winter of 2012, with groups of children and youths. I mainly held focus groups, which are described in the introduction. But I also conducted in-depth interviews with parents of young children in the community.

# 6.2 SOCIAL FACTORS THAT INFLUENCE SCHOOL DESERTION AND FAVOR CHILD LABOR: THE COMMUNITY OF SANTA ANA

Santa Ana is a colonia located in the southwestern section of the Guadalajara metropolitan area. Its colonial origins make Santa Ana a place that calls itself a *comunidad*. It is a comunidad because of its geographical location and social dynamic; it finds itself socially isolated from the rest of the metropolitan area. It is a colonia that

retains some customs from the colonial era and its indigenous heritage<sup>2</sup>; which support social cohesion, despite the high levels of violence that exist in the area. At present, given the high levels of inequality, social breakdown, and violence, Santa Ana forms part of one of the most marginalized areas (Murrieta, Tapia, & Torres, 2011).

Its designation as an area of "very high marginalization" is, among other things, based on indicators of access to health care, level of schooling, and housing conditions. More than half of the population lacks access to health care. Approximately 10% of school-aged children do not attend school and half of the population that is fifteen or over only attend elementary school. Of the 1,861 homes that make up the comunidad, more than 36% are severely overcrowded (LEES, Laboratorio de Estudios Económicos y Sociales, 2010).

Santa Ana is a community of indigenous origin, with large tracts of land. Land, which after agricultural reform was distributed among the inhabitants and that today is made up of multiple informal land parcels subdivided amongst the families who come from the community, and small plots sold to people who have arrived from other areas of the city or other regions of the country. This process of community-formation has given rise to a division that goes beyond that of the division of plots; it has given rise to a division between those who come from outside and those who are from Santa Ana, which with the passage of time and without respect to the organization of the population, has become a division between those from up above (the people who live on the hill) and those from down below (those who live on the plaza that lies to the east).

 $<sup>^2</sup>$  Santa Ana continues to celebrate the festival of the *Tastoanes*, a traditional celebration from the colonial period. It also conserves one of the few prehispanic settlements found in the city.

The indigenous origins of the population, their traditions, and the growth of the metropolitan area—which has absorbed the community and brought many utilities near in the midst of increasing poverty, has caused some authors to consider Santa Ana "a traditional pueblo with deteriorating modernization and progressive impoverishment" (Tapia & Torres, 2010, p. 4), impoverishment, which is in part the result of family growth and the subdivision of homes, many of which continue being irregular settlements. The "deteriorated modernization" can be observed in the streets and school facilities, as well as in the neglect of the sports complex and public spaces. There is a mix of tradition and "imperfect" transition to modernity, where there is no gender equity and teenagers have a predominately negative view, due in great measure to violence among the youth (LEES, Laboratorio de Estudios Económicos y Sociales, 2013).

There are great contrasts in the community. As I already mentioned, with the expansion of the city, the community became part of the metropolitan area of Guadalajara, without completely losing its cultural identity. It adjoins some middle class residential neighborhoods where many of the women from the community work as domestic employees; on the other hand, it is right next to some of the most violent areas of the city. The majority of the men who live in the community works as master bricklayers. A few of the men and women work in the surrounding factories or have a small business.

However, those contrasts are not only found when considering the outside world. Within the community, paved and gravel-covered streets contrast with dirt roads and streets in poor condition. Wooden houses with sheet metal roofs are mixed in with cement houses. A significant number of people live in houses without adequate space for cooking or sleeping without overcrowding. The urban infrastructure is concentrated in the areas where the families with the most economic resources live. Some have electricity and internet, while others do not have access to power or water utilities. Six out of every one hundred homes do not have drinking water, 8% lack sewer services, and 2% lack electricity (LEES, Laboratorio de Estudios Económicos y Sociales, 2010).

The community has two preschools, seven elementary schools, one middle school, a health center, and a public homeopathic dispensary. Recently, a high school opened, with the goal of serving the youth who live in the area of Santa Ana Tepatitlán. Nevertheless, as some community members report, none of these services is sufficient to meet the existing demand. Many of the children cannot attend the public school due to lack of space, and their parents do not have the resources necessary to send them to private school. The public elementary schools have both morning and afternoon sessions, in order to serve most of the population. Very few of the youth in Santa Ana manage to get into the public high school. The health center serves a limited number of people each day. Emergency cases have to be transported to another area of the city. Despite the size of the community and being part of the metropolitan area, Santa Ana does not have the infrastructure or services of an urban downtown, with a high level of development, like the municipality to which it belongs.

These conditions, combined with the high levels of poverty in which most of the population lives, and the increase in violence that is the result of the ever-growing presence of street gangs, are the context in which school desertion, and the social dynamic that reproduces it, occur. In the last ten years, the presence of street gangs in the community has increased in a significant way, becoming an attractive option for boys who are continually less willing to attend school. Despite the fact that many boys begin to join up with street gangs while still in school, their constant presence in the streets and the greater use of drugs and alcohol begins when they leave their studies and decide to work or do nothing. For young women, dropping out of school results in teen pregnancies that in the majority of cases lead to the total abandonment of schoolwork (Tapia & Torres, 2010).

In Santa Ana, school desertion has much to do with poverty, and the lack of work prospects for of young people that would allow them to believe in the possibility of a work life different from that of their parents. The majority of them see very few possibilities of continuing their studies beyond high school. Furthermore, they think that if they cannot make it to college and if their best option is to be a bricklayer or a domestic worker, "why should I go on studying, if I don't need either middle school or high school to do that?" (Juan, a youth who dropped out of school to do construction work with his father).

In Santa Ana, child labor is strongly related to the violence that is experienced in elementary and middle school, with the existence of gangs that can become an alternative space of belonging to cliques that form in school, the lack of expectations for a future that differs from that of their parents, a future which requires schooling to achieve. In this case poverty has an important influence, but it does not determine whether a child works. Furthermore, some parents view work as an alternative for their children who do not wish to continue attending school, especially when the other alternative is to link up with gangs, or "to be a lazybones or good-for-nothing," as the women say.

# **Self-Fulfilling Expectations**

In Santa Ana, school desertion, especially in middle school, is the most important mechanism in a sequence of self-fulfilling expectations in which youths think that their chances for achieving standards of living better than the community norm are very limited. Because of that, it makes no sense to continue attending school. This very discouraging view of their futures makes it more probable that kids will drop out before finishing middle school.

I carried out focus groups in the community if Santa Ana with the goal of exploring the difference between those who wanted to continue their schooling and had not linked up with street gangs, and those who had dropped out and joined a gang. During the discussions, I asked them what they thought might be the difference between them and the kids who drop out of school and are linked up with gangs. The common response on every occasion was the lack of expectations for the future and the perception that young people have a low probability of breaking the pattern of the dynamic in Santa Ana. Valentina, one of the young people interviewed, expressed it like this: *"They don't have dreams, or hope...they think that no matter what they do, they are going to be just like their parents or like most people in Santa Ana."* 

Valentina finished high school a few months ago and, for the time being, decided to work for a year to save money and be able to pay her university registration

fees, but she is determined to return to school and finish a degree, something not all young people do. Juan also temporarily left school. He is seventeen and was attending the afternoon session of the Colegio de Bachilleres del Estado de Jalisco (COBAEJ), at the colonia Miramar location, bordering Santa Ana. Juan decided to leave COBAEJ due to his fear of returning from Miramar to Santa Ana at night, as there is a certain amount of rejection of people from Santa Ana by some youths and other people from Miramar, as well as rivalry between groups of youth from both colonias. In the upcoming months he will try to improve his score on the admission exams for the University of Guadalajara's (UdG) high school, located closer to Santa Ana than COBAEJ, and in an area that Juan perceives as safer. Like Valentina, he thinks that most young people believe that they will live as their parents do: "Since most of the adults in Santa Ana didn't go to school and are bricklayers, many (of the youth) think that they will go along the same way...if their parents and people can live like that, so can they." Juan thinks differently, but he knows that few think as he does. Even so, for him the only alternative is the UdG High School, if that doesn't work out, there is no other.

María is in the last year of high school and is convinced that continuing in school and going to college will allow her to have a better future and–in contrast to what she perceives to be the thinking of the youth involved in gangs–that she can have a better quality of life than her parents and most people in the community. This way of viewing things has a great deal to do with her parents:

"In my case, neither my father nor my mother finished middle school, but they have always insisted that we must stay in school, that we can have a better life than theirs, and that we can go to college and get better jobs...I think that the ones who get involved with gangs, with drugs, and drop out of school don't think about the future, or that they can improve. Since they see that their parents didn't finish school, and they get along, well, they think they can do the same; they'll end up bricklayers, and that's that, but they don't think they could do something better."

#### (María, 17 years old)

In all of the cases studied, the youths who continue their schooling, whether in middle or high school, and who are not involved with gangs, think that staying in school will give them more possibilities to earn a higher income and a better quality of life in the future. In a similar manner, they agree that most kids from the community who drop out of school do so because they have no expectations of the future that would motivate them to stay in school.

Approximately 60% of youths who join gangs leave school prematurely; the great majority of them did so before finishing middle school. At one of the meetings of the Gaspers 11 gang,<sup>3</sup> Fabián arrived a little late. The meeting started at 6:30 PM in order to permit people who had to work until that time to attend. Like the great majority of the gang members who work, Fabián arrives in Santa Ana between six and seven in the evening, goes by his home, and, from there goes to look for his friends so they can "mess around" in the street, always within their gang's territory. When I interviewed him Fabián told me he had dropped out of middle school after the second year, four years before. Since then he worked in construction as a bricklayer, just like his father, who introduced him to the trade when he left middle school. "*School wasn't for me*," Fabián told me. "*The teachers just bothered me, and I couldn't take them anymore. It was better for me to* 

<sup>&</sup>lt;sup>3</sup> One of the eleven gangs that are in the community

get out of there, hanging out is better, and I wasn't going to be able to get into high school anyway. It's a real pain to get in; and why would I, I was just going to work construction anyway."

David was at the meeting from the beginning. He's a friend of Fabián's, and is also seventeen. He also left school after the second year of middle school, and he reinforces Fabián's argument:

"Yeah, the teachers spend their time messing with us and flunking us. I didn't like them telling me what to do, and besides, even if I studied, they always flunked me and told me off. That's not for me...and what's the point, you can't even get into high school. It wasn't my thing and I'm no good for schoolwork, that's why it was better for me to leave."

In Santa Ana, many young people have been seen to drop out of school for economic reasons; others didn't get a place in high school and hope to get one during the next registration period; many who have left school have done so because they didn't adapt to their schoolmates or teachers. They feel picked on and don't want to continue going to school. Those who return do so because they share the expectations of Juan, María, and Valentina, or because their parents think education is the only way to secure future wellbeing. For them it is the only way to have a better standard of living than their parents and the majority of people in the community. Those who are convinced that they are not cut out for school or those who feel that education does not help to improve wellbeing have no interest in returning to school. This is most frequent among those who have friends or siblings in college who have not been able to find work.

The majority of the kids see how difficult it is to stay in school, and, as Señora Luz says, what the children see does not help those who want to stay in school: "(...) they're from Santa Ana, and if they see that those who stay in school and are from Santa Ana can't get out of here, well, then, why stay in school...you don't need to do anything more than go around the corner, there are three who finished college, and, go look at them, there they are in the street all day, drinking and taking drugs. That's what the children see."

# The Likelihood Of Staying In High School

I learned through fieldwork that a common perception among children and youths—as likely to be found in those who had dropped out as in those who stayed in school or who were committed to staying in school—was that someone from the community of Santa Ana who finishes middle school has very little chance of enrolling in the next level of studies, above all in the school considered to be of the best academic quality: the UdG High School. This same perception is shared by the adults of the community.

There are few secondary school facilities close to Santa Ana. The closest school is the UdG High School, which is considered by most members of the community to be a school specially constructed for people in the area. Regardless, there are very few youths from the neighborhood who have access to it. This idea is shared by the adults, who are aware that their children have few options:

"the kids don't have a lot of opportunities to keep studying, it's that the high school (High School #9) was built for the people of Santa Ana and now the kids have to go other places because they can't get in there...they need to open another high school here." (Sandra, 38, mother of a middle school child)."

In the words of Julia as well as Sandra, High School #9 was built so that the community's young people would go to school. It is located a few blocks towards northeastern Santa Ana. This proximity makes it possible to walk there from whatever point in the community. Nevertheless, the school serves students from different colonias in the area, among which are found colonias with low poverty levels and higher levels of education, which makes it even more difficult for young people from Santa Ana to study there. This is due in great measure to the enrollment process, which is determined by the score that applicants receive on a general admissions exam for the University of Guadalajara high school system. Given that the instructional level of the secondary school in Santa Ana is less than that of the majority of middle schools in the area, those who matriculate through there have fewer opportunities to enroll in the aforementioned school than those who come from other areas or private schools. Nevertheless, from the perspective of people from Santa Ana, the sparse enrollment in this school is due to discriminatory policy and preference for those who come from middle and upper class colonias.

In a discussion with a group of kids who are staying in school, or have the intention of staying in school, the protests about the difficulties involved in staying in school through high school, especially in enrolling in High School #9 were widespread.<sup>4</sup> During the meeting Cristina angrily argued that:

"we're the ones who should go to school there (High School #9), not the people who come from Las Fuentes, Los Águilas, or from Bugambilias. But since they have money and influence, they're the ones who get in and

<sup>&</sup>lt;sup>4</sup> This group was comprised of 18 young people between the ages of 16 and 21, mostly women.

leave us standing outside. This is fair because this high school was built for the people of Santa Ana; they built is so that we would study."

Due to the difficulties that many of these young people have confronted, each time there are fewer who try to enroll in the aforementioned high school. There are very few who, like Juan, have tried to do it more than once. "*Nearly all of us who come from Santa Ana fail to get in…we don't get the enough points. That's why nearly everyone tries other places, like COBAEJ, but (High School) Nine is the best,*" Juan, who was at this same meeting, told us. The rest of the kids who participated agreed that the likelihood of applicants from Santa Ana getting into High School #9 was very low.

# **Level Of Education**

The great majority of children from Santa Ana Tepetitlán who attend middle school go to Secundaria Mixta 34, Lázaro Cárdenas del Río. This is the only middle school in Santa Ana, and according to figures from the Department of Public Education (SEP) it serves 556 students: 307 during the morning session, and 249 during the afternoon session. There are twenty-five classroom teachers for the morning and twenty for the afternoon; only five of those, all of whom work in the morning session, participate in the Carrera Magisterial, which provides incentives for ongoing training and upgrading of the teachers. The building has seven classrooms, and has running water, bathrooms, a perimeter fence, and thirty-five computers for educational use, thirty-one of which have Internet access. This means that during the morning session, there are forty-three students per class, while in the afternoon, there are thirty-five. The number of students per computer is nine and seven, respectively, for each session. Furthermore, this school participates in the Escuela Segura (Safe School) and Escuela de Calidad (High Quality School) programs, and in the national reading program (Secretaría de Educación Pública, 2012). It apparently seems like a school that meets all of the necessary conditions, in terms of infrastructure and faculty size, to offer a sound educational background. Regardless, the figures from SEP demonstrate the opposite.

According to the results of the ENLACE test reported for 2012, a low level of academic achievement and poor performance can be observed among the school's students. For third year middle school students, those about to seek high school admission, the results reported that 95.1% had only a basic or insufficient level in mathematics. In the case of Spanish and sciences, the results are not much different: in science, it reports that 94% of the third-year middle school students are at a basic or insufficient level, while in Spanish, 90.2% of the students in this same group received scores in a similar range. Not one third-year middle school student in the school received a score of excellent in mathematics or science, and only 1.2% qualified in that range in Spanish. That is to say, only one student in the entire cohort has very good mastery of those subjects (Secretaría de Educación Pública, 2012).

These results can explain, at least to a certain degree, the low probability of a student who matriculates from this school managing to enroll in a high school program. In addition to this, there are no services within the community that reinforce or contribute to bolstering the learning or academic level of children or teens. The kids who stay in school, or who try to continue attending past middle school, clearly understand the

importance of these activities, and that their lack puts them at a disadvantage and decreases their opportunities. "There aren't any activities that would prepare us better," said Norma, in a talk I had with a group of kids from the parish. "...before there were other activities and workshops you could go to..." Julieta interrupted her, "Well, in the DIF they have classes..." (referring to the DIF Community Development Center that is in Santa Ana). Several kids responded to Julieta's comment, one of them saying "Yes, but they're tailoring and hairstyling and things like that..." Another added, "Well, it isn't that it would be bad, but those things are more for older ladies, there isn't anything for us." Norma spoke again: "There should be theater or dance...or something with music or computers, all of that is also important for our training." Marcela commented, "There should also be sports, and there should be more playing fields and places to play sports," "but they shouldn't charge so much because if they do, then they're not worth anything." The other kids agreed with this last comment. Marcela concluded, "it's that all of these things would help us have more opportunities, and I think things would go better for us."

In addition to the lack of extracurricular activities or activities that would complement their education, the municipal library is in a very bad state. Hardly anyone uses it, as in addition to the lack of "good books," they cannot use the computers for their required work. It's nearly impossible to do homework in the library. In general, the young people report the need for activities that could help them with their educational formation, activities that would grant them better opportunities to accomplish and satisfactorily continue their schooling.

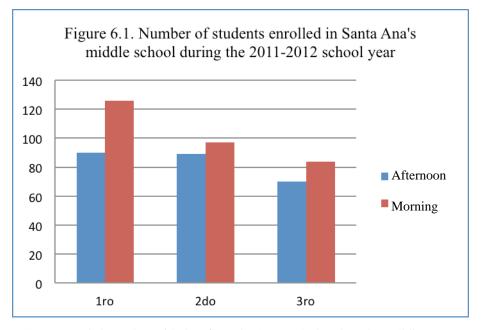
## The Need for a High-Quality Education

In both focus groups and in informal conversation and interviews with parents and youths, I encountered a very pessimistic view of the feasibility that children from the community could obtain a good secondary and post-high school education. This pessimism, based in the low chance that kids from Santa Ana have of enrolling in the high school system, creates in many people-especially teens-a low valuation of secondary education and an incentive to drop out at that level of schooling. The reasoning is very clear: if the probability of continuing through high school is very low, and the work to which they will gain access—in this case, construction—doesn't discriminate for hiring purposes between those who finish and those who don't finish secondary schooling, the opportunity cost for finishing secondary school is too high. This idea isn't solely held by the teen group, but is also held by various heads of household, through which young people see this notion reinforced within their own family contexts. The result is that many teens decide to drop out of school, which fulfills the expectations of those in the community who think that there is little chance that youth from the community will stay in school.

Figure 6.1 demonstrates the number of students enrolled in the colonia's middle school during the 2011-2012 school year, by grade, in the morning and the afternoon sessions. It is clear that the number of students decreases as the grades increase, independent of the session. According to interviews carried out with parents, the demand for secondary enrollment is high, and the capacity of the school is insufficient. This has happened for several years, and if we take into account that during that time the school's,

capacity has not changed, the drop in students as the grade level goes up is explained, then, in great measure by the high drop-out level at this school.

The Department of Public Education reports that the drop-out rate for school year 2011-2012 was around 10%, that is to say that one in every ten children dropped out of school during that school year (Secretaría de Educación Pública, 2012). If we take into account that during this time period the school reported a total of enrollment of 556 students, this indicates that approximately 56 students dropped out of school. This statistic, however, comes from the number of children who register for each school year and does not take into account those that, having finished the first or second year during the previous school year, do not return to enroll in the second or third year, which means that the true number of students who drop out of middle school is even greater than the reported statistic.



Source: Made by author with data from the Secretaría de Educación Pública

In the case of the reported rate of failure, there is a large variation depending on the session and the gender of the students, with a minimum of 27.2% of the girls attending the afternoon session and a maximum of 60.9% of the boys who attend the same session. In any case, the failure rate is quite high, and as David mentioned, is one of the factors that impacts the kids' frustration and the decision to drop out of school. Nearly all of the youth with whom this research was conducted, gang members who had dropped out of middle school, reported that they frequently failed classes and were in trouble with the teachers for being out of control. They were in agreement that, given the poor academic results they got, and the perception that the teachers rejected and were constantly rebuking them, dropping out seemed like a better alternative than staying in school. All of them thought, as Fabián said, that school was not for them. Or, in the words of David, they weren't cut out for schoolwork. This matches with other data from federal surveys that report that not adapting to school or the feeling of being incapable of schoolwork is the principle cause of school drop-out (See for example the Encuesta Nacional de Ingreso Gasto de los Hogares or the INEGI Módulo de Trabajo Infantil, referred to in the previous chapter).

### Why Go To School?

To summarize, the opportunity cost of keeping yourself in school is very high; there are very few opportunities to finish a bachelor's degree and find a good job. On top of this the lack of parental demand that they return to school, the support when they leave school, and the ease with which they can incorporate themselves into informal labor facilitate the fulfillment of their expectations and the ability to get by without the need for better schooling. All of this favors youths quitting school, getting involved with drugs, getting pregnant at an early age, and that they begin working in low-skilled work from an early age.

For many young people in Santa Ana, basic needs are "resolved" thanks to the possibility of subdividing the pieces of land that were initially ejidales and now belong to their families, pieces of land that have been subdivided to accommodate family growth. This has allowed school desertion or teen pregnancy to have less severe consequences for those who do not have parental support. Despite the fact that many parents are opposed to their daughters getting pregnant, in general, they don't abandon them. To the contrary, in most cases they offer them space in their own homes, or they give them a piece of the property on which to build a room. As Juan described very well: "*If, for example, a guy drops out of school and gets his girlfriend pregnant, he knows that her parents will build her a room or that she will live them; that's the way it always is here. Then there's no problem. It's always been that way.*" Young people have confidence that their families will do whatever is possible within the space that they have even though it increases the overcrowding. For the most part, dropping out of school and going to work isn't much of a problem. In fact, in some cases, it is desirable.

In the case of Santa Ana, the presence of street gangs also has an important relationship to school desertion. Dropping out doesn't just diminish individual and collective productivity and carry consequences for the future, it also feeds the gang dynamic. With more free time, they have more time to spend socializing; confronted by an empty set of occupational and recreational alternatives, they begin to associate with other street gangs that easily become involved in problems like vandalism, delinquency, and drug addiction. Those who work have money to invest in group activities, which given the lack of alternatives and spaces, are often harmful activities: drugs and alcohol. Those who are working are young people who don't have major family responsibilities, and who demand time, activities, and recreation with their peers. Since there aren't any spaces, or particular activities, they use their free time—evenings and nights—in the space that is available: the street, to get together and take part in the only activities available to them: drinking and taking drugs.

Dropping out amplifies the gang problem. If it doesn't actually create the gangs, it does feed and magnify them. On the other hand, the gangs increase the drop out problem, because they become a place to belong for those youths and children who feel like they don't fit in at school. This relationship between schooling and gang life gives way to a dynamic that is fairly destructive of the social fabric. In the best cases, the kids leave school and start working, a great majority of them in the informal sector. In other cases, they simply dedicate themselves to being out in the streets making up an important part of the gangs, with scarcely any alternatives for productive activities or recreation. For these young people, there are not many choices: getting into high school is difficult, it is hard for them to finish middle school, and it is evidently unnecessary to go to school to get the sorts of jobs they see as available; it is much easier to belong in a street gang than at school. Why not drop out of school? The opportunity cost of attending school is very high; and the lack of expectations for a better life makes it difficult to change the value placed on getting an education. For the people of Santa Ana, this change will come only through better opportunities at the level of the school, for a better quality of education, and, of course, better job opportunities.

# 6.3 THE INFLUENCE OF CULTURE AND GENDER IN PARENTS' DECISIONS ABOUT CHILD LABOR AND SCHOOL ATTENDANCE: THE CASE OF FAMILIES THAT WORK ON THE STREET

### Mixtecos in the colonia Ferrocarrilera

In 2007, there were more than 1165 people working on the streets and in the markets of the municipality of Guadalajara, approximately 250 families (Coordinación de Protección a la Infancia, 2007a; 2007b). Of these families, at least fifty are Mixtecos who live in one of the poorest areas of the city, a regularized settlement in what Ward describes as the "innerburbs" of the metropolitan area (Ward, 2011). The Guadalajara metropolitan area is known as a receiving point for families that come from different parts of the Republic, many of them seeking better work opportunities while avoiding the fear that the enormity of Mexico City causes them. As in the majority of migratory processes, families come with the support of other relatives and friends who arrived earlier, or from groups that have formed in the city made up of members from their same community.

The Ferrocarrilera area is one of the poorest areas in the municipality of Guadalajara. It is made up of a series of irregular settlements, among which are found: *El* 

Campamento, Las Casetas, El Patio del Ferrocarril, Comunidad Mixteca, and El *Embarcadero*. Many of the Mitxtecos who currently live in Guadalajara have established themselves in this area, and have formed neighborhoods in which they reproduce, to a greater or lesser extent, ways of life similar to those in their hometowns. Some of them live in rooms loaned out to them by other family members, others live in the homes of the brother or sister who returned to Oaxaca; the most recent arrivals live in the most hidden and poor area of the area, the Embarcadero, in rooms made of wood with dirt floors. In some of these settlements, the streets are divided into the houses of outsiders and those that "are really from here." In the *Emabarcadero*, the Tapatíos (Jalisco natives) can be distinguished from the Mixtecos because the former live in one or two story concrete houses, with utilities. Mixtecos share their dwellings with other families. In general, there are three or four rooms for several different families. Don Mario lives with his family in a room that is approximately three by five meters. They have two beds, a toilet-that in reality is a latrine—and stacked up boxes for storing their clothes. The roof is a thin sheet of metal on top of some light-metal beams, creating a gap between the wooden planks of the walls and the ceiling through which water or small animals can get in.

In the *Ferrocarril*, the houses are better. The Mixtecos live along three streets. The outsiders live towards the back of the settlement, on the right side, with the "real Tapatíos" on the left side. Those on the right are primarily gardeners, those that are more toward the front area of the settlement have a variety of jobs. On the second block is the home of Rosa, a seven year-old girl whose parents are convinced that she should attend school so that she doesn't have to depend on selling candy, as they do. They do not want to create a third generation of street vendors. Rosa and her siblings like school, and their cousins accompany them in the effort to get ahead.

I don't know very much about those that are called the "real Tapatíos," but just as in the other families, the boys and girls who don't attend school play in the small street that divides the groups until the rest arrive. The only difference is the age at which they enter school. Those who have lived in Guadalajara longer, or who want to change their way of life send their children to school starting at four years of age; while for those most recently arrived from Oaxaca, children under the age of seven are considered very young to send to school. But not all of the Mixtecos have the same ideas. Those who live in the *Embarcadero* have a lower level of education, speak practically no Spanish, and are illiterate. Those who have lived for a relatively short period in the *Ferrocarril* also speak little Spanish, but those who arrived earlier as children speak both languages very well, and have attended more years of elementary school. Some of them even began middle school.

In both cases, job opportunities are limited. Limited Spanish and lack of education mean that gardening or street vending are among the few jobs available to them; when they have work, 80% of the recently arrived Mixteco men are gardeners, and when they don't have work, they stay at the house, due to the difficulty of speaking Spanish—they prefer that their children or wives go out to sell. If they are indigenous, the opportunities are fewer. Only men who were raised in the city go out to sell; it is usually women who go out to the intersections, at least among the Mixtecos.

But Mixtecos are not the only group that works on the streets. In addition to other indigenous groups, and emigrants from other states, a prominent number of the families working on the street are people born in towns on the outskirts of the city, or within the metropolitan area; families that have lost their jobs, that do not have the necessary skills for the formal employment available or that they just like this kind of work.

### Families from Guadalajara

"Why don't you look for work? I know someone who can help you." "No... not me. Why would I do that? In the plaza, people give me everything... they've even given me diapers... food for my children... I don't lack for anything."

(Esmeralda, 21 years old)

Esmeralda is one of many who work on Guadalajara's streets. Every day between eleven and twelve, she arrives at the Plaza with her four children. Hidden in the rebozo she wears hanging across her back, Juan sleeps nearly the whole day while his mother wanders the plaza with a bundle in her hand. Her daughter Jacinta usually carries the little ones bottle, while Lucía makes sure that Andrés doesn't distract himself with the store's fixtures. Most of the time, they sit by the side of the street, hoping to receive spare change from people passing by to catch the bus. After two in the afternoon, Esmeralda goes with some of the children to walk in the area where food is sold. She gets a taco, a torta, or a few coins so that she can buy something. There are some who buy her diapers or milk for her baby from the drugstore on the Plaza. At dusk, they return to the room where Esmeralda's mother and siblings also live. Like Esmeralda, Ana (another young girl that sells on the streets) and her children position themselves around the jewelry center, and Mariana and her children near another commercial center.

Rosa is on the street for another reason. Every day she goes to school early, accompanied by her sister and her two brothers. At 1:30, she comes running to the house, her hair still in place, but with her shoes full of dirt, and asks for something to eat. Rosa's family lives in room that her grandmother lets them use. Rosa, her siblings, and their parents make do with the only bed they have and a small corner of the room. For the last month they have shared the space with a refrigerator they received from the government, and soon they will put in a new stove. After she finishes her homework, usually Rosa goes with her mom to the intersection, where they sell candies, because her mother doesn't like to be on the street alone. Rosa is the perfect companion, easily entertaining herself in the median. The families of Juana, María, and Cenobio, other of the children I found working on the streets, find themselves in similar circumstances as Rosa's, as do many others who often run into each other playing in the city's medians.

Families work on the street for a variety of reasons. In every case, there is the need to get together enough money to survive. Nevertheless, children aren't always on the streets because their parents want them to be. Some of the families interviewed bring their children out on the streets because they don't want to be alone, or because they don't have anywhere else to take them, or because the family's income desperately

requires their help. The cases in which children are brought along because it leads to more money are relatively few. Despite the fact that most passersby prefer to give change to a child or a disabled person (Murrieta, 2008), many parents try to prevent their children from leaving school and facing the risks of working at the intersections, above all in the case of women, who are more often sexually harassed by other adults.

Not all children who leave school do so because they need to work. Some children don't go because their parents think they are too young, despite the fact that current requirements are that children attend two years of preschool before entering elementary school. Some families don't have any problem with their children dropping out: if they're able to make it without an education, why shouldn't their children be able to? But for some, it's important that their children finish school so that they don't have to make a living selling things on the street. These differences are as much cultural expression as they are the results of the personal histories of the families interviewed. The Mixtecos who have not been in Guadalajara for very long have moved into the labor market in a very different way than the Mixtecos who have been there longer. Those who migrated as children and know how hard it is to find work or make a living selling things on the street see education as a means to access better living conditions. The difference is even greater with those who were born and raised in the metropolitan areas, who in most cases don't want their children to work on the streets; most of them consider the streets to be a bad environment for their children, due to the vice that surroinds them, and to the violence to which they are exposed, especially girls.

Monica and her husband have just moved out of their in-laws' home. Since the birth of their first child, who is now ten years old, they have lived in a room made of thin metal sheets on the flat rooftop of the house. Monica's husband washes windshields in the intersections. Previously, she brought their youngest child and went with him; now she takes care of their children. Señora Susana lives with her granddaughter in a small room in another of the city's marginal colonias. She is deaf and mute, and Natalia is the translator between her grandmother and other people. Natalia goes out every day to sell candy, but when her grandmother needs her, she stays home. Julieta, another of the girls interviewed, is about to turn seventeen. She was let go from her job, and Mariana recommended that she sell telephone cards on the street. She tried that for a while, but sales were slow, so she decided to sell candy. Like Monica and Señora Susana, Julieta has basic utilities in her home. But neither she nor Monica live in as small and dark a space as Señora Susana.

The vast majority of adults who work on the streets clean windshields in the intersection or sell candy. Children and older women usually ask for change, sell flowers, or help with the candy. There are some who juggle or mind parked cars. For these families there are more options. Despite the fact that economic necessity brought a great majority of them to the streets, many of them had the opportunity to work in a factory or workshop, but can now no longer do so, or that salary alone is not enough to get by. As with the Mixtecos, lack of opportunity is not only due to the economic situation; it is closely linked to lack of education or training for skilled labor.

For the Mixtecos as well as the families from Guadalajara, the possibility of working or going to school appears to depend primarily on the values and beliefs of their parents or guardians. This means that there is not a causal relationship between school desertion and child labor. Some children neither go to school nor work, while others take on both, as is the case with minors between the ages of seven and twelve and adolescent girls.

### **Gender differences**

Every day, from two thirty in the afternoon on, I find the same scene: two girls playing on the sidewalk, sometimes playing between the cars at the same time they are offering their candy. While the stoplight is on, the mother offers various things, sometimes taking the hand of the smallest child in her right hand. When he is sleeping, she leaves him in a corner underneath the bridge, protected from the sun and the cars. Sometimes the four of them read papers they have gathered in the street; sometimes the younger girl takes care of her little brother while her sister and mother continue selling. Some days I am able to locate the father, handing out flyers or selling candy on the other side of the street; they always protect themselves beneath the bridge from the sun or the rain. Independent of the activities that they are carrying out, school sessions and vacation periods are easy to identify. Each year when school starts, they stop coming in the mornings and their visits to the intersection are less frequent. Once vacation starts, the entire family is present on almost daily basis. According to the last census of families who work on Guadalajara's streets (Coordinación de Protección a la Infancia, 2007; 2007b), more than 335 boys and girls work on the streets; 58% of them are males. Most of the girls are between seven and twelve, while most of the males are between thirteen and seventeen. Some go to school, some go to school and work, and others just work. More males than females attend school, but more females than males continue on to middle school. Both participate in begging, even when girls get money more easily than boys. Anyway, both of them are up to working. As Mrs. Teresa says "*children are smarter at selling; they make friends with all the people in the cars.*"<sup>5</sup>

The majority of the girls are just companions of other adults, but they ask for change or sell candy in the meantime. The older ones are franeleras<sup>6</sup> or work seasonally selling in the street, because their principal activity is working around the house. Few of them sell crafts, which most often is the work that their mothers undertake. Children prefer to clean windows or sell candy. The younger ones are almost always accompanied by an adult; sometimes they are brought along because it is better to ask for money while holding a child—people are more sympathetic. On other occasions they are brought along because there is nowhere else to take the child. In contrast with females, boys are more likely to work as jugglers or clowns at street intersections.

A significant number of child laborers work in the city's markets. In 2007, 212 children were found to be working in the city's three main markets. (Coordinación de Protección a la Infancia, 2007). As opposed to work at the intersections, market activity is

<sup>&</sup>lt;sup>5</sup> "Los niños son más listos para vender; hacen amistad con los de los carros."

<sup>&</sup>lt;sup>6</sup> Franeleros or franeleras are people who clean windshields at the intersections.

characterized by a greater number of males; 80% of the minors who work in the markets are boys. This is in large measure due to the sort of work that can be done in those places. Most of them work delivering goods in the market. Girls generally work selling candy, juice, or caring for their siblings. Many times they simply spend their time keeping their parents company, just like the girls in the intersections.

A significant percentage of the boys and girls who work in the markets also attend school. Due to the possibility of being employed in established market stands, it is more common to find children who have completed middle school in the markets than in the intersections. Seventy-two percent of the minors who work in the Mercado de Abastos (Wholesale Market) are between thirteen and seventeen years old, probably it is mostly the older children who can haul heavy boxes and loads.

It is not common to find indigenous peoples working in the markets. In general, those who have a stand or who perform either formal or informal work in the markets were born in the city or in one of the surrounding municipalities. For indigenous peoples, it is usually easier to work selling things or asking for money than it is to be employed; for this reason, it is more common to find them in the intersections, in the downtown walkways, or in the entries to the markets rather than inside the market or in an establishment.

#### From The Public To The Private Space.

The risks that are encountered in the street, combined with the importance that women's sexuality has for some families, means that males confront many more risks in the street than do the females of families who work on the street. From the data obtained in interviews with those families,<sup>7</sup> I found a significant decrease in the proportion of girls between thirteen and fifteen who worked in the intersections. Many parents resisted letting their adolescent daughters work in the intersection; they believed that as girls grew up, the risks on the street were greater, simply because of the fact that they are female. Due to this, among these families, once adolescence began, girls were more frequently sent to school, and boys to work—especially when the boys in question had problems with their teachers, or didn't want to keep going to school, and their parents didn't want them to be "at leisure." Some fathers mentioned that even in cases when the school is secluded, many times it isn't safe to send girls to school, and they don't like to do it; however, these were isolated cases.

For many fathers, females are more prone to danger than males, in great part due to their inability to defend themselves physically, but also because of their sexuality. They think that, once she is a "young lady," being a woman who works on the street makes them more vulnerable to disrespectful behavior directed toward them by men. These ideas, in addition to being based on what the women themselves confront on the street, are shared by the mothers:

It isn't the same being a woman on the street as a man. They pester us more and they feel that if we're working in the street, it's because we're crazy. Later they think you're looking for someone to go with. They came to respect me because I got together with Gustavo, but I wouldn't let my daughter go to work in the intersection.

(Mónica, October 2009)

<sup>&</sup>lt;sup>7</sup> The description of the methodology used and the number of families interviewed, can be found in chapter 1, as part of the introduction.

For women who work on the street, being accompanied by an adult is fundamental, especially for young women, although indigenous women are usually accompanied by another woman or by children or youths. It is less common to see them with an adult male companion.

### Social Roles and Child Labor: Cultural Differences

But the decision to work or to go to school does not only depend on the fear that some parents have about being a girl. There are roles that say what a girl or a boy (or woman or a man) should do; roles that in some cases are imposed and in some modeled, and one way or another, as I have already argued, they determine the manner in which a girl is incorporated—or not—into the labor market.

For the majority of the Mixtecos who have recently arrived in the city, a woman's primary responsibility is the home. As girls grow up, their responsibilities in the home increase in such a way that child labor moves from the street to the home. This repeats itself to a greater or a lesser degree in different parts of Mexico, and with real tapatíos. As Stern (1997) argues, there is a cultural pattern—although it is tending to decrease—that values schooling for girls less, because of the belief that their main role is in the domestic and reproductive spheres.

The idea that women should learn how to take charge of their siblings and of the house from a young age increases the hours spent working, as well as brings the street work into the home. María is in middle school. Every day, before leaving for school, she has to make her bed and pick up her clothes. Juan is ten, and shares certain obligations with María. Nevertheless, María is the one with the responsibility to help their mother clean the house. Her aunts as well as her mother constantly repeat to her that she is a young lady and she has to learn how to do things, something they do not do to her brother. In general, she spends more time on housework than he does. This is not an exception; according to the data I gathered with families who work on the street, on average girls spend more hours on housework than boys.

While the women stay home, the men go out to work in diverse activities. Every day, José María goes with his father to some of the surrounding colonias. He has learned to garden since he was a small boy, and it is the only work his father does. If his father doesn't get any gardening work, they stay home, and then it is his mother who must go out to sell. Among the Mixtecos, selling things at the intersections is not a socially acceptable activity for men. Few decide to ask for money or go out to sell when they don't have work.

The average number of hours that a boy spends working in the thoroughfares or in the markets is greater than the time girls spend there. Nevertheless, taking into account the number of hours girls' work inside the home as well as the hours employed outside the home, females between seven and twelve work more than males. A female carries a double workload that is not evident in child labor statistics that do not count domestic activities as work. Females work in the home and go to school, as well as working on the street. When Ernestina, who is twelve years old, gets out of school, she often goes to the intersection where her mother is from early on in the day, and starts selling; when they finish, they get home and she helps her mother prepare dinner for the rest of the family. Mexican ideas about the role of women significantly influence the double workload carried by girls between seven and twelve years old. For girls of Mixteco origin, as with most other children, it is exactly this period when the negative impact is felt most, since because they are helping the family, they are deprived of time for play or study. During adolescence, the impact has more to do with the consequence of the previous period—a lag in education—and with the possibility of becoming pregnant at an early age than it does with the double workload (Kurz & Prather, 1995). Furthermore, when these girls have arrived in the city only a short time before, the difficulty of speaking Spanish, added to the lack of socialization through play and the difficulty of arriving at school well-rested and well-fed gives rise to a below-average level of achievement, adding to the disadvantages they face, and in the end, facilitating the reproduction of poverty.

### School and Work

As teenagers, girls work less than boys, especially in paid work. Some leave the streets to work in houses as domestic employees, others care for their siblings so their mothers can work. Even in adolescence, the absence of girls in the workforce is not reflected in school attendance. Until the age of fifteen, the number of boys who go to school is greater than the number of girls, despite the general decrease in the number of minors who attend school. This tendency changes in high school (*bachillerato*). From the age of sixteen on, there is a significant increase in the number of girls and boys who do not attend school, but the proportion of girls who leave school is lower (table 6.1).

Rizzini (2009) argues that boys drop out due to inability to adapt to school, lack of interest, or difficulty studying. This could explain the increase in school desertion by boys, although in this case I did not find clear evidence supporting lower adaptation to school among boys; nevertheless, as previously mentioned, in the case of youth from Santa Ana this is an important reason for leaving school. Some parents think boys are more restless and less dedicated than girls, although among the families I interviewed there were some who thought that males are more intelligent than females. Even if I cannot confirm through the interviews that there is a bias around the capabilities of boys and girls to study among these families, there is enough evidence to argue that girls have an easier time adapting to school than boys. Nevertheless, the double workload and the importance that motherhood and the role of women as responsible for the care of the home have in Mexico means that girls' performance and interest in school is lower.

# Parent's Valoration Of Children's Education as significant variable that influences child labor

Señor José is from Oaxaca. He came to the *Ferrocarrilera*, as the people who live there call the colonia, looking for a better job. One of his cousins let him know that he would be returning to Oaxaca, and that his house was available. Don José, like most of the Mixtecos who have come to this area, depended on those who had arrived in the city before him to find a place to live and to get work. Again like most, his primary job is gardening. For Don José, preschool is not important. In his town there wasn't any preschool, so none of his older sons or daughters attended it. Why should he make the youngest daughter go, if for him she is still very young? Caritina does not attend school even though she is already five years old. Joel, the oldest of the boys, doesn't attend school, either, because his father needs him as a translator and for help when he goes to work. Emiliano, a resident of *El Embarcadero* who is also originally from Oaxaca, and has not been in the city for very long, cannot finish middle school, either; his parents need him to watch the house while they go to sell things in the intersection. Though their belongings are few, Emiliano's parents are afraid to leave their house, a wooden room with dirt floors in which they keep their clothes and few belongings, and into which any person could gain easy entry, unoccupied.

Like Caritina, Joel, and Emiliano, many Mixteco children for a variety of reasons do not attend school. The Mixtecos are mistrustful of city people. They carefully look after their wives, but, at the same time, adult males do not like to sell on the street; they prefer that their wives do it, accompanied by some of the children. They are very hardworking people, but have little knowledge of the city, or of Spanish, which makes job possibilities more difficult. Most come, like Don José, with the support of relatives or friends from the community who let them use a room or a space to stay in. Don José arrived to a small house that is in the process of being legalized. If he is lucky, it will become his, if he cannot establish himself in a few months, he will go back to Oaxaca. Alicia isn't sure she wants to keep going to school; she is sixteen, and she does not like school. I think that this isn't because of the situation in which she lives, but rather the simple fact that she is a teenager. What I can state is that for her father it is not imperative that Alicia continue studying, he would prefer she work and he not to have to go out on the street.

Tomás was born and raised in the city of Guadalajara. He attended middle school and went to work. For many years he worked making shoes. When he was twentythree, he was arrested and was in jail for two years; he did not tell me why. When he was released, he wanted to go back to doing the work he had done his whole life: sewing soles onto shoes. Nevertheless, the impossibility of obtaining a letter of no criminal record meant that he could not return to working in a factory. The same thing happened with other jobs. So he decided to go out on the street. His wife had a similar run of bad luck. Although she did not have a criminal record, her work has been very unstable and in the factories, she was not hired for more than three months. At the time of the interview, Julia was out of work; for this reason, they both decided to work in the intersection. For many months, Tomás and Julia lived in a room on the rooftop terrace of her mother's house. When I met with her they were living in a small house, whose rent they paid with support from DIF Guadalajara. Both of them were convinced that their children should not drop out of school; despite the fact that the school was isolated, for them the only way things could go better for their children was through schooling. Julia and Tomás are convinced that education is the way to get ahead.

Despite Don José's disinterest in the education of his children, I cannot say that Mixtecos place little value on their children's education. Many think like Julia and Tomás; for those who have recently arrived in the city, it is simply that their young children are too young to go to school, and life in the city makes it difficult to support their studies. It is difficult for Julia and Tomás, too, but their experience forged in them the conviction to send their children to school, even though this means having to work on the street.

### 6.4 THE INTEGRATION OF THE RURAL AND THE URBAN

The experience of families who work on the streets allows for the observation of how social constructions related to gender define the workforce participation of girls and boys, and how these prejudices are immersed in a culture that facilitates or limits, as the case may be, the possibility of continuing to study. At the same time, it demonstrates how certain beliefs come from cultural differences, and generate distinctive patterns of labor market incorporation, different from the patterns that are found in other places. Santa Ana presents an example of the limitations that youths encounter, and that prevent them from continuing to attend school: an example of how limited expectations about the future can shape children's decision about work and schooling. At the same time, the case of families who work on the streets of Guadalajara and the dynamic that takes place in Santa Ana are both examples of the integration of the rural into the urban.

In Guadalajara, as in other cities of Latin America and Mexico, the rural sector has increasingly integrated into the urban sector; urban and rural markets have, as Kay argues, "become more closely interlinked" (Kay, 1999, p. 302). The rural origin of Santa Ana and the Ferrocarrilera settlements of Mixtecos are examples of the integration of the rural into the urban. In the case of Santa Ana, the urban expansion has absorbed the rural community, allowing a process of land division that has increased inequality and household density. Mixteco settlements are an example of the continuous rural-urban migration that results from rural poverty and lack of work opportunities in rural areas.

However, this inter-connection between the rural and the urban has also influenced rural life in other forms. The increased presence of agricultural producers has intensified rural-rural migration, as in the case of the migrant agricultural workers of Cihuatlán, which I discuss in the next chapter. But that is not the only effect; migration has also resulted from new life-models available through this increased interlink between the rural and the urban, shaping children's alternatives to work and schooling.

In the next chapter, I explore the influence of role models that results from the closest link between the urban and the rural, a link mediated by gender roles that limit available models for girls. I discuss social and economic conditions that influence parental decisions about child labor and schooling in a context of limited economic and educational resources, in this case, shaped by rural-rural migration.

### Chapter 7

## **Going Beyond Poverty: The Rural**

An important aspect of child work in urban areas connects directly with the alternatives available to people in rural areas. The Mixtecos of Guadalajara arrive from Oaxaca with hopes of finding better work options, therefore creating opportunities for their children that are different from the few jobs that they find in their native places. Other groups of indigenous people, who, like the Mixtecos, migrate and try to develop the skills that they have, are found in big cities across Mexico. Some establish themselves in settlements dedicated to artisanal furniture production, others work selling handcrafts, and a few work selling sweets or products they obtain in the city and resell. In all cases, these are people who decide to migrate to the city.

As mentioned in the previous chapter, this migration generates a particular dynamic that influences the way in which minors are incorporated into the labor market. The traditions and the view that they have of work, social roles, and education influence the possibilities that children have for working and/or going to school. Regardless, the family dynamic in the countryside is not necessarily the family dynamic that they can create in the city. In the majority of cases, it isn't what they want. It is precisely this that prompts my interest in the dynamic that brings them to the decision to migrate, and, in the case of migrant agricultural workers, the factors that make it difficult for them to avoid having their children work and those that prompt them to send their children to school.

People in the countryside confront a variety of situations. In some communities, such as is the case in El Rincón, a balance between work options and the educational opportunities for their children allows children to finish at least an elementary education. In poorer communities, as is the case in Cihuatlán, Jalisco, the campesinos are obligated to migrate in search of work, which complicates the conditions under which their children can attend school. Many times migration makes child work the best option.

In this chapter, I analyze the situations confronted by familias in the country that facilitate child work and migration. I address two distinct forms of migration. In the case of El Rincón, I analyze the migration from the country to the city as a result of the influence that adults from the community who have migrated exert on children. This form of migration does not stem from the need to seek better working conditions, but from the effect of having on hand a model for an alternative way of life that presents itself to the rest of the community. That is, the effect of having the image of an adult who can go live in the city and "have fun," in the words of Mateo, a fifteen-year old boy who moved between Mexico City and the community, as opposed to that of a campesino who lives in the country and works on his land or on the land of those who have larger landholdings, and who thinks only of day-to-day life in the country. Cihuatlán is a clear example of migration out of necessity, a migration that is the result of the lack of work opportunities in rural Mexico.

El Rincón de Negros is located in the central part of Veracruz, four hours north of Xalapa. It is a small rural community of no more than 130 persons. I was the first time in the community ten years ago. There I learned about the influence of gender roles in the activities carried out by boys and girls, and in the possibility of continuing to attend school.

At the same time, I could observe the influence that adults who migrated to the city had on children, and on the inability of girls to think about the possibility of continuing their education, given that it "wasn't appropriate for them." The theme of rural migration appears again in describing the experience of children who work in agriculture, who confront harsh levels of poverty. The community of Cihuatlán, in the municipality of Cihuatlán, Jalisco, is an example of the consequences that might happen for child labor when extreme poverty meets with a lack of the structures necessary to contain it; in that municipality, the alternatives to school as well as the lack of restrictions by producers facilitate the work that children do in the fields.

Both cases allow observation of the ways in which poverty intersects with culture, as demonstrated in the previous chapter, in the case of the families who work on the streets of Guadalajara. They also permit a deeper analysis of the alternatives available (or, perhaps one should say, unavailable) to rural residents in terms of work and school attendance, and the ways these alternatives are even more limited by the biases that exist with regard to what women, and consequently men, should do.

### 7.1 LIFE MODELS: MY EXPERIENCE IN THE COFFEE PLANTATION OF EL RINCÓN

Agricultural work has always been one of the principal sites of child labor. Despite being one of its worst sorts, due to the impact it has on health, development, and school performance (UNICEF, 2005), in Mexico, working in the fields is part of the sociocultural traditions of many communities (Cos Montiel, 2000). In these communities, children are brought into work in the fields from an early age, harvesting coffee or sugar cane; in the surrounding fields, or in their own, in which they primarily produce for their own consumption. They sow, take care of what is sown, and when the time comes, they harvest. Some take care of the animals or take them out to pasture; some work on getting fuel, cutting wood and carting it back to their homes. As they get older, the girls take over preparing food and the care of their younger siblings, while the boys go out to the fields with the men.

If there is a school in the community, the youngest attend classes, especially when they turn six and can attend elementary school. If there is not a kindergarten, the children wait until they are the age for elementary school. After finishing elementary, very few families let their children go to middle school, especially when the school isn't in the place where they live. For many of the boys, staying in school makes no sense; for many of the girls, it isn't possible. As they get older, the girls work helping their mothers until they have the opportunity to marry and have their own families; the boys work, and, like the girls, plan to have this own homes. A similar story repeats itself with their children. Those who have had the opportunity to leave their communities and go to one of the cities that are found relatively nearby usually have more hopes of doing something different. Those who haven't ever left continue to live quiet lives in their community, in the day-to-day routines of the countryside; they don't want things to be different.

Nevertheless, there is always someone from the community who has gone to Mexico City or some other city that appealed more. When that happens, it influences the children who have yet to leave the town greatly. For some, those who have gone to the city are an example to follow; for others, the stories about the cities are an incentive to prefer staying in the community. There are few women who leave; it is more common for men to do it. El Rincón is a community like many other in the mountains of Veracruz. Families dedicate themselves to harvesting coffee and subsistence farming. In addition to the above, the men carry out various tasks for the owner of the surrounding area. The dynamic in the community is not much different than that described above. Every morning the men take their horses and go to work in different places in the surrounding lands. The women prepare what at midday they will eat: generally a pile of tortillas with chile or some beans that they wrap in a rag so that they stay warm. A little later, the children go to school—a school operated by the Consejo Nacional de Fomento Educativo (CONAFE, National Council for Educational Development)—where they will be through midday. When school ends, they go home to eat. After their meal, the children usually do chores that their parents ask them to do—most commonly those having to do with chopping wood or taking orders to other houses. The girl wash the few dishes that were used during lunch, wash their clothes and the clothes of their siblings, and go out to play. The oldest stay and take care of the little ones.

When the girls come back, they start the nixtamal for the next day's tortillas boiling. In general, corn is ground in the morning for the tortillas that will be made and eaten that day. When afternoon comes, the aroma of roasting coffee begins to waft into the community; with it, one begins to hear the horses of the men, returning from their day spent in the hills. They wash, some serve themselves a drink, and eat supper. If they arrive early, they go out to one house or another, or they simply sit and rest. If they come back late, their meal is combined with the children's supper and the coffee hour. Finally, the days comes to an early close, and the same routine is repeated the next. Sundays are different. Many go to Las Hayas to shop for their weekly needs, some go just to stroll around. The girls and the youngest children go with their mothers; the boys and their fathers sometimes stay later in Las Hayas, where they often visit friends or relatives. Every once in a while this routine is broken up by a dance in a surrounding community, by the birth of a baby, or someone's death; but what is most appreciated is when the routine is disrupted by the arrival of one of the relatives who has left El Rincón, especially those who live in Jalapa or Mexico City.

As a community, it isn't that different from those around it; I assume that is very different from communities in Guanajuato, Zacatecas, and other states with high migration rates. That is not true of El Rincón. Very few leave the community, and they don't have many choices. There, children are born, raised, go to school, are included in work from an early age, and, if they are lucky, they make their own homes in which their children repeat the same patterns. Few leave the community for Mexico City, but increasingly, the influence of those few shows the possibility of seeking something else. It isn't clear what else, but something else.

### **Education And Work**

Unlike the surrounding communities, there is a CONAFE (National Council for Educational Development) elementary school in El Rincón. This school, in which one lone teacher serves all of the children who are the age to attend elementary school, allows the boys and girls to go to school without leaving the community. In the same way, the presence of a teacher who lives and works there means that classes can be held in such a way as to facilitate attendance, even during the coffee-cutting season. In contrast to what happens with other educational systems, such as the *Programa de Educación Pre-escolar y Primaria para Niños y Niñas de Familias Jornaleras Agrícolas Migrantes* (PRONIM,

Program for Preschool and Elementary Education for Boys and Girls from Migrant Agricultural Worker Families), the closeness of the community teacher to the people of the place, and the fact that the school is inside the community, means that parents can go to work without bringing their children along, even when there aren't classes in session—which happens often for migrant agricultural workers (see the next section on this topic). When it is necessary, the teacher changes school hours so that the boys and girls can participate in the cutting the coffee, in which the whole family participates, because the pay is by the piece; this allows them to improve their income.

Nevertheless, despite the benefits that having a CONAFE school in the community brings, not all of the children attend school regularly, although it is important to emphasize that in El Rincón, the CONAFE school allows nearly all of the school-aged children to do so. The first time I went to the community, there were 104 people, fewer than thirty of whom were of school age, but not all attended school. At Lucía's house-the poorest family there – Armando, her older brother, decided not to finish elementary school, and to go work in the fields like the rest of the men. His father is mute, and doesn't always like to go to work; Armando felt that rather than "waste time" in school, he should help out his family by working. José Manuel, the youngest of the three, went to school with Lucía. The school is a scant four meters from their house. Nevertheless Lucía and her brother missed a lot of school, in great part because they didn't have supplies to do the work and they didn't want to go without them, or because they hadn't finished their homework. This situation was worse the previous year. Lucía didn't like the previous teacher because he scolded her a lot; this is why, when I was there, she was attending the first year of elementary school, or Level I, as CONAFE defines the grades, for the second time.

When I returned to the school two years later, I learned that Pascual had not stayed in school because he argued with the teacher who came. Like Pascual, Lucía and Elenaanother of the girls who had major conflicts with other children in the community-many children leave school temporarily or repeat years because they don't like the teacher who is assigned or because the teacher doesn't do anything to become closer to the children who don't want to stay in school. That was Elena's situation; the teacher had told her that she was not going to be able to pass that year. Nevertheless, when I arrived at that school, my particular interest in her family situation and my friendship with her father facilitated her staying in school and finishing out the year well. Emma finished elementary school the year before I returned to visit the community. Regardless, like most of the girls in the area, she had decided not to go on to middle school because she didn't like having to go all of the way to Plan de Las Hayas to attend the telesecundaria. Of all of the girls who were in El Rincón at the time, only Don Gustavo's daughters continued on to middle school; one had even gone to Jalapa to attend high school, and had not returned. The rest didn't want to; they didn't think continuing in school was important.

Emma, Lucía, and the other girls of El Rincón spent the afternoons in their homes, almost always keeping their mothers company, playing with their friends, or helping to care for younger siblings. Inés carried the heaviest load. She was the oldest of eight siblings and the one given the task of helping her mother care for Gerardo and Manuel. Despite having completed elementary school, she had no expectations of continuing into middle school. Rosalia, who very much liked going to school, was not allowed to continue. Her father decided that she needed to take care of her aunts, who lived alone. Her older sister already helped around the house, meaning that now it was her turn; it was likely that the youngest would have a chance to go to school, if he didn't want to go work in the fields with the others from an early age.

Most families wanted their sons and daughters to attend school. It was important to all of them that their children know some basic math operations, and that they know how to read and write. However, anything else was extraneous. In truth, they didn't understand why it was necessary to learn about Egypt, an abstract place that they weren't able to understand what or where it was. Neither did they find it important to know much about world history. For the parents, it was enough that they learned the basics and were entertained.

Middle school brought with it many things that they didn't want for their children. On top of the expenditure, it meant traveling from one town to another every day. For some, having girls go all the way to Las Hayas meant the risk of an accident or that someone would do something to them. For others, it meant the possibility that they might learn bad habits and "get off-track," as Don Vicente said. For girls, not staying in school was at once a protective mechanism and a way to guarantee that they would keep doing what they should: respecting their families and their homes, and not getting involved in things they shouldn't (such as dances, going out with friends, or having a boyfriend, among other things). In El Rincón there was a very clear definition of roles associated with gender. Girls could go to school and study, but their priority was caring for younger siblings, their fathers, and their homes. Like their mothers, they didn't have any reason to be leaving the town on a regular basis, and their few outings were limited to visiting relatives in other communities, or doing errands. Very few women had gone to the city of Jalapa, and even fewer to Mexico City. In contrast, men were responsible for working in the fields, and boys for bringing firewood; in a particular ways both adults and boys were responsible for the family's sustenance.

The differences are also present in the social sphere, not just the home. During wakes, most of the women stay in one room while the men are in another, or are outside the house where the wake is being held, although this wasn't a sharp division. It wasn't common to see women where men were drinking. The boys could be with their fathers, but not the girls. During my stay in the community, one of my favorite things to do was making cookies with boys and girls, an activity that at first drew criticism and ridicule for the boys. Pascual and Matías were the ones who enjoyed it most. Nevertheless, even with my influence, it wasn't easy to win the respect of the rest. Furthermore, having the girls who were no longer attending school baking cookies wasn't looked upon kindly, either. They should have stayed home to help their mother or take care of the younger ones.

In general, boys as well as girls respected their parents very much, especially those who worked most closely with the landowner, Don Vicente. For the boys, being able to work in the fields meant being an adult and being accepted by the older people in a world that they could only dream of at the end of elementary school. Working in the fields was synonymous with being an adult, and therefore enabled them to have other interests, among them the ability to have a girlfriend. In El Rincón, going to work in the fields was, for men, a sort of rite of passage between being boys and being men, a rite that was much more attractive than staying in school and remaining a boy. For women, things were much simpler. From the freedom that attending school gave them, they moved into a state of less freedom, in which their activities were limited to the necessities of home and family. This wasn't much different than what they had been doing before, but without the possibility of doing things they could do because they were girls or students, like going on excursions with their schoolmates.

Given these well-defined gender roles, it isn't difficult to figure out what happened with labor in the community. For Alma, the activities that Inés carried out upon taking charge of her younger siblings and helping her, weren't actually work: it was a responsibility she should fulfill as the young woman that she was, and something she needed to learn how to do. Helping out was her duty and her obligation. For men, in most cases, working meant receiving a salary. The work they did in the family plots was, as for women, a duty and an obligation. But the work they did for Don Vicente was paid, and they felt this entitled them to the care and services of their sisters and mothers.

At the completion of elementary school, there were only two options: staying in school, or going to work. Since for most of the population staying in school made no sense, they went to work. In El Rincón, almost all boys and girls went to work when they turned thirteen. Despite attending school, most girls worked from a younger age. Nevertheless, with very few exceptions, the dynamics in the fields didn't affect their results in school very much. The majority preferred to work and go to school rather than dropping out.

There is only one time of the year in which the whole family works, including children as young as three: when it is time to harvest the coffee. During this time, the children leave early in the morning to work with their parents in the fields. They like it, because they have fun and are with the rest of the members of the community. During the harvest, they gossip, laugh, and help out. The coffee harvest is an important time for social unity and integration. It's an enjoyable time, which, although it becomes tiring and can be risky, the children like, because, with the extra money they earn, their parents can buy them things that they cannot afford during other times of the year. Very few children prefer not to go to the coffee harvest.

For parents, it is both enjoyable and convenient to have their children participate in the harvest; nevertheless, they worry about them missing school. For this reason, the teacher's flexibility becomes important. Some hold classes during both sessions, so the children can attend school either in the morning or the afternoon; others change school hours to the afternoon, although some parents don't agree with their children not having school in the morning. Nevertheless, the size of the community allows for negotiation and the attempt to adapt the school schedule to the children's needs.

During the time that I was in the community, only one family wanted their children to go to school and not miss classes, even during the coffee harvest: Don Gustavo's family. Don Gustavo's family was unusual. His daughters were among the few who had left El Rincón to attend middle school. Despite living in the community, they highly value the possibility that their children, Irma and Julio, will stay in school. They are interested in having them finish elementary school in good standing, and go on to middle school. It doesn't matter to them that to do this, they will need to walk to another community. Their wish for a better life for their children is reflected in the construction and care of their home, and in the expectations they have for the future. Unlike the other houses in the community, theirs is built of concrete and has a small entryway where they dry coffee and carry out other activities. Irma's mother would like her to be a teacher or a doctor. She didn't say much about Julio, but she doesn't want him working in the fields for Don Vicente; she hopes he will at the least work in Don Gustavo's fields, as he also owns a large piece of land.

### The Third Option: Migration To The City

It is difficult to speak of a third option in El Rincón, given that so few have decided to leave the community to go work in another place. When I was there, only one boy and a handful of adults had done so. José went to the city when he was eleven years old, following one of his uncles who had been working in Mexico City for a few years. Really, only Don Vicente's nieces and Don Gustavo's daughters had left to attend school. Don Marciano's sons left because they didn't want to stay in the community, and every once in a while returned for a visit.

In all cases, migration comes through relationships with other people who are in the city. Martín has returned to El Rincón very few times. He was one of the first to go to the city, and is the one who facilitates arrivals. When I went to the community for the second time, I coincided with Martín. We really didn't talk much, but his affection for the place and his family were evident, a tie that, according to what he told me, makes him return at least once a year. In El Rincón, almost everyone is related. The community was created through an inheritance a hacienda owner left for his children. Don Vicente is the one who was left with the largest share and the charge of the main house, what they call the *Beneficio de Café* (the place where the pulp is removed from the coffee and it is dried so it can be sold), which is where everyone brings their coffee during the harvest. The rest of the families are Don Vicente's nephews and nieces, some more closely related than others, but family when all is said and done.

These family ties make possible the relationship with those who are in the city, and encourages the idea of being able to do the same. José come and goes between the community and Mexico City. In Mexico City, he is always around people from El Rincón. In El Rincón, he lives with an aunt. José is as unfixed as Tavo, who moves constantly between Mexico City and the community. He started out working for his father, Don Gustavo. After a dispute with him, he decided to leave the community and go to Mexico City. He was also with Martín and his brothers. Tavo has done a little bit of everything in Mexico City. He has worked in mechanic shops and selling things. A few years after my stay in El Rincón, he went back to Mexico City and tried to open his own restaurant. Regardless, he ended up like most do, returning to El Rincón and thinking about where to build his house.

Very few people have definitively left El Rincón. The majority retains their ties with the people of the community. This coming and going by a few has aroused in some of the children a certain amount of interest in leaving the community. Nevertheless, they are few. Most see migration as something temporary and with few advantages, because outside of the few gifts that they might at some time bring for the community, they see no other advantages. Although it isn't easy to think of migration as a third option, each time more children see it as a possibility. Some have even thought of going to school in Jalapa in order to be able to find work doing something else, but always with an eye to coming back to El Rincón.

# 7.2 EDUCATION AND WORK FOR MIGRANT CHILDREN: THE CASE OF THE MIGRANT AGRICULTURAL WORKERS OF CIHUATLÁN, JALISCO

In El Rincón, children were incorporated into agricultural work from a young age. Despite that, the stability of living in a permanent place, having a school within the community, and the flexibility of an educational system that allows them to attend school even during the coffee harvest meant that the opportunity cost of attending elementary school is not as high for them as it is for other children. As in El Rincón, in Cihuatlán there are families that work in the fields. But unlike those in El Rincón, many of the families in Cihuatlán come from other parts of the country. They are families of agricultural workers who migrate constantly from one place to another during planting periods, looking for work.

In both places, the work the children do carries many risks. However, in El Rincón the time children devote to work is sporadic, while many of the children of agricultural workers spend as much time working in the fields as their parents do, between eight and ten hours a day (Secretaría de Desarrollo Social, 2010). In El Rincón, the risks associated with the work children do are linked to the same risks they run when playing in the fields: being bitten by an animal, a fall, or an accident that might befall any child playing, for example— while in the agricultural fields, the risks are greater. Children are exposed to the sun for many hours, they are easily injured when working, and they often suffer from the effects of the agricultural chemicals used as fertilizers, which are often spread when they are out working. It is for this reason, among other, that working in agricultural fields is considered one of the most dangerous sorts of work for children (Programa Internacional para la Erradicación del Trabajo Infantil, 2013).

For many migrant agricultural workers, working in the fields means not having a permanent place to live. It means temporarily establishing themselves in inadequate spaces, lacking the most basic health and hygiene standards; and, most of the time, I means working under conditions that respect neither their human nor their labor rights (Secretaría de Desarrollo Social, 2001). In general, they do not have adequate equipment to carry out

237

risky tasks such as fumigation, or they are exposed to the extreme weather conditions, which many times result in dehydration and sunstroke.

Like their parents, child laborers confront many poor working conditions. Most of them begin to work between the ages of seven and eight, although it isn't unusual to see children from the age of five incorporated into agricultural labor. However, the youngest are not formally considered laborers. For that, it is necessary to be at least ten years old and to be physically capable of doing the work. This isn't to say that by not having that capability or by being too young they are not going to work. Any boy or girl can do it. The difference is that those who are formally hired as laborers must be able to carry out the same work as the adults (Secretaría de Desarrollo Social, 2010). This means they are exposed to worse working conditions, simply because of the length of the working day.

Even though there are not any rules about who does what, the physical capacity of the men and other traits which are apparently the result of being a woman or underage such as the delicacy needed to pick vegetables—means that there are certain differences in the work that each member of the family carries out. The adult men take on the heaviest and dangerous activities. Children are usually found picking, thinning, and weeding, where there are generally people of all ages and both sexes. Although women also share in these activities, it is more common to see them taking care of packing (Secretaría de Desarrollo Social, 2010), where the girls are the "*rezagadoras*," that is to say, those who are in charge of holding back (setting aside) "the tomatoes that are rotten, streaked, or very sunburned" (Secretaría de Desarrollo Social-UNICEF, 2006, p. 66).

Child labor is strongly related to the way in which payment is made. Usually laborers are paid by the job, by the day, or by the piece. This last method is the one that

238

encourages the most child labor, since the pay depends upon production, which is always higher when other members of the family participate. The easiest way to control child labor is by paying by the shift, as in that case the pay is for a day's work, independent of the tasks set (Secretaría de Desarrollo Social, 2010), and in general, adults tend to be more productive than children. In El Rincón, the only period during which the children were incorporated into paid work in the fields was when the time came to harvest the coffee, as this was paid by the piece. As one of the ladies told me, "every coffee berry counts, although sometimes we have to keep an eye on the children, because some eat as many as they cut."

In addition to the form of payment, the way that hiring is done and the crop type mean that the family income varies, and with that, the probability that children will work. It isn't the same to be hired for the day as it is for the season; it isn't the same to produce vegetables as grains or feed, to work with small or medium-scale producers as it is to work with large-scale producers. The best salaries are offered by the medium and small producers. However, they do not offer public benefits, and hiring is done on a daily basis, which is not a good option for migrant workers, who require a bit more stability with regard to work. The best option for migrant agricultural workers is working for large-scale vegetable producers, who pay more than grain and feed producers (Secretaría de Desarrollo Social, 2010). Regardless, the latter offer more sources of employment. When workers travel with their whole families, the most convenient option is to find work with a big business, since, if they are lucky, these places offer housing and facilitate their children's education.

Independent of the sort of work they get, their salaries also depend on the recruiters or "*chanzoneteros*" that find the work for them. If they go through a recruiter who depends on the producer, it is possible that they don't have to pay to be hired, but they don't have guaranteed work. However, when they use "coyotes" to get work, they have guaranteed jobs, but the "coyote" keeps control of the contract, and, for the most part, the laborers. He is the one who receives the payments for the entire group he controls, and who pays them, once he has deducted "transportation fees, food, loans, and a commission for his services" (Secretaría de Desarrollo Social, 2010, p. 7), which results in a much lower salary. Some arrive independently, without using intermediaries; their salaries do not suffer as much.

The precariousness of their living conditions is not due only to their wages; the type of migration also influences their working and living conditions. Non-migratory laborers have the advantage of being able to get better jobs, as they are there permanently. They have a house or a stable place of residence from which they can better their living conditions. The migrant "swallows" move from one place to another across the country, on a route more or less predetermined by the farming seasons. Generally they are workers who travel with only the most indispensable items, which means they generally live in very precarious conditions—especially if they don't manage to work in a place that offers housing support. The "commuter" migrants go to the crop fields and return to their communities; they maintain a home base to which they return more than once a year.

Jalisco receives a significant number of migrant agricultural workers during the reaping and harvest seasons. They take up residence in rooming houses, bunkhouses, and houses that they rent. In 2006, it was estimated at approximately 15,000 people, including

240

men, women and children (Secretaría de Desarrollo Social-UNICEF, 2006), who arrived to the sugar cane region and the regions of Sayula, Tamazula, Cihuatlán, and Ameca. Many indigenous migrants arrive from Guerrero, Oaxaca, and Morelos, but migrants also arrive from other states, like Veracruz, Zacatecas, Colima, México, and Michoacán.

The migratory process added to the cost of being hired makes the cost of living in the agricultural fields very high. Those who do not succeed in migrating with hiring and housing secured find themselves having to accept worse working conditions than those who travel with "everything arranged." Many times they arrive in the work areas without the chance to choose a cheap place to live. In this way, they invest a significant part of their earnings in renting shelter as well as in things that enable them to camp. The cost of living in the fields is high.

This precariousness and difficulty in getting by means that boys and girls are obligated to work from an early age (Cos Montiel, 2000); doubling or tripling the workdays of women and girls, who, in addition to agricultural labor also assume responsibility for preparing the food and washing the clothes for the rest of the family. They start the first part of their workday very early in the morning—before going to the farm fields—and they finish it with a third period when they return home after their workday in the field.

## Poor working conditions: The migrant agricultural workers of Cihuatlán

The municipality of Cihuatlán is located in the region of the southern coast of the state of Jalisco, in Mexico. According to the latest figures of the National Census of Population and Housing from the INEGI 2010, a little more than 39, 020 people live there, and about 1500 workers arrive during the harvest seasons. The majority come from

Michoacán and Oaxaca, and work on farming vegetables and harvesting mango (Secretaría de Desarrollo Social-UNICEF, 2006), although coconut, bananas, limes, and tamarind are also produced in the area.

There are three periods during which agricultural workers migrate. The first and most important takes place from December to May. During this time, they work in the chile, tomato, tomatillo, and watermelon harvest. When the harvest season ends in May, most return to their home regions, and give way to new workers for the mango harvest. They are only in the municipality from May to August. In august, they leave, and those who work in cultivation from August to December arrive. For many, the work is specialized. Those who know how to harvest, move constantly behind the harvest; they leave cultivation for those who know how to do it. It seems it is less costly to move than to learn, although at times it seems that it isn't they, but the contractors, who decide.

The majority of these people work and live in very bad conditions. On the one hand, the lack of sufficient and adequate lodging means that they have to look for their own space in bunkhouses, houses, and rented land, which in most cases does not allow them to have adequate housing conditions; on the other, the lack of official documents means that they do not have formal contracts, meaning that they lack adequate medical benefits and the guarantee of a minimum wage in accordance with the law. This situation is even worse for those who get work through a "*cabo*" (headman) who is an intermediary for the producers. He is in charge of paying their wages, for which they have to pay him twenty pesos of the salary they receive.

In the municipality, there is only one shelter, located in the community of Jaluco. It can house sixteen families, which is insufficient for the number of people who arrive

242

during each of the seasons Each family is assigned a separate room, approximately three square meters, with a small entryway that functions as a cooking space or storage for a few things, despite the risk that animals or people might get in and take their things. Most live like Señor Manuel's family, who in his room has an improvised bunk and a small mattress on which he, his wife, and their seven children sleep.

Very few of the workers can stay in the shelter. The majority has to look for a place to live, and the conditions under which they are able to do so depend completely on their economic possibilities. Rents fluctuate between 350 pesos for a property without a bathroom, and 700 pesos for a room with vinyl flooring, approximately 24 meters square, with a bathroom (interview with a property owner in Cihuatlán, Jalisco, April 18, 2012). In general, they move into places that aren't fit for their families, especially for their children. They live jammed into unsanitary places, with little protection from the weather or from animals that live in the area. Some of the people interviewed in Cihuatlán in May of 2012 lived in room two meters wide and three meters across, with ten to fifteen other people. They ate, slept, played, went to the bathroom and washed in that room. That was the case for Don José, whose living space was inhabited by eleven people at the time:

"Eleven of us live in this room: my wife, six children, the wife of one of my sons, and two of their daughters. Sure, we live well. The bad thing is when it rains, well, we all end up wet...(...) We sleep all together in a line on the floor because we don't have anything more."

Other families hardly have enough to rent a piece of land and put up some improvised tents with plastic sheeting and blankets that, in the best cases, are obtained for them by the owners of the place. But just as in other parts of the country, wide discrepancies in the quality of life of the workers also happens in Cihuatlán. Some families are able to rent better spaces, either because they have the money to do so, or because they get there before other families can beat them to it. The best "houses" are small concrete rooms with aluminum doors and a window that looks out onto the common patio. Although often what seems to be an adequate living space turns out to be the house of those who are renting a small space outside their home so that families can spend the night protected by cardboard, blankets, and sheets of plastic.

Migrant agricultural workers make up one of the most vulnerable populations at the national level. The lack of work in their places of origin obligates them to move from one place to another, making it impossible for their families to stay in a stable place. Migration prevents them from keeping animals and farming for their own consumption, making subsistence much more difficult. Wages are very low, and their diets of very poor quality. Furthermore, Cihuatlán is in a coastal zone, which increases the heat and the exposure to mosquitoes and dehydration. Most of the children of the migrant agricultural workers do not attend school; those who do, do so in great part to avoid the sun's rays in the farm fields, not necessarily because they want to go, which facilitates the continuous reproduction of poverty that is lived out in the place.

## School And Work Among The Girl And Boy Workers

Migrating can in some instances be good, above all when it means leaving a place they don't like, but at times it can mean leaving behind a place with conditions that aren't so bad. Most of the children do not like their situation as migrants, most of all when they have to migrate to places with extreme climates or in which there is little freedom for them.

"(...) me and my parents and my brothers and sisters also go to Tijuana, Monterrey, Chiapas, and Autlán, I don't like going there, I want to stay here in Jaluco all the time, because there sometimes it's really hot and there we live on the top of a hill and I can't play because it scares me, if we're hungry, there's nothing to eat like there is here in Jaluco, here there are a lot of fruits, there there is nothing."

(Julio, age nine, April 19, 2012)

Nevertheless, regardless of how disadvantageous it is for their children, year after year, the families of the migrant workers find themselves obligated to dislodge themselves from one place after another in a cycle that seems never-ending.

Working in the fields is not easy. Regardless, in the areas where vegetables are produced, there is a huge demand for child labor, especially in the tomato harvest (Secretaría de Desarrollo Social-UNICEF, 2006). This demand sometimes makes child labor the primary source of family income. When the work is paid by the piece, the probability of working is higher. This type of work allows additional labor to be incorporated at any point in the workload: the more boys and girls work, the more they harvest, the more they harvest, the more *arpías* of chile there are, and the more arpías of chile, the more they earn. Children's participation in work in the fields represents an economic intake that is very difficult to give up.

In Cihuatlán, children principally participate in the harvest of chiles, tomatillos, tomatoes, and loofahs. They are paid approximately seventy pesos a day for their work, a wage that is given directly to their parents. The workday last eight to nine hours in full sun. Due to the sun exposure and the fatigue, many children work in the morning and go to school in the afternoon. When they like going to school, they do everything they can to keep up despite their exhaustion.

Andrés, who was just eight years old, enjoyed school very much. It didn't matter to him that he arrived at school after eight hours harvesting chile, sunburned and unable to disguise his fatigue; his desire to learn to read, to write, and to get to be a great firefighter motivated him to attend school every day.

"(...) I like to work because they pay me, but sometimes I don't like, because the sun hits me hard and my head hurts...I harvest seven containers of chiles. They pay me seventy pesos a day, and with that money, I buy my clothes. I give fifty pesos to my mom and I keep twenty, and with that I buy a Coke and some bread to eat here at school, I do like to go to school, because I want to be a firefighter when I'm an adult like you. I also want to read and write well."

(Andrés, age 8, April 19, 2012)

But not everyone enjoys it. For Virginia (who is twelve) work is an obligation of which she cannot rid herself. Her parents need her wages, and since she doesn't attend school in the morning, for them leaving her in the house is a waste of time and money, as she wouldn't have anything to do.

"I like going to school a lot, because here there isn't sun. I like learning to read and write, I want to be a teacher when I'm grown. Also, I don't like work very much because of the heat, but my parents take me to work because in the mornings there isn't anything to do in the house, (...) I would like for school to be in the morning so I wouldn't have to go to work."

(*Virginia, age 12, April 20, 2012*)

Few children do not work; the few who stay behind usually do it out of the necessity or the pretext of helping to care for their siblings or doing chores around the house. For some, helping around the house is a way to avoid the bad conditions in the fields.

"I stay at my house, and I help my mom sweep or whatever she tell me to do because I don't like to work because there is a lot of sun, and I get really hot, I would rather stay at home and do chores and also go to school, because there isn't any sun there" (...)

(Jonathan, age 9, April 20, 2012)

Whatever preferences that children might have with respect to school and work, the difference in work hours and school hours allows them to do both if they like, although the number of girls who go to school and work is higher.

Despite the fact that Cihuatlán has a school associated with the *Programa de Educación Pre-escolar y Primaria para Niños y Niñas de Familias Jornaleras Agrícolas Migrantes* (PRONIM, Program for Preschool and Elementary Education for Boys and Girls from Migrant Agricultural Worker Families) that serves the children from Jaluco and Pinal Villa, the percentage of boys and girls who study is very low. The objective of this program is to facilitate school continuity form one agricultural zone to another, allowing for the recognition of schoolwork and the integration of a single curriculum between one region and another. Theoretically, this should make attending school easier, and, as an endpoint, the completion of their schooling. Despite this, in Cihuatlán as in other region (Moreno, 2009), the possibility of working in the morning together with the exhaustion that that means and the difficulty that many indigenous students have doing schoolwork in Spanish, means that the drop-out and failure rates are very high.

This is due in part to the way in which the program is implemented in this area. In these communities, the teachers are college students earning degrees in education, who receive a grant for their services while they continue studying. Since they go to class in the morning, the grantees hold classes in the afternoon. This gives the children free time in the morning during which it is hard for their parents to be around, as they work in the agricultural fields from approximately six in the morning until five in the afternoon. This is why many boys and girls are forced to work.

This necessity to send children to work has generated a very high rate of school absenteeism. Many boys and girls return from the fields, where they spend most of the day carrying out physical activities and exposed to the sun and heat, exhausted. After a hard day, they prefer to return to eat and rest, to recuperate the energy they will need for the next day, rather than attending school, despite their wishes to go to school. In general, the teachers are dedicated and affectionate with the children, which keeps the children interested in school. They try to be flexible with their hours so the children can go to school even when they work. Regardless, the impossibility of holding class in the morning promotes child labor even when it could be avoided.

## **Factors That Enable Child Labor**

In addition to the economic necessity that the migrant agricultural families have, the choices—educational as well as labor—make the cost of attending school in Cihuatlán very high. The lack of school in the morning means that the parents have nowhere to leave their children while they work, especially in homes in which both parents work. Many heads of household don't like for their children to have "nothing to do" while they work; others are afraid to leave their children alone. This is why they prefer to have their children come with them to work, despite being conscious of the importance of getting an education and the risks they run while working. Some children decide to leave school because they cannot understand their teachers. Many of the children who come to Cihuatlán don't speak Spanish, which doesn't allow for communication between the children and their teachers. Given that families come from different regions and speak different languages, it isn't feasible to have a bilingual teacher completely suited to the needs of the group.

In addition to the school hours and the hardship that studying in Spanish means for many of the children, the permissiveness of the producers enables the work that the children do. It is businesses that decide to hire children even though it is illegal; and given that this is the informal sector, it is very easy to evade regulations. As has already been mentioned, in Mexico child labor is prohibited for children under the age of fourteen, and only in certain circumstances is it permitted for those under eighteen. Regardless, many boys and girls participate in work illegally. In most of the agricultural fields, the work is paid by the piece, without a contract in place, which means that children can participate without it being possible to identify the work that they do, and sanction the companies.

It is for this reason that the only alternative the government has is to convince the companies not to hire minors and to promote their education. However, for both companies and families, the work the children do is important. For the companies, the work done by children increases production and keeps costs down; for many of the families, it means being able to get by. The families need the work the children do; therefore, it would be very difficult for them to expose the companies that hire them. And beyond that, if the work is enjoyable, as harvesting coffee can be (Rodríguez, 2009), why not do it? In El Rincón, the coffee harvesting season was a type of fiesta in which everyone participated...and why not?

If they can pick five berries for the sack and two for their mouths...especially when they are sweet.

## 7.3 RETURNING TO POVERTY

For me the relationship between poverty and child labor appears undeniable, and here is not the time to close a chapter attempting to convince the reader otherwise. Poverty is the common denominator in all of the stories mentioned, but not in all of them are we talking about the same sorts of poverty. The poverty of the Mixtecos in the railyard differs greatly from the poverty of the people of Santa Ana; regardless, both of them occur in the metropolitan area of Guadalajara. In a similar manner, the reality in El Rincón is very different from the reality that the children of migrant agricultural workers confront, and both happen in the country. The people in El Rincón are poor, but they can manage without the work the children do; the workers cannot. In Santa Ana, young people drop out of school because they feel it makes no difference to finish middle school; in any event, they don't believe they can stay in school. For families that work on the street, the only way their children can get out of the poverty in which they find themselves is by going to school.

However, despite these differences between one situation and another, there are factors that repeat themselves in all or some cases. Despite that in the case of Santa Ana it isn't very evident that gender is a factor that influences decisions about child labor and schooling, in all the rest of the cases it is a very clear influence. Being a woman influences the probability of doing domestic labor in the city as well as in the country, in those who migrate from less urban areas to more urban ones, and those who migrate from one place to another in the country. Despite the changes in women's roles and their greater participation in the workforce, domestic labor continues to be a woman's matter (Chant, 1994; Beşpinar-Ekici, 2007) and as the work that the daughters of migrant agricultural laborers clearly demonstrates, the flexibility of domestic labor allows for school to be combined with work both in the fields and in the home. In El Rincón as well as in Cihuatlán, work can be combined with school attendance; they are complementary activities, as they are in Perú and other places in Latin America, Asia, or Africa, to mention some examples (Basu, Das, & Dutta, 2010).

The situation for boys is somewhat different, especially in the case of the sons of Mixtecos who have migrated to the city of Guadalajara, for whom school attendance is subject to the needs of the home. As Dreze and Sen (2002) argue, the necessity to survive or to have more income many times obligates parents to take their children out of school, despite the value they place on education. In this case, child labor is, as some authors argue, activities that compete (Hazarika & Bedi, 2009; ILO, International Labour Organization, 2006). In the case of the Mixtecos, this conflict between activities is due to that necessity being cultural as well as economic, and for the most part, follows working hours; teenaged boys and girls many times serve as translators for their parents, which is quite difficult to combine with going to school.

These cultural differences mean that the cost of schooling is different for each group. There is always a trade-off between sending children to school or sending them to work; a trade-off that depends in great part on the value that the child's wage has in the home. When the pay is by the piece, children's work is a highly valued complement; when

it is for a day's work, said value diminishes. The level of poverty also increases the value that the child brings in. Of the four groups analyzed, the Mixtecos and the migrant workers are the poorest. The children of the laborers bring in an income that helps their families survive; it isn't a complement. We could even argue that for many of these families having a child who does not work is a luxury item (Basu, Das, & Dutta, 2010); for some Mixtecos, children are a means through which to access work.

There are situations that don't affect the cost of going to school because they don't cause a trade-off between the child's income and the time they spend going to school, such as the case of domestic labor. The same thing happens with the girls and boys who accompany their mothers (Mixtecos) or both parents (Jalisco natives or second generation Mixtecos) to sell thing on the street, who generally go out when they aren't in school. In both cases here is generally a very strong value placed on education as the only way out of poverty, which means that they avoid having the children miss school, to the degree that it is possible. Nevertheless, there is always a point at which this become impossible, and it is at this point that parents send their children to work, even when that decisions goes against their well-being.

There are other cultural values that influence not attending school. For some, the boys and girls are very young to attend kindergarten, for others, not. Language differences also intervene. It is very difficult for indigenous children to understand everything that goes on in school. For those who were born in the city, this difficulty is lessened, regardless of the language their parents speak. But for those who speak Mixteco, Nahuatl, or Maya—to name some examples—trying to learn in Spanish is almost impossible: it's better to go to work.

For families of indigenous origin, the lack of understanding of Spanish also reduces the possibility of improving their wages. Those who speak a different language suffer more from the abuses of the contractors and the consequences of a lack of understanding of the conditions and opportunities for work. They see the opportunity to negotiate for a job with better working conditions. This makes subsistence more difficult, and, for the most part, increases the chance that minors will have to work. This lack of knowledge also generates mistrust, which for the Mixtecos becomes the need to go about accompanied by one of their children.

In all cases, the idea of living a life like their parents' limits the interest in staying in school. Especially in the case of Santa Ana, there is a clear difference in the likelihood that youths will stay in school between those who believe their lives can be different than their parents, and those who don't. Children in the countryside dream of being doctors, firefighters or teachers. Nevertheless, through their daily lives they realize that their alternatives will not be much different from their parents', and they decide to plan according to what they do. When Juan finished elementary school in El Rincón, he had a very clear path to follow: go to work in the field with his father and the rest, and when the time was right, find a girl from his community or one of the surrounding ones, and start his own family. His beliefs and norms are immersed in the majority of activities that children carry out (Beşpinar-Ekici, 2007). As Jones and Chant (2009) argue, we cannot deny the role that cultural practices and socialization play in the decisions that are made about children's participation in work, beginning with the modeling of women's work in the home.

It is difficult to affirm, as Delap (2001) does, that socio-cultural factors are more important than economic rationality in explaining child labor. It takes some work for me to think that with levels of poverty as high as those that the Mixtecos of the railyard or the migrant agricultural workers experience, it is culture that determines child labor. Nevertheless, there is no doubt that the way in which economic necessity and the activities that children carry out are adjusted is immersed in those factors. We cannot deny the differences in the decisions made by the families who work on the street. The expectations that each of those groups has for the roles of men and women are part of their culture and their personal history, and it is from those expectations that they make their decisions. For families that have encountered the difficulty of finding a job for lack of schooling or because of speaking a different language, going to school is a priority. For those whose available work options don't require completing middle school, going to school isn't important. For those who hold more traditional values, it isn't necessary for girls to go to school since they will be in charge of the home, and that isn't taught in school, it is learned through working.

## CHAPTER 8

# **CONCLUSIONS: THE NEED TO GO BEYOND POVERTY**

Throughout this work I have discussed the relationship between poverty and child labor and highlighted the impact of other factors on parents' decisions with regard to child labor and schooling: an informal market that facilitates work at any age, an education system that demands few hours and is flexible, ideas about gender that limit activities done by boys and girls, and the ways in which each family, within its own context, makes sense of everyday experience, in other words, their culture.

I have also argued that the link between the rural and the urban sectors is changing the opportunities available for children. In some cases, urban life becomes something desirable, as in Rincón; in others, a lack of educational opportunities prompts migration, as in the case of migrants in Cihuatlán or adolescents in Santa Ana. But in all cases, poverty is a constant. The cost of schooling can be very high, and even when public education is available, many families are not able to afford it.

The existence of an informal market and a flexible education system creates working opportunities for children in the cities and the countryside. Public policies focused on increasing school attendance, as in the Rincón and Cihuatlán, increase the probability that children will work. If the labor market functions outside the law, the possibility of finding a place to work is even greater.

255

There is no doubt of the relationship between income and child labor, especially among those families that don't have an income that guarantees a minimum level of wellbeing. But other variables are also important. Parental education is one of the variables of major significance, at least among the ones in which we can have some incidence. A high level of education decreases both the probability that children will work and that there will be gender disparities. It also influences the value parents place on education. In other words, it increases their desire to send their children to school.

Both qualitative and quantitative analysis show important differences between the activities that boys and girls perform, as a result of the ideas that their parents have of what a child "must do" due to being a boy or a girl. Conceptions about gender roles favor unpaid domestic work and work at home for girls, and market-oriented activities for boys. Girls take care of their siblings, especially the youngest ones, while boys become providers at a young age. Girls accompany their mothers to the streets or intersections to sell goods, while boys do the same activities as their fathers. If someone has to quit school, it will most likely be a girl.

Finally, we cannot deny the context, the personal history and culture, which are the starting points that define what is important for the children. For the Mixtecos that have just arrived to the city, children who could attend kindergarten are too young to go to school. They prefer to keep their children with their mothers until they have reached what they consider the best age for starting school. Those who have had a difficult life due to the lack of education value their children's education more and will do anything possible for their children to continue studying. In El Rincón, women are expected to marry at a very young age, and there aren't many expectations for men to continue their education through

middle school; work in the fields does not require much formal schooling. In Santa Ana, some adolescents wish to have lives that differ from their parents' lives—they don't want to be construction workers—but it is difficult for them to get into the only high school "accessible" to them. Others think they will gain nothing by attending school; they prefer to quit and hang out with their friends in the gangs. In each case, the contextual particularities create very different realities. But in every context, the value placed on education is fundamental when deciding whether to finish school or not, and therefore, in the decision to work at an early age.

This research shows a complex reality, originating from an apparently simple relationship: as poverty increases, the necessity for an additional income also increases. This apparently simple relationship is supported by an education system unable to retain these children and a labor market that facilitates work, with which the cycle is completed. I could end with this statement. However, there are still two tasks pending: one with regard to public policies, and the other with regard to academic inquiries. We need to deepen our analysis of these aspects.

It is necessary for academics to further analyze the issues that still need to be addressed, or that need to be thought through differently. I explain this further in this chapter. In the field of public policy, we cannot simply bring a recounting of what we have observed to a conclusion: we need to analyze how we can translate this puzzle into better practices for ending child labor. If we want to eliminate child labor, we need to help individuals escape poverty. Improving families' livelihoods generates productivity gains and facilitates economic growth. Economic growth shouldn't be built at expenses of children. However, current social and economic conditions do not allow for a complete elimination of child labor. The worst sorts need to be eliminated, and working children protected.

In Mexico, there are four tasks pending if we want to act to provide meaningful protections for children. We need an integrated policy for the eradication of child labor that considers structural factors that help prevent the need for children's work; second, the consolidation of a school system that guarantees equitable learning for all and high quality education; third, the implementation and fulfillment of a law that protects teenaged labor and restricts work done by children under fifteen years old; and finally, the identification of the worst forms of child labor at the state level, with the aim of implementing improved practices, based on local needs, to eradicate the worst forms.

### 8.1 THE NEED FOR AN INTEGRATED POLICY FOR THE ERADICATION OF CHILD LABOR

On June 12, 2013 the president of Mexico presented a decree to reform the Article 123 Paragraph A, section III, of the Political Constitution of the United States of Mexico. The purpose of the decree was to prohibit children under fifteen years of age from working. He also presented an agreement for the creation of the Board of Commission for the Prevention and Eradication of Child Labor and the Protection for Teenage Workers with Minor Work Permit in Mexico (Presidency of the Republic, 2013), The objective of these actions was the fulfillment of the requirements necessary to ratify the Convention 138 of the International Labor Organization. As previously mentioned, this sets fifteen as the age at which children can be legally employed or work without hindering their education. However, this decree, in addition to focusing on a prohibition that in the context of informality is almost impossible to fulfill, generates new controversies.

Based on the General Law of Education (Secretaría de Educación Pública, 2013) and following the traits of Agreement 138, the minimum age for working in Mexico should be eighteen, the age at which high school is completed. However, Convention No. 138 also states that in countries where the economy is not fully developed (as is the case for Mexico, where only half of the population has reached an income that guarantees well-being), the minimum age to work could be fourteen years of age. For this reason, Mexico could ratify the Agreement without modifying the minimum age for child labor, but it hasn't. Why not? The answer is simple: Article 2 of the Convention also establishes that, in order to be able to ratify the agreement, countries need to show changes in their policies by establishing a higher minimum age of access to employment than the one currently being enforced. It encourages countries to set the age limit at sixteen (R-146-Minimum Age Recommendation, 1973). Currently in Mexico, the minimum age required is fourteen years old. In order to be able to ratify the Convention, the Mexican government needs to set a new age limit and show that significant actions are being taken-even when poverty in Mexico could justify a ban set at a younger age.

The modifications to the General Law of Education and the Federal Law of Labor (the latter without approval yet), suggest the national government's interest in ratifying the convention and complying with the elimination of child labor, as established in the National Development Plan 2013-2018. The question remains as to what extent raising the age limit is a good measure to eliminate child labor? It is true that the models presented in Chapters Four and Five show an important correlation between age and child work. However, there is also an important correlation between child labor and gender, parental education, and marginality, just to give some examples. So, it is not difficult to imagine that increasing the minimum age of access to formal employment will only influence the type of activities children do, moving from formality to informality, and from a regulated workplace to a situation in which exploitation could be more difficult to observe and prevent.

From the perspective of the International Labor Organization policy for the elimination of child labor in Mexico has a significant gap: it hasn't considered recommendation number 146 of the convention. It has not given priority "to the progressive extension of the inter-related measures necessary to provide the best possible conditions of physical and mental growth for children and young persons" (R-146-Minimum Age Recommendation, 1973). This means, going beyond the implementation of age bans, which in synthesis implies:

- (a) a national commitment to full employment through the promotion of employment-oriented development in rural and urban areas;
- (b) economic and social measures to alleviate poverty to ensure family living standards and income, so children do not need to work;
- (c) social security and family welfare measures to guarantee child maintenance;
- (d) improvement in the quality and provision of education;
- (e) protection of the adolescents that work and who should have guaranteed adequate conditions for their development.

This underlines the need to prioritize the fulfillment of the needs of minors, and the continuous improvement of the development of their physical and mental conditions (R-146-Minimum Age Recommendation, 1973).

In Mexico, as in other underdeveloped countries, children need to work, because they need to eat, to get dressed, to sleep, and to rest in adequate places. A relatively small proportion of children say they work because their money is needed; most children report working for other reasons. However, even these children experience living conditions that do not guarantee them a minimum level of well-being; a family income that does not facilitate the fulfillment of their basic needs. Worse still, the increase of informal and illegal work leaves children completely unprotected and, consequently, is creating conditions that do not guarantee good physical and mental development. And even if we want to eradicate child labor, informality makes it harder to do so because it increases the opportunity cost of going to school. Therefore, eradication is not possible if alternatives are not generated. Limiting formal jobs increases the likelihood of working in inappropriate conditions are found within formality.

However, solving this problem is not easy. There are formal sectors with good labor conditions but with high risk for children, in which, in addition to the risk, there are no possibilities for education, resting sufficiently, or time at play, due to the great physical effort required. An example of this is construction work in which children receive higher wages and better medical attention, but there is also a higher risk of accidents.

This is the reason why it is not possible to think simply in terms of protecting or legalizing child labor. As I argue in Chapter Three, we cannot determine child labor policy based on the wishes of few children who want to work, while exposing the rest to exploitation and bad working conditions. In the first place, most of these children work because they need to, or because of an adult's decisions, not necessarily because they want

261

to work. Protecting labor at an early age allows many adults to justify their decisions to send their children to work, even in abusive conditions. Moreover, the majority of the children who decide to work do it informally, and in this case, the legislation of formal labor does not necessarily protect them, while creating the opportunity for "legal" exploitation against minors.

In other words, age bans are important, but it is necessary to guarantee a minimum standard of living for the entire population if we want age bans to be useful. As statistical data indicates, the probability of working increases when income is under the minimum level of well-being. As the level of income increases, the probability of child labor is determined by fewer factors, which eases the process of eradication of child labor. Additionally, in the long term, and based on the results obtained in Chapters Four and Five, the best way to reduce the probability of a child having to work and ending the intergenerational transmission of poverty is through education. A higher level of parental education means a lower probability of having to work for boys as well as for girls.

## 8.2 EDUCATION WITH QUALITY AND INCLUSIVE

As argued in Chapter Six, many boys and girls find it difficult to continue with their studies, given the low academic level of most public elementary schools. In Santa Ana, teenagers who finish middle school encounter many difficulties in order to continue with high school. The level of education in their sending schools makes them not competitive with other young people who come from private schools in surrounding neighborhoods. This relationship between academic level and school attendance explains partly why, even though Mexico has very high levels of school enrollment at the basic level (recall that in 2010, 96.1 % of the children between six and twelve years old were attending school), school attendance drastically decreases between junior high school and high school (in 2010, the 85.9 % of adolescents between thirteen and fifteen years old attended school, while only 51.2% of teenagers between sixteen and nineteen years old attended school). Terminal efficiency in Mexico is low. Eighty-four out of a hundred boys and girls enrolled in junior high complete their studies. At professional technical and high school, the termination efficiency is 48.4 and 63.3 per cent, respectively.

A significant number of children leave their studies incomplete and start working at early age. Others simply quit studying. Many of them need to quit, but many more stop attending school because they never truly adapt to school in the first place, or because they are subject of bullying and violence, or because the system fails to integrate them and keep them enrolled, as happens with migrant farmers. As mentioned in Chapters Four and Six, one of the principal causes of school drop-out is difficulty adapting to school, especially boys. In Santa Ana, some boys quit school because they feel they are not good at studying, others because they are not accepted in high school. In El Rincón, the main reason is the distance to the closest school, and the lack of meaning they find in going to school. For girls, going to school is an unnecessary risk when the next step is helping in their homes with domestic chores, or getting married. The role model for boys is agricultural work, and for that they do not need to complete middle school, so why continue studying? In any case, the education system, the economy, and the very few benefits that they find in education weight the decision that boys and girls make in favor of quitting school.

Therefore, the problem in Mexico is not the universalization of basic education, which was achieved in 2009 with the incorporation of children of migrant agricultural

workers to the national education system. The main problem is keeping children enrolled at school, and providing good quality education at the national level. More children go to school, even in middle school, but they are not learning what is expected for children of their age.

The question is, how to keep them in school? Based on my research, a significant number of children quit school because it is not possible to retain them when they become dissatisfied, when they have problems with teachers, or when they find no reason for studying. But many times, these problems and the frustrations associated with them are the result of students who fail to pass from one grade to the other, thereby constantly falling behind. This frustration easily transforms into the idea that they are not capable, and when they or their parents believe they do not have the ability to study. Thus, they quit or their parents make them quit. Given this situation, the best option for many parents, if they want to keep their child "on track," is to send them to work.

In response, the federal government has taken measures to increase school attendance and terminal efficiency for basic education. Two main policies have been implemented: First, is the increased investment of resources for the education of children in vulnerable situations, especially for migrants and indigenous populations. Second, through the Secretariat of Public Education, the government implemented a policy of not leaving children behind. This means that all children need to be promoted from one grade to the other, independent of knowledge. To achieve this, new forms of evaluation based on skills development instead of knowledge accumulation, have been enforced. The principal aim of this policy is to make children feel capable of learning and therefore, willing to continue studying.

This formative evaluation system was implemented in 2009, and is based on positive feedback instead of student failures (Dirección General de Desarrollo Curricular, 2013). Based on this evaluation model, students that fall behind receive tutoring with the objective to facilitate their course certification at the end of the school cycle. So, the main rule is not to fail students.

While this has resulted in a decline in children's dropout rates and has facilitated the universalization of basic education (a laudable motive), it has also harmed educational quality. The majority of public schools do not have tutors to help children who fall behind in school. Therefore, they pass from one level to the next, even when they are not ready. At the end of the cycle, they receive a certificate. However, they are not able to continue with middle school or, if they do so, they enter middle school with a very low level of education to which teachers need to adapt. This affects the rest of the students, who in the next cycle are not going to be able to compete with students from private schools, as it is the case in Santa Ana.

This transfers the problem of school completion from elementary school to high school, which could be considered as something positive, as children appear to have more years of education. However, in reality, the level of knowledge is lower than it should be. They have more years of education, but they have achieved a lower level of mastery. Therefore, when these children try to enroll in high school, they don't have the minimum level of mastery to be accepted. This problem is worse in those states and cities where there aren't enough high school opportunities, and which looks to grow in the years to come, as the demand for high schools will increase. According to information from the National Board of Population, the greatest demand for high school education will come in five years. There is an urged need to retain children in school through quality education. Children need to be eager and have the opportunity to enjoy school. We need to create interest in children and give them tools so they can continue through junior high and high school. A good level of education makes it easier for them to be admitted to high school. When boys and girls understand that studying is an alternative that will give them benefits, it will decrease the opportunity cost of going to school and the probability of working. However, it is important not to lose sight of the fact that the decrease in child labor and increase in school attendance have to do with the improvement of working conditions for adults. This is the basic requirement for reducing child work. Achieving better working conditions for adults decreases the incidence of child labor and increases the education of teenagers, especially in junior high school and high school.

### **8.3 LEGISLATING THE LEGISLATABLE**

Based on previous arguments, we can assume that a higher quality education will help diminish school desertion, but it will not necessarily reduce child labor. As I have been arguing, there are many factors that influence children's probability of working, but the lack of a family income high enough to guarantee a minimum level of well-being is the main cause of child labor. Consequently, if the level of well-being is not achieved, we are not going to be able to decrease child labor as expected. That's why it is mandatory to regulate what we cannot eliminate, at least in the short term. An effective and comprehensive policy aimed at protecting minors requires the regulation of work done by children that is not currently regulated, or where the law is not enforced. It also requires a questioning of those practices that are socially "accepted," and in which exploitation is frequent, as it is the case of domestic work.

When children reach the minimum employment age, they can work legally only when working conditions and the work environment are guaranteed to be suitable for their age; that is, only when their specific needs are taken into account, and any danger can be avoided when doing the work. However, not all work sites receive the inspections necessary for guaranteeing safe conditions, and the required supervision to prevent younger children from working in either informal or illegal work. For example, according to data from the child labor module, 38 percent of children under ten years of age who work, do so as subordinates, which means that they are employed somewhere despite age bans. Eleven per cent of children between five and seventeen years old who work are industrial workers, craftsmen, and assistants. Both situations are illegal, because they do not comply with age regulations and working conditions.

Some working sectors are particularly complex to protect and regulate; such is the case of domestic work. When children are engaged in cleaning, cooking, ironing, or taking care of other children in their homes, on reasonable terms, and under the supervision of other family members, it is not considered child labor. This is considered an important part of family life and its development. However, many times this work is done outside the home, or exceeds seven hours a week, compromising the possibilities for study, rest, and play. Moreover, when work is done outside the home, children also suffer from discrimination and isolation, and live completely dependent on their employer for the fulfillment of their basic needs (IPEC, 2013). Isolation and dependency makes children

very vulnerable to situations of exploitation, and even physical, psychological, and sexual violence (IPEC, 2013).

Domestic child labor is a special problem due to the fact that it is socially accepted or, even in some cases, due to the lack of awareness of its existence. Also, there is no regulation of this type of work. In Mexico, domestic labor is seen as something necessary and acceptable. No purposeful distinction is made between child labor in domestic work the work executed by the children that haven't reached the applicable minimum age or who are of the required age but work in situations similar to slavery, in homes of third persons or employers (IPEC, 2013); and juvenile domestic labor (teenagers of the legal age to perform domestic work, in adequate working conditions, and without interruption to their education).<sup>1</sup> Even though some people prefer to hire adults or teenagers with experience to perform domestic chores, other people prefer minors who, from their perspective, they can train and teach to work. Many people do not recognize the early age at which girls begin to work (sometimes because girls lie about age), or the exploitation that takes place. They think it normal for a domestic worker to work for more than eight hours.

The work takes place in a private work setting, which makes it difficult to observe and measure, making it difficult to protect working children. This situation worsens when the work is done within their own homes, where most of the time this exploitation is seen as a form of education and formation for the little ones, because it has parental approval. This "not so visible" form of work makes children especially vulnerable to exploitation.

<sup>&</sup>lt;sup>1</sup> Child Labor in domestic work makes reference to the situations that are not accepted at an international level, either due to the age of the children or because of the conditions in which the work is executed. It includes: "i) every child from 5 to 11 years old that execute domestic work; ii) every child from 12 to 14 years old that execute domestic work more than 14 hours a week; and; and iii) every child from 15 to 17 years old that execute dangerous domestic work, which includes long working days" (43 or more hours of work per week) (IPEC, 2013, p.20).

Legislation for this type of work, besides helping to protect children, enables people to understand the risks they take, and the need to guarantee a good life and working conditions.

In 2011, the International Conference of Labor of OIT adopted agreement 189, which establishes the commitment of the member states to guarantee protection to domestic workers, (men and women), and to eradicate child labor in this type of work. In this same period, recommendation 201 was established. This gives practical guidelines for possible legal measures to guarantee the rights of domestic workers. However, Mexico has not ratified this convention. Although labor legislation provides some guarantees for domestic workers, it does not mention anything regarding the respect of fundamental rights at work: "(a) the freedom of association and the effective recognition of the right for collective negotiation; (b) the elimination of all forms of forced or compulsory work; (c) the abolition of child labor; and (d) the elimination of work and employment discrimination;" and "the effective protection against all forms of abuse, harassment, and violence" (Organización Internacional del Trabajo, 2011, p. 3). Likewise, the Mexican legislation doesn't include social security and education benefits, the latter for teenagers under 18 years old.

In the specific case of the minors, ILO recommendation 201 on decent work for domestic workers recommends a strict limitation of working schedules for the purpose of providing an "adequate time for rest, education or professional training, entertainment activities, and family time" (Oficina Internacional del Trabajo, 2011). It prohibits working at night, and limits jobs that are physically and psychologically overwhelming. It also underlines the importance of watching over children's living and working conditions, and the need to formalize jobs through a working contract. Until now, Mexico hasn't ratified agreement number 189, and doesn't have any specific restrictions in regards to domestic child labor. The Federal Labor Law in Mexico lays out the regulations for all domestic workers, but it doesn't include special situations that are important for children, like time for education, professional training, entertainment, and time with their families. It also doesn't limit work at night or exhausting work. The Federal Labor Law lays out employer obligations towards their employees for general working conditions and those in their homes, and general instructions for the domestic worker. It also describes obligations in case of a disease or death. But there is a big gap with relation to domestic child labor.

This gap in terms of legislation also exists in other areas in which children work. The legislation of child labor is as urgent as it is ensuring the fulfillment of existing legislation. When it comes to legislation, the main problem is its relationship with different political spheres. Legislation has to do with legislative action and with observation of the law; legislation with no guarantee of being fulfilled is not effective. Additionally, legislation without clarity as to what has to be prohibited and what needs to be regulated is ineffective, and therefore difficult to implement and carry out. Hence the importance of making clear the worst forms of child labor and those that must be eradicated.

## 8.4 THE NEED TO DEFINE THE MOST HARMFUL CHILD LABOR IN MEXICO

In 2010, as part of The Hague Global Child Labour Conference, governments set as goal the eradication of the most harmful forms of child labor by 2016. A roadmap was established in order to define the steps to accomplish such goal (International Labor Organization, 2010). In addition to giving priority to the adoption and enforcement of national legislation against child labor and its most harmful forms, the recommendations underline the importance of reviewing and updating the national list of dangerous jobs prohibited for children.

Following such recommendations, Mexico has reinstated the International Labor Organization definitions of the most harmful forms of child labor, and has set out a series of activities that are prohibited. These forms are defined by the level of risk in working conditions, as well as by the character (formative/not formative, voluntary/compulsory), and the possibility of respecting children's rights to education, recreation, and adequate rest (cfr. with table 2.1 of chapter 2).

The Board of Labor and Social Care (STPS as it is abbreviated in Spanish), identifies commercial sexual exploitation of children, mine labor, trash collecting, breaking stones, working in brick kilns, working in the streets, fishing and extracting mollusks, agriculture, and the manufacture of fireworks as the most harmful (table 7.1). Slavery, working in criminal or illicit sectors, and pornography are mentioned as part of the definition of the International Labor Organization, but are not recognized as among the most harmful forms that take place in Mexico. Something similar happens with work in maquiladoras, in battery production, glass or talc factories, in packing plants and foundries, among others (López Limón, 2006), which usually have conditions not suitable for children. Table 8.1 shows the most harmful forms of child labor as recognized in Mexico by the Secretariat of Work and Social Provision, and the risks associated with each type of work.

Table 8.1. Worst forms of Child Labor in México, Secretariat of Work and Social Provision (STPS)

The worst forms of child labor	Risks
Commercial Sexual Exploitation of	• Rape
Children	Physical and psychological abuse
	• Loss of self esteem
	Alcohol and Drug Inducement
	<ul> <li>Exposure to illnesses of sexual transmission such as</li> </ul>
	VIH/AIDS
	• Debt with a procurer (exploitative)
	Social stigma
	<ul> <li>Pregnancy among young girls and adolescents</li> </ul>
In Mines	Handling toxic substances and explosives that cause
	respiratory and skin infections, mutilations and amputations
	Eye infections and chronic cough
	Using tools that can cut or wound
Garbage Collecting	Suffering abuse and aggression
	Being run over by vehicles that unload garbage
	• Accidents caused by handling garbage (cuts, wounds, etc.)
	Stomach infections
	Skin diseases (fungal infections, allergies)
Breaking stones and brick kilns	Bone deformation
	• Eye infections
	Loss of nails
	Dehydration
	<ul> <li>Wounds and bruises in hands and feet</li> </ul>
	• Sunstroke
	Chronic Cough
Urban labor (in streets and markets) <sup>2</sup>	Sexual and physical abuse
	Aggressions and robbery
	Consumption of alcohol and drugs
	• Pain and bone malformation caused by lifting excessive
	weight
	Breathing toxic waste
	Walking long distances
	Being exposed to high temperatures, rain and traffic
Fishing and extracting mollusks	• Addiction to drugs <sup>3</sup>
	• Suffering wounds caused by thorns, shells and glass
	Skin infections
	Suffering from mosquito bites
In agriculture	• Sunstroke and dehydration, or skin cancer by long exposure
	to sun radiation
	• Exposure to snake bites that can cause death

<sup>&</sup>lt;sup>2</sup>Many deaths in street situations occur because of poor health conditions and the discrimination street vendors face when they require medical assistance, and with homicides and traffic deaths (La Redacción, Proceso Magazine, 2013).

<sup>&</sup>lt;sup>3</sup>Working in the wetlands of the coastal zones for long hours creates a lot of stress and anxiety, especially if workers are not used to insect bites. To overcome stress and keep up their working rate, workers take tranquilizers or smoke cigars in order get rid of the insects.

The worst forms of child labor	Risks
	<ul> <li>Contract respiratory diseases caused by drastic change in temperature</li> </ul>
	Exposure to pesticides and chemicals
	• Using heavy and cutting tools
	Having static prolonged postures held throughout exertion
Manufacture of fireworks	Amputations
	Death caused by explosions
	<ul> <li>Respiratory Infections caused by exposure to toxic substances</li> </ul>
	• Eye infections
	• Burns
	• Itching and stinging in general
	Cutting wounds
	Joint pain

Table 8.1. Worst forms of Child Labor in México, Secretariat of Work and Social Provision (STPS)

Source: Secretaría del Trabajo y Previsión Social (2011) El trabajo infantil y sus peores formas de explotación, pp. 9-10

This is due to a large extent to the fact that Mexico has not complied with the review and periodic updating of national listings of the most harmful forms. Some of these forms are not recognized as unacceptable; such is the case of domestic labor, despite the fact that, as I explained in the previous section, it can take the form of slavery or forced labor, and that children are frequently isolated. Others simply have not been updated, as with those mentioned in the previous paragraph. Some have yet to be recognized, as in the case of the boys recruited as "*burreros*" or "donkeys"(used to transport drugs without being arrested), "*halcones*" or "hawks" (used as guards in towns where people do not want the police or authorities to arrive—usually where adults are involved with illicit activities), or children directly linked to delinquent activities such as kidnapping, extortion, or working as low-level drug dealers.

Based on data from INEGI, the sector with the highest incidence of work accidents is construction. However, construction is not recognized as one of the most harmful forms or child labor. This is caused by two factors. In the first place, many children grow up involved in this environment from a very young age, especially boys who start working as *peones* (assistants in constructions), or who begin helping their families with home repairs and do-it-yourself construction. In such cases, there is a cultural acceptance of this work, similar to what takes place with girls and domestic work. Secondly, it has to do with the type of work that they carry; some of the activities are not risky for those that are over fourteen years old, which makes it seem a good work option. However, many times child workers are exposed to sunlight for long periods of time, which causes dehydration and sunstroke. Those who work in high places run the risk of falling or getting hurt. It is common for them to be hurt by falling objects; they are also exposed to dust and excessive noise. Other materials that can harm them are asbestos and lead, commonly found in construction sites. For these children, muscular and bone problems are common, due to lifting heavy objects. Additionally, they often suffer from respiratory diseases due to the exposure to dust or bad weather conditions, among other things.

Even though there isn't clear information about the participation of children in the glass industry in Mexico,<sup>4</sup> it is an area in which it is important to take special measures due to the risk for these children. It is easy for them to be involved in this activity without being noticed, because in Mexico it is artisanal work. As such, it is easy for children to participate if a relative or a friend is engaged in this work, even when it is dangerous. In the glass manufacturing, children are exposed to high temperatures and poor ventilation. Most of the shops and factories have poor air circulation to keep the ovens and oil lamps from turning off while working. Glass is manufactured in front of ovens with very high temperatures.

<sup>&</sup>lt;sup>4</sup> López Limón makes references to child labor in the glass industry; however, I didn't find evidence that would allow me to confirm this assertion.

The work has to be done very quickly to allow the glass to be molded as desired, which is very dangerous for minors. It is even riskier when working with blown glass. The craftsmen have to go from one place to another carrying a heavy tube of steel with a mass of melted glass on the opposite side. The use of oil lamps to make glass figures is also dangerous.

Even though underground mining is considered one of the most harmful forms of child labor, in Mexico children also work in sand mines and in places where stone is crushed, work that carries many different risks and maybe worse than the risks faced when chopping stone. These activities are especially dangerous for minors, since in the production processes of sand, particles of crystalline silica float in the air, which can cause black lung disease or silicosis (UCLA-LOSH, 2003). Silicosis is a very serious lung disease. In some places in which children have been found working, silica is being used.

Working with metals is especially dangerous due to the toxic gases that are released when working with them. These can cause damage to the eyes and burns on the body. Children are also constantly exposed to the high temperatures of the ovens. Some accidents are caused by the sparks of metal as it emerges after being heated. Neurological problems and lead poisoning have also been identified among children working with metal (López Limón, 2006).

In the *maquiladoras*, night shifts and extended working hours happen easily. The six-hour working day, with one hour of rest, legally required for children under 16 years of age, is not respected. Some of the activities are dangerous, like handling cardboard and paper, which easily cut children when they handle it without gloves, or working with toxic material (López Limón, 2006). In many cases, they spend hours standing in the same place

275

and have very little rest. Their wages are usually lower than those of adults. They don't have very few, if any, working benefits. There aren't adequate protection, security, or hygiene systems in many factories; and children commonly face health problems and severe labor risks (accidents and health problems due to their work).

Besides risk of the activities already mentioned, in most cases, the conditions in which children work are not adequate. It is common for them to be paid less than they should be and to work more hours than permitted by law. Many adults do not get sufficient training; children don't get any at all, even when they must handle equipment and hazardous material. In general, working in factories and piecework generates much stress for these children. These working conditions are not exclusive to the aforementioned activities. In some cases, even the easiest task becomes a harmful form of child labor.

Each day there are more children that participate in illicit activities related to drug trafficking. Nevertheless, there are no records of such activities; we don't know how this is done, who really participates, or how they get involved. This is due in part to the difficulties and risks involved in reporting an illegal activity. Despite my work with people in high-risk neighborhoods and the trust that I have in many ways gained, very few have dared to talk about children working as burros for the narco-retailers that they know. This silence or lack of recognition by both civil society and government facilitates the existence of children doing this type of work.

The cases of "*burros*" and "*halcones*" (donkeys and hawks) are especially alarming because both activities facilitate children's involvement in other activities that can be even more dangerous. The "hawks", the "ears," or "*antennas*", are kids recruited to guard the towns or neighborhoods where there is a strong presence of drug dealers. They

276

are in charge of signaling the appearance of policemen, soldiers, and other authorities, or other undesired people. Aside from moral harm and the strong possibility that they will get involved in other, more dangerous activities within drug dealing (including becoming drug consumers themselves), the greatest danger that these kids face is being in the middle of conflict or a shooting between groups, and not being able to escape from such organizations. This problem is even worse for girls, whom besides being recruited as "hawks", are also recruited as *sicarias* or slaves (NOTIMEX, 2011). None of the activities linked to drug dealing are recorded as the most harmful forms of child labor in Mexico, and are therefore not taken in consideration in eradication programs. These types of labor must be taken into account, despite the complexity associated with their elimination.

It is therefore urgent to update the list of the most harmful forms of child labor, and, based on this identification, to direct policies of child labor eradication. This is key. If we limit more easily identifiable forms or less risky types of labor first, children will simply move from activities that are not so dangerous to activities classified as most harmful, since the need for work is still present. In most cases, the jobs that are most dangerous and violent for children pay more.

As part of this task, it is urgent to differentiate the sexual exploitation of minors from other activities considered as the most harmful forms. We can't continue considering forced prostitution and sexual abuse as forms of child labor. Exploitation is exploitation and it should be treated as such. If people are allowed to think of exploitation as a form of work, we will never achieve the necessary strength to eradicate these and other forms of exploitation. Child prostitution, defined as "the action of hiring or offering the services of a child to perform sexual activities for money, or for another compensation with the same or another person" (IPEC Sudamérica, 2001, p. 10), the trafficking of children (the recruitment, transportation, or transfer of a child for the purpose of exploitation, in exchange for financial or other types of compensation), and child pornography are not forms of child labor. As rightly raised by IPEC: "for girls, boys, and adolescents, being linked to prostitution is never a free choice" (IPEC Sudamérica, 2001, p. 10). Since pornography and the trafficking and sale of children are never free choices, either, we cannot include them as child labor. Perhaps this will require modification of Convention 182 on the most harmful forms of child labor, but that discussion remains open for further study.

#### 8.5 THE URGENT NEED TO RECONSIDER HUMAN RIGHTS AND GENDER

Based on this research, we cannot deny the negative impact of poverty and marginality on child labor, and, therefore, on children's development. We also cannot deny the particular way in which social and cultural factors influence boys and girls differently. These differences are suggested in Chapter Four, proven to be significant in Chapters Five, Six and Seven. Child labor is a problem because it influences the likelihood of attending school, and therefore, the probability of leaving poverty behind. But it is also a problem because it puts health, nutrition, and social, emotional, and cognitive development of minors at risk. It is a problem that directly impacts the rights of children, and that does so in ways that impact boys and girls differently.

I include gender based on the assumption that child labor is framed by shared expectations, beliefs, values, routines, and practices of members of a culture; that shared background knowledge creates the very possibility of certain activities (Geertz, 1973).

Gender as a perspective comes from the recognition of the differences between boys and girls as cultural products. It broadens our understanding of women's participation in work. In terms of public policy, the integration of a gendered perspective means that the differences between men and women are considered at every level of the implementation of public policy and economic development programs. It means taking into account the social and cultural roles that influence parental decisions about child labor and schooling, which will improve the functioning of public policies and through which equity will be achieved.

A Human Rights perspective helps bring the needs of boys and girls into focus with regard to public policy. It permits the ethical articulation of social demands, converting them into social obligations (Gilabert, 2011); it lays the groundwork for the creation of laws that guarantee the fulfillment of social needs. The ethical importance of these rights provides the foundation for their execution through institutional expansion and the implementation of reforms. This can be achieved in a variety of ways, from the demand for appropriate legislation to the generation of legal actions based on political recognition and social monitoring.

A human Rights perspective also allows for the recognition of situations that remain unseen. It arises from the idea that "the ethical force of human rights is made more powerful in practice through giving it social recognition and an acknowledged status, even when no enforcement is instituted" (Sen, 2004, p. 343). From this perspective, the recognition of certain forms of child labor and their negative effects on children's development, in and of themselves, will have a significant impact on the reduction of child labor and a rise in the school attendance of minors. Beyond that, a human rights perspective allows for respect among different social groups. It recognizes individual rights without losing sight of common interests through respect for universal rights(Sen, 2004). This is where we find it compatible with a genderbased perspective. By combining both perspectives, the need to reduce child labor while keeping in mind the differences between men and women becomes a social obligation that takes into account the particularities of the rural as well as the urban, of boys and girls, of those who are thirteen or younger, and those who are over fourteen. That is to say, it takes into account and respects particularities; it understands the process through which parents make decisions about child labor and schooling, without excluding the various people involved in the decision-making process. As Amaryta Sen argues, "that understanding suggests the need to work towards changing the prevailing circumstances to make the unrealized rights realizable, and ultimately, realized" (Sen, 2004, p. 348).

#### How far should we go?

"The difficult issue is not where we start, but where we end up going and why" (Gilabert, 2011, p. 446)

When human rights are not being met, a rights perspective can indicate the direction political reforms should provide(Gilabert, 2011). As was already mentioned, a human rights perspective establishes the minimum necessary to guarantee access to human necessities; it allows for the identification of problems and questions; it serves the purpose of monitoring, and allows for the comprehensive review of national laws, policies and practices in order to make changes where they are necessary. The strengthening of institutions permits a fair and efficient implementation of human rights. Therefore, cultural

and institutional conditions should be created that permit the fulfillment of rights that until now have not been respected (Gilabert, 2009).

From this perspective, it is fundamental to review the child protection laws, with special attention to unseen work, activities carried out by girls, and the different ways that girls and boys participate in child labor. Special attention should be given to domestic work, one of the biggest legislative gaps. It is not an easy task, but at the very least general points should be raised, to serve as the starting place for future discussions, and, in the short term, to create changes in labor laws for minors.

The topic of domestic labor should be approached from two flanks. On the one hand, it is important to make people aware of the risks associated with domestic work. Some people view domestic labor as a secure place for girls, as it is work that occurs in the private sphere; they lose sight of the risks of invisibility. On the other, it is very important to have a registry of girls and boys who work inside homes. And to guarantee appropriate working conditions, through monitoring. While it will be quite difficult, since work is done in private homes, a process for filing complaints of rights violations committed against those working in this sector can be created. This requires the institutionalization and/or formalization of domestic labor, no easy task given the cost that institutionalization can have for employers. Formalizing domestic labor implies, among other things, guaranteeing access to health care, which would generate extra costs for employers. It will be necessary to create mechanisms that permit access to social security, without a cost that makes domestic work an illegal practice.

Nevertheless, domestic labor is not the only unseen practice. There remains the task of making the invisible, visible, to protect boys and girls from an integrated

281

perspective that seeks not only to regulate child labor, but that also includes measures that end the need for children to work and that help children stay in school.

#### 8.6 GOING BEYOND POVERTY: WHAT WE STILL NEED TO THINK ABOUT

It is evident that there is still much to be done. I agree with López and Estrada (2006), who argue in favor of the need to sign and ratify Convention 138 on the minimum age to access child labor. I question, however, the eradication of child labor by simply restricting access to formal employment, which is the same as criminalizing many of the activities that children carry out, even when this is done because of necessity. As I argued, raising the minimum age of access to work without modifying other things will simply push children from formality to informality, and from less dangerous kinds of work to the most harmful. Likewise, I recognize the need to enforce compliance with both the Constitution and the Federal Labor Act, but I also think it's necessary to do things in the field of social development and education. Improving the quality of people's lives is fundamental if we want to lower the incidence of child labor.

Not only do we have important gaps with regard to public policy; there is much to do also in the field of research. Based on the above argument, it is imperative to analyze child labor legislation and to generate proposals on legislative matters. It is important to understand the resistance of the federal government to ratifying Convention number 138, but we also need to understand other aspects of child labor. While it is true that this work includes quantitative as well as qualitative study, it is necessary to provide more thorough analysis of case studies: of the differences that occur in Mexico at a state level, by type of activity, and in the processes associated with the different types of work carried out by

children. Little has been formalized about domestic labor; we don't have enough information to state whether or not is if it should be considered one of the most harmful forms. Something similar happens with work in factories and other sectors. We do not know how girls get involved in construction or boys in domestic labor.

In regards to quantitative analysis, there is much to be done. The use of levels of well-being simplifies the identification of the variations between groups that are important. However, we need to analyze whether current ranges are adequate. It is difficult to believe that a child is going to be able to attend school when he lives on 52 US dollars per month, or that an income of 100 US dollars can be considered sufficient for achieving well-being and, therefore, attending school and not working, when there are not enough public schools—and even fewer of good quality. Information about children's time allocation is missing. Additionally, there are many ambiguities in the management of the concept of domestic work, which in spite of helping analyze child labor from a perspective of gender does not allow us to have a more accurate image of the situation for women.

The existence of new data will allow us to evaluate changes in the prevalence of child labor. However, due to the lack of evaluations of child labor eradication programs, it will not allow us to know what has worked and what has not. Much remains to be done in this area. We have discussed much about the determinants of child labor, but little about public policy related to activities done by children.

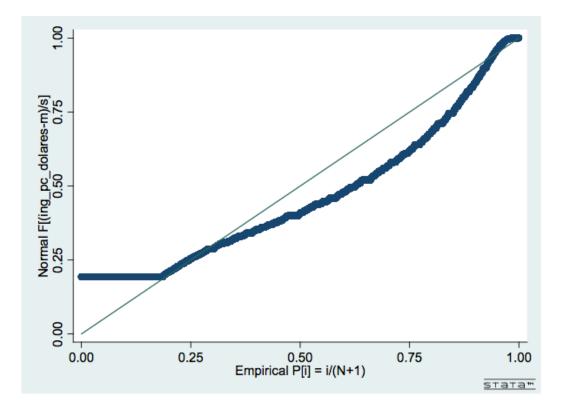
In regards to work organization, there are new questions that will influence child labor. What will happen if, as is proposed, employers of domestic labor get organized? Will this make a difference for working children? Could it be a mechanism for the reduction of child labor in domestic work? The study of the unions linked to informality can also shed light on different alternatives for protecting children.

The Global Campaign on Social Security and Coverage for All (ILO, 2009) urges all governments to implement a social security system for the majority of the population, to ensure that the human right to social security can be achieved in the shortest possible time. This implies guaranteeing a minimum level of well-being for families. In Mexico, a growth of informality has been observed on par with the expansion of the social security system, through public insurance. However, there are no studies that evaluate the correlation between the two, and the effect of both on child labor. The ideal would be to have panel data allowing the observation of changes in the trajectories of the families.

Finally, there is much to discuss about education policies and their impact on child labor. The new forms of evaluation in schools are increasing graduation rates at elementary and junior high school levels, but at the cost of a high-quality education, making it more difficult to access a good job. Children stay in school, but continue working when it is necessary, and when they finish school they don't have improved options. We need to analyze the social consequences of these new mechanisms of school retention on teenage and adult work, and see whether the social reproduction of poverty stops or not. In this a viable hypothesis to test would be that children have more education, but a lower quality of life.

# APPENDIX

# FIGURE A.1 INCOME PER CAPITA, NORMALITY TEST (WITH STATA)



## TABLE A.1. MARGINAL EFFECTS AND ODDS RATIO FOR LOGIT REGRESSION MODELS PREDICTING CHILD WORK IN ECONOMIC ACTIVITIES, BY LEVEL OF WELLBEING (STANDARD ERRORS IN PARENTHESES)

	wellbe		wellt	At least minimum wellbeing		With an income which has reached a wellbeing level (Income higher than 99 US		
	dollars when countryside or un for those living	der 73 US dollars	between 53 and and between 7 dollars in u	74 and 156 US	dollars in rural areas and 156 US dollars in urban areas)			
	Marginal effects	Odds Ratio	Marginal effects	Odds Ratio	Marginal effects	Odds Ratio		
Per capita Income	0002*	0.9965*	0.0002	1.0039	0.0002***	1.0041***		
	(.0001)	(.0015)	(.0002)	(.0042)	(.0000)	(.0007)		
Squared per capita income <sup>a</sup>	.00001***	1.0003***	0.0000***	1.0001***	-0.0000002***	0.999996***		
	(.0000)	(.0000)	(.00000)	(.00002)	(.0000)	(.0000)		
Age	.0158***	1.3925***	0.0144***	1.3688***	0.0142***	1.3722***		
	(.0003)	(.0095)	(.0004)	(.0112)	(.0005)	(.0120)		
Male	.0487***	2.7248***	0.0322***	2.0092***	0.0278***	1.8551***		
	(.0018)	(.0922)	(.0021)	(.08689	(.0027)	(.1073)		
Male household head	0109***	0.8040***	-0.0073*	0.8587*	0.0023	1.0524		
	(.0028)	(.0420)	(.0034)	(.0585)	(.0042)	(.1014)		
School level of household head	0073***	0.8577***	-0.0096***	0.8104***	-0.0145***	0.7233***		
	(.0005)	(.0095)	(.0006)	(.0113)	(.0010)	(.0142)		
Household head in economic activities	.0179***	1.5074***	0.0186***	1.6211***	0.0203***	1.7607**		
	(.0021)	(.0805)	(.003)	(.1501)	(.0049)	(.3027)		
Living with both parents	.00002	1.0005	0.0000	1.0008	-0.0131*	0.7582*		
	(.0032)	(.0665)	(.0042)	(.0907)	(.0060)	(.0906)		
Older siblings	0024*	0.9505*	-0.0008	0.9834	0.0034	1.0777		
	(.0011)	(.0227)	(.0016)	(.0351)	(.0024)	(.0578)		
Younger siblings	.0059***	1.1325***	0.0095***	1.2310***	0.0073***	1.1774***		
	(.0007)	(.0158)	(.0010)	(.0275)	(.0016)	(.0429)		
Living with other family members	0034	0.9305	-0.0001	0.9968	-0.0109**	0.7720*		
	(.0028)	(0570)	(.0040)	(.0866)	(.0048)	(.0933)		
Marginality	.0097***	1.2245***	0.0098***	1.2386***	0.0075***	1.1820***		
	(.0008)	(.0194)	(.0012)	(.0312)	(.0016)	(.0419)		
Rural	.0098*	1.2176*	0.0559***	2.4792***	0.0472**	2.2448**		
	(.0044)	(.1033)	(.0153)	(.4716)	(.0211)	(.6357)		
Interaction between living in rural area and household head in economic activities	.0344*** (.006)	1.8374*** (.1650)	-0.0041 (.0082)	0.9121 (.1743)	-0.0117 (.0108)	0.7519 (.2169)		
Constant	-7.65	95***	-8.170	)3***	-6.839	4***		
Observations	52.	,113	31,	091	17,8	317		
Correctly predicted	90.	58%	91.1	2%	91.3	1%		
Area under ROC curve		3464	0.8	342	0.81	.34		

\* p < .05, \*\* p < .01, \*\*\* p < .001. Standard errors appear in parentheses.

Source: 2009 Module of child labor, ENOE

#### TABLE A.2. MARGINAL EFFECTS AND ODDS RATIO FOR LOGIT REGRESSION MODELS PREDICTING CHILD WORK IN ECONOMIC ACTIVITIES, DOMESTIC WORK AND MARGINAL ACTIVITIES, BY LEVEL OF WELLBEING (STANDARD ERRORS IN PARENTHESES)

		minimum ing line		minimum being	With an inco has reached a leve	a wellbeing	
	(monthly income under 52 US dollars when living in the countryside or under 73 US dollars for those living in urban areas)		between 53 and and between 2	ne in rural areas 199 US dollars, 74 and 156 US urban areas)	(Income higher than 99 US dollars in rural areas and 156 US dollars in urban areas)		
	Marginal effects	Odds Ratio	Marginal effects	Odds Ratio	Marginal effects	Odds Ratio	
Per capita Income	.00075***	1.0041***	0008	.9955	.00005	1.0003	
	(.0002)	(.0009)	(.0006)	(.0033)	(.00008)	(.0004)	
Squared per capita income <sup>a</sup>	0.00000007	1.0000	0.0000006	1.00003	-0.00000007**	.99999989**	
	(.00000)	(.00001)	(.0000)	(.00001)	(.0000)	(.0000)	
Age	0500***	1.3146***	.0492***	1.3075***	.0482***	1.2831***	
	(.0007)	(.0051)	(.0008)	(.0063)	(.0011)	(.0063)	
Male	08399***	0.6308***	0858***	.6253***	0644***	0.7161***	
	(.0039)	(.0137)	(.0051)	(.0175)	(.0069)	(.2558)	
Male household head	00355	0.9807***	0265**	.8626**	0084	0.9569	
	(.0064)	(.0343)	(.0083)	(.0412)	(.0125)	(.0628)	
School level of household head	0055***	0.9704***	0011	.9939	00011	0.9994	
	(.0014)	(.0072)	(.0018)	(.0096)	(.0028)	(.0145)	
Household head in economic activities	.0257***	1.1480***	.0340**	1.1962**	.0798***	1.4673**	
	(.0059)	(.0358)	(.0109)	(.0661)	(.0212)	(.1398)	
Living with both parents	0360***	0.8205***	.0101	1.0565	0100	.9495	
	(.0084)	(.0382)	(.0126)	(.0718)	(.0172)	(.0853)	
Older siblings	0195***	0.8987***	0157***	.9179***	0070	.9645	
	(.0020)	(.0097)	(.0030)	(.0148)	(.005)	(.0249)	
Younger siblings	.0124***	1.0703***	.0116**	1.0654**	.0127*	1.0681*	
	(.0026)	(.0151)	(.0040)	(.0232)	(.0063)	(.0350)	
Living with other family members	0577***	0.7358***	0186	.9043	0280	.8633	
	(.0083)	(.0317)	(.0125)	(.0602)	(.0182)	(.0780)	
Marginality	.0222***	1.1291***	.0249***	1.1453***	.0137**	1.074**	
	(.0021)	(.0131)	(.0035)	(.0216)	(.0050)	(.0277)	
Rural	0106	0.9441	.0239	1.1428	.0570	1.3645	
	(.0098)	(.0503)	(.0234)	(.1533)	(.0357)	(.2822)	
Interaction between living in rural area and household head in economic activities	.0264* (.01021)	1.1593* (.0678)	0238 (.0261)	.8810286 (.1197)	0720 (.0453)	.7027 (.1484)	
Constant	-1.774	48***	-1.63	95***	-1.947	8***	
Observations	52,	113	31,0	091	17,81	17	
Correctly predicted	75.7	70%	75.5	57%	74.14	-%	
Area under ROC curve	0.7	767	0.77	703	0.750	01	

\* p < .05, \*\* p < .01, \*\*\* p < .001. Standard errors appear in parentheses. Source: 2009 Module of child labor, ENOE

#### TABLE A.3. MARGINAL EFFECTS AND ODDS RATIO FOR LOGIT REGRESSION MODELS PREDICTING CHILD WORK OUT OF NECESSITY, BY LEVEL OF WELLBEING (STANDARD **ERRORS IN PARENTHESES**)

wellde	Under the minimum wellbeing line (monthly income under 52 US dollars when living in the countryside or under 73 US dollars for those living in urban areas)		At least minimum wellbeing		With an income which has reached a wellbeing level		
dollars when countryside or und			d 99 US dollars, 74 and 156 US	(Income higher than 99 US dollars in rural areas and 156 US dollars in urban areas)			
Marginal effects	Odds Ratio	Marginal effects	Odds Ratio	Marginal effects	Odds Ratio		
.00009	1.0033	.0004***	1.0166***	.00009***	1.0045***		
(.00005)	(.0017)	(.0001)	(.0044)	(.00002)	(.0009)		
.000006***	1.0002***	.0000007	1.00003	-0.0000008***	1.0000***		
(.0000)	(.00002)	(.0000)	(.00001)	(.0000)	(.0000009)		
.0106***	1.475***	.00945***	1.4596***	.0086***	1.5143***		
(.0003)	(.0129)	(.0003)	(.0166)	(.0004)	(.0247)		
.0233***	2.3123***	.01546***	1.8471***	.0142***	1.9737***		
(.0012)	(.0891)	(.0014)	(.0918)	(.0016)	(.1380)		
0057**	.8206**	0056**	0.8091**	0019	0.9131		
(.0018)	(.0482)	(.0022)	(.0819)	(.0024)	(.1007)		
0047***	.8429***	0058***	0.7928***	00726***	0.7045***		
(.0004)	(.0108)	(.0004)	(.0128)	(.0006)	(.0163)		
.0045**	1.1904**	.0089***	1.5232***	.0067*	1.4622*		
(.0015)	(.0710)	(.0019)	(.1594)	(.0029)	(.2797)		
0050*	.8344*	00236	0.9106	0079*	0.7013**		
(.0021)	(.0621)	(.0026)	(.0922)	(.0033)	(.0956)		
.0014	1.0540	.0018	1.0775	.00548***	1.3027***		
(.0008)	(.0305)	(.0011)	(.0467)	(.0013)	(.0856)		
.0037***	1.1470 ***	.00559***	1.2508***	.0044***	1.2386***		
(.0004)	(.0176)	(.0007)	(.0311)	(.0009)	(.0512)		
0045*	0.8428 *	0012	0.9523	00545*	0.7531*		
(.0018)	(.0575)	(.0024)	(.0919)	(.0025)	(.1033)		
.0053***	1.2135 ***	.00495***	1.2192***	.0024**	1.1248**		
(.0005)	(.0221)	(.0007)	(.0353)	(.0009)	(.0476)		
.0041	1.1574	.04339***	3.1601***	.01516	1.8129		
(.0028)	(.1101)	(.0115)	(.6653)	(.0100)	(.5854)		
.0209***	1.8857***	0029	0.8860	.00134	1.0656		
(.0040)	(.1905)	(.0049)	(.1874)	(.0071)	(.3509)		
					1453		
					817		
					96%		
	dollars when countryside or una for those living Marginal effects .00009 (.00005) .000006*** (.0000) .0106*** (.0003) .0233*** (.0012) 0057** (.0013) 0057** (.0018) 0047*** (.0015) 0050* (.0021) .0014 (.0008) .0037*** (.0004) 0045* (.0018) .0037*** (.0004) 0045* (.0018) .0053*** (.0018) .0053*** (.0018) .0053*** (.0004) 0045* (.0018) .0053*** (.0005) .0041 (.0028) .0209*** (.0040) 8.152 92. 0.8	dollars when living in the countryside or under 73 US dollars for those living in urban areas)Marginal effectsOdds Ratio.000091.0033 (.0005).00006***1.0002*** (.0000).00006***1.0002*** (.0000).00006***1.0002*** (.0000).00006***1.0002*** (.0000).0106***1.475*** (.0003).0106***1.475*** (.0003).0106***1.475*** (.0012).0233***2.3123*** (.0012).0057**.8206** (.0018).0047***.8429*** (.0014).0045**1.1904** (.0015).0045**1.1904** (.0012).00141.0540 (.0621).00141.0540 (.0305).0037***1.1470 *** (.0004).0053***1.2135 *** (.0005).0053***1.2135 *** (.0004).0209***1.8857*** (.0040).0209***1.8857*** (.0040).0209***1.8857*** (.0040)	dollars when living in the countryside or under 73 US dollars for those living in urban areas)between 53 an and between dollars in u dollars in uMarginal effectsOdds RatioMarginal effects.000091.0033.0004*** (.0001).00006***1.0002*** (.0000).000007 (.0000).00006***1.0002*** (.0000).000007 (.0000).0106***1.475*** (.0003).00945*** (.0003).0233***2.3123*** (.0012).00945*** (.0013).0012)(.0891) (.0014).0014) (.0014)0057**.8206** (.0022)0056** (.0021).0004***.00891** (.0004).0022).0047***.8429*** (.0004).0058*** (.0015).0004).0108) (.0004).0004).0045**1.1904** (.0026).0018 (.0011).0050*.8344* (.0026).0018 (.0011).0037***1.1470*** (.0026).0018 (.0007).0045*0.8428 * (.0015).0012 (.0024).0053***1.2135*** (.0004).04339*** (.0007).00411.1574 (.04339*** (.0028).04357*** (.0029).0209***1.8857*** (.0040).0029 (.0049)-8.6399-10 (.0049).2113.31 .92.97%.31	dollars when living in the countryside or under 73 US dollars, and between 74 and 156 US dollars in urban areas)Marginal effectsOdds RatioMarginal effectsOdds Ratio.000091.0033.0004***1.0166***.00006***1.0002***.0000071.00003.00006***1.0002***.0000071.00003.00000.00002).0000071.00003.00000.0002***.00945***1.4596***.00003.0129).00033.0166).0233***2.3123***.01546***1.8471***.0012).0891).0014).0918)0057**.8206**0056**0.8091**.0018).0482).00022).0819)0047***.8429***0058***0.7928***.00045**1.1904**.0089***1.5232***.00045**1.1904**.0089***1.5232***.0015).0710).0011).0467).0050*.8344*002360.9106.0021).0621).0026).0922).00141.0540.00181.0775.0008).0305).0011).0467).0037***1.1470 ***.00559***1.2508***.0005).0221).0007).0311).0045*0.8428*00120.9523.0018).0575).0024).0919).0053***1.2135 ***.00495***1.2192***.0005).0221).0007).0353).0041	dollars when living in the commyside or under 73 US dollars for those living in urban areas)between 53 and 99 US dollars, and between 74 and 156 US dollars in urban areas)dollars in urban dollars in urban areas)dollars in urban dollars in urban areas)Marginal effectsOdds RatioMarginal effectsOdds RatioMarginal effectsOdds effects.000091.0033 (.0005).00017) (.0001)(.0044).00009*** (.00003).0000006*** (.00000).00006***1.0002*** (.0000).000001 (.00001).00000008*** (.00001).00000(.00002) (.00001).00003).00000008*** (.00003).0016***1.475*** (.0003).00145**1.4596*** (.0003).0012 (.0012)(.0891) (.0014).0018).0016 (.0015).0057**.8206** (.0004).0023** (.0012).0003.0047***.8429*** (.0004).0058*** (.0022).0024) (.0024).0047***.8429*** (.0004).0018 (.0015).0077* (.0015).0047***.8429*** (.0004).00236.9106 (.0027).0050*.8344* (.0005).00256.0047** (.0013).0037***1.1470***.0059*** (.0021).00548*** (.0007).0053****1.2135***.00495*** (.0007).00311).0051.0021).00077.0311).0052.00559***1.2192*** (.0007).0053.00110.0015.0044***.00120.00255.0053***		

\* *p* < .05, \*\* *p* < .01, \*\*\* *p* < .001. Standard errors appear in parentheses. Source: 2009 Module of child labor, ENOE

Margin effects of age (eda) in the odds of working in economic activities (ocu\_1) (Part of the output was removed to simplify presentation)

Logistic regres		_	LR	mber of ol chi2( ob > chi2	14) = =	101021 14931.73 0.0000
Log likelihood	= -26414.15	5		Pseudo R	2 =	0.2204
ocu_1	Coef.	Std. Err.	z P>	z  [9	95% Conf. Inter	val]
ing_pc_dol~s sqr_ip_dol~s eda sex sex_jefe_d escol_jefe ocu_jefe2 PAREJA_con~S herm_may herm_menores fam_extensa nivel_marg~n rural INTER_rura~e _cons	.0044857 -5.56e-06 .3363398 .8729951 -1658056 -2263945 .4715515 -1277282 -0322746 .1411098 .1367338 .1837409 .0863586 .3675595 -7.150009	.0002507 4.72e-07 .0048158 .0236569 .0368363 .0077205 .0425529 .046827 .0183188 .0108663 .0441584 .0120524 .0719734 .0752948 .0952992	17.89 -11.77 69.84 36.90 -29.32 11.08 -2.73 -1.76 12.99 -3.10 15.25 1.20 4.88 -75.03	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.006 0.078 0.000 0.002 0.000 0.230 0.000	.0039943 -6.48e-06 .326901 .8266285 -2380035 -2415264 .3881494 -2195074 -0681788 .1198122 -2232827 .1601187 -0547067 .2199844 -7.336792	.0049771 -4.63e-06 .3457785 .9193617 -0936078 -2112626 .5549535 -0359489 .0036296 .1624074 -050185 .2073632 .2274239 .5151345 -6.963226

2 . margins, at(eda = (5(1)17))

```
Predictive margins
Model VCE : OIM
```

Number of obs =

101021

Expression : Pr(ocu\_1), predict()

		De	lta-method				
		Margin	Std. Err.	z P>	> z	[95% Conf. Interv	val]
	_at 1 2 3 4 5 6 7 8 9 10 11	.0087774 .0122133 .0169557 .0234674 .0323469 .044346 .0603729 .0814675 .1087357 .1432293 .1857721	.000367 .000453 .0005496 .0006529 .0007563 .0008513 .0009329 .0010141 .0011525 .0014596 .0020358	23.92 26.96 30.85 35.94 42.77 52.09 64.71 80.33 94.34 98.13 91.25	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0 .0113255 0 .0158786 0 .0221878 0 .0308646 0 .0426775 0 .0585443 0 .0794799 0 .1064768 0 .1403686	.0094967 .0131011 .0180328 .024747 .0338292 .0460146 .0622014 .0834552 .1109947 .14609 .1897622
	12 13	.2367489 .2958974	.0029032	81.55 73.73	0.000	.2310587	.2424391 .3037631
_at:							
1	5 ye	ars old			8	12 years old	
2	6 ye	ars old			9	13 years old	
3	7 ye	ars old			10	14 years old	
4	8 ye	ars old			11	15 years old	
5	9 ye	ars old			12	16 years old	
6 7	•	ars old ars old			13	17 years old	

Margin effects of age (eda) in the odds of working in economic activities, domestic work and/or marginal activities (ti\_aem\_tdc)

(Part of the output was removed to simplify presentation)

3 .logit ti\_aem\_tdc ing\_pc\_dolares sqr\_ip\_dolares eda sex sex\_jefe\_d escol\_jefe ocu\_jefe2 PAREJA\_con+ > may herm\_menores fam\_extensa nivel\_marginacion rural INTER\_rural\_ocujefe, nolog

Logistic regres Log likelihood		3	LR	mber of ob chi2( ob > chi2 Pseudo Ri	14) = =	101021 19731.14 0.0000 0.1619
ti_aem_tdc	Coef.	Std. Err.	z P>	z  [9	5% Conf. Inter	val]
ing_pc_dol~s sqr_ip_dol~s eda sex sex_jefe_d escol_jefe ocu_jefe2 PAREJA_con~S herm_may herm_menores fam_extensa nivel_marg~n rural INTER_rura~e _cons	.0007236 -1.68e-06 .2657288 4378805 0667149 0252466 .1945058 099597 0916258 .0781362 2202401 .1203088 0417131 .0518535 -1.736312	.0001442 2.15e-07 .0026621 .0154813 .0257722 .0053805 .0254087 .0349272 .0084339 .0110127 .0332115 .0090567 .0471363 .0503645 .0517344	5.02 -7.80 99.82 -28.28 -2.59 -4.69 7.66 -2.85 -10.86 7.10 -6.63 13.28 -0.88 1.03 -33.56	$\begin{array}{c} 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.010\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.376\\ 0.330\\ 0.000\\ \end{array}$	.0004409 -2.10e-06 .2605112 468232 1172274 0357921 .1447057 168053 108156 .0565517 2853335 .102558 1340986 0468591 -1.83771	.0010062 -1.26e-06 .2709464 0162024 0147011 .2443059 031141 031141 031141 03197207 1551466 .1380597 .0506724 .1505661 -1.634914

4 . margins, at(eda = (5(1)17))

Predictive margins Model VCE : **OIM** 

Expression : Pr(ti\_aem\_tdc), predict()

		D	elta-method				
		Margin	Std. Err.	Z F	'> z	[95% Conf. Interv	val]
	_at						
	1 2 3 4 5 6 7	.376992	.0036623	102.94			.38417
	2	.4396617	.0032813 .0028093	133.99 179.50			.4460929
	4	.5687524	.0023222	244.92			.5733039
	5	.6310282	.0019101	330.37	0.00		.6347719
	6	.6893031	.0016481	418.24			.6925333
	7	.7422281	.0015473 .0015431	479.68 511.30			.7452608
	8 9	.8293068	.0015558	533.05			.832356
	10	.8633225	.0015389	561.00			.8663387
	11	.8914993	.0014791	602.71			.8943983
	12 13	.9144809	.0013814 .0012576	661.98 741.87			.9171885
	13	. 3323074	.0012370	741.07	0.00	.9303223	. 33 34 32 3
_at:							
1	5 ye	ars old			8	12 years old	
2	6 ye	ars old			9	13 years old	
3	7 ye	ars old			10	14 years old	
4	8 ve	ars old			11	15 years old	

Number of obs =

101021

12

13

16 years old

17 years old

Margin effects of school level of household head (escol\_jefe) in the odds of working in economic activities (ocu\_1)

Logistic regres Log likelihood		5	LR	umber of ol chi2( rob > chi2 Pseudo R	14) = =	101021 14931.73 0.0000 0.2204
ocu_1	Coef.	Std. Err.	z P>	z  [9	95% Conf. Inter	rval]
ing_pc_dol~s sqr_ip_dol~s eda sex sex_jefe_d escol_jefe ocu_jefe2 PAREJA_con~S herm_may herm_menores fam_extensa nivel_marg~n rural INTER_rura~e _cons	.0044857 -5.56e-06 .3363398 .8729951 -1658056 -2263945 .4715515 -1277282 -0322746 .1411098 -1367338 .1837409 .0863586 .3675595 -7.150009	.0002507 4.72e-07 .0048158 .0236569 .0368363 .0077205 .0425529 .046827 .0183188 .0108663 .0441584 .0120524 .0719734 .0752948 .0952992	17.89 -11.77 69.84 36.90 -4.50 -29.32 11.08 -2.73 -1.76 12.99 -3.10 15.25 1.20 4.88 -75.03	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.006 0.078 0.000 0.002 0.000 0.230 0.000 0.000	.0039943 -6.48e-06 .326901 .8266285 -2380035 -2415264 .3881494 -2195074 -0681788 .1198122 -2232827 .1601187 -0547067 .2199844 -7.336792	.0049771 -4.63e-06 .3457785 .9193617 0936078 2112626 .5549535 0359489 .0036296 .1624074 050185 .2073632 .2274239 .5151345 -6.963226

2 . margins, at(escol\_jefe = (1(1)7)) noatlegend

Predictive margins Number of obs = Model VCE : **OIM** 

Expression : Pr(ocu\_1), predict()

	D Margin	elta-method Std. Err.	z P>	z  [9	5% Conf. Inter	val]
_at 1 2 3 4 5 6 7	.1638265 .1403867 .1193887 .1007907 .0845003 .0703833 .0582737	.0025836 .0016993 .001097 .0008962 .0010253 .0012293 .0013874	63.41 82.62 108.83 112.47 82.41 57.26 42.00	0.000 0.000 0.000 0.000 0.000 0.000 0.000	.1587627 .1370562 .1172387 .0990343 .0824907 .067974 .0555544	.1688904 .1437172 .1215387 .1025472 .08651 .0727926 .0609929

101021

\_at:

- 14 Without education
- 15 Some elementary school completed
- 16 Elementary school completed
- 17 Some middle school completed
- 18 Middle school completed
- 19 Some high school completed
- 20 Not specified

Margin effects of school level of household head (ecol\_jefe) in the odds of working in economic activities, domestic work and marginal activities (ti\_aem\_tdc)

3 . logit ti\_aem\_tdc ing\_pc\_dolares sqr\_ip\_dolares eda sex sex\_jefe\_d escol\_jefe ocu\_jefe2 PAREJA\_conH > may herm\_menores fam\_extensa nivel\_marginacion rural INTER\_rural\_ocujefe, nolog

Logistic regression		Number of obs LR chi2(	- 14)	=	101021 19731.14
Log likelihood =	-51057.173	Prob > chi2 Pseudo R2	= _		0.0000 0.1619

ti_aem_tdc	Coef.	Std. Err.	z P>	z  [9	95% Conf. Inter	val]
ing_pc_dol~s	.0007236	.0001442	5.02	0.000	.0004409	.0010062
sgr_ip_dol~s	-1.68e-06	2.15e-07	-7.80	0.000	-2.10e-06	-1.26e-06
eda	.2657288	.0026621	99.82	0.000	.2605112	.2709464
sex	4378805	.0154813	-28.28	0.000	4682232	4075378
sex_jefe_d	0667149	.0257722	-2.59	0.010	1172274	0162024
escol_jefe	0252466	.0053805	-4.69	0.000	0357921	0147011
ocu_jefe2	.1945058	.0254087	7.66	0.000	.1447057	.2443059
PAREJA_con~S	099597	.0349272	-2.85	0.004	168053	031141
herm_may	0916258	.0084339	-10.86	0.000	108156	0750955
herm_menores	.0781362	.0110127	7.10	0.000	.0565517	.0997207
fam_extensa	2202401	.0332115	-6.63	0.000	2853335	1551466
nivel_marg~n	.1203088	.0090567	13.28	0.000	.102558	.1380597
rural	0417131	.0471363	-0.88	0.376	1340986	.0506724
INTER_rura~e	.0518535	.0503645	1.03	0.303	0468591	.1505661
_cons	-1.736312	.0517344	-33.56	0.000	-1.83771	-1.634914

4 . margins, at(escol\_jefe = (1(1)7)) noatlegend

```
Predictive margins
Model VCE : OIM
```

Number of obs =

101021

Expression : Pr(ti\_aem\_tdc), predict()

	De Margin	elta-method Std. Err.	z P>	z  [9	5% Conf. Interv	val]
_at 1 2 3 4 5 6 7	.7218598 .7177085 .7135268 .7093152 .7050743 .7008044 .6965061	.0029984 .0022458 .0016056 .0012896 .0015385 .0021811 .0029831	240.75 319.58 444.39 550.03 458.29 321.31 233.49	0.000 0.000 0.000 0.000 0.000 0.000 0.000	.7159831 .7133068 .7103798 .7067877 .7020589 .6965296 .6906594	.7277365 .7221102 .7166738 .7118428 .7080897 .7050792 .7023529

\_at:

- 1 Without education
- 2 Some elementary school completed
- 3 Elementary school completed
- 4 Some middle school completed
- 5 Middle school completed
- 6 Some high school completed
- 7 Not specified

Margin effects of living with both parents (PAREJA\_conHIJOS) over the effect of parents' occupation (ocu\_jefe2), when predicting work in economic activities (ocu\_1)

Logistic regress		5	LR	mber of ol chi2( ob > chi2 Pseudo R	14) = =	101021 14931.73 0.0000 0.2204
ocu_1	Coef.	Std. Err.	z P>	z  [9	95% Conf. Inter	val]
ing_pc_dol~s	.0044857	.0002507	17.89	0.000	.0039943	.0049771
sqr_ip_dol~s	-5.56e-06	4.72e-07	-11.77	0.000	-6.48e-06	-4.63e-06
eda	.3363398	.0048158	69.84	0.000	.326901	.3457785
sex	.8729951	.0236569	36.90	0.000	.8266285	.9193617
sex_jefe_d	1658056	.0368363	-4.50	0.000	2380035	0936078
escol_jefe	2263945	.0077205	-29.32	0.000	2415264	2112626
ocu_jefe2	.4715515	.0425529	11.08	0.000	.3881494	.5549535
PAREJA_con~S	1277282	.046827	-2.73	0.006	2195074	0359489
herm_may	0322746	.0183188	-1.76	0.078	0681788	.0036296
herm_menores	.1411098	.0108663	12.99	0.000	.1198122	.1624074
fam_extensa	1367338	.0441584	-3.10	0.002	2232827	050185
nivel_marg~n	.1837409	.0120524	15.25	0.000	.1601187	.2073632
rural	.0863586	.0719734	1.20	0.230	0547067	.2274239
INTER_rura~e	.3675595	.0752948	4.88	0.000	.2199844	.5151345
_cons	-7.150009	.0952992	-75.03	0.000	-7.336792	-6.963226

4 . margins, dydx (ocu\_jefe2) at( (min) PAREJA\_conHIJOS) at((max) PAREJA\_conHIJOS)

Average margi Model VCE	nal effects Num : <b>OIM</b>	mber of obs = <b>101021</b>
	: Pr(ocu_1), predict() : ocu_jefe2	
1at	: PAREJA_con~S = <b>0</b> (m	in)
2at	: PAREJA_con~S = 1 (ma	ax)
	Delta-method dy/dx Std.Err. z P>	z  [95% Conf. Interval]
ocu_jefe2 _at 1 2	.0380063 .0034244 11.10 .0353964 .003248 10.90	0.000 .0312945 .044718 0.000 .0290305 .0417623

\_at:

1 Living with one parent or tutor

2 Living with both: parent or tutor and spouse

# **References**

- Abler, D., Rodríguez, J., & Robles, H. (1998, Marzo). The allocation of children's time in Mexico and Peru. Working Papers , 42. Population Research Institute.
- Allison, P. (2013). Why I Don't Trust the Hosmer-Lemeshow Test for Logistic Regression. Retrieved el 19 de 02 de 2014, de Statistical Horizons: www.statisticalhorizons.com/hosmer-lemeshow
- Arvin-Rad, H., Basu, A. K., & Willumsen, M. (2010). Economic reform, informal-formal sector linkages and intervention in the informal sector in developing countries: A paradox. International Review of Economics and Finance, 662-670.
- Baland, J.-M., & Robinson, J. (2000). Is Child Labor Inefficient? The Journal of Political Economy , 108 (4), 663-679.
- Banerjee, A., & Duflo, E. (2011). Repensar la pobreza. México: Taurus.
- Basu, K. (2000). Analytical Development Economics: The Less Developed Economy Revisited. Cambridge, MA: MIT Press.
- Basu, K. (2006). Gender and say: a model of household behavior with endogenously determined balance of power. Economic Journal , 116, 558-580.
- Basu, K., Das, S., & Dutta, B. (2010). Child labor and household wealth: Theory and empirical evidence of an inverted-U. Journal of Development Economics, 91, 8-14.
- Basu, K., & Van, P. (1998). The economics of child labor. American Economic Review (88), 412-427.
- Becker, G. S., & Barro, R. (1988). A reformulation of the economic theory of fertility. Quarterly Journal of Economics , 103 (1), 1-25.
- Becker, G. S., & Tomes, N. (1976). Child Endowments and the Quality and Quantity of Children. Journal of Political Economy , 84 (S), 279-88.
- Becker. G. S. (1965). A theory of the allocation of time. Economic Journal, 75, 493-517.
- Beneria, L. (1992). The Mexican Debt Crisis: Restructuring the Economy and the Household. In L. Beneria, & S. Feldman, Unequal Burden: Economic Crisis, Persistent Poverty, and Women's Work. Boulder, Colo.: Westview Press.

- Beşpinar-Ekici, F. U. (2007). To work or not to work: Women's experience in Mexico and Turkey. Austin: The University of Texas at Austin.
- Bhalotra, S., & Heady, C. (2003). Child farm labor: the wealth paradox. World Bank Economic Review , 17 (2), 197-227.
- Binder, M., & Scrogin, D. (1999). Labor Force Participation and Household Work of Urban Schoolchildren in Mexico: Characteristics and Consequences. Economic Development and Cultural Change, 48 (1), 123-154.
- Blanco Allais, F. (2009). Assessing the gender gap: Evidence from SIMPOC surveys. Geneva: ILO.
- Boserup, E. (1970). Women and Economic Development. New York: St. Martins Press.
- Brewis, A., & Lee, S. (2010). Children's work, earnings, and nutrition in urban Mexican shantytowns. American Journal of Human Biology , 22 (1), 60-68.
- Brizzio de la Hoz, A. (1996). El trabajo infantil en México: una realidad a superar. En A. (. Brizzio, El trabajo infantil en México. México: UNICEF.
- Brown, D., Deardorff, A., & Stern, R. (2003). Child Labor: Theory, Evidence and Policy. In K. Baso, H. Horn, L. Román, & J. Shapiro (Eds.), International Labor Standards (pp. 193-270). Malden, MA: Blackwell.
- Buchmann, C. (2000). Family Structure, Parental Perceptions, and Child Labor in Kenya: What Factors Determine Who is Enrolled in School? Social Forces , 78 (4), 1349-1379.
- Buchmann, C., & Hannum, E. (2001). Education and Stratification in Developing Countries: A Review of Theories and Research. Annual Review of Sociology , 27, 77-102.
- Cámara de diputados. (2006 17-January). Leyes. Retrieved 2011- 4-May from Secretaría del Trabajo y Previsión Social: http://www.diputados.gob.mx/LeyesBiblio/pdf/125.pdf
- Carvacho, H., Zick, A., Haye, A., González, R., Manzi, J., Kocik, C., y otros. (2013). On the relation between social class and prejudice: The roles of education, income, and ideological attitudes. European Hournal of Social Psychology , 43, 272-285.
- Castells, M., & Portes, A. (1989). World Underneath: The Origins, Dynamics, and Effects of the Informal Economy. In A. Portes, M. Castells, & L. Benton (Eds.), The Informal Economy: Studies in Advanced and Less Developed Countries (pp. 11-37). Baltimore: Johns Hopkins University Press.

- Centeno, M. A., & Portes, A. (2006). The Informal Economy in the Shadow of the State. In P. Fernández-Kelly, & J. Shefner (Eds.), Out of the Shadows. Political Action and Informal Economy in Latin America (pp. 23-48). University Park, Pennsylvania: The Pennsylvania State University Press.
- Chant, S. (1991). Women and Survival in Mexican Cities: Perspectives on Gender, Labour Markets and Low-income Households. In C. H. Wood, & B. R. Roberts (Eds.). Manchester: Manchester University Press.
- Chant, S. (1994). Women, Work and Household Survival Strategies in Mexico, 1982-1992: Past Trends, Current Tendencies and Future Research. Bulletin of Latin American Research , 13 (2), 203-233.
- Christenson, B., & Juarez, F. (1987). Household Economy and the Labor Force Particiaption of Male and Female Children in Mexico. Mexico, D.F.: CEDDU-El Colegio de México.
- Cigno, A., Rosati, F., & Guarcello, L. (2002). Does globalization increase child labor? World Development , 30, 1579-1589.
- CNDH. (2011). CNDH Media. Retrieved el 10 de May de 2011, de Comisión Nacional de Derechos Humanos: http://www.cndh.org.mx/cndh\_media/campanias.html#
- Collier, D., Mahoney, J., & Seawright, J. (2004). Claiming Too Much: Warnings about Selection Bias. In H. Brady, & D. Collier, Rethinking Social Inquiry. Diverse Tools, Shared Standards (pp. 85-102). New York: Rowman & Littlefield.
- CONAPO. (Noviembre de 2009). Consejo Nacional de Población. Retrieved el 22 de Noviembre de 2009, de Consejo Nacional de Población: http://www.conapo.gob.mx/index.php?option=com\_content&view=article&id=12 6&Itemid=204
- CONEVAL. (2010). CONEVAL Líneas de bienestar. Retrieved el 22 de October de 2012, de http://www.coneval.gob.mx/cmsconeval/rw/pages/medicion/Pobreza\_2010/Lineas %20de%20bienestar.es.do
- Coordinación de Protección a la Infancia. (2007a). Estudio de niños, niñas y adolescentes que realizan actividades paraeconómicas en los mercados Abastos, Felipe Ángeles y Libertad del Municipio de Guadalajara. Guadalajara: DIF Guadalajara.
- Coordinación de Protección a la Infancia. (2007b). Estudio de personas que realizan actividades paraeconómicas, deambulan o pernoctan en vía ública en el municipio de Guadalajara. Guadalajara: DIF Guadalajara.

- Cos Montiel, F. (2000). Sirviendo a las mesas del mundo: las niñas y niños jornaleros agrícolas en México. En N. (. Del Río, La infancia vulnerable en México en un mundo globalizado (pp. 15-38). México: UAM-UNICEF.
- Cross, J. C., & Peña, S. (2006). Risk and Regulation in Informal and Illegal Markets. In P. Fernández-Kelly, & J. Shefner (Eds.). University Park, PA: The Pennsylvania State University Press.
- Cunningham, H. (1995). Child labour and industrialization. Geneva: ILO.
- De Graff, D., Bilsborrow, R., & Herrin, A. (1996). Children's education in the Phillippines: does high fertility matter? Population Research and Policy Review , 15 (3), 219-247.
- De Tray, D. (1983). Children's work activities in Malaysia. Population and Development Review, 9 (3), 437-455.
- Delap, E. (2001). Economic and Cultural Forces in the Child Labour Debate: Evidence from Urban Bangladesh. Journal of Development Studies , 37 (4), 1-22.
- Dreze, J., & Sen, A. (2002). India: Development and participation (2nd Edition ed.). New York: Oxford University Press.
- Dwibedi, J., & Chaudhuri, S. (2010). Foreign capital, return to education and child labour. International Review of Economics & Finance , 19 (2), 278-286.
- Edmonds, E. (2003). Child labor in South Asia. Working paper No. 5.
- Edmonds, E. (2005). Does Child Labor Decline with Improving Economic Status? The Journal of Human Resources , 40 (1), 77-99.
- Edmonds, E. (2008). Child Labor. En P. Schult, & J. Strauss, Handbook of Development Economics (pp. 3607-3709). Elsevier.
- Edmonds, E., & Turk, C. (2004). Child labor in transition in Vietnam. In P. Glewwe, N. Agrawal, & D. Dollar (Eds.), Economic Growth, Poverty and Household Welfare in Vietnam (pp. 505-555). Washington, D.C.: World Bank.
- Evenson, R., Popkin, B., & King-Quizon, E. (1980). Nutrition, work and demographic behaviour in rural Philippine households: a synopsis of several laguna household studies. In H. Binswanger, R. Evenson, C. Florencio, & B. White, Rural Household Studies in Asia) (pp. 290-365). Singapore: Singapore University Press.
- Fernández-Kelly, P., & Shefner, J. (2006). Out of the Shadows. Political action and informal economy in Latin America. (P. Fernández-Kelly, & J. Shefner, Eds.) PA: The Pennsylvania State University Press.

- French, L. (2010). CHildren's Labor Market Involvement, Household Work, and Welfare: A Brazilian Case Study. Journal of Business Ethics (92), 63-78.
- Fuller, B., Singer, J., & Keiley, M. (1995). Why do Daughters Leave School in Southern Africa? Family Economy and Mothers' Commitments. Social Forces, 74 (2), 657-681.
- Gereffi, & Fonda. (1992). Regional Paths of Development. Annual Review of Sociology , 18, 419-448.
- Gilbert, A. (1994). The Latin American City. Nottingham: Russell Press.
- Gilbert, A., & Ward, P. (1985). Housig, the State and the Poor: Policy and Practice in Three Latin American Cities. Cambridge: Cambridge University Press.
- González de la Rocha, M. (1994b). Household Headship and Occupational Position in Mexico. En E. Kennedy, & M. González de la Rocha (Edits.), Poverty and Well-Being in the Household: Case Studies of the Developing world (pp. 1-24). San Diego, CA: Center for Iberian and Latin American Studies, University of California San Diego.
- Grajeda, E., & Ward, P. (2012). Inheritance and Succession in Informal Settlements of Latin American Cities: a Mexican Case Study. Latin American Research Review , 47, 139-162.
- Grant, J. H., & Hamermesh, D. S. (1981). Labor Market Competition among Youths, White Women and Others. The Review of Economics and Statistics , 63 (3), 354-360.
- Grootaert, C., & Patrinos, H. (Eds.). (1998). The Policy Analysis of Child Labor: A Comparative Study. New York: St. Marin's Press.
- Guarcello, L., Kovrova, I., & Rosati, F. (2008). Child labour as a response to shocks: Evidence from Cambodian villages. Rome: Understanding Children's Work Programme Working Paper Series.
- Guarcello, L., Mealli, F., & Rosati, F. (2003). Household Vulnerability and Child Labor: The Effect of Shocks, Credit Rationing, and Insurance. Understanding Children's Work Working Paper.
- Gunnarsson, V., Orazem, P., & Sánchez, M. (2006). Child labour and school achievement in Latin America. World Bank Economic Review, 20 (1), 31-54.
- Hazan, M., & Berdugo, B. (2002). Child Labor, Fertility, and Economic Growth. Economic Journal , 112 (482), 810-828.

- Hazarika, & Bedi. (2003). Schooling costs and child work in rural Pakistan. Journal of Development Studies , 39 (5), 26-64.
- Hazarika, G., & Bedi, A. S. (2009). Child work and schooling costs in rural Northern India. In R. Kanbur, & J. Svejnar, Labor Markets and Economic Development. Hoboken: Routledge.
- Heady, C. (2003). The Effect of Child Labor on Learning achievement. World Development, 31, 385-398.
- Herrera, L. (28 de February de 2011). Franeleros podrían ser reclutados por el crimen organizado. Periódico el Informador . Guadalajara.
- Hosmer, D., Hosmer, T., Le Cessie, S., & Lemeshow, S. (1997). A Comparison of Goodness-of-fit Tests for the Logistic Regression Model. Statistics in Medicine , 16, 965-980.
- IE, OIT. (12 de Junio de 2009). Demos una oportunidad a las niñas: Erradiquemos el trabajo infantil. Retrieved el 10 de Julio de 2013, de Education International: download.eiie.org/docs/IRISDocuments/Human%20and%%20Trade%20Union%20Rights/Chi ld%20Labour/2009%20World%20Day%20Against%20Child%20Labour/2009-00078-01-S.pdf
- ILO, International Labor Organization. (1998). Child Labor: Targeting the Intolerable. Geneva: ILO.
- ILO, International Labor Organization. (2000). Estimates and projections of the economically active population. In Sources and Methods: Labor Statistics 10. Geneva: ILO.
- ILO, International Labour Organization. (2006). The end of child labour: Within reach. Geneva: ILO.
- ILO, International Labour Organization. (2006c). Text of ILO Convention No. 138. Retrieved el 11 de April de 2011, de ILO Conventions on Child Labour: http://www.ilo.org/ilolex/cgi-lex/convde.pl?C138
- INEGI. (2005). Estadísticas de Educacón. Educación básica, media superior y superior (Fin de cursos). Serie Boletín de estadísticas continuas, demográficas y sociales. Aguascalientes, Ags. México.
- INEGI. (2007). Cómo se hace la ENOE. Métodos y procedimientos. Retrieved el 15 de 05 de 2010, de www.inegi.org.mx: http://www.inegi.org.mx/est/contenidos/espanol/metodologias/enoe/ENOE\_como\_ se\_hace\_la\_ENOE1.pdf

- INEGI. (2008). Resultados del módulo de trabajo infantil 2007. Mexico: Instituto Nacional de Estadística y Geografía, Secretaría del Trabajo y Previsión Social.
- INEGI. (2009). ENAMIN Encuesta Nacional de Micronegocios 2008. Retrieved el 4 de March de 2011, de http://www.inegi.org.mx/sistemas/biblioteca/detalle.aspx?c=26830&upc=0&s=est &tg=188&f=2&cl=0&pf=EncH
- INEGI. (2009b). Módulo de Trabajo Infantil 2009. Retrieved el 15 de September de 2010, de Módulo de Trabajo Infantil 2009: http://www.ingegi.org.mx/inegi/default.aspx?s=est&c=17093
- INEGI. (2009c). Tabulados básicos, Trabajo Infantil 2009. Retrieved el 07 de February de 2011, de http://www.inegi.org.mx/sistemas/tabuladosbasicos/default.aspx?c=26241&s=est
- INEGI. (February 2011). Encuesta Nacional de Ocupación y Empleo. Problemática de ocupación y acceso a empleo. Retrieved el 18 de April de 2011, de http://www.inegi.org.mx/sistemas/tabuladosbasicos2/probocupa.aspx?c=26229&s =est&a=0
- INEGI. (March 2011). Principales resultados del censo de población y vivienda 2010. Retrieved 2011-18-April from Censo de población y vivienda 2010: http://www.inegi.org.mx/est/contenidos/Proyectos/ccpv/cpv2010/Principales2010. aspx
- INEGI. (12 de Noviembre de 2013a). Indicadores de ocupación y empleo al tercer trimestre de 2013. Retrieved January 10, 2014, from INEGI, Instituto Nacional de Estadística y Geografía: www3.inegi.org.mx/sistemas/temas/default.aspx?s=est&c=25433&t=1
- INEGI. (20 de Diciembre de 2013b). Indicadores oportunos de ocupación y empleo. Cifras preliminares durante noviembre de 2013. Retrieved January 03, 2014, from Comunicados de prensa: www.inegi.org.mx/inegi/contenidos/espanol/prensa/comunicados/ocupbol.pdf
- Instituto Nacional de las Mujeres. (2007). Trabajo Infantil en México 2007. Mexico: Instituto Nacional de las Mujeres.
- International Labour Office, ILO. (2013). World report on child labour: Economic vulnerability, social protection and the fight against child labour. Geneva: International Labour Office.
- Invernizzi, A., & Milne, B. (2002). Are children entitled to contribute to international policy making? A critical view of children's participation in the international campaign for the elimination of child labour. The International Journal of Children's Rights , 10, 403-431.

James, A., Jenks, C., & Prout, A. (1998). Theorizing Childhood. Cambridge: Policy Press.

- Jones, G., & Chant, S. (2009). Globalising initiatives for gender equality and poverty reduction: Exploring 'failure' with reference to education and work among urban youth in The Gambia and Ghana. Geoforum, 40, 184-196.
- Jütting, J., & de Laiglesia, J. R. (2009). Employment, Poverty Reduction and Development: What's New? In O. D. Centre, Is Informal Normal?: Towarsd More and Better Jobs in Developing Countries (pp. 17-26). Paris: OECD.
- Kambhampati, U. S., & Rajan, R. (2008). The 'Nowhere' Children: Patriarchy and the Role of Girls in India's Rural Economy. Journal of Development Studies , 44 (9), 1309-1341.
- Kay, C. (1999). Rural Development: From agrarian reform to neoliberalism and beyond. En R. Gwynne, & C. Kay, Latin America Transformed. Globalization and Modernity (pp. 272-304). London: Arnold.
- Knaul, F. M. (2001). The Impact of Child Labor and School Dropout on Human Capital: Gender Differences in Mexico. In E. Katz, & M. C. Correia (Eds.), The Economics of Gender in Mexico: Work, Family, State, and Market (pp. 46-84). Washington, D.C.: The World Bank.
- Kucera, D., & Xenogiani, T. (2009). Women in Informal Employment: What Do We Know and What Can We Do? In O. D. Centre, Is Informal Normal?: Towards More and Better Jobs in Developing Countries (pp. 89-113). Paris: OECD Publishing.
- Küpper, B., Wolf, C., & Zick, A. (2010). Social status and anti-immigrant attitudes in Europe: an Examination from the perspective of social dominance theory. International Journal of Conflict and Violence, 4 (2), 205-219.
- Kurz, K., & Prather, C. (1995). Improving the Quality of Life of Girls. New York, NY: AWID, UNICEF.
- LEES, Laboratorio de Estudios Económicos y Sociales. (2010). Encuesta sobre condiciones sociales y de vivienda en la comunidad de Santa Ana Tepetitlán. Zapopan, Jalisco, México.
- LEES, Laboratorio de Estudios Económicos y Sociales. (2013). Diagnóstico sobre las problemáticas que enfrentan los diversos grupos juveniles en Santa Ana Tepetitlán. Zapopan, Jalisco: SUBSEMUN.
- Levinson, D., Moe, K., & Knaul, F. M. (2001). Youth Education and Work in Mexico. World Development, 29 (1), 167-188.

- Levy, S. (2010). Buenas intenciones, malos resultados. Política social, informalidad y creicmiento económico en México. Mexico: Oceano.
- Levy, V. (1985). Cropping Pattern, Mechanization, Child Labor, and Fertility in a Farming Economy: Rural Egypt. Economic Development and Cultural Change, 33 (4), 777-791.
- López Villavicencio, A. (2005). Schooling and child labour in Mexico: an empirical analysis. Análisis Económico, XX (45).
- López, M. d., & Salles, V. (2006). Colegio de México. Retrieved el 23 de 05 de 2012, de Libreria: http://ogp.colmex.mx/libreria/OportunidadesOGP.pdf
- Maloney, W. F. (1999). Does Informality Imply Segmentation in Urban Labor Markets? Evidence from Sectoral Transitions in Mexico. The World Bank Economic Review, 13 (2), 275-302.
- Martínez, A. (05 de 10 de 2009). Lucran en Jalisco con espacio público. Periódico Reforma.
- Masuhama, M. (2006). Macro Analysis of Child Labor and School Enrollment. Dissertation . University of Pittsburgh.
- Menon, M., Pareli, F., & Rosati, F. (2005). Estimation of the contribution of child labour to the formation of rural incomes: An application to Nepal. (L. a. Center for Household Income, Ed.) Working paper No. 10.
- Moreno, B. F. (2009). Educación, desarrollo y migración: falacias de nuestro tiempo. Trabajo presentado en el primer congreso de egresados COLEF. (C. d. B.C., Ed.) Retrieved el 17 de 05 de 2012, de Docencia COLEF: http://docencia.colef.mx/system/files/file/ponencias/mesa%2011/Francisco%20Jav ier%20Moreno%20Barrera.pdf
- Murrieta, P. (2008). Poder y Resistencia. El proceso de permanencia de los niños de la calle en la ciudad de México. Mexico: Plaza y Valdes.
- Murrieta, P. (2012). Los niños a trabajar, ¿y las niñas? Trabajo infantil en Guadalajara: una visión de género. Journal of International Studies, Kemyung University, January 2012, Vol. 16.
- Murrieta, P., Gatica, L., Ramírez, M., & Álvarez, N. (2009). Evaluación del programa Municipal de Asistencia Social Rescate de Familias en Situación de Calle de la Zona Metropolitana de Guadalajara. Documento Interno . DIF Guadalajara.
- Murrieta, P., Tapia, C., & Torres, A. M. (2011). Santa Ana Tepetitlán: Construyendo una comunidad amiga de la infancia. España: Editorial Académica Española.

- Nash, J., & Fernández-Kelley, P. (1983). Women, Men, and the International Division of Labor. Albany: State University of New York Press.
- OECD. (2003). Combating Child Labour. A Review of Policies. Paris: OECD Publications.
- OECD Development Centre. (2009). Is informal normal? Towards more and better jobs in developing countries. Paris: OECD Publishing.
- OIT-IPEC. (6 de 2009). IPEC Programa Internacional para la Erradicación del Trabajo Infantil. Retrieved el 10 de 05 de 2013, de OIT Organización Internacional del Trabajo: www.ilo.org/ipecinfo/product/viewProduct.do?productid=10290
- Ordóñez Bustamante, D., & Bracamonte Bardález, P. (2005). Consideraciones para el diseño y evaluación de programas y proyectos sobre trabajo infantil y de adolescentes. New York: Banco Interamericano de Desarrollo.
- Parish, W., & Willis, R. (1993). Daughters, Education, and Family Budgets: Taiwan Esperiences. The Journal of Human Resources, 28 (4, Special Issue: Symposium on Investments in Women's Human Capital and Development), 863-898.
- Parker, S., & Skoufias, E. (2001). Conditional Cash Transfers and Their Impact on Child Work and Schooling: Evidence from the PROGRESA Program in Mexico. Journal of the Latin American and Caribbean Economic Association, 2 (1), 45-86.
- Patrinos, H., & Psacharopoulos, G. (1997). Family size, schooling and child labor in Peru-An empirical analysis. Journal of Population Economics , 387-406.
- Pérez Sainz, J. (2005). Exclusion and Employability: The New Labor Force Dynamics in Latin America. En C. a. Wood, Rethinking Development in Latin America (pp. 205-32). University Park, PA: Pennsylvania State University Press.
- PLAN. (2009). Publications. Retrieved el 10 de July de 2013, de PLAN, Promoting child rights to end child poverty: plan-international.org/aboutplan/resources/publications/campaigns/because-i-am-a-girl-girls-in-the-globaleconomy-2009/
- Poder Ejecutivo Federal. (1995). Programa Nacional de POblación 1995-2000. México: CONAPO.
- Portes, A., & Schauffler, R. (1993). Competing Perspectives on Latin American Informal Sector. Population and Development Review, 19 (1), 33-66.
- Programa Internacional para la Erradicación del Trabajo Infantil. (04 de 2013). Proyectos para la erradicación del trabajo infantil en la agricultura. Retrieved el 29 de 04 de 2013, de Programa Internacional para la Erradicación del Trabajo Infantil: http://white.oit.org.pe/ipec/pagina.php?seccion=42&pagina=108

- Psacharopoulos, G. (1997). Child labour versus educational attainment: Some evience from Latin America. Journal of Population Economics , 10, 377-386.
- Ranjan, P. (2001). Credit Constraints and the Phenomenon of Child Labor. Hournal of Development Economics , 64 (1), 81-102.
- Ravallion, M., & Wodon, Q. (2000). Does child labor displace schooling? Evidence on behavioural responses to an enrollment subsidy. Economic Journal , 110, C158-C157.
- Ray, R. (2000). Analysis of child labour in Peru and Pakistan: A comparative study. Journal of Population Economics, 13, 3-19.
- Reggio, I. (2011). The influence of the mother's power on her child's labor in Mexico. Journal of Development Economics , 96 (1), 95-105.
- Roberts, B. (1995). The Making of Citizens. Cities of peasants revisited. Great Britain: Arnold.
- Roberts, B. (2011). Consolidation of the Latin American City. City and Community, 10 (4).
- Rodríguez, S. C. (2009). Programa de educación básica para niñas y niños de familias jornaleras agrícolas migrantes. México: PRONIM.
- Rogers, C. A., & Swinnerton, K. (2004). Does Child Labor Decrease When Parental Incomes Rise? *Journal of Political Economy*, 112 (4), 939-946.
- Rosati, F. C., & Rossi, M. C. (2003). Children's Working Hours and School Enrollment: Evidence from Pakistan and Nicaragua. The World Bank Economic Review, 17 (2), 283-295.
- Rubalcava, L., Teruel, G., & Thomas, D. (2004). Spending, Saving and Public Transfers Paid to Women. On-Line Working Paper Series (CCPR-024-04).
- Rubalcava, R. M., & Murillo, S. (2006). El ingreso en los hogares rurales pobres y los beneficios monetarios del Programa Oportunidades vistos desde una perspectiva socioespacial de género: la jefatura económica femenina en Guanajuato . En M. d. López, & V. Salles, El Programa Oportunidades examinado desde el género. México: Sestante.
- Sakurai, R. (2006). Paper commissioned for the EFA Global Monitoring Report 2007, Strong foundations: early childhood care and education. UNESCO: Education for All Global Monitoring Report.
- Schluter, C., & Wahba, J. (2010). Are parents altruistic? Evidence from Mexico. Journal of Population Economics , 1153-1174.

- Secretaría de Desarrollo Social-UNICEF. (Abril de 2006). Diagnóstico sobre la condición social de las niñas y niños migrantes internos, hijos de jornaleros agrícolas. Retrieved el 25 de 03 de 2012, de UNICEF México: http://www.unicef.org/mexico/spanish/mx\_resources\_diagnostico\_ninos\_jornalero s.pdf
- Secretaría de Desarrollo Social-UNICEF. (Abril de 2006). Diagnóstico sobre la condición social de las niñas y niños migrantes internos, hijos de jornaleros agrícolas. Retrieved el 25 de 03 de 2012, de UNICEF México: http://www.unicef.org/mexico/spanish/mx\_resources\_diagnostico\_ninos\_jornalero s.pdf
- Secretaría de Desarrollo Social. (2001). Programa Nacional con Jornaleros Agrícolas. México: Subsecretaría de Desarrollo Regional.
- Secretaría de Desarrollo Social. (Mayo de 2010). Diagnósticos del Programa de Atención a Jornaleros Agrícolas. Retrieved el 4 de Abril de 2012, de Secretaría de Desarrollo Social: www.sedesol.gob.mx/work/models/SEDESOL/sedesol/sppe/dgap/diagnostico/Dia gnostico\_PAJA\_Mayo2010.pdf
- Secretaría de Educación Pública. (2012). ENLACE 2012: SEP. Retrieved el 08 de 07 de 2013, de ENLACE 2012, Evaluación Nacional del Logro Académico en Centros Escolares: 201.175.44.203/Enlace/Resultados2012/Basica2012/R12CCTGeneral.asx
- Secretaría de Educación Pública. (2012). Sistema Nacional de Información de Escuelas: SEP. Retrieved el 08 de 07 de 2013, de Secretaría de Educación Pública: www.snie.sep.gob.mx/SNIESC/
- SEDESOL. (2003). Lo que dicen los pobres. Retrieved el 25 de Noviembre de 2011, de Secretaría de Desarrollo Social: http://sedesol2006.sedesol.gob.mx/subsecretarias/prospectiva/voces.htm
- Skoufias, E., & Parker, S. (2001). Conditional Cash Transfers and their impact on child work and schooling: Evidence from Progresa Program in Mexico. Food Consumption and Nutrition Division, Discussion Paper (123).
- Sosenski, S. (2010). Niños en acción. El trabajo infantil en la ciudad de México. 1920-1934. Mexico: El Colegio de México.
- Tapia, C., & Torres, A. M. (2010). Identificación de los factores que influyen en la presencia de embarazo adolescente y sus consecuencias en el bienestar de los hogares de Santa Ana Tepetitlán. Zapopan, Jalisco: SEDESOL.

- Tisdell, C. A. (2002). Children and Economic Development: Family Size, Gender Preferences and Human Capital Formation--Theory and Indian Cases'. Economics and Development Working Paper (25).
- Udry, C. (2006). Child Labor. En Benerjee, Benabou, Mookherjee, & Editors, Understanding poverty.
- UNESCO. (28 de Abril de 2000). The Dakar Framework for Action. Obtenido de World Education Forum: http://unesdoc.unesco.org/images/0012/001211/121147e.pdf
- UNICEF. (1986). The contribution of UNICEF to the peace process. Retrieved el 27 de April de 2011, de UNICEF: http://www.unicef.org/about/history/files/contribution\_unicef\_peace\_process.pdf
- UNICEF. (2005). Child Labour Today-End Child Exploitation-.
- United Nations. (2010). World Urbanization Prospects: The 2009 Revision Population Database. Retrieved el 6 de April de 2011, de http://esa.un.org/wup2009/unup/index.asp
- Villarreal, A., & Shin, H. (2008). Unraveling the Economic Paradox of Female-headed Households in Mexico: the Role of Family Networks. The Sociological Quaarterly (49), 565-595.
- Ward, P. (2011). Housing and urban regeneration in the first suburbs and innerburbs of the Americas. En S. Smith (Ed.), Encyclopedia of Housing.
- Weiner, M. (1991). The Child and the State in India. Oxford: Oxford University Press.

Weiss, R. (1994). Learning from Strangers. New York: The Free Press.

White, B. (1994). Children, Work and 'Child Labour': Changing Responses to the Employment of Children. Development and Change , 25, 849-878.

Woldehanna, T., Jones, N., & Tefera, B. (2008). The Invisibility of Children's Paid and Unpaid Work: Implications for Ethiopia's national poverty reduction policy. *Childhood*, 15, 177-201.